

# 3Com® Embedded Firewall Solution

DATA SHEET

Extend hardwareenforced firewall capabilities to internal systems within the LAN, as well as to remote systems connecting from the outside.

# **OVERVIEW**

The 3Com® Embedded Firewall solution extends centrally managed, hardware-enforced security to notebooks, desktops, and servers across the organization—inside and outside the network perimeter. This innovative combination of policy server software and firewall card hardware safeguards network assets with superior tamper-resistance that software-only firewalls can't match.

# **KEY BENEFITS**

#### STREAMLINE AND AUTOMATE ROUTINE SECURITY TASKS

The 3Com Embedded Firewall Policy Server software provides central control through configurable security policies. These security policies can be used to streamline and automate many routine security tasks, such as auditing and filtering or blocking unnecessary ports.

### **CENTRALLY MANAGE SECURITY POLICIES**

3Com Firewall PCI and PC Cards are configurable only through authenticated policy servers, so security policies can be managed centrally. Security can't be disabled or modified at the system end point.

# **EASILY IMPROVE CLIENT SYSTEM PERFORMANCE**

Security tasks are offloaded to the firewall card's security processor, helping boost system performance. 3Com Firewall PCI and PC Cards plug into standard PCI or PC Card slots, replacing the conventional Fast Ethernet LAN connection.

## INTEGRATE WITH MICROSOFT ACTIVE DIRECTORY

The 3Com Embedded Firewall eases the complexity of configuring particular users or group assignments by assigning firewall rules based on Microsoft Active Directory (AD) users.



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# **FEATURES AND BENEFITS**

#### **SECURITY**

**Defense in depth>** Complements and enhances other security products, including perimeter firewalls, website filters, antivirus software, intrusion prevention systems (IPSs), and VPNs.

Hardware-based tamper resistance> Prevents security from being modified or disabled by user action or malicious code; configurable only through policies issued by authenticated policy servers.

**Transparent enforcement>** Enforces policies without interacting with host OS, security software, user applications, or system processing; users can't access or change security settings.

Global security policies> Automates security chores such as packet filtering and auditing, no sniffing/no spoofing, block unnecessary ports, and deny "ping" requests.

Intrusion resistance> Stops network attacks before they can start and helps eliminate false alarms generated by IDS monitoring; provides 24/7 protection for mobile/telecommuting users and "always on" broadband connections.

**Inside-the-perimeter protection>** Safeguards internal systems such as confidential databases, e-commerce servers, private-access intranets, guest workstations, and public kiosks.

Fiber-compatible firewall> Ideal for locations exposed to electrical interference or to optimize the quality of time-sensitive, converged transmissions such as voice and video; (3CRFW220B only).

#### **MOBILITY AND SCALABILITY**

Topology independence> Defines policies based on user role or group association, rather than on network infrastructure; enforces security at the end system, independent of the network to which users are connected.

Remote awareness> Automatically senses whether connection is internal or external and implements appropriate security policies.

Fallback policy> Automatically enforces a preconfigured, default security policy if mobile or remote systems are unable to communicate with an authenticated policy server.

**Beyond-the-perimeter protection>** Extends firewall security from the server all the way to the network edge—including telecommuter desktops, mobile notebooks, broadband Internet access points, and remote systems connected to someone else's LAN.

**Cost-effective scalability>** Deploy security when and where needed; firewall cards can be installed system-by-system as needed; one policy server can support up to 8,333 desktop, server or notebook systems and up to three policy servers can be combined to create a domain that can support 25,000 systems.

**Shared-system protection>** Gives authorized users and strategic partners easy access to shared or open systems without endangering the rest of the network.

Flexible deployment> Users and systems can be easily added or removed to fit changing security needs, making it ideal for temporary or contract workers.

**Upgradable components>** Open standards-based software helps ensure future compatibility; firewall cards are firmware upgradable.

# **MANAGEMENT**

**Centralized management>** Simplifies the configuration, distribution, and enforcement of security policies at all end points across the enterprise.

**Policy-based enforcement>** Helps prevent network security from being disabled or bypassed at the host; firewall cards only accept instructions from authenticated policy servers.

Fast response to network attacks> New policies can be configured and deployed to all systems across the network, inside and outside the perimeter, in a few minutes.

**Starter policy server>** Economical ten-client version allows installation of embedded firewalls on a smaller network or as a test-run before enterprise-wide deployment.

Syslog support> Network managers can audit the Embedded Firewall and send those audits to a Syslog server.

Microsoft Active Directory support> The Embedded Firewall and its support of Microsoft Active Directory simplify the complexity of maintaining user groups. User-based policies provide network managers with the flexibility to have multiple users with different firewall policies.

#### **COMPATIBILITY**

Open standards architecture> All components work with IEEE 802.3-/802.1x-compatible hardware; firewall cards use standard PCI-bus or CardBus interfaces.

# **SPECIFICATIONS**

#### **DIMENSIONS**

PCI card: length 13.34 cm (5.25 in); width 5.23 cm (2.06 in)
Fiber PCI card: length 13.34 cm (5.25 in); width 6.35 cm (2.50 in)
Type II and II PC cards: length 86 mm (3.37 in); width 54 mm (2.23 in)

#### MEDIA

10BASE-T, 100BASE-TX, 100BASE-FX

#### **CONNECTORS**

10BASE-T/100BASE-TX PCI cards: RJ-45 100BASE-FX PCI card: SC Type III PC Card: integrated RJ-45 Type II PC Card: RJ-45 LAN cable (model 07-0337-002)

#### **BUS INTERFACE**

PCI cards: 32-bit 33 MHz PCI PC Cards: 32-bit CardBus

# CABLES AND OPERATING DISTANCES

10BASE-T: Category 3, 4, 5, or 5e UTP up to 100 m (328 ft)

100BASE-TX: Category 5 or 5e UTP up to 100 m (328 ft)

100BASE-FX: 1,300 nm multimode fiber optic up to 412 m (1,351 ft) half-duplex; up to 2,000 m (6,557 ft) full-duplex

### **SECURITY PROCESSOR**

PCI Cards: 100 MHz RISC PC Cards: 100 MHz RISC

# PROCESSING OFFLOADS

Windows 2003, 2000, or XP operating system required to support IPSec and TCP/IP offloading

Security: firewall policies; IPSec, including 168-bit 3DES, 56-bit DES, SHA-1, MD5, RFC 2402

TCP/IP: TCP segmentation, TCP large send, TCP/UDP/IP checksum

#### FIREWALL FILTERING

IP protocols only, non-IP protocols (IPX, NetBEUI, PPPoE) can be blocked or passed through without filtering

#### **MANAGEMENT**

3Com Firewall PCI and PC Cards support SNMP management; security policy and firewall management require 3Com Embedded Firewall Starter Policy Server (3CRFW025-97-STRPS) or 3Com Embedded Firewall Policy Server (3CRFW025-PS-97)

#### **CLIENTS SUPPORTED**

3Com Embedded Firewall Policy Server (3CRFW025-PS-97): up to 8,333 firewall-client devices per policy server; as many as three policy servers can be combined within a domain that will support 25,000 firewall-client devices

3Com Embedded Firewall Starter Policy Server (3CRFW025-97-STRPS): up to 10 firewall-client devices; as many as three starter policy servers can be combined within a domain that will support 30 fire- wall-client devices

# **POLICY SERVER REQUIREMENTS**

Pentium III or 1 GHz or higher, 250 MB hard drive, 512 MB RAM Windows 2003/2000 Server Internet Explorer 5.01 or later

recommended 256-color monitor, screen resolution 800 x 600 or higher

3Com Firewall PCI Card (3CRFW200B or 3CRFW220B)

# MANAGEMENT CONSOLE REQUIREMENTS

Pentium II 400 MHz or higher recommended, 100 MB hard drive, 64 MB RAM

Windows XP, 2000, 2003

Microsoft Management Console web browser requires Internet Explorer 5.0 or higher

256-color monitor, screen resolution 800 x 600 or higher

3Com Firewall PCI Card (3CRFW200B or 3CRFW220B)

# DESKTOP OR SERVER FIREWALL REQUIREMENTS

PCI 2.2-compliant desktop or server, 16 MB RAM

Linux 2.4/Red Hat 7.3-9.0; Windows 2003, 2000, XP, NT4.0 (SP3 or higher), 98, or 98SE

3Com Firewall PCI Card (3CRFW200B or 3CRFW220B)

3Com Embedded Firewall does not support broadband services that use the PPPoE protocol with a software client

# NOTEBOOK FIREWALL REQUIREMENTS

32-bit CardBus notebook PC, 16 MB RAM

Type II PC Card (3CRFW102) requires one Type II PC Card slot

Type III PC Card (3CRFW103) requires one Type III PC Card slot or two vertically stacked Type II slots

Windows XP or 2000

3Com Firewall PC Card: Type III (3CRFW103) or Type II (3CRFW102) 3Com Embedded Firewall does not support broadband services that use the PPPoE protocol with a software client

#### STANDARDS COMPLIANCE

PCI 2.1/2.2, PC 99/2001, IEEE 802.1P GMRP, 802.1Q, 802.2, 802.3, and 802.3u; IPSec, TCP/IP, UDP, ISO 8802-3; SNMP, WfM, ACPI, DMI, WMI, PXE, BOOTP, DHCP, RWU, WOL

#### SAFETY, EMISSIONS

PCI Cards: cCSAus, FCC B, CE, C Tick, VCCI, MIC, BSMI

# PC Cards: FCC B, CE, C Tick, VCCI

**ENVIRONMENTAL RANGES**Operating temperature: 0° to 70°C (32° to 158°F)

Humidity: 10 to 90% non-condensing

#### POWER REQUIREMENTS

PCI Cards: +5 V +/-5% @ 1.26 A max PC Cards: 650 mA (maximum)

## PACKAGE CONTENTS

PCI Card/PC Card single-pack: one firewall card (Type II PC Card includes RJ-45 LAN cable); one installation CD-ROM

PCI Card/PC Card multi-pack: number of firewall cards indicated; one installation CD-ROM (Type II PC Cards include a matching number of RJ-45 LAN cables),

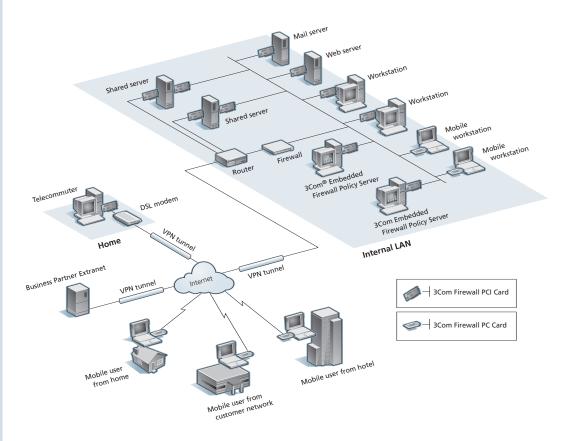
## WARRANTY

Limited Lifetime warranty. For more information, refer to www.3com.com/warranty.

#### **CUSTOMER SUPPORT**

3Com Knowledgebase offers proven answers and technical expertise—seven days a week, 24 hours per day. Explore our Knowledgebase, as well as product information, technical tips, and FAQs by visiting www.3com.com.

# SAMPLE CONFIGURATION: HARDWARE-ENFORCED FIREWALL CAPABILITIES EXTENDED TO WITHIN THE LAN AS WELL AS TO REMOTE SYSTEMS



# ORDERING INFORMATION

PRODUCT DESCRIPTION	3COM SKU
Policy Servers	
3Com Embedded Firewall Policy Server	3CRFW025-PS-97
3Com Embedded Firewall Starter Policy Server	3CRFW025-97-STRPS
PCI and PC Cards	
3Com Firewall PCI Card with 10/100 LAN	3CRFW200B
3Com Firewall PCI Card with 10/100 LAN (25 pa	ack) 3CRFW200B-25
3Com Firewall Fiber PCI Card with 100 LAN	3CRFW220B
3Com Firewall Fiber PCI Card with 100 LAN (25	5 pack) 3CRFW220B-25
3Com Firewall PC Card with 10/100 LAN, Type	II 3CRFW102
3Com Firewall PC Card with 10/100 LAN, Type	III 3CRFW103
3Com Global Services 3Com Network Health Check, Installation Service	rac
and Express Maintenance	www.3com.com/services quote
	www.3com.com/security assessment
3Com University Courses	www.3com.com/3comu

To upgrade your existing 3Com Secure NICs into Embedded Firewall cards, an EFW software license is required:

FFW	Software	License

EFW License 3CR990B-FX Client Fiber NICs	3CRFW025-FXLIC-97
EFW License 3CR990B-TX Client NICs	3CRFW025-TXLIC-97



Visit www.3com.com for more information about 3Com secure converged network solutions.

 $3 Com\ Corporation,\ Corporate\ Headquarters,\ 350\ Campus\ Drive,\ Marlborough,\ MA\ 01752-3064$   $3 Com\ is\ publicly\ traded\ on\ NASDAQ\ under\ the\ symbol\ COMS.$ 

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