

DATA SHEET

3Com® Embedded Firewall Solution

Distributed-hardware system protection and centralized security-policy control

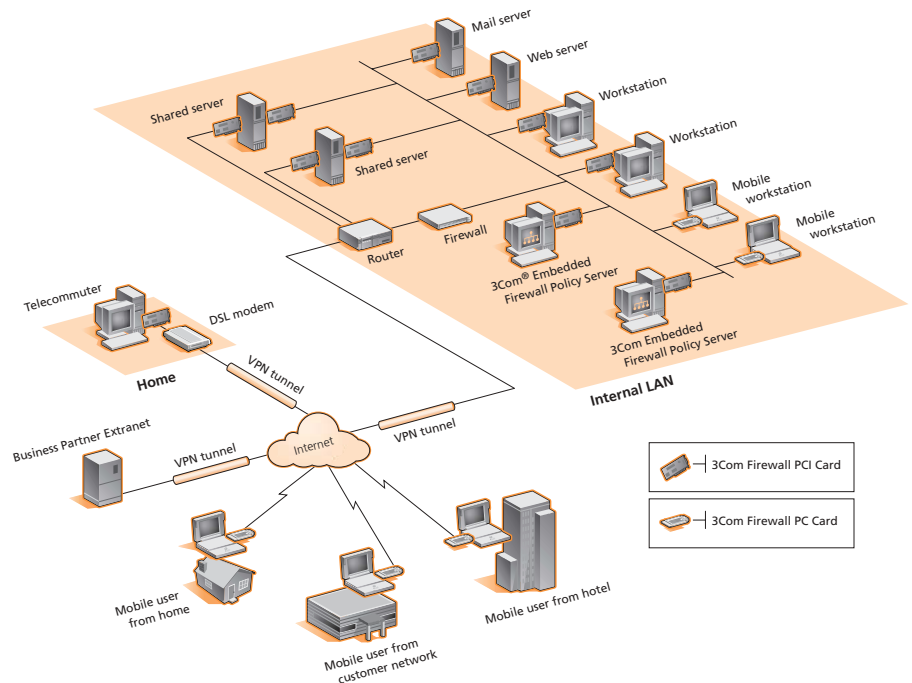
The 3Com® Embedded Firewall solution extends centrally managed, hardware-enforced security to notebooks, desktops, and servers across the organization—inside and outside the network perimeter. This innovative combination of policy server software and firewall card hardware safeguards your network assets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

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 chores, such as auditing and filtering or blocking unnecessary ports. Central management also helps ensure that security can't be disabled or modified at the end system.

3Com Firewall PCI and PC Cards plug into standard PCI or PC Card slots, replacing the conventional Fast Ethernet LAN connection. Security tasks are offloaded to the firewall card's security processor, helping boost system performance. The firewall cards operate independently of their host systems and are practically impervious to Internet attacks, user actions, or malicious code. Equally important, they're configurable only through authenticated policy servers. In other words, even if a firewall-client system is invaded, it's practically impossible to exploit as an attack launching pad.

The 3Com Embedded Firewall solution extends hardware-enforced firewall capabilities to internal systems within the LAN as well as to remote systems connecting from the outside.

Network Diagram



Features and Benefits

Feature	Benefit
Security	
Defense in depth	Complements and enhances other security products, including perimeter firewalls, website filters, antivirus software, intrusion detection systems (IDSs), 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 Internet access gateways.
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	Prevents signal degradation, making it ideal for locations exposed to electrical interference or to optimize the quality of time-sensitive, converged transmissions, such as voice and video; 3CRFW320 required for fiber connections.
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	Lets you deploy security when and where needed, in cost-justifiable increments; firewall cards can be installed system-by-system as needed; one policy server can support up to 1,000 desktop, server or notebook systems
Shared-system protection	Gives authorized users and strategic partners easy access to shared or open systems without endangering the rest of your network—such as partner websites, shared servers, VPN gateways, DMZ subnets, web/e-mail servers.
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 lets you install embedded firewalls on a smaller network or as a test-run before enterprise-wide deployment; learn how to use this product to create your own "starter packs" at www.3com.com/other/pdfs/products/en_US/104076.pdf .
Compatibility and Performance	
Open standards architecture	All components work with IEEE 802.3-/802.1x-compatible hardware; firewall cards use standard PCI-bus or CardBus interfaces.
Security processor	Offloads IPSec and policy enforcement processing, enabling host CPU to devote more cycles to user applications and transmissions; IPSec offloads require Windows XP or 2000 operating system.
Faster encryption	Throughputs 3DES data four to five times faster than SonicWALL or WatchGuard firewall appliances; IPSec offloads require Windows XP or 2000 operating system.

Specifications

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 multi-
mode 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: 125 MHz RISC

PC Cards: 100 MHz RISC

Processing Offloads

Windows XP or 2000 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 proto-
cols (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 (3CR010STRPS-1-
97B) or 3Com Embedded Firewall
Policy Server (3CR010PS-1-97B)

Clients Supported

3Com Embedded Firewall Policy
Server (3CR010PS-1-97B): Up to
1,000 firewall-client devices per
policy server; as many as three
policy servers can be combined
within a domain that will sup-
port 3,000 firewall-client devices

3Com Embedded Firewall Starter
Policy Server (3CR010STRPS-1-
97B): Up to 10 firewall-client
devices; as many as three starter
policy servers can be combined
within a domain that will sup-
port 30 firewall-client devices

Policy Server Requirements

- Pentium III or 4,600 MHz or
higher, 150 MB hard drive,
128 MB RAM
- Windows 2000 Server or
Windows NT 4.0 Server (SP4
or higher)
- Internet Explorer 5.01 or later
recommended
- 256-color monitor, screen
resolution 800 x 600 or higher
- 3Com Firewall Server PCI Card
(3CRFW300)

Management Console Requirements

- Pentium II 400 MHz or higher
recommended, 100 MB hard
drive, 64 MB RAM
- Windows XP, 2000, NT 4.0
(SP4 or higher), 98, or 98 SE
- Microsoft Management
Console web browser requires
Internet Explorer 5.0 or higher
- 256-color monitor, screen reso-
lution 800 x 600 or higher
- 3Com Firewall Server PCI Card
(3CRFW300)

Desktop or Server Firewall Requirements

- PCI 2.1-compliant desktop or
server, 16 MB RAM
- Windows XP, 2000, Me, NT4.0
(SP3 or higher), 98, or 98SE
- 3Com Firewall PCI Card:
Server (3CRFW300), Fiber
(3CRFW320), or Desktop
(3CRFW200) PCI Card
- 3Com Embedded Firewall does
not support broadband ser-
vices 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, 2000, 98 SE, NT
4.0 (SP6 or higher); Windows
NT also requires Softex ver-
sion 2.79 or later, or
SystemSoft version 5.20.03 or
later; DOS ODI can be used for
installation but will not sup-
port firewall functionality
- 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
802.3/802.3u/802.2/802.1Q/802.
1 GMRE, IPSec, TCP/IP, UDP, ISO
8802-3, SNMP, WfM, ACPI,
DMI, WMI, PXE, BOOTP, DHCP,
RWU, WOL

Safety, Emissions

PCI cards: FCC Part 15, Class B, CE
PC Cards: FCC B, CE, C Tick,
VCCI

Environmental Ranges

PCI cards: Temperature = 0° to
55°C (32° to 131°F); humidity =
5% to 85% noncondensing
PC Cards: Temperature = 0° to
70°C (32° to 158°F); humidity =
10% to 90% noncondensing

Power Requirements

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

Specifications, continued

Firewall Card Dimensions

	<i>Length</i>	<i>Width</i>	<i>Thickness</i>
Server/Desktop PCI card	12.0 cm (4.75 in)	6.4 cm (2.54 in)	1.9 cm (0.75 in)
Fiber PCI card	16.6 cm (6.6 in)	6.5 cm (2.54 in)	1.9 cm (0.75 in)
Type III PC Card	86 mm (3.37 in)	54 mm (2.23 in)	10 mm (0.40 in)
Type II PC Card	86 mm (3.37 in)	54 mm (2.23 in)	5 mm (0.20 in)

Package Contents

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

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

Product Warranty

3Com Firewall PCI and PC Cards are backed by a Three-Year Limited warranty that includes hardware replacement and phone support. 3Com Embedded Firewall Policy Server and Starter Policy Server software is warranted for 90 days. Additional support packages, including extended service contracts, are available. For details on warranties and services, refer to the product manual or visit our warranty support page at www.3com.com.

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.

Ordering Information

3Com Embedded Firewall Starter Policy Server	3CR010STRPS-1-97B
3Com Embedded Firewall Policy Server	3CR010PS-1-97B
3Com Firewall PC Card with 10/100 LAN, Type II (single-pack)	3CRFW102
3Com Firewall PC Card with 10/100 LAN, Type II (20-pack)	3CRFW102-020
3Com Firewall PC Card with 10/100 LAN, Type III (single-pack)	3CRFW103
3Com Firewall PC Card with 10/100 LAN, Type III (20-pack)	3CRFW103-020
3Com Firewall Fiber-FX PCI Card with 100 LAN (single-pack)	3CRFW320
3Com Firewall Fiber-FX PCI Card with 100 LAN (25-pack)	3CRFW320-25
3Com Firewall Server PCI Card with 10/100 LAN (single-pack)	3CRFW300
3Com Firewall Server PCI Card with 10/100 LAN (10-pack)	3CRFW300-10
3Com Firewall Desktop PCI Card with 10/100 LAN (single-pack)	3CRFW200
3Com Firewall Desktop PCI Card with 10/100 LAN (25-pack)	3CRFW200-25

Please note: These products contain encryption and may require U.S. and/or local government authorization prior to export or import to another country.

To learn more about our end-to-end security products—including perimeter firewalls, website filters, secure gateways, and embedded firewalls—please visit www.3com.com/security.



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To learn more about 3Com solutions, visit www.3com.com. 3Com Corporation is publicly traded on Nasdaq under the symbol COMS.

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