



Hybrid security at Gigabit speeds

Great security—no compromise. The Sidewinder G₂ Firewall delivers highly-available, multi-layered-security at wire speeds.



Key firewall performance features

Individual appliance models available supporting:

- Throughput from 150 Mbps to 1.5 Gbps
- Concurrent connections from 250,000 to over 1,000,000
- The establishment of 15,000+ new security sessions every second
- Latest Xeon™ processors MP
- NetBurst Micro-architecture processing with Hyper-Threading and Level 3 Cache
- Single, dual, or quad processors

“Sidewinder G₂ is tops at combining protection and performance...”



—Mike Fratto
Network Computing
March 2003



“The Sidewinder G₂ Firewall’s multi-layered security mechanisms recently achieved the most in-depth Common Criteria Application Firewall certification ever awarded. The Sidewinder G₂’s EAL4+ certification is recognized by all 16 countries participating in the Common Criteria Mutual Recognition Arrangement.”

Business Wire
April 29, 2003

SECURE
COMPUTING

The world’s ✓strongest security at ✓gigabit+ speeds

The growth rate of Internet-delivered applications for business and governments has been astounding over the last five to seven years. In response to this incredible Internet-usage growth, many IT professionals well versed in shopping for network devices such as routers and switches have been shopping for the fastest purpose-built product they could find that said ‘firewall’ on the box. Stateful inspection firewall technology has become synonymous with speed. As a result, some firewall manufacturers have put most of their efforts into this one simple security mechanism (i.e., stateful inspection), tuned it for performance, and added management tools to improve administration.

- Speed: High, due to simple packet forwarding mechanism.
- Security: Low, due to limited application awareness.
- Result: Internal servers all over the world are under attack (Code Red, Nimda, Slammer) through open ports in most well-known brands of firewalls. New markets have recently opened up for application-specific firewalls needed to protect Internet-facing Web services, E-mail services, DNS services, database services and more.

Does that mean you need to purchase and maintain two different kinds of firewalls - a stateful inspection firewall for speed, and an application-level firewall for layer 7 security? No, not if you use the Sidewinder® G₂ Firewall™.

Sidewinder G₂ Firewall

Sidewinder G₂ Firewall is a *hybrid* firewall that delivers blazing speed (*up to 1.5 Gbps throughput*) for stateful inspection filtering just exactly like the leading brands of simple stateful-inspection-only firewalls do! That’s just the beginning of the ways the Sidewinder G₂ Firewall will amaze you. Not only does it deliver blazing stateful-inspection performance, but it also protects customer networks with high-speed Layer 7 application-specific security filters (*up to 800 Mbps throughput today*), integrated intrusion detection and intrusion prevention, real-time alerts and alarms, true forensic-quality audit facilities, and much, much more. That’s why the Sidewinder G₂ Firewall is protecting many of the world’s most important networks all over the globe today, as it has since 1995.

Sidewinder G₂ provides protection for ✓24X7 business continuity operations ✓money transactions ✓trade secrets ✓public utility services ✓customer-record privacy ✓government services ✓transportation ✓national defense ✓e-mail communications, ✓port-80 Web services and ✓more.

Staying ahead of the performance curve

Secure Computing pioneered the technology to optimize edge security performance without taking security short cuts. Secure Computing’s “*fast path*” technology optimizes multi-layer inspection techniques to deliver the best security at top performance. Secure Computing is committed to providing strong and scalable security to enterprises. Here are a couple of examples of that commitment.

- Intel Corporation invited the Secure Computing firewall team to be the first to bring a firewall product to their Application Solution Center (ASC). At this specialized lab, a team of Intel experts worked closely with our senior engineers to optimize the source code for the Sidewinder G₂ Firewall’s SecureOS® UNIX operating system to achieve the *best* possible performance using Pentium® processors.

"The Sidewinder G₂ Firewall continues to be the firewall of choice for buyers that reject simple stateful-inspection-only firewalls. Why? These buyers have discovered that they can actually experience the world's strongest security—at gigabit+ speeds."

Michael A. Simon
Chief Technology Officer
Conjungi Networks



Sidewinder G₂ Firewall Appliance
Model 1000



Unlimited scalability
One-to-many cluster management.
Six individual appliance models to choose from.

- Secure Computing purchased the Gauntlet™ firewall business from Network Associates in 2002. The Gauntlet firewall has an excellent reputation for high-end performance, in particular its unique "adaptive proxy" architecture. The performance numbers in this data sheet are a result of work done with the former NAI Gauntlet firewall performance lab.
- Owning full access to the kernel of the SecureOS UNIX operating system, the hardware interface drivers, and the TCP/IP stack, means our experts leave absolutely no line of code unscrutinized when it comes to optimizing performance *and* security. Many firewalls load up on top of commercial operating systems like Solaris and Windows. These commercial, general purpose operating systems have *millions* of lines of software code sitting under the firewall applications; adding bloat, sluggish processing time, and never ending hacker attacks against the underlying OS.

High speed network interface support

The Sidewinder G₂ Firewall offers connectivity for two to ten network interfaces and the robustness to isolate each with a unique security policy. Gigabit interfaces are a standard component shipped with every appliance. Traffic can be controlled for any service between any of the networks with a click of a button. Using "connection caching" technology with our performance-optimized SecureOS, Sidewinder G₂ is able to achieve connection rates comparable to less secure stateful-inspection-only firewall products. When tested with high-speed 64-bit Intel Ethernet interfaces, Sidewinder G₂ was proven to maintain the ability to establish new connections at a rate of 15,000+ per second. Combined with the ability to support over 1 million concurrent connections, Sidewinder G₂ delivers an impenetrable firewall and VPN solution at the high performance rates required to meet today's demanding business needs.

World class appliance platforms

Symmetric multiprocessing

- Running application intrusion prevention services and secured servers requires support for high performance hardware. The Sidewinder G₂ Firewall supports up to four symmetric processors using the latest Intel-based Pentium 4 and Xeon processors at 2.8 GHz and above.

RAID disk subsystem

- Sidewinder G₂ Firewall is provided in a rack-optimized form factor that supports integrated, high-performance SCSI RAID controllers and drives. This capability allows Sidewinder G₂ to maintain comprehensive audit logs of security critical activities without sacrificing performance.

UPS and redundant power supply support

- Sidewinder G₂ provides integrated support for power event detection from most major UPS vendors including APC. In addition, Sidewinder G₂ appliances models include redundant power supply configurations.

See www.securecomputing.com for additional white papers describing performance, interoperability, and load balancing.

Firewall measurements	Model 1000	Model 2000	Model 4000
Concurrent connections	1,000,000+	1,000,000+	1,000,000+
Proxy throughput	600 Mbps	800 Mbps	Solutions center
Stateful packet inspection throughput	Up to 1.2 Gbps	1.4 Gbps	1.5 Gbps
Connection setup rate	15,000/sec.	15,000/sec.	Solutions center

Note: Performance statistics, hardware specs, and network interfaces are current as of June 2003. For the latest information or addition details please contact a Secure Computing sales representative or channel partner.

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