



**NETWORK SECURITY:  
WHAT YOU DON'T KNOW CAN HURT YOU**

By Joseph Heinzen

Vice President of Engineering and Professional Services

The insidious nature of computer viruses recently hit home for me (literally!). On February 13, we received a bunch of e-mails carrying the new (and actually quite harmless) Anna Kournikova virus. Open the e-mail attachment — a photo of the famous tennis pro — and the virus goes to work, automatically e-mailing itself to everyone in the user's Microsoft Outlook address book. Fortunately, as security specialists, we caught the worm before it infected our system. Unfortunately, we traced the virus-laden messages to several of our customers, who had been unknowingly infected. We quickly called these solution providers to tell them they had a security problem.

That's the issue with security: Hackers and viruses lurk everywhere and can even infiltrate the very companies whose job it is to stop them. It's so pervasive that a recent study by OMNI Consulting Group estimates that network security breaches cost businesses 5.57 percent of annual gross revenue on the average. Furthermore, *Network Computing* reports that FBI network intrusion investigations mushroomed from 200 cases in 1997 to some 2,000 cases in 1999. It's why the first of The Pro Shop's new Private Label development offerings is a security assessment tool, SecureCheck.

Not surprisingly, many end-users want to beef up security. According to *CRN*, where the OMNI study was reported, North American companies spent 21 percent more on security last year than in 1999. OMNI predicts a 38 percent increase in security expenditures this year over last. *CRN* states that security-based business for resellers has increased two- to three-fold over the past year. That obviously opens doors for you.

For despite high profile viruses like Anna and last year's Love Bug, your customers need to know

that the attacks are the real worry they don't hear about, like the persistent hacker whose attempts go undetected because no one is analyzing intrusion patterns. Security is always evolving and should exist in multiple layers; a firewall alone is not enough. How many of your customers actually analyze their logs to determine, for example, aggregate long-term intrusion-attempt patterns? Or have your clients ever installed a firewall but left all the network's wiring in an unlocked closet? (A true story!)

I hope you enjoy this issue of Pro Shop Talk, which focuses on security. It is an arena we are committed to through a range of engineering services, deep expertise in security solutions like the Cisco PIX line (see p. 2), and private label offerings like SecureCheck, a fixed-price assessment service you can label as your own. We become a risk-free, "invisible" partner to your organization, so you can compete for bigger jobs and reap long-term profits.

Does this newsletter give you information you value? Let me know at [jheinzen@comstor.com](mailto:jheinzen@comstor.com) or (703) 345-5107.

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## PRO SHOP CHALLENGE:

**RECONFIGURE A SECURE VPN FOR EIGHT GLOBAL OFFICES — NOW!**  
**How can you transfer your customer's 400-line rule base to a new global PIX firewall with a minimal time/staff investment? Call the Pro Shop.**

When a prominent IT end-user (a leading software development firm in Fairfax, VA) needed to replace its managed firewall solution with a Cisco PIX firewall solution, they had one specific request: the end-user wanted Clint. Clint is the engineer who had impressed them during the project implementation of their Cisco switching infrastructure solution, which was provided by a leading Virginia systems integrator, AAA Networks. Clint is a senior network engineer at Comstor's Pro Shop and AAA Networks frequently partners with The Pro Shop, presenting Pro Shop's advanced engineers as its own and profiting from this depth of expertise.

AAA's end-user, a leading provider of integration software solutions for business-to-business integration (B2BI), was growing so rapidly that *Forbes ASAP* magazine had listed it as one of the top 100 fastest-growing technology companies of 2000. To help accommodate this growth, the company wanted to switch to a Cisco PIX 525 firewall solution. The installation needed to facilitate an IPSEC VPN that would connect the company's headquarters with eight remote offices (some pre-existing and some newly-acquired) in the US, Europe and Asia. The network also had to connect to individual software developers overseas and to domestic sales staff who worked at home. The deadline was just two weeks away, so AAA Networks and the Pro Shop had to coordinate efforts and resources promptly.

The Pro Shop's team of advanced engineers immediately went to work on the AAA Networks installation. "We received The Pro Shop quote within hours of our request, added a realistic profit margin and closed the deal," said Steve Seasholtz, vice president of AAA Networks. Clint spent the first two days at the end-user's site assessing its existing security policies, to help insure that the new firewall would perform as designed once in continued use. After consulting with the end-user and its managed firewall service provider, Clint's team was able to finalize the end-user's existing rule base and configure the new firewall and VPN to meet the end-user's needs.

This complex pre-installation process presented one of the bigger challenges for The Pro Shop: The end-user's firewall rule base, which defines line-by-line what data can pass through the firewall, contained

more than 400 lines. (The end-user does most of its business via the Internet, which necessitates a greater number of servers and applications, hence more lines in the rule base.) "It took about 12 hours to piece together their current solution and transfer it to the Cisco PIX," said Clint. A more traditional pre-installation would take about two hours.

The Pro Shop team mounted the Cisco PIX firewall, rewired the DMZ area and tested each server and application (about 100 total) through the new firewall.

"After we made a few needed adjustments to the firewall rule base, we were able to configure the IPSEC VPN for the eight remote locations, which included a combination of Cisco PIX 515 firewalls or Cisco 2610 routers, and then tested VPN access to all the offices," said Clint. When completed, the system enabled Cisco PIX-to-router VPN capability and PIX-to-PIX capability, thus fully meshing the end-user's network. "Instead of paying the phone company for lines to connect all these offices, we allowed them to use the Internet," Clint confirmed. In addition, the new system gave the end-user the highest level of Internet encryption currently available, 3DES.

The end-user's top management circulated an internal e-mail to all staff praising the smooth transition to the new network. AAA Networks was equally satisfied. "The Pro Shop's rapid response and Cisco expertise enabled us to win this deal. We knew that by partnering with them, we'd get total customer satisfaction with minimal investment of our own resources," Seasholtz said.

## PRO SHOP SERVICES:

### Resources You Can Rely On

The Pro Shop offers VARs, solution providers and ASPs packaged and custom services for resale. Pro Shop services are designed to augment your existing resources, extend your geographic reach, provide you with hard-to-find technical expertise and turn the service burden into a value-added service opportunity that gives you the competitive edge.

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## PRO SHOP PRO:

### **DAVE, Senior Network Systems Engineer**

**Certifications: Check Point CCSA, CCSE; RSA/CSE; Sun C2000 Enterprise Engineer; Novell CNE, CNE4, CNEIW; Microsoft Product Specialist; Citrix WinFrame Engineer**

#### **WHY THE PRO SHOP?**

We're unique. There's no other distributor that can wrap professional services around products and deliver them to customers the way we can. We help VARs increase their portfolio of skills, and we don't sell to end-users. This is not something you normally find in distribution. We focus on a few specific products, not thousands. We're not just a fulfillment center. Plus, we have top-notch people. It's very nice to work with the people here because they're all experts in their fields.

#### **MEMORABLE CAREER ACHIEVEMENTS:**

While working for Bell Atlantic (now Verizon), Dave was sub-contracted to the US Army Strategic and Advanced Computer Center to set up security as dictated by the Pentagon. Within a month, in January 2000, hackers known as the "Boyz of Brazil" publicly threatened to attack the Army's home web page. Dave, who was working at the web site's host location, set up perimeter security to keep the hackers out and allow business to continue uninterrupted. He designed and implemented firewall systems and security policy as well as hardened Solaris OS on multiple Sun hosts against common exploits. The hackers tried to attack but ultimately failed to penetrate the site.

#### **BACKGROUND:**

Dave has more than 15 years of technical management, consulting and engineering experience in the security and LAN/WAN environment. Most of his professional career has been in the employ of solution providers, serving commercial and government clients. His focus over the past five years has been on security technologies such as firewall, VPN, strong authentication, content filtering, log analysis and antivirus solutions. Along with the design and implementation of these technologies, he has supplied security-based consulting services such as policy review and vulnerability studies.

Dave has extensive experience with custom client services including requirements analysis, design services and UNIX consulting.

#### **QUOTE:**

"While I have always loved computer technology and its challenges, nothing is as invigorating as my security focus. Since it is a head-to-head contest against malicious individuals or groups who attempt to harm an end-user's data or disrupt their communications, simply putting up a firewall and punching out for the day doesn't get it done! You must create a comprehensive security plan, follow it and be ever-vigilant."

### **Pro Shop Now Cisco "AVID" Certified**

Comstor engineers are now certified for IP Telephony Specialization through Cisco's AVID (Architecture for Voice, Video and Integrated Data) program.

Solution providers can now sell Cisco's convergence platform installed by the Pro Shop team as a risk-free partner. Cisco has established AVID specialized training to ensure that its industry-leading technology is installed by advanced engineers with the appropriate skill sets.

Access to specialized certified engineers can help solution providers enter the lucrative but complex convergence arena faster and more easily. This allows them to capitalize on new market opportunities and capture incremental revenues – all without introducing competition.

Comstor will pursue forthcoming specialized Cisco certifications as they are offered (e.g., in wireless technology), increasing the Pro Shop's value as a provider of hard-to-find, advanced engineering and consulting resources.



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## HARDWARE CORNER:

### **Cisco Secure PIX Firewall 506: Enterprise-class Security and VPN Capabilities for SMB Customers**

As one of the largest Cisco distributors in the industry, Comstor offers the Cisco Secure PIX Firewall 506 unit. With a throughput measured at 10 Mbps (3DES of 7 Mbps) and 168-bit encryption, the 506 unit delivers secure, cost-effective, high-performance protection for high-end small business/home office environments.

The Cisco Secure PIX Firewall 506 is designed for companies that are leveraging the cost advantages of the Internet and allowing employees to work remotely. It specifically targets organizations where engineers, developers and other "power-users" are maintaining multiple computers that connect back into the corporate network through ISPs or VPNs.

Key benefits:

- Non-UNIX, secure, real-time embedded system eliminates risks associated with a general-purpose operating system
- Standards-based VPN can reduce costs of connecting mobile users and remote sites to the corporate site via the Internet or other public IP networks
- Prevention of Denial of Service Attacks protects the firewall, as well as the servers and clients behind it, from disruptive or damaging hackers

**Comstor's Pro Shop engineers can install, stage and configure the PIX Firewall 506 units;** configuration can be done prior to shipping or at the customer's site, according to customer needs.

### **Cisco Aironet 350 Wireless Products Incorporate Enhanced Security Framework**

*Contributed by: Chris Marco, President Gigawave Technologies*

Through the new Cisco Aironet wireless networking security framework, based upon the proposed IEEE 802.1x standard, enterprises can, for the first time, scale wireless deployments to thousands of users with a standard, centralized security management framework.

This enterprise-class security framework delivers scalable, centralized security management and supports dynamic single-session, single-user encryption keys integrated with network logon. 802.1x utilizes standard security protocols such as RADIUS to provide centralized user identification, authentication, dynamic key management and accounting. RADIUS server support for the Cisco Aironet 350 Series has also been incorporated into the newest release of Cisco Secure Access Control Server (ACS) for Windows 2000 and NT version 2.6. Cisco Secure ACS includes full support for user authentication of Aironet wireless clients and provides dynamic distribution of encryption keys to secure each connection. This dynamic allocation of encryption keys eliminates the burden of Wired Equivalent Privacy (WEP) key management, giving IT managers the confidence to deploy an enterprise-wide wireless solution for their users.

## **THE PRO SHOP STRATEGY**

The Pro Shop, Comstor's Professional Services Team, is a global channel provider of Cisco Systems and networking-related solutions. The Pro Shop supplies solution providers, VARs and ASPs with packaged and custom services for resale. We package our wide array of services and training to make it easy for you to buy — and resell — the specific services that grow your profits.

Our greatest value to you is The Pro Shop's technical knowledge expertise in real world experience. We customize networking wireless, voice and video solutions for government, education, dot.com and telco organizations. Plus, we conduct wireless and IP solution tests in our labs every day. Our expert staff has the skills you need — from Cisco-Certified Networking Associates (CCNAs) through Cisco-Certified Internetwork Experts (CCIEs). We will never sell directly to an end-user.



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