

The End of Antivirus as You Know It: A First Look at VIPRE Enterprise





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This TechTarget IT Briefing covers the following topics:
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The End of Antivirus as You Know It: A First Look at VIPRE Enterprise

This document describes the rapidly evolving malware landscape facing enterprises today, as well as the next-generation software that addresses today's malware in the most comprehensive, highly efficient manner. It provides a first look at VIPRE Enterprise, a new solution that combines antivirus, antispyware, anti-rootkit, and other technologies into a seamless, tightly integrated product.

Introduction

Sunbelt Software is the leading provider of best-of-breed Windows security and management tools, including endpoint security and e-mail security and management. Its award-winning product lines (illustrated in Figure 1) include CounterSpy and Counter-Spy Enterprise, VIPRE and VIPRE Enterprise antivirus and antispyware, Ninja E-mail Security and Sunbelt Exchange Archiver, Sunbelt Network Security Inspec-

tor, and Sunbelt Personal Firewall. Sunbelt Software is a Microsoft Gold Certified Partner.

In 2007, Sunbelt Software won SC Magazine's Best E-mail Security Reader's Choice award. As shown in Figure 2, Sunbelt Software's customers range from small businesses to large enterprise and government institutions.

Sunbelt Software has a very active strategic OEM partnership group (shown in Figure 3). The company has worked with them to achieve what they need in the security arena.

Cisco IronPort uses part of the CounterSpy definition as a part of their Web-filtering solution. Marshal Software has a Web-filtering product that uses Counterspy. Sunbelt Software works with Dell on the Ninja Blade product. These partnerships have enabled



Figure 1





Figure 2



Figure 3

Sunbelt Software to grow and to improve the quality of its own products.

The Problem with the Antivirus Industry

Sunbelt Software believes that the antivirus industry—a multibillion dollar industry—needs to change. Companies like Symantec have very significant revenues, and even smaller companies like Sophos and Kaspersky are \$200- to \$300-million companies.

Sunbelt Software believes that the problem in the industry is that antivirus has become a "must-have" tool. This means it has become, in effect, monopolized by the larger brands that increase subscription fees every year. The product quality has declined during the past several years. This technology has become buggy and bloated, resulting in a sad state of affairs. For individual PC users, addressing any problem requires disabling or uninstalling the existing antivirus solution, which can be a problem. This means the industry has not evolved to meet the needs of its customers.

The industry is also reluctant to detect "grayware," which was a problem in the days of spyware. When the antivirus companies failed to address the spyware business quickly, that left the door open for companies to create antispyware products. However, there is still reluctance in the enterprise. The antivirus industry may have caught up with spyware and adware, but a range of other types of tools is available, such as remote monitoring tools and packet analysis tools, that IT administrators should know about. The problem is not just malware—the problem is software that can also act like malware. The antivirus industry runs the gamut from bloated software to high subscription prices to offshore support.

Malware Is Exploding

There is no practical difference between "spyware" and "viruses"—everything falls into the category of "malware." Malware authors are economically motivated and their targets are organizations' employees. Malware has become very complex and includes rootkits and multiple components. Malware is polymorphic. It no longer infects a single file or macro.

Technology is getting worse in terms of its implementation. It requires an increasing amount of processor power and RAM to run. At the same time, malware is an exploding epidemic. Data from www.av-test.org

shows that last year's antivirus tests collected about six million samples. These are unique samples. That does not necessarily mean that there are six million different Trojans, because these typically include variations of the same malware. However, most antivirus companies do not reveal this fact. The 15 million or more unique samples of malware probably represent around 300,000 variants.

In Figure 4, the larger chart shows the general trend. More specific information is shown in the smaller chart. The number of malware programs is growing.

Botnets, which have been a problem historically, continue to be a problem, as shown in Figure 5. In 2008, the Stormworm and Srizbi botnets created a problem that tapered down and then increased again. The data in Figure 5 is from shadowserver.org.

The data in Figure 6 is from Team Cymru, a company that specializes in malware research. It shows the level of infection and that the underground economy is staying static.

Social Engineering

During the last several years, the way computers are getting infected has changed. Previously, exploits were very common, especially in the days of Windows XP-1. Windows XP Gold was very problematic and insecure. It was very easy to get fooled by Active X controls. Not as many exploits are "zero day." They have not been as significant and current since early to mid-2007. Patching has made it more and more difficult for exploits to be used. Instead, malware vendors have moved to highly creative social engineering methods. Web browsing is now a major issue and spam is a major infection vector.

Examples of Malware

Social engineering is responsible for over 80% of infections. For example, an e-mail message can provide a link to a video or false news story, as shown in Figure 7.

Clicking when prompted may install a Flash player, and that Flash player is a Trojan. Users are fooled by this and end up by infecting an organization's systems. Fake ads are also pushing malware, as shown in Figure 8. These ads may look legitimate but malicious content can be embedded in the Flash file.

Also, in Google groups, there are many ways of pushing malware. In Figure 9, notice 51,900 entries for



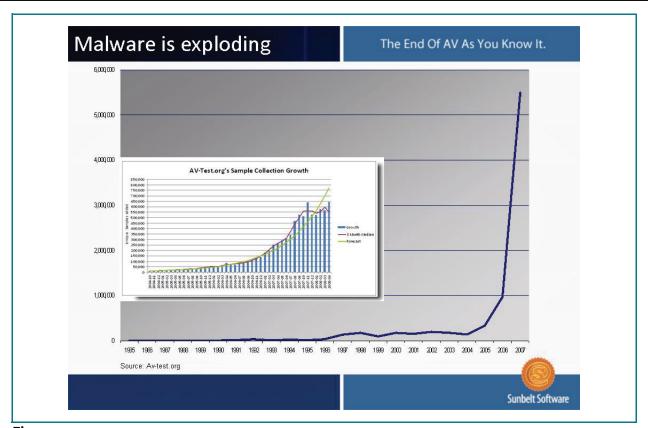


Figure 4

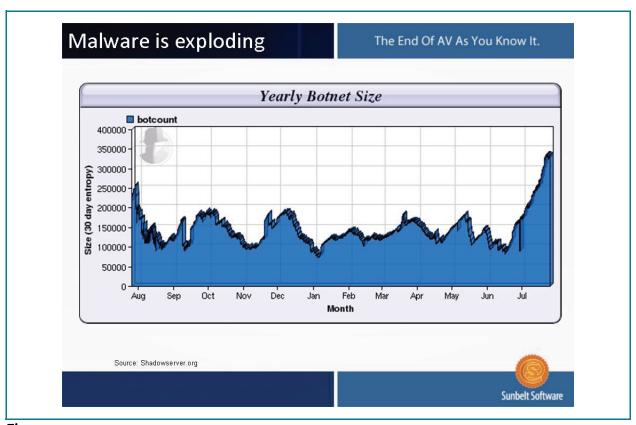


Figure 5

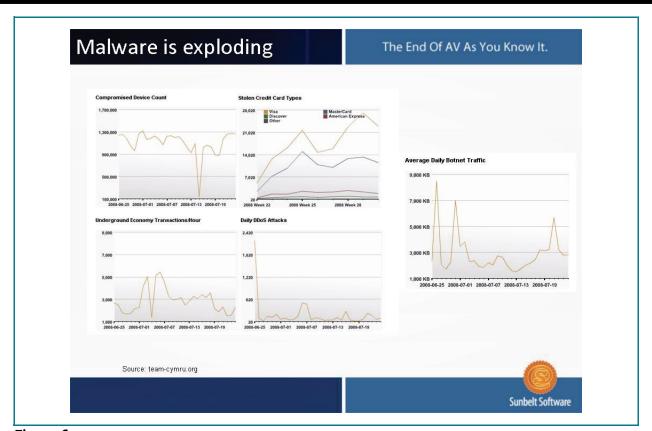


Figure 6

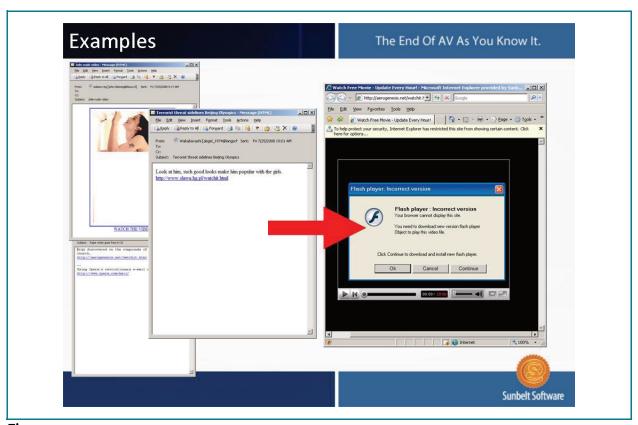


Figure 7





Figure 8

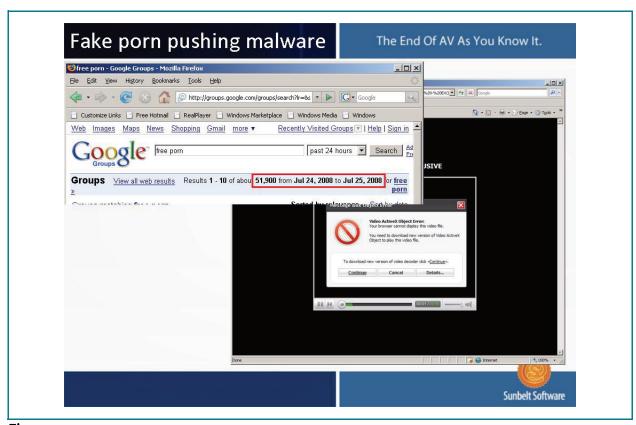


Figure 9



the key words "free porn" in a 24-hour period at the end of July. These are not all necessarily real pornography sites. Many are fake sites pushing malware, as shown in this specific example.

Endpoint Technology

Administrators are frustrated with their existing endpoint solutions, with software that is slow, full of bugs, and difficult to manage. In addition to hogging resources, this software allows threats to infiltrate an organization, with poor remediation.

Existing antivirus engines are often cobbled together from acquisitions and licensed technologies they have acquired over the years. Keep in mind that the antivirus industry began about 20 years ago and has evolved to the point where antivirus companies are making an extraordinary amount of money. These companies have a "feature race" mentality: they constantly add more features to sell more subscriptions and win reviews.

Some products can be unusable in many cases. Products have firewalls. Some have antispyware, antivirus, and often anti-rootkit and anti-keylogger functionality. Some have technology that scans every URL it encounters or prefetching technology that determines the safety of URLs. There are anti-phishing filters. All these products can be very cumbersome, which is part of the problem.

The Industry Needs to Change

The industry is in need of change that would require completely new technology and a new business practice. This requires an entirely new way of looking at the technology and the business itself. With regard to technology, administrators want products that are fast, light on resources, stable, and robust. Make the management console robust. Products need to stop malware. Administrators have a lot of frustration about the practices of the existing security business. Pricing is a major issue for many companies, especially when they see high-priced renewal notices from the larger vendors. Pricing needs to be fair.

Everyone is familiar with the problem of calling for support and then getting routed to a call center in another part of the world. This is very frustrating for everyone, yet businesses still continue to propagate the idea that support can be outsourced or sent offshore. Off-shore support is no problem as long as the caller and the support center are located in the same country. However, it becomes a serious problem when the customer is located in the United States and that customer's call is rerouted to a call center somewhere on the other side of the planet. Companies in the U.S. need fast, trustworthy, U.S.-based support. Customers need to be able to speak to a real person who understands their problems.

IVR systems also cause problems. Everyone can relate to getting lost in a phone tree, meaning they have to navigate through prompts to press number after number. A better policy is for a support center to have its employees pick up the phone. It is important not to take customers for granted. When organizations are dealing with security or a real threat that can take down a business, it is critical that support centers be available for their customers.

What Is VIPRE Enterprise?

VIPRE Enterprise is a high-performance, proactive, endpoint security solution. It replaces antivirus and antispyware products. It has a completely new agent and combines antivirus, antispyware, and anti-rootkit technologies. These technologies are seamless and tightly integrated. VIPRE Enterprise provides powerful protection against today's most relevant, highly complex threats. It provides a field-tested administrative console for central management.

The following background explains how VIPRE Enterprise was originally developed. Sunbelt Software launched a product called Counterspy in 2004, which was very successful. The company realized that at some point it would be necessary to go to integrated endpoint security. As a result, the company considered creating its own antivirus technology. One step was to hire Joe Wells, who is very well known as one of the early antivirus pioneers. But that was going to take a lot of time, so Sunbelt Software looked at licensing third-party engines. The company then put a third-party engine together and prototyped it, but decided not to send it to customers. By doing what other companies had done, Sunbelt Software had followed an ineffective path that led to a terrible solution. Instead of cobbling together too much or having one large engine, Sunbelt Software decided to start fresh. This meant creating an antivirus engine, which is a very complex process. For example, it is necessary to build an entire X86 simulation subsystem to provide the ability to analyze polymorphic viruses in real time. As a result, VIPRE has no old code; it is a

brand new product. Everything is designed to work together. VIPRE is also very complex internally. Programmatically, the product has more than 50 subsystems. Because VIPRE Enterprise has been created from scratch and is designed to work with today's operating systems, the user experience is very pleasant.

High Performance

VIPRE Enterprise is fast and memory-efficient. For example, for a typical user workstation, administrators can expect:

- · Scan speed of 9.42 MB per second
- Low 67 MB RAM used during the scan
- 32 MB used in idle with default settings
- Only 63 MB on-disk footprint

VIPRE has a low impact on system resources. It is designed for an unobtrusive user experience. Notification pop-ups and warnings are kept to a minimum. A scan always causes some slowdown, because it is necessary to access a file system. However, VIPRE's scan speeds are fast. Organizations will see a real difference in everyday operations. The product does not

impair performance on a PC: it has 1% CPU usage and low memory usage. The product is very light, friendly, and easy to work with.

The product contains a lot of behavioral-based detection technology. Although behavioral detection typically creates the problem of false alerts, the business logic keeps false alerts to a minimum. This is accomplished through whitelisting technology. When an organization deploys VIPRE Enterprise, it includes the whitelisting database, which includes the Google toolbar whitelisted, for example. It is possible to override that whitelist, but it is included to reduce the chances of a particular application triggering some of the behavioral detections in VIPRE. Incidentally, to a behavioral analysis, Google toolbar looks like malware. While it is possible to override that, no one wants to trigger a malware alert every time they search the Web!

Product Comparisons

Figure 10 compares percentage of memory usage during scans. This information is also available at vipreenterprise.com.

Figure 11 compares the percentage of CPU used during a scan.

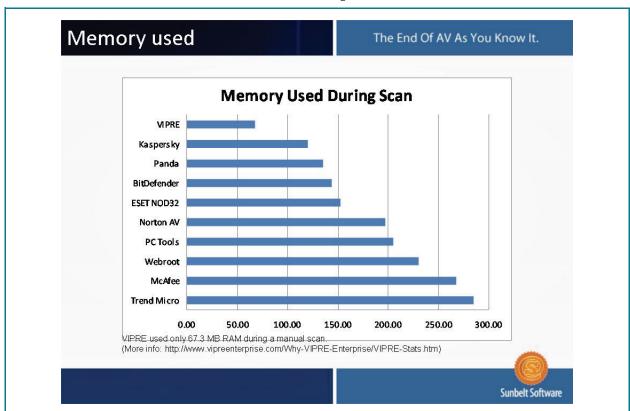


Figure 10

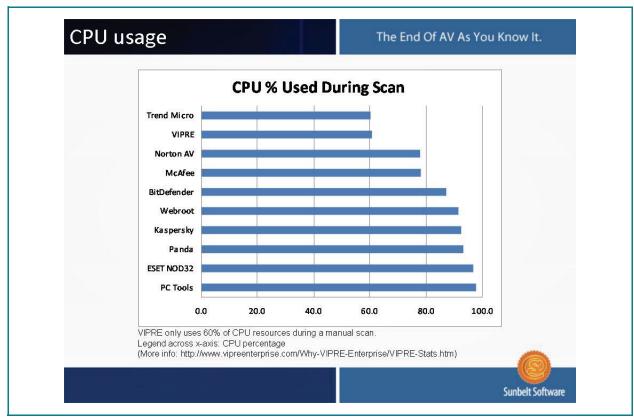


Figure 11

Figure 12 compares the scan speed during a scan, in megabytes per second.

Figure 13 compares the percentage of memory used with real-time protection during a scan.

Next Generation Technology

Sunbelt Software's approach has been to engineer from the ground up. The company has built exclusive new technology, without building on older-generation antivirus engines. The result has been to merge the detection of all types of malware into a single, efficient, and powerful system.

CounterSpy, the product before VIPRE, was Sunbelt's stand-alone antispyware solution. Virtually all of CounterSpy data is in VIPRE, but VIPRE'S new database schema—in addition to its detection of viruses—has received Westcoast Labs Checkmark certification for 100% detection of all malware in the wild list.

Best-in-Class Research

Sunbelt Software is very proud of its research. VIPRE leverages:

- Sunbelt Malware Research Labs (industry-leading researchers and senior experts in malware analysis)
- Sunbelt CWSandbox (automated malware analysis tool)
- Cooperative arrangements with other major security companies
- VirusTotal participation

In addition to its malware research plans, there is the Sunbelt CWSandbox tool, which can be seen at sunbeltsandbox.com. Organizations can simply submit malware to the sandbox and it will produce an analysis of what the malware has done. Sunbelt Software uses the sandbox tool to analyze huge amounts of malware; the sandbox analyzes 25,000 samples each day.

Sunbelt Software has collaborative arrangements with other security companies. This makes it possible to receive threats as they come in. Like all major antivirus companies, Sunbelt Software also receives samples through VirusTotal.



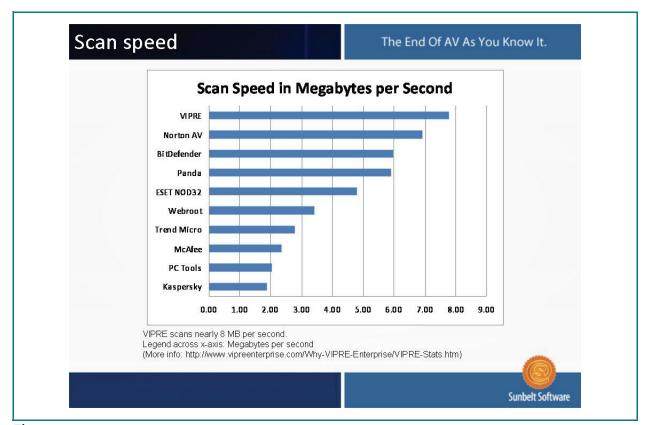


Figure 12

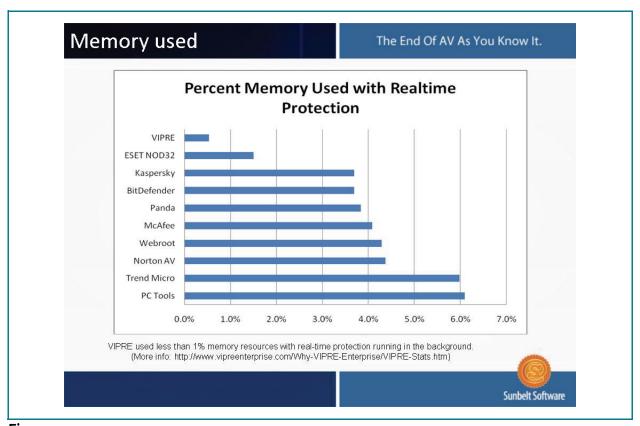


Figure 13

Sunbelt Malware Research

Sunbelt Software employs highly talented, veteran security professionals in its security organization, including several Microsoft MVPs. In 2005, Google publicly recognized Sunbelt Software for its contributions to Google's security and product safety. Sunbelt Software has exclusive access to highly vetted security communities and information, and proprietary knowledge of malware distribution sites. It was the first company to find malware, including WMF and VML exploits in the wild.

Active Protection

VIPRE has real-time protection from potentially dangerous or bad programs. This works at the operating system kernel, stopping malware before it has a chance to execute. Sunbelt Software includes dynamic, sophisticated analyses of malware files and uses three different methods of detection in Active Protection (AP):

- Signature detection (exact match)
- Heuristics (pattern match)

• Behavior detection (behavior patterns)

The behavior detection is the one part of the VIPRE active protection that an administrator can modify to suit the organization. An administrator can set different rules inside the application or accept the default behavior.

Full E-Mail Protection

VIPRE Enterprise provides comprehensive protection against viruses. It provides direct support for Outlook, Outlook Express, and Windows Mail. It supports any e-mail program that uses POP3 and SMTP, including Thunderbird, IncrediMail, and Eudora.

The VIPRE Interface

Figure 14 is a screenshot of the VIPRE console.

Figure 15 shows the agent that customers see.

Sunbelt Software's Malware Command Center is the VIPRE home screen, shown in Figure 16.

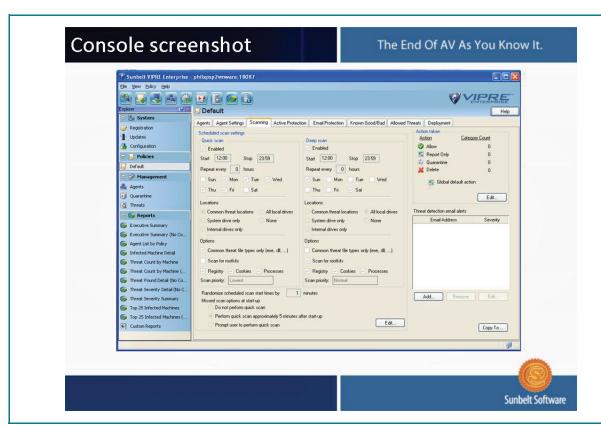


Figure 14



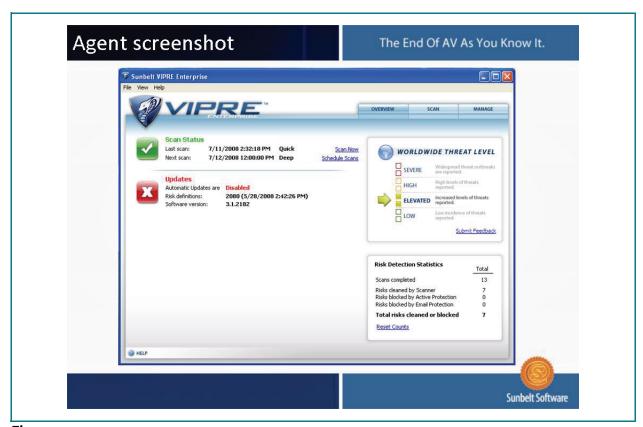


Figure 15

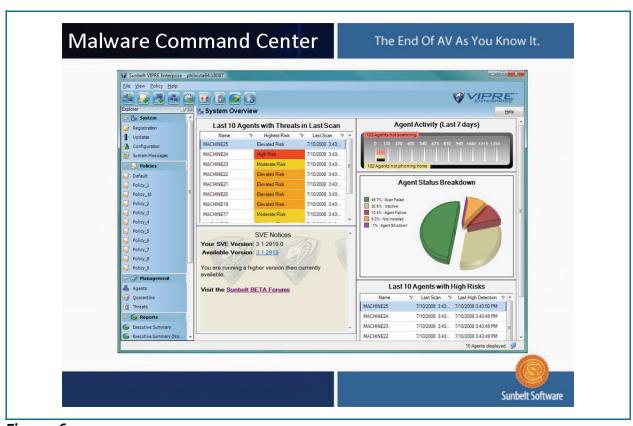


Figure 16

Common Questions

Question: Can you talk about the upgrade pricing from CounterSpy to VIPRE?

Answer: If you have CounterSpy Enterprise, it is not a problem to upgrade to VIPRE for a nominal cost. We also have an upgrade to CounterSpy Enterprise, which is CounterSpy Enterprise 3.1, which is actually a subset of VIPRE. It doesn't include some of the more advanced features of VIPRE (like the macro viruses and e-mail protection), but it has all the benefits of VIPRE'S much faster performance. That will be available as a free upgrade. However, you can upgrade to VIPRE and remove your existing antivirus solution for a very nominal fee.

Question: How does VIPRE integrate with a Microsoft Exchange server for e-mail server protection?

Answer: VIPRE is an endpoint security tool. Now, you can certainly run VIPRE on your Exchange server, but I wouldn't try to scan outbound ports in Exchange. I would leave that to a typical Exchange security product like Ninja.

Question: What about machines that are rarely on the network?

Answer: This is really a question of getting updates. In that case, in VIPRE Enterprise you simply set the laptop or remote machine to get its own updates independently. When it checks back in on the network, VIPRE will get an update on it.

Question: Do any of your products support Lotus Domino?

Answer: No. We only support Exchange with our Ninja e-mail security product. Although we have a gateway e-mail security product called Ninja Blade, that is agnostic.

Question: Can you push an agent to a remote machine that is VPN and needs different authentication?

Answer: If it is VPN, it can be seen on the network. It should not be a problem. If it does not have an admin

login, you may need to have the user's account in order to push it out and have it successfully installed.

There are many different ways to push an agent. As long as you can communicate with a remote box, you can push an agent to that box. You can use MSI, RPC, MSI transforms, and a variety of tools in VIPRE to get that agent deployed remotely.

Question: Does VIPRE require AD? How do we integrate?

Answer: First, you don't need AD to run VIPRE. Peerto-peer networks are supported, but integration is with Active Directory in terms of utilizing server accounts. You can definitely do that. If you have that admin login —which is an AD login to local account privileges—it is much easier. If you do not do it by IP range, it does not matter whether you are running AD as long as it is network; you can reach those computers.

Question: Does the console offer reporting of custom-created Crystal reports?

Answer: We do not use Crystal in our products. Actually, I think you will be pleased with the performance of the reporting that we have in the product.

Question: Can data be published on an intranet, for example, for employees to connect to?

Answer: Sure. You can export reports to HTML and you can publish them.

Question: Is full SQL required or can MSDE work?

Answer: Yes, MSDE can work. You can use SQL Express, too. You do not need a full SQL license. It is a question of how much data you are storing and obviously there are limitations.

Question: Can VIPRE be installed as a VMware infrastructure guest?

Answer: Yes. If the console can see it, you can install it and get the reports back on it.



Question: Is there support for SQL Server 2008?

Answer: Yes.

Question: Two hundred of my 250 machines are laptops that are never on the network. They access their e-mails from the Internet. I want to be able to protect these machines and get status data and reporting information into my VIPRE console. How is that supported?

Answer: If they are never on the network, they need to be able to connect to that SQL database or Access database in order to pull that information. Otherwise, basically they are standalone systems and they are going to get their updates over the Internet.

Question: Can individual computers be disabled or selectively installed? For example, can an individual computer have the antivirus or antispyware module installed?

Answer: It is policy-based, so you could have one computer for policy and you can choose which functions you want to run. You can turn off the active protection. You could turn off the antivirus updates and the antivirus part of it, if you wanted to.

Question: Does VIPRE work on an NT4 domain with no active directory?

Answer: Absolutely. Just do it by IP address. Do not do anything as far as browsing active directory. You will have no problems there.

Question: Does VIPRE work with Windows 2008 Server?

Answer: Yes, it does. It also works with Small Business Server.

Question: Are log files easily accessible?

Answer: They can be scanned by software like Enable or the files can be kept on disk in text format.

Question: Will CounterSpy Enterprise go away with VIPRE now being available?

Answer: No, we are going to keep CounterSpy Enterprise. In fact, many people still have an existing antivirus product and want to keep CounterSpy Enterprise

to give them that layered protection against the spyware.

Question: Does CounterSpy use the same database?

Answer: Yes, CounterSpy Enterprise is a subset of VIPRE.

Question: Does VIPRE detect suspicious outbound connections?

Answer: No. That is a very good question. In this version of VIPRE, we just wanted to get a pure-play antivirus and antispyware product. It does not include a firewall or some of the capabilities you might see around a firewall, such as Web filtering, host security protection, or IVS. That functionality is actually in a separate product, Sunbelt Personal Firewall, which was acquired a couple of years ago from Kerio Technologies. It is a very popular and powerful firewall. We are in the process of integrating that technology into VIPRE. The next major release of VIPRE will include full firewall capabilities. You will be able to manage that through your enterprise console.

Question: Can you set up VIPRE to send an executive report at the first of every month or quarter?

Answer: Yes, you can certainly schedule that.

Question: How hard is it to migrate from CounterSpy Enterprise to VIPRE?

Answer: It is extremely easy. VIPRE Enterprise is a direct upgrade from CounterSpy 3.O. The install pretty much does everything for you. If you have any doubts or reservations, schedule a call and one of our technicians will lead you through it.

Question: Can VIPRE be installed to a workstation from a CD? For example, SynchroNet?

Answer: Yes, you can easily create an installer for the console. You can create a self-extracting executable. It can be done on a thumb drive or a CD. It can be emailed.

Question: What about pricing?

Answer: Pricing is per workstation, per server, per client. So, if you have 3,000 workstations and 200 servers, you would get a quote for 3,200. You would not get 3,000 workstations at one price and 200

servers at a different price. Bundling options are available if you want to bundle in your e-mail security with the client security. So, for example, if you just want one price for e-mail security and client security, we would bundle in Ninja, which is our e-mail security product. It is a very popular and successful product.

Question: Will file type exclusions be implemented in VIPRE? I do not want to use a scan.txt file.

Answer: There are quite a few, including the Google toolbar. We do have a large whitelist. For example, regarding AutoHotkey, VIPRE was finding the SCR.bin as a bad file. When I did the search, I found out that all the antiviruses were finding it as a bad file. It took one e-mail. The very next version of VIPRE allowed that to be a whitelisted item, so we worked very quickly. We do add things in as we are told about them—if they should be allowed, they will be allowed.

Question: Is it possible to use wild cards, for example, all .txt or .pdf?

Answer: Yes, you can basically do any of that you would like.

Question: Does Sunbelt Software have a partner program?

Answer: Yes.

Question: Is there special pricing for SPF (Sender Policy Framework) users?

Answer: Not specifically, but I think you will find that our sales people will always try to work out a price that is competitive. If not, contact CEO Alex Eckelberry directly.

Question: Does VIPRE Enterprise allow for disabling a system from a network that is infected beyond repair? That is, cut the machine off from the network?

Answer: You cannot completely cut it off. If there is a major problem, the recommendation is to pull the

network cord. You do not want to let the virus spread out. Take it off, install, and make sure that VIPRE is installed. If you need to reinstall it, do it through the thumb drive or the CD method we talked about, run that until you have removed all the viruses, and then plug it back in.

Question: Do you support file type and folder exclusions?

Answer: We can exclude anything you want to exclude. That is no problem. We can exclude entire folders and subfolders, anything underneath that folder, and individual files.

Question: Does VIPRE support handheld mobile devices?

Answer: No, not currently, but we are certainly looking at that. We do not have an overwhelming demand right now, but that is changing.

Question: Do you give the users the ability to see an HTML report of a scan on their workstation?

Answer: You can print the scan from the Agent Details tab. Currently, reporting does not support peragent reports, but this will be in the next release of the Enterprise version.

Question: How will this work in a terminal server environment?

Answer: We support both terminal services and Citrix—just run the agent on the servers in a session. You will need a VIPRE agent on the workstation, so it is protected locally. You can run those on servers.

Question: How can we contact you?

Answer: I am alex@sunbeltsoftware.com. I am always available for any customers whether they need help or assistance. Of course, you can contact our Sales department (sales@subeltsoftware.com) or our Support department (support@sunbeltsoftware.com).



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