

Upgrading to Real-Time Web Security

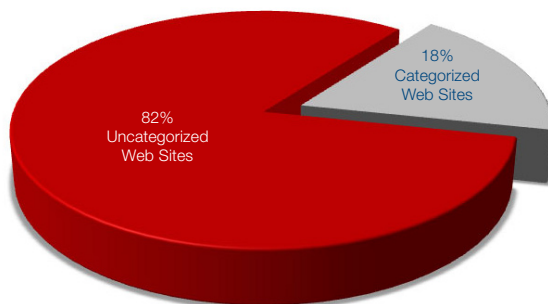
The most common gateway Web security product today is URL filtering, deployed in up to 95% of enterprise networks. URL filtering products were originally designed to increase employee productivity and limit legal liabilities by enforcing acceptable use policies for the Web. As Web malware such as spyware grew to become a major enterprise security issue, URL filtering products were repositioned from Web productivity to Web security. Products often claim comprehensive protection from Web malware through their sizable URL databases and regular updates from their Web mining and analysis.

How effective is URL filtering as a Web security solution?

The Internet is Big

URL filtering is only as effective as its database of categorized Web sites. But even the largest URL database only categorizes 18% of all Web sites in existence. This means that over 80% of the Web is uncategorized by URL filters.

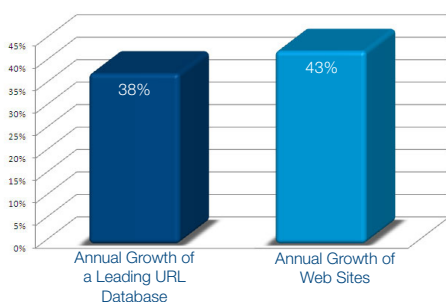
82% of Web Sites are Uncategorized



Sources: Netcraft and a leading URL filtering vendor, June 2007.

URL filtering cannot protect against what it does not know, which is most of the Web. This security gap is unlikely to change in the foreseeable future, as the growth rate of leading URL databases continues to lag the growth rate of the Web.

URL Database Growth Lags Web Site Growth



Sources: Netcraft and a leading URL filtering vendor, June 2007 and June 2006.

In addition, while some Web sites may be categorized, all Web pages within a given Web site may not be individually analyzed for malware. This kind of URL analysis is prohibitively labor-intensive. There are over 30 billion Web pages that would need to be crawled several times each day to ensure that a given URL database is up-to-date. This translates into the impossible task of analyzing at least 350,000 Web pages per second.

Why Upgrade from URL Filtering?

- Over 80% of existing Web sites are uncategorized by URL databases
- Crawling the Internet's 30+ billion Web pages several times each day is impossible
- URL filtering is a static and reactive Web security technology
- Even traditional signature-based anti-malware scanning at the Web gateway is more effective at stopping Web malware than URL filtering
- Real-time Web malware scanning for known and unknown threats plugs a large security gap in URL filtering

"URL filtering suffers a fundamental flaw to be an effective security filter: It does not monitor threats in real time."

GARTNER*

"We wanted a solution that would not only guard against Web-borne threats, but also allow our members free rein on where they surf. ScanSafe came on-board and within two days we had a solution that is simple to manage and maintain."

THE ROYAL SOCIETY OF MEDICINE

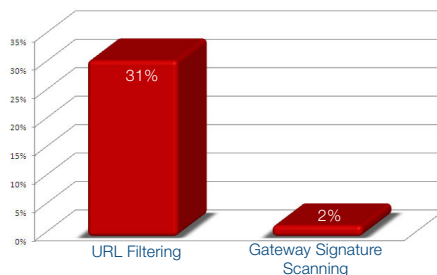
A Static and Reactive Approach

Besides the large size of the Internet, another challenge to URL filtering is that it is a static, reactive security approach. According to Gartner, "URL filtering suffers a fundamental flaw to be an effective security filter: It does not monitor threats in real time."* This approach is reactionary,

relying on URL lists that include Web sites already known to host malware. Web malware therefore can evade URL databases by appearing on short-lived Web pages which are never detected or on the Web pages of trusted Web sites.

As a result of these Web security challenges, URL filtering provides only partial protection against sophisticated Web malware. A third party test using 200 known spyware samples revealed that an enterprise URL filtering product significantly underperformed a signature-based gateway anti-malware scanner, missing 31% of the keystroke loggers, browser hijackers, adware, rootkits, dialers, dataminers, and Trojan horses used in the test.

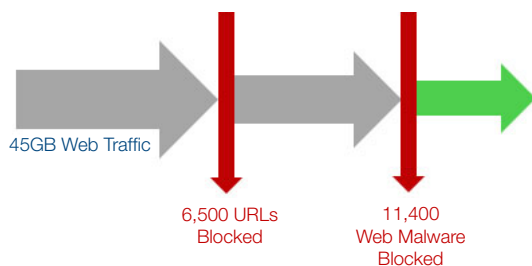
Test Results: Leakage of Known Spyware



Source: Barry Nance, Network Testing Labs Review, November 2006. This test sample was limited to certain known spyware. It did not include known viruses and worms nor did it include new, unknown malware.

This leakage result is confirmed by enterprise customers that use both URL filtering and Web malware scanning as part of their layered defenses. Each day, they typically block several thousand Web sites. It would seem that most malware programs should be eliminated by blocking access to so many inappropriate and malicious Web sites. But the reality is that Web malware scanning, which scans the contents of each requested, uncategorized Web page in real-time, would detect and block several thousand malware.

URL Filtering and Real-Time Web Malware Scanning



Source: Average daily data from a global investment bank, May 2007.

The Recommended Solution

According to Gartner, organizations should "Use URL filtering renewals and budget money to upgrade to a secure Web gateway solution that is capable of detecting and filtering malicious Web traffic."* A secure Web gateway solution should go beyond URL filtering to include real-

time Web malware scanning that uses both signatures and heuristics. The combination of these technologies delivered as a service provides the strongest security against today's growing Web malware threat.

About ScanSafe

ScanSafe is the pioneer and leading global provider of Web Security-as-a-Service, scanning billions of Web requests in real-time, stopping millions of malware attacks, and protecting thousands of organizations around the world.

The company's award-winning Web security solution – Web malware scanning, URL filtering, and IM control, powered by Outbreak Intelligence® – proactively protects enterprise and small-medium organizations against Web threats; improves productivity and compliance; saves on traditional costs associated with hardware, management, and downtime; and frees IT resources to focus on core organizational missions. ScanSafe is based in Silicon Valley and London, and operates globally.

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*Source: Gartner, "The Growing Web Threat", Peter Firstbrook, 13 April 2007.