Results of Anti-Spam Solution Testing

Opus One
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Opus One tested six anti-spam solutions as well as reputation-based anti-spam services. The goal of the test was to evaluate the effectiveness of the solutions when acting as a spam filter, as well as to determine the degree to which spam can be stopped before it reaches the gateway and begins to impact infrastructure and related costs. All products were tested using the same real-world production mail stream over a 10-day period during February 2007. All products were running simultaneously and each product saw the same messages at the same time to provide a true apples-to-apples comparison between different solutions.

Result Summary: Anti-Spam Solutions

The table below shows the anti-spam catch rate and the false positive rate (positive predictive value) for each solution, including the use of reputation-based services if provided as part of the solution by the vendor. Because of the test methodology used, actual results for each product would likely be slightly higher than reported here. For example, some characteristics of the SMTP dialog that can be used to help identify spammers are hidden by the test methodology; these would be visible to the products tested if they were used in a typical deployment. However, the relative effectiveness of each product should be constant in all environments.

Comparison of Anti-Spam Solutions			
Anti-Spam Vendor	**Reputation Service**	**Spam Catch Rate**	**False Positive Rate**
Trend Micro	Email Reputation	97.36%	0.16%
Symantec (Brightmail)[1]	SenderBase	96.60%	0.20%
IronPort	SenderBase	95.03%	0.14%
Microsoft (Forefront)	No services with solution	80.15%	0.42%
Secure Computing	TrustedSource	78.35%	0.03%
Barracuda	No services with solution	74.10%	0.85%

In this test, the Trend Micro anti-spam solution has a very high spam catch rate and a competitive false positive rate when configured with vendor-recommended best practices.

[1] Symantec Brightmail is offered on multiple platforms, including as a standalone appliance and integrated with other MTA platforms. In this test, Brightmail was tested on an IronPort appliance with IronPort's reputation service, SenderBase. The effectiveness of Symantec Brightmail alone without IronPort's reputation services is a 95.33% catch rate and .18% false positive rate.

Result Summary: Standalone Reputation Services

The table below shows the spam catch rate and false positives for several different reputation-based services. Reputation services may be used by anti-spam solutions for different functions, including outright refusal of messages or simply as one component in a more complex spam scoring algorithm. This test shows the percentage of spam that was positively identified by the reputation-based service by itself, without considering any other characteristics or filtering. All of these reputation-based services act on IP information only; they do not include characteristics such as the purported sender of a message or any message content.

Comparison of Anti-Spam Reputation Services		
Reputation Service[2]	Percentage of Spam Blocked	False Positive Rate
Trend Micro Email Reputation Services Advanced	72.70%	0.08%
Trend Micro Email Reputation Services Standard	47.40%	0.00%
Spamhause SBL-XBL	51.90%	0.03%
IronPort SenderBase	51.80%	0.02%
Spamcop BL	41.20%	0.00%
NJABJL DNSBL	5.70%	0.01%

In this test, the Trend Micro Email Reputation Services Advanced has the highest catch rate of the tested reputation services. For more conservative organizations concerned about false positive rates, Trend Micro Email Reputation Services Standard provided a competitive catch rate with zero false positives.

Methodology Notes

In this test, six different anti-spam products were evaluated. Each product was running the latest, current version of software (or firmware in the case of appliances) as recommended by the vendor. In cases where the recommended anti-spam configuration was not clear, technical support from the vendor was asked to validate and approve the configurations.

To simplify comparisons across all products in this test, only solution verdicts of "definitely spam" were considered to be spam. Several anti-spam products have a "suspected spam" verdict and these verdicts were considered to be the same as "not spam" verdicts. The sample size for this test was 10,417 messages.

A full discussion of the methodology used for this test, developed by Network World and used in their public anti-spam testing, is available at http://www.opus1.com/www/whitepapers/spamtestmethodology.pdf.

Portions of this test were funded by Trend Micro, Inc. It is the tester's belief that these results represent an unbiased and objective view of the capabilities of the products discussed.

About Opus One

Opus One is an IT consulting company and test lab located in Tucson, Arizona. With 24 years of experience testing products and hundreds of products publicly tested, Opus One's results have become known in the industry for their impartiality and thoroughness. More information on Opus One is available at http://www.opus1.com/.

[2] The effectiveness of Secure Computing's TrustedSource reputation services cannot be separated from the overall effectiveness of Secure Computing's anti-spam solution using openly available tools. Therefore, TrustedSource was not listed in the comparison of anti-spam reputation services.