Written Presentation of the Technology for Research Project of the Requirement for the Course of Computer Networks and Computer Security

TITLE: Spam Prevention Service
SUBMITTED BY: Katherine Zhang (9813727)
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Introduction

In this technology era, communication through e-mail is increasing, no matter how the style of it varies, web based, ftp, etc., it plays a strong role in network communication. Companies depend more and more on the internet to conduct business and so do individuals. At the same time, an increasing number of spam gets into the way to transferring all kinds of bulk messages such as sexually explicit, hate mail, get-rich-quick schemes, bulk newsletters and commercial offerings. Therefore, the information security of it becomes a major concern since unwanted e-mails may contain harmful material and virus, which will affect the regular routine. The current technology of blocking mails is commonly blocking certain IP addresses. It is not only limited but also hard to manage if there are hundreds of them.

The Technology

"Spam has a debilitating effect on email systems and is now far more than a nuisance for end users. IT groups must aggressively block spam with the same diligence they apply to virus blocking. We believe tools which combine spam and virus blocking represent an excellent approach to improving overall email hygiene. - Matt Cain, Senior Research Analyst, META Group” [1]

SPS, known as Spam Prevention Service, is network-level software technology designed to fight junk e-mail. The one would be focused on is Trend Micro Spam Prevention Service, which is a high-performance, anti-spam software application that blocks spam at the internet gateway. “This gateway-based spam protection employs dynamic, flexible heuristic technology, which is to collect a set of characteristics occurred in a particular message to decide if it is spam.” [2] Instead of comparing incoming mails with a list of known spam, it continuously evaluate messages in real-time. The goal of this software is to block spam before they reach company’s network. As long as the spam prevention service enters the system, its heuristic engine goes through the message, analyzes it and gives the result in score, which would appear in the header. Then Trend Micro ActiveUpdate delivers new heuristic rule weighing files that incorporate timely and relevant rules as they are needed.
Why Does It Work?

The key features of Trend Micro Spam Prevention Service include
Seamless Integration with Anti-virus and Content Security Offerings
  It is not only can be a stand alone solution but also can work with other anti-virus
  and content security software such as InterScan Messaging Security Suite,
  ScanMail for Microsoft exchange, or ScanMail for Lotus Notes for protection.
High Performance and Scalability
  As fast as 40 to 50 messages per second can be processed and analyzed to fit for
  demanding tasks.
Advanced Filtering, Analysis, and Updating Capabilities
  “Trend Micro Spam Prevention Service leverages findings from analysis of fresh,
  high-volume e-mail samples to adjust spam catching rates in response to new
  spamming techniques. Trend Micro ActiveUpdate delivers new heuristic rule
  weighting files that incorporate timely and relevant updates as needed.”[3]
Ease of Administration and Configuration
  “Trend Micro spam Prevention Service offers minimal configuration and rapid
  time-to-deployment without network reconfiguration. Flexible spam handling
  options enable administrators to “tag and deliver” suspected spam or send it to a
  pre-defined administrator mailbox. Multiple spam categorization options and
  configurations provide ease of administration and configuration.”[3]
Comprehensive Reporting and Auditing
  “Trend Micro Spam Prevention Service delivers detailed batch reports, which
  provide relevant spam statistics such as overall spam volume, spam volume by
  category, spam volume by recipient, and spam volume by sending IP address.
  Comprehensive reporting and auditing capabilities provide administrators a
  yardstick for ongoing refinement of configuration thresholds.”[3]

Conclusion

This software designed to work on both Sun Solaris and Microsoft Windows. The
System requirement is relatively high, which also guaranteed the performance of the
application.

It has been a long time that bulk messages cause people's frustration. Low rate of
capturing junk mails and possibility of blocking useful messages have driven some of us
crazy. With this spam prevention service, 90 to 95 percent or even more of spam can be
detected. It also gives customers choices of blocking sensitivity for customizing different
needs in various categories. Under the key benefits of this Trend Micro Spam Prevention
Service, this frustration can be eliminated and thus more productivity time can be saved
for employees and so is the saving in cost to manage messages.[4]
References
