



WHITE PAPER

Glossary of Spam Terms

THE JARGON OF THE SPAM INDUSTRY

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# Acceptable Use Policy (AUP)

A policy statement, made by an ISP, whereby the company outlines its rules and guidelines for use of the account. It also specifies unacceptable uses for the account.

#### **Alias**

An alternative name for a mailbox. For example, john.doe@abc.com could create the alias johnny@abc.com.

# **Autoresponder**<sub>r</sub>

A program or a script that automatically sends a response when it receives an e-mail message. The most common uses of autoresponders are for subscribe and unsubscribe confirmations, welcome messages and customer-support questions.



# Ban on Spam

Nickname given to the anti-spam legislation passed by the European Commission called Privacy and Electronic Communications Directive. More information can be found at http://ec.europa.eu/information\_society/policy/ecomm/todays\_framework/privacy\_protection/spam/index\_en.htm

# Bayesian Filtering

Based on Thomas Bayes' theorem, Bayesian filtering calculates the probability of a message being spam, based both on its content and on past results, to distinguish legitimate e-mails from spam. The theorem states that "the probability that an e-mail is spam, given that it has certain words in it, is equal to the probability of finding those certain words in spam e-mail, times the probability that any e-mail is spam, divided by the probability of finding those words in any e-mail".



#### **CAN-SPAM**

Acronym for Controlling the Assault of Non-Solicited Pornography and Marketing Act of 2003. Anti-spam legislation passed by the United States of America.

#### Catch Rate

The catch-rate measures the efficiency of a Spam solution. The calculation used is: (# of Spam messages caught total # of Spam messages) x 100.

#### **CAUCE**

The Coalition Against Unsolicited Commercial E-Mail. A non-profit organization that attempts to reduce spam by creating and/or amending spam legislation worldwide.

# **Challenge Response Authentication**

An authentication technique whereby an unrecognized sender is prompted (the challenge) to provide some

private information (the response) in order for his/her e-mail to be delivered to the recipient.

#### **Checksum Database**

Early spam blocking method that assigned a unique identifier to each spam message found and then built a database of these identifiers so that incoming e-mail could be compared with the contents of the database.

# Click-through

A web page that exists merely to redirect users to another site. Spammers typically create click-through pages on throw-away accounts and advertise the click-through page. The Click-through Rate (CTR) is used to calculate the how often the web page is visited.

# **Content Filtering**

Spam scanning plain text for key phrases and the percentage of HTML, images and other indications that the message is spam.

#### Crawler

See Bot



# **Denial of Service (DoS)**

An attempt to make a computer resource unavailable to its intended users. Considered an Internet crime.

# **Dictionary Attack**

A system of combining letters and numbers in an attempt to find active e-mail addresses. Any addresses to which messages are delivered, as opposed to being bounced back, are legitimate.

#### **DNSBL**

DNS Black List or DNS Blackhole List. An online list of e-mail spam sites that may be used for e-mail spam filtering, either on a personal basis or on an entire domain. Sites are added to DNSBLs when spam becomes a problem and are removed once the problem is resolved. Typically, there are two types of DNSBLs: Exploit-Targeting blacklists (i.e.: list of open relays, open proxies, etc.) and Spammer-Targeting blacklists (Spamhaus SBL and Spamcop are typical spammer-targeting lists).



#### **EC** Directive

Nickname given to the spam legislation passed by the United Kingdom, called The Privacy and Electronic Communications Regulation 2003.community.

#### E-mail Bomb

Act of sending copious amounts of e-mail in an attempt to overflow a mailbox or crash the mail server. It can also be used to describe an e-mail message with an attached ZIP file that contains a ZIP, which contains another ZIP file and so on. An e-mail bomb can block scanning engines and cause a DoS, for example.

# **Exploits Block List (XBL) (from Spamhaus.org)**

A real-time DNS-based database of illegal 3rd party exploits IP addresses, including open proxies, spam messages with built-in worms/viruses and other types of Trojan-horse exploits utilized by spammers.



# **False Negative**

The result of an anti-spam engine failing to identify a spam message and letting it through to a user's inbox.

# **False Positive**

Legitimate mail is incorrectly recognized by a spam solution and not delivered to a mail inbox. Filter An e-mail security solution feature that scans e-mail messages based on the analysis of their structure and/or contents.

# **Filter Scripting**

An anti-spam filtering method that uses a programming language (such as Vircom's Sieve) to write generic and/or specific filters to block spam.

# **Fingerprinting**

[E-mail] Technology that identifies similar, but not identical, messages as part of the same, alreadyidentified spam broadcast. [File] Smart file type detection. A technology that scans e-mail attachments in search of forbidden file formats (e.g. \*.exe) in order to prevent them from concealed with modified file extensions.

#### Flood

Large quantities of email sent to an Internet / e-mail server in a short amount of time.



#### Hacker

A malicious or criminal programmer who infiltrates computer systems or creates e-mail-borne malware such as viruses.

#### Header

The top portion of an e-mail that contains the sender's name, date the message was sent, recipients' names, title, routing details, message priority, and other structural information.

# **Heuristic Filtering**

A spam filtering technique, based on mathematical models and rules, which determines the likelihood of an e-mail message to be spam or legitimate.

# Honeypot

A program disguised as a legitimate resource (open proxy or mail relay) to gather information about spammers and their activities.

# **Horizontal Spam**

Spam messages sent to the greatest number of recipients regardless of their relevance to the recipient.



# **Internet Death Penalty**

Extreme situation whereby all traffic from a domain that hosts spammers is blocked at the packet level, essentially shutting the domain off from the rest of the Internet.

# **Internet Service Provider (ISP)**

A company that provides access to the Internet to consumers.



#### Joe Job

A spam attack that uses a spoofed or forged sender address, often as an act of revenge. Joe-job attacks result in non-delivery reports, out-of-office notices, challenge-responses, auto-responders, etc. which are generated with the forged sender address. The barrage of spam can often sully the sender's reputation and incur the wrath of the unfortunate recipients.

K

# **Keyword Filtering**

Filtering spam based upon keywords in the header or body of the message.

# **Landing Page**

A web page that upon which a person lands after clicking on a link or adverstisement, often part of a spam message.

#### **LDAP**

Lightweight Directory Access Protocol. Standard protocol for the exchange of directory entries between servers.

# Listwashing

The process of removing individual e-mail addresses from an address list, which usually contain addresses of people who have not chosen to subscribe to the list.



# Machine-learning

A sub-field artificial intelligence. Machine learning automatically extracts information from data and, in the context of spam filtering, creates and updates heuristic checklists.

# **Mailing List**

A type of Internet forum. A set of e-mail addresses used for widespread distribution of information or information sharing. Individuals must subscribe to the mailing list to participate.

#### **Mainsleaze**

A term used to describe a credible or legitimate company that spams or uses third parties to spam on its behalf.

# **Malware**

A combination of malicious and software. It is software or scripts designed to harm computers, networks and systems. Examples are viruses, worms, trojans and spyware.

# Mung

To obscure or modify an e-mail address so that automated e-mail address harvesters cannot obtain valid e-mail addresses. The address is munged from a computer's perspective but not a human's.

# N

# Nigerian 419 Scam

An advance fee fraud. Solicits and attempts to persuade people to advance money to the sender while promising a huge gain. The sender is usually in dire straits and the message is often a plea for help. Recipients are asked to provide personal information such as their bank account numbers.

#### Nuke

Refers to an ISP canceling a user's account. Also a DoS.



#### **Open Proxy**

A proxy that allows computers to use it to make connections to services on their behalf, whether they would normally have permission to access the service or not.

# **Open Relay**

An SMTP (mail) server configured in such a way that it allows anyone on the Internet to relay (i.e. send) mail through it. Often open to attack and hijacked to send large amounts of spam.

# Opt-in

The option to receive bulk e-mail (like subscribe). This is typically a newsletter or advertising from companies. Failure to obtain permission to send the bulk messages is important because, without it, the message is considered spam.

# **Opt-out**

The option to discontinue receiving bulk e-mail (like unsubscribe). There is a possible risk that the opt-out feature may actually be confirming the e-mail address instead of opting out of the bulk e-mail.



# **Pagejacking**

A form of spamming a search engine's index (spamdexing) whereby spammers make a copy of a website and use it to redirect surfers to malicious websites.

# **Phishing**

A scam that uses spam to deceive people into disclosing their credit card numbers, bank account information, passwords and other sensitive information. Phishers often masquerade as trustworthy or wellknown businesses.

#### POP3

Post Office Protocol version 3. A standard mail protocol for authenticating and retrieving mail over the Internet. Unlike IMAP (where mail resides on the server), POP3 moves messages from the server to the users' computers

#### **Pump and Dump**

A spammers' twist on the stock scam. Involves the touting of a company's stock through false, and often, misleading statements to the marketplace. After pumping the stocks' value, spammers make huge profits by selling (dumping) their shares at inflated prices



#### Quarantine

Mail that has been blocked because of suspicious content, viruses or forbidden attachments, usually sent to a quarantine folder.



#### **RBLs**

See DNSBL.

#### **Reverse DNS**

A process to determine the hostname associated with a given IP address. This feature ensures that users are from legitimate domains.

#### **ROKSO**

Register of Known Spam Operations. A database, maintained by Spamhaus.org, of professional spam operations that have been terminated by a minimum of 3 Internet Service Providers for spam offenses<sup>2</sup>.



#### SBI

Spamhaus Block List. A real-time database of IP addresses of spam-sources, including known spammers, spam gangs, spam operations and spam support services.<sup>3</sup>

#### Scam

A fraudulent or deceptive act.

# Segmentation

Dividing an e-mail list based upon interest categories, purchasing behavior, demographics and more for the purpose of targeting specific e-mail campaigns to an audience most likely to respond to the messaging or offer.

#### **SMTP**

Simple Mail Transport Protocol. The protocol used to deliver mail to its destination.

#### **Spam**

Unsolicited, bulk e-mail. Also known as junk mail.

# **Spambot**

A bot designed to collect e-mail addresses from the Internet to be used to build mailing lists for sending spam.

# **Spamhaus**

An Internet Service Provider or other organization that provides service to spammers.

# **Spamming**

The act of sending spam.

#### **Spamware**

Any program used by spammers to facilitate their spamming activities. Examples include generating email address lists and make use of open relays.

#### **SPEWS**

Spam Prevention Early Warning System. A list of known spam sources and spam-friendly hosts. For more information, go to http://www.spews.org/.

# Spider

See Bot.

# Spim

A type of spam which targets instant messaging.

# Spoof

In the context of network security, a spoofing attack is a situation in which a person or program successfully masquerades as another by falsifying data. With phishing, a legitimate Web page (such as a bank's) is reproduced in look and feel by the phisher. The intent is to trick users into thinking that they are connected to a trusted site. The phisher then harvests personal information.

# **Spyware**

Software that is secretly, and without consent, installed on a computer to intercept personal information or to take control of the computer.

Т

# **Training Set**

See Machine-Learning.

# **Trojan Horse**

Malicious software that is disguised as being something benign, such as a game.

#### **Trusted Senders List**

Also known as whitelist. Anti-spam feature that lets users designate a source or IP address from which all e-mail will be accepted without any scanning.



#### UCE

Unsolicited commercial e-mail. Also known as spam.



#### Whack-A-Mole

Terminating a spammer's throw-away account.

#### Worm

E-mail borne computer program that replicates itself and that often, but not always, contains some

functionality that will interfere with the normal use of a computer or a program.



# **Vertical Spam**

A large number of spam messages sent to few recipients.



#### Zombie

A computer compromised and is being used for malicious purposes. Zombies are often used to send spam.