



MessageLabs®

Be certain

The Spectre of Spam: Free Your Business and Boost Your Bottom Line

A MessageLabs White Paper for Businesses

Contents

Spam's Cost – Time and Money	3
Spam Today – Current Trends and Threats	4
The Burden to Your Business	6
Junk the Junk Mail – How to Survive Spam	7
Cutting Costs, Increasing Efficiency	8

Spam erodes business efficiency and eats away at profit.

Spam's Cost – Time and Money

Electronic junk mail. Spam. It's become a familiar feature of the email landscape. So it's easy to forget the damage it does to any business – large or small. It's not simply a nuisance. The stark reality is that defending against and dealing with spam represents an unwelcome cost to your organisation. Spam erodes business efficiency. It pushes down productivity. It eats away at profit.

Think of the time your staff spends, in the course of a year, identifying and deleting unsolicited emails. Think how those messages weigh down and clog up your network. Consider the endless expense and effort involved in protecting your network's integrity against the relentless tide of garbage.

But that's not all. The landscape is changing. Threats are converging. Spam is no longer just an advertising medium. As scammers grow ever more sophisticated, spam is increasingly being used as a delivery mechanism for malicious software, or malware, whose ultimate aim is to disrupt business communications or gain access to confidential commercial information.

This MessageLabs White Paper summarises the threat spam poses to small and medium businesses right now. It highlights disturbing trends you should be aware of – and need to take seriously. It also underlines the advantages of opting for an outsourced solution to your messaging security needs – advantages that translate directly into bottom-line benefits for your business.

The information presented in this document is based on our hands-on experience of providing cost-effective messaging security for over 15,000 clients worldwide, and the 1.5 billion emails processed each week on their behalf.

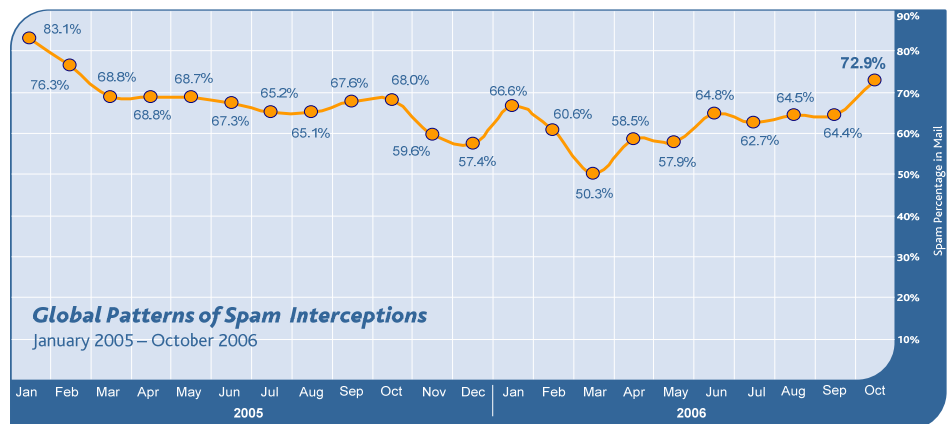
Spam dominates the threat landscape.

Spam Today – Current Trends and Threats

Make no mistake. Spam is still the undisputed number-one messaging/web-related threat to your business. Statistically, it dominates the threat landscape – and it's growing:

- The most recent figures available at the time of writing (ie for February 2007) showed spam accounting for 81.3% of all emails processed by MessageLabs
- This represented an increase of 8.2% compared with the previous month – continuing a trend of unprecedented growth in spam
- This trend began in October 2006 where, in terms of volume, spam grew by around 70%, pushing up overall email volumes by 33% (see graph below)
- Most of this increase in global spam was caused by an explosion in “botnet” activity (see page 5)

Compare the 81.3% headline figure for spam with the corresponding figures for viruses (around 0.16% of all emails) and phishing¹ (around 0.31% of all emails) – and you soon get a sense of the scale of the spam problem confronting your business.



But even these striking statistics don't convey the full picture. In 2005, MessageLabs reinforced its network perimeter defenses with its Traffic Management system, deterring spam emails by slowing them down and encouraging them to look for softer targets. This means the amount of spam showing up in our monthly figures is significantly lower than the total amount which we receive.

¹ The sending out of counterfeit but legitimate-looking messages designed to gather personal/financial information from recipients (based on SearchSecurity.com definition)

Link spam works very simply – and confidential data is at risk.

Alarming, when this is taken into account, the “true” spam figure for October 2007 was probably just under 89% – surpassing the all-time peak reached by spam in summer 2004 (see the bottom of this page).

October’s results represented a substantial surge compared with previous months. Although spam activity often ramps up towards Christmas, the increase may actually reflect the start of a more worrying trend – with spammers developing and utilising an arsenal of sophisticated and aggressive new weapons to achieve their goals.

For example, a small business needs to be aware that 2006 saw a particularly big rise in the number of “link spam” emails intercepted by MessageLabs. Link spam is a very effective way of delivering spyware or other malware to your computer. A comparatively new breed of software, spyware is designed to extract information from your company without you knowing – information that can then be used to closely target virus or phishing attacks.

Link spam works very simply. You receive an email that looks harmless – it just contains a hyperlink to a website. But what you don’t realize is that the website contains spyware (or in some instances, a virus) which automatically downloads when you click on the link. Your machine is infected – and confidential data is suddenly at risk.

From a small business perspective, it’s vital to take all these developments on board. Though it may not grab as many headlines as it used to, there’s a colossal amount of spam out there. No sector of the economy – and no part of the world – is immune. Inevitably, the precise picture, in terms of geographical and industry hotspots, shifts from month to month. But the net result is constant – spam costs your organisation.

A Brief History of Spam

Spam first appeared back in the 1990s. This quirky descriptor for unsolicited bulk email is generally believed to have been inspired by the classic Monty Python sketch where every item on a menu included spam – whether you wanted it or not. Whatever the truth about the term’s origin, the problem quickly escalated.

A key milestone in spam’s history arrived in 2003 with the emergence of Sobig, the first virus exclusively related to spam. Since then, most viruses have been spam-related – and their main aim has been to build “botnets”.

A botnet (or “robot network”) comprises a number of Internet-linked computers set up, without their users’ knowledge, to forward spam and other unwanted traffic to other machines. Usually, they consist of home-based computers. Home users tend to take fewer security precautions than corporate users and so represent easier prey for the botnet builders.

Botnets played a fundamental role in driving global spam levels to their all-time high in summer 2004, when spam accounted for 90% of email traffic – and siren voices widely predicted the death of email. And while spam/botnet levels did then reduce until recently, present levels appear to be approaching that mind-boggling figure once again.

Today, spam is more sophisticated than ever.

But who exactly are the spammers? It's been estimated that 80-90% of spam currently originates from perhaps 15-20 perpetrators around the world. Sometimes they're simply out to disrupt communications. Generally, though, they're looking to make money. They do this, for instance, by renting out the botnets and code they create to individuals or organisations who want to advertise a product or service or who are trying to gain access to commercially valuable data.

Today, spam is more sophisticated than ever. As well as an imaginative range of ploys to encourage you to open their emails, spammers are developing aggressive new tricks to outrun and outgun traditional protection resources installed to keep them at bay. For example, two particular weapons were instrumental in causing the October 2006 spam surge and the sharp rise in botnet activity experienced during the month:

- "SpamThru" – a spam-sending trojan, with new strains regularly released in order to evade detection by traditional anti-virus systems. SpamThru uses the so-called "spam cannon" technique and is designed so that, if the command-and-control channel gets disrupted, the botnet operator can regain control by having access to just one machine on the botnet. SpamThru harnesses a range of tricks to neutralise anti-virus software, for example inserting dummy addresses to override genuine anti-virus update URLs.
- "Warezov" – a particularly aggressive trojan, with tens of thousands of copies of each variant sent out in numerous batches. Because each batch differs subtly from the previous ones, it can sidestep traditional anti-virus protection measures. During one 24-hour period, MessageLabs seized over 900,000 copies of this trojan. Although Warezov's precise purpose is unclear, it certainly seems to be connected with the hike in worldwide spam levels.

The Burden to Your Business

Whichever way you look at it, SpamThru, Warezov and the extensive array of other weapons harnessed by spammers add to the cost burden weighing down your business:

- Your staff have to identify and delete spam reaching their computers, perhaps taking up to 2 days per employee per year and distracting them from the jobs they're paid to do – COST!
- Your competitive edge suffers as spam clogs up your network and it takes longer to send and receive important/time-critical messages – COST!
- Your IT resources are stretched by the need to fire-fight spam instead of focusing on strategic issues and potentially profit/efficiency-boosting ideas and initiatives – COST!

- You find yourself investing in increased bandwidth and additional in-house messaging security technology to rectify or prevent spam problems – COST!
- The growing sophistication of the spammers enables them to penetrate your new defenses...and the whole cycle starts again – COST!

Junk the Junk Mail – How to Survive Spam

Spam is a reality. So is its damaging impact. The problem may evolve and mutate from month to month, but it certainly won't go away. The urgent task facing businesses like yours is clear – to find a reliable, cost-effective, hassle-free solution that enables you to focus on the job of competing and succeeding in your field of expertise.

To combat spam, many businesses still rely on basic messaging security systems, made up of appliances and/or software installed and managed in-house. These defenses constantly need maintaining, updating and overhauling, while the level and nature of today's threat is also overwhelming their ability to respond swiftly and effectively.

No wonder smart businesses around the world are recognising the benefits of subscribing to a managed security system – a system that can identify spam and stop it before it even gets close to their network boundaries. Crucially, this type of solution doesn't just take the problem away – it also represents the most affordable option that can keep pace with emerging and developing threats on an ongoing basis.



	Managed Service	Appliances	Software
Industry expertise	✓	✗	✗
Ease of use	✓	✗	✗
Value for money	✓	✗	✗

Managed anti-spam solutions can provide defenses that are always up-to-date and always fit for purpose. Unlike in-house anti-spam measures, they use intelligence acquired from scanning and assessing millions of messages every day to continually develop their knowledge base and evolve their capabilities –

You need a reliable, cost-effective, hassle-free solution.

and so deal with new threats as soon as they appear. Above all, properly managed solutions integrate proven, leading-edge techniques into multi-layered defenses designed specifically to identify and block spam from both known and unknown sources – an ability that traditional anti-spam solutions simply can't match.

For example, MessageLabs' Email Anti-Spam Service (incorporating the unique suite of proprietary technologies that we call Skeptic) presents a number of lightning-fast gateways through which an email must pass before it's permitted to proceed to your network. This approach provides the confidence and certainty that you, as a small or medium business, need if you're to function as efficiently and effectively as possible.

The statistics reflect the real-world effectiveness offered by a managed anti-spam solution. In October 2006, MessageLabs processed each day an average of 2.35 billion SMTP connections – different from actual email messages – on our clients' behalf. 92.2% of these connections were identified as malicious or unwanted and so were blocked by our perimeter defenses. Of the remaining 7.8% that reached our scanning towers, 72% were identified as spam – and all of these were prevented from reaching our clients' networks.

Cutting Costs, Increasing Efficiency

Around the world, businesses are discovering that a managed anti-spam service generates cost savings and efficiency improvements that contribute directly to a healthier, more successful organisation.

Managed services are simple to set up – usually involving little more than switching your Mail Exchange records so your email comes via the managed service provider. They also work with any server configuration, anywhere in the world, and completely eliminate the need to invest in additional hardware or software, in increased bandwidth/storage, and in spam/virus definition and software updates. They liberate your staff – and your IT specialists in particular – from an unwanted drain on their time. And they deliver managers from a regular headache.

Any business shouldn't have to worry about spam. Nor should it settle for anything less than a genuinely cost-effective solution. And the answer is simple. Choosing an integrated, managed messaging and web security system will free your business from the specter of spam – and boost your bottom line.

Free your
business from the
specter of spam.

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