Introduction
Welcome to the October edition of the MessageLabs Intelligence monthly report. This report provides the latest email threat trends for October 2005 to help in the ongoing fight against unwanted email from spammers and virus sources.

Global Trends & Content Analysis
MessageLabs Anti-Spam and Anti-Virus Services focus on identifying and averting unwanted emails originating from unknown bad sources (such as fresh proxies) and which are addressed to valid email recipients.

Spam Protection: In October, the global ratio of spam in email traffic from new and unknown bad sources, for which the recipient addresses were deemed valid, was 68.0% (1 in 1.47), an increase of 0.4% on the previous month.

Global Patterns of Spam Interceptions

Anti-Virus and Trojan Protection: The global ratio of email-borne viruses in email traffic from new and previously unknown bad sources and destined for valid recipients, was 1 in 50.9 (2.0%), and increase of 0.1% since September.

Global Patterns of Virus Interceptions

Phishing: October shows a further increase in phishing attacks, perhaps not surprising in the run-up to Christmas when more people are expected to turn to the Internet to beat the crowds and pick-up a bargain.

The introduction of chip-and-pin technology in the UK over the last year has reportedly reduced the number of cases of card fraud involving stolen and counterfeit bank cards. However, as predicted, this has driven the criminals towards online fraud and the number of cases of card-not-present fraud has increased by almost one third, and is now the largest type of card fraud in the UK.

Global Patterns of Phishing Interceptions
Vertical Industry Breakdown
By analysing the market distribution of email traffic where possible, MessageLabs compiles data that shows the impact and vulnerability rates of spam and viruses specific to major industry sectors. The chart below reflects impacts and ratios for October 2005:

Geographical Breakdown
By analysing the geographical dispersal of email traffic where possible, MessageLabs compiles data that shows the impact and vulnerability rates of spam and viruses specific to geographies. The chart below reflects impact and ratios for October 2005:
Traffic Management (Protocol Level)
Traffic Management continues to reduce the overall message volume through techniques operating at the protocol level. Unwanted senders are identified and connections to the mail server are slowed down using features embedded in the TCP protocol. Incoming volumes of known spam are significantly slowed, while ensuring legitimate email is expedited.

Connection Management
Connection Management is particularly effective in stopping directory harvest, brute force and email denial of service attacks where unwanted senders send high volumes of messages to force spam into an organisation or disrupt business communications.

Connection Management works at the SMTP level using techniques that verify legitimate connections to the mail server, and is comprised of the following:

SMTP Validation: identifies unwanted email originating from known spam and virus sending sources, where the source can unequivocally be identified as an open proxy or a botnet, and rejects the connection accordingly. In October, on average, 14.0% of inbound messages were intercepted from botnets and other known malicious sources and rejected as a consequence, an increase of 5% on the previous month.

User Validation: reduces the overall volume of emails for registered domains, by discarding connections for which the recipients are identified as invalid or non-existent. In October, on average, 7.7% of recipient addresses were identified as invalid; these were attempted directory attacks upon domains that were therefore prevented.

The table below details the current impact of connection management techniques on unwanted email volume being measured by MessageLabs Intelligence.

<table>
<thead>
<tr>
<th>Region</th>
<th>SMTP Validation (botnet sources)</th>
<th>User Validation (directory attacks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>19.7%</td>
<td>9.8%</td>
</tr>
<tr>
<td>UK</td>
<td>9.2%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Europe</td>
<td>9.2%</td>
<td>11.8%</td>
</tr>
<tr>
<td>Asia Pacific</td>
<td>8.5%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Worldwide</td>
<td>9.0%</td>
<td>8.2%</td>
</tr>
</tbody>
</table>

MessageLabs is the world’s leading provider of email security and management services with more than 12,000 clients.

MessageLabs Intelligence is a respected source of data and analysis for email security issues, trends and statistics. MessageLabs provides a range of information on global email security threats based on live data feeds from its control towers around the world.

For further information on MessageLabs Intelligence, please visit [www.messagelabs.com/intelligence](http://www.messagelabs.com/intelligence) and register to receive regular alerts and reports.