

# ITU WSIS Thematic Meeting on Countering Spam: The Scope of the problem





MessageLabs protects businesses worldwide against email threats reaching their networks.

- Over 8,700 Business Customers Globally
- More than 2.5 million End Users
- 400 Global Enterprises With Over 2,500 Employees
- Over 55 Million Business Emails Scanned Per Day
- 99% Customer Retention Rate
- Sole Focus On Business Enterprise Market

#### Dynamic Global Platform



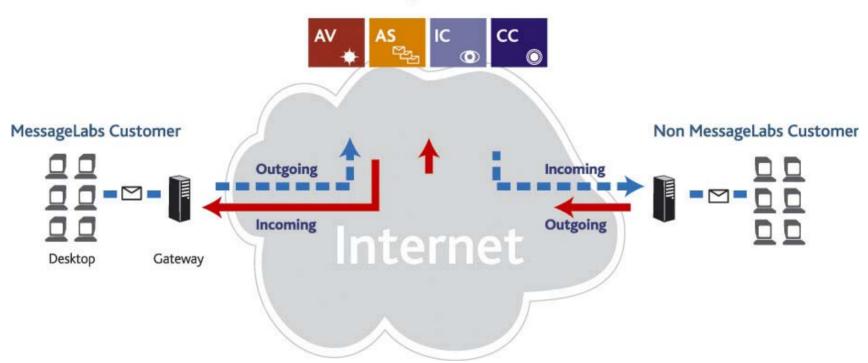


- Secure email management service
- Globally distributed architecture
- 24/7 threat monitoring and response
- Provisioning and supporting clients 24/7 globally
- Instant scanning over 55 million business emails a day

#### Operating at the Internet Level







- Client Simply Points MX (Mail Exchange) Record to MessageLabs
- Email is Scanned and Handed to Client Mail Server Protected & Controlled
- All Threats are Kept AWAY from the Client Network

#### Skeptic™ Predictive Technology



Predictive technology identifies unknown and dynamic threats

6+ years R&D

2Gb+ self learning rules knowledge base:

Virus & Spam "DNA"

 Thousands of Heuristic Rules

Known Security
 Vulnerabilities

uristic

London

New York

Amsterdam

Hong Kong

Washington

- Analysis of traffic patterns
- Thresholds are dynamic & action taken accordingly

Scale only possible at internet level

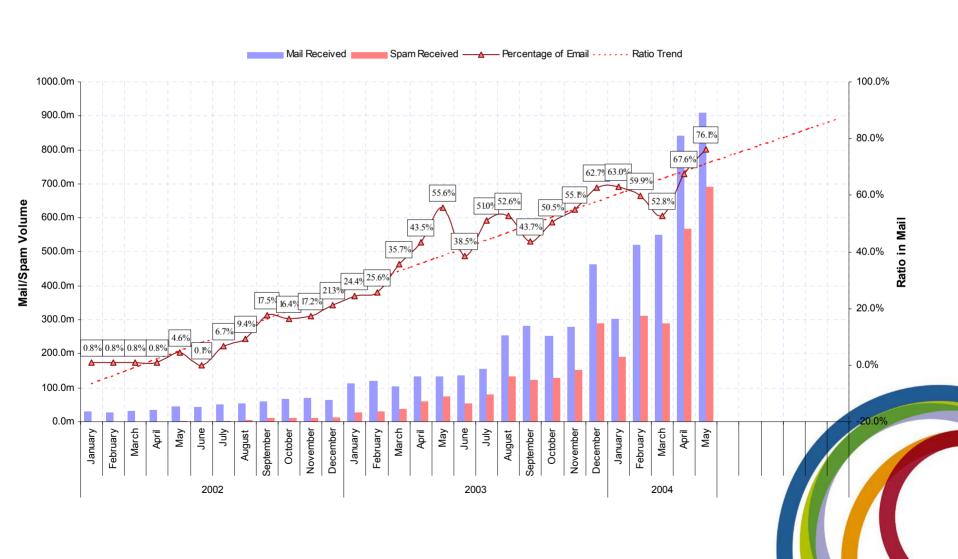


Brisbane

#### Global Spam Patterns and Trends



#### **Spam to Mail Ratio**



#### Global Email Patterns and Trends



- Email is now considered a business-critical application (Gartner Sept 2003)
- Email is also considered a legal document and industry is required to treat it as such
- June 2004: 1 in 10.8 (9.3%) emails contained viruses; equivalent to 37.6 virus borne emails every second
- June 2004: Spam accounted for 85.3% of email traffic; equivalent to 305.5 spam messages per second
  - US >80%, UK 50-60%, Germany 40%, Australia 30%, Netherlands 30%, Hong Kong 25%



#### Convergence

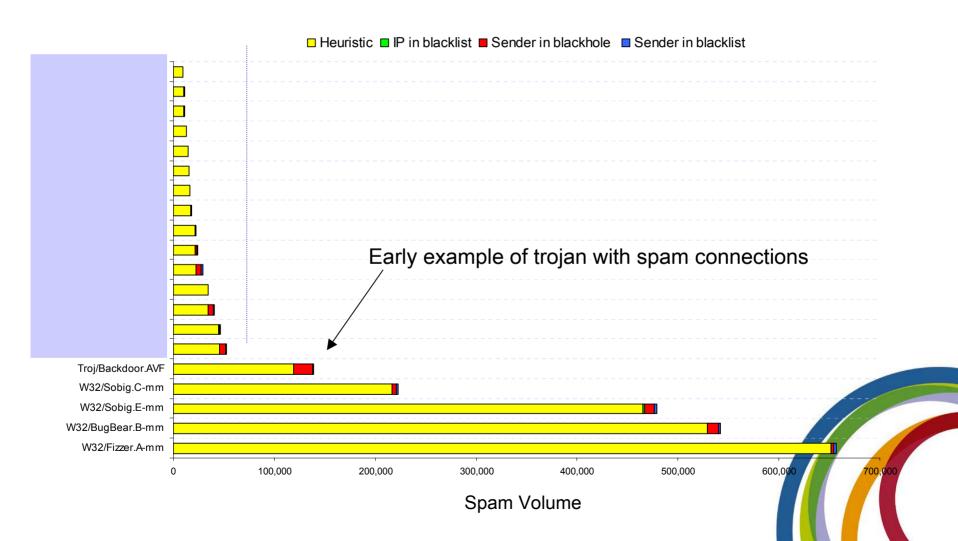


- Recent viruses contain Remote Access Trojan (RAT) component
  - Fizzer, Sobig, MyDoom, Sober
  - Spyware: leaking information to spammers
- Case study: Sobig.F
  - Sobig.F was the fastest spreading email worm in the past 4 years
  - It generated over 200 million infected email messages during its first week of activity
  - Staged deployment of WinGate Proxy software
- Currently 70% of spam intercepted by MessageLabs is sent via open proxies
  - Spammers will portscan for open proxies
  - Some Ratware comes with pre-set lists or daily updated lists
  - This leads to 50,000 new zombies appearing each week
  - Traded online as potential open proxies for the spammers or as hosts for everything from paedophile images, DDoS attacks (distributed denial of service) to Phishing scams
  - Some estimates suggest that 15% to 25% of the Internet may be controlled by spammers or criminal gangs

#### The "Bot-net" Phenomenon



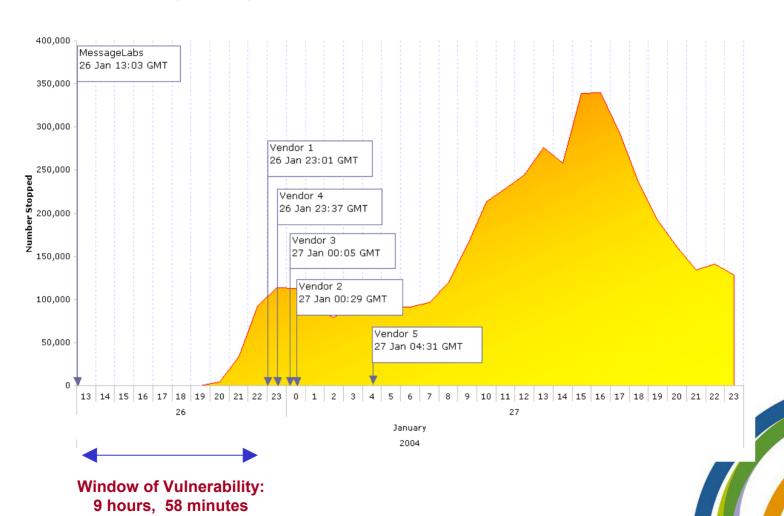
- Around 70% of all spam is sent via an open proxy
- •75% of which originated from virus infected domains



## MyDoom.A: window of vulnerability



## Case Study: MyDoom.A



### Growth of Open Proxies





#### The Impact of Spam Legislation



- New EU spam legislation enacted in December 2003
  - In December 2003, 62.7% of email scanned was spam, rising to 63.0% in January 2004
  - >70% of spam sent to UK in January originated in the US
    - Figure set to rise to >80% by July 2004
  - Open to interpretation
  - Jurisdiction not clearly defined
- EU/US legislation unlikely to ease spam epidemic
  - CAN-SPAM opt-out vs. opt-in
  - Majority of CAN-SPAM compliant spam is "dressed-up" to appear legitimate
  - Regulation for a previously ungoverned industry
- Corporate governance (e.g. Sarbanes-Oxley, Basel-2)
  - Email archiving policies
  - Risk Management

#### Tackling Spam



- Legal framework is only part of an overall solution
  - Less appealing
  - Difficult to operate and be profitable
  - "Locks" vs. "Laws"
- Need a technology based solution as well
  - IP Block-listing / Permitted sender lists
  - Fingerprints / Signatures
  - Collaborative filtering
  - Heuristics
  - Statistical methods, e.g. Bayes
  - Sender Warranted Email, e.g. Habeas haiku
  - Open Proxy detection
  - URL signatures



#### Phishing and Identity Theft



Phishing emails intercepted by MessageLabs

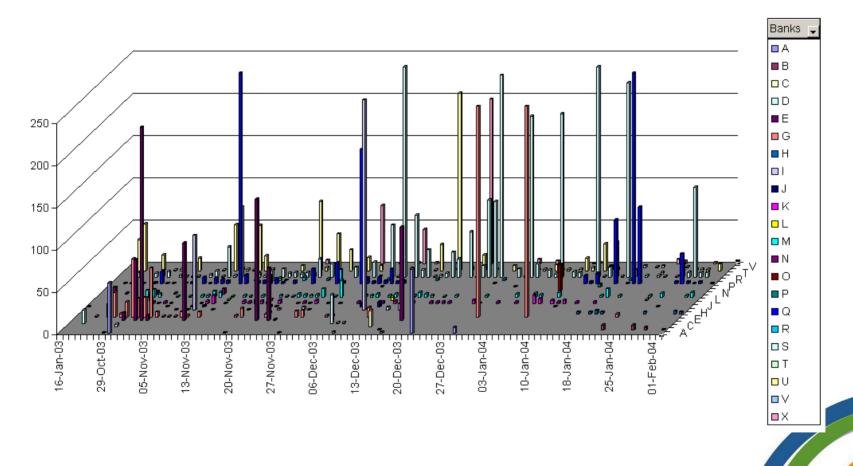




## Phishing: A Global Problem



### Worldwide Phishing





# Any Questions?

www.messagelabs.com/intelligence

