
Panel discussion
"Harmonizing Technology with Society"



September 30, 2009

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- 1) Consumer Security**
- 2) Corporate Security**
- 3) Network Security**

- **Protect client devices from Cyber attack**
 - Firewall
 - Virus scan and vaccine
 - Host intrusion prevention system
- **Physical security**
 - Storage Encryption (HDD, Removable device)
- **Protect access to malicious site**
 - URL Filtering
 - Phishing-site Filtering
 - Content Filtering
- **Present Situations of Cyber Security**
 - New malicious Web links are increased and infected by trusted sites
 - Spam mails, Online magazines, mainstream news sites
 - Blog/SNS/Bulletin board, Popular search engines, Personal webs

The volume of anonymous proxy Web sites reflects this trend:

Increase in Anonymous Proxy Web Sites

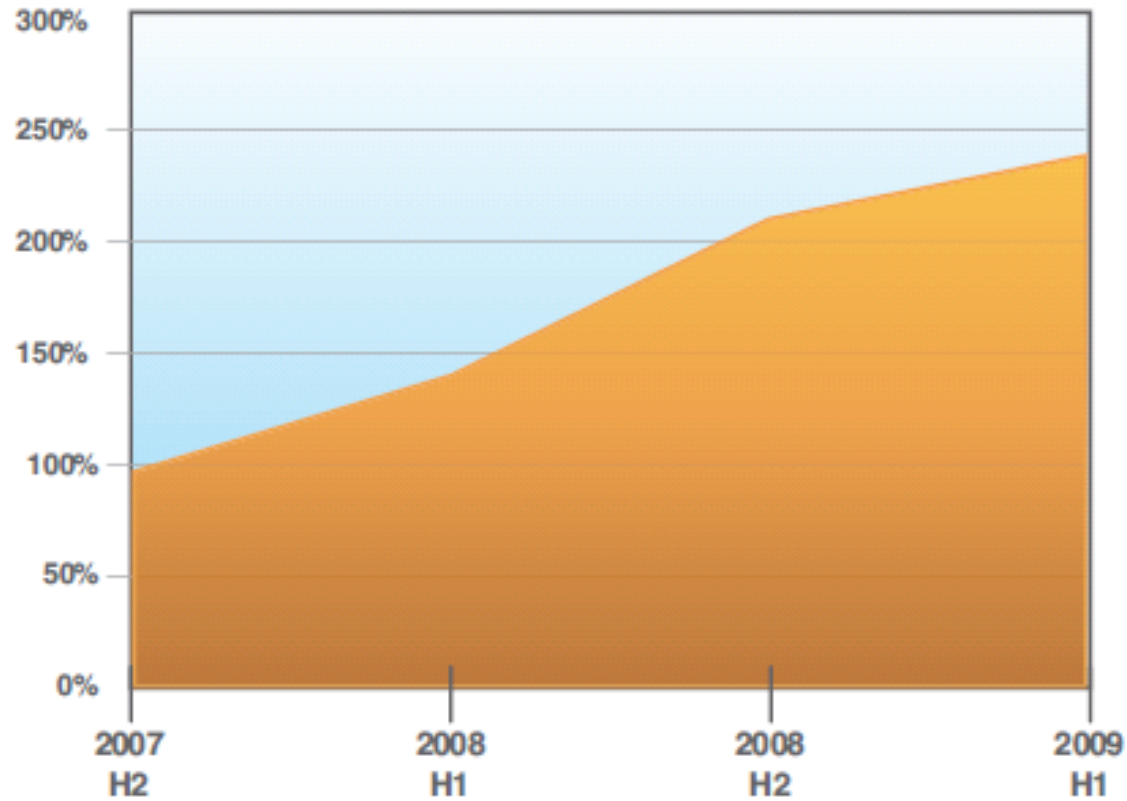


Figure 20: Volume of Anonymous Proxy Web Sites, 2007 H2-2009 H1

• Protect web application from cyber attack

➤ Web Application Firewall (WAF)

SQL Injection

LDAP Injection

Xpath Injection

Cross site scripting

Cross Site Request Forgery

Shell command Injection

Server side include

PHP File include

Directory traversal

Cookie poisoning

JavaScript Object Notation

Buffer over flow

• Intelligence leakage protection

➤ Server based computing (Thin client)

➤ Log management

➤ Access control

➤ Authentication

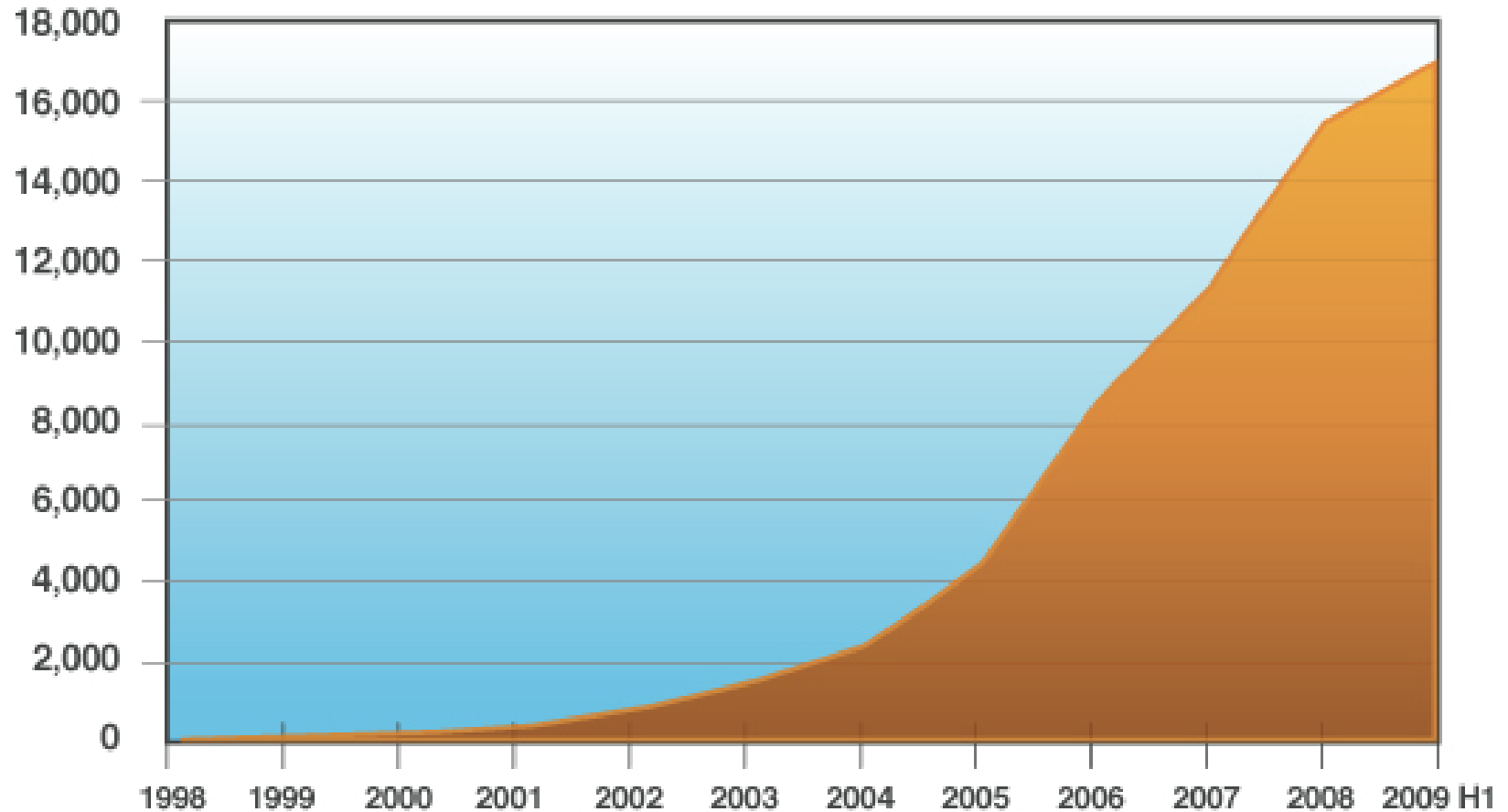
• Benefits and drawbacks of Cloud Computing

➤ **Benefits:** Use of CC can provide standard security management fulfilling almost security needs.

➤ **Drawbacks:** Sometimes it is hard to meet the particular security requirement.

Vulnerability Disclosures Affecting Web Applications

Cumulative, year over year



source: IBM X-Force®

- **DNS Defender**

- Protect DNS Servers that use “**Deep Packet Inspection**” (DPI)
 - ✓ Cache Poisoning
 - ✓ Invalid flags and checksums
 - ✓ IP Spoofing
 - ✓ Drop fragmented UDP packets
 - ✓ Request and Response length checking
 - ✓ DDoS
 - ✓ Cache UDP DNS responses

- **Distributed Denial of Service Defender (DDoS)**

- Protect networks that use “**Deep Packet Inspection**” (DPI) from DDoS attack
 - ✓ SYN Flood
 - ✓ Ping Flood
 - ✓ Ping of Death
 - ✓ Connection Flood

Question1

- The legal system usually depends on the regulations in which the new information system is based on.
In general, changes to the legal system are moderate.
- Morality usually depend on the history and customs of the people.
- Management would be the practical executable process for the administration of the new information system.
- Technology supports management in terms of the efficiency but, sometimes management is not executable without technology.

The legal system and morality will be the circumstances of the information system. For the design of the global information system, the legal system and morality should be globally compatible.

The incompatibility of the legal system and morality must be solved by management and technology.

As a result, management would be the most practical means for the social Innovation.

Question2

The social scientist would be expected to be researching the harmonization of opposing thoughts for the benefits of the society:

Examples of opposing thought are

- Freedom of speech versus protection of privacy
 - Freedom of personal behavior versus national or social security
 - Information disclosure versus disadvantage or attack of personal beliefs
- etc