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U.S. and Pakistan Clash Over Payments for War on Terror

IN DEPTH Pages 14–15

OPINION:
Bailing Out Tepco the More Honest Way
Page 11

E WALL STREET JOURNAL.

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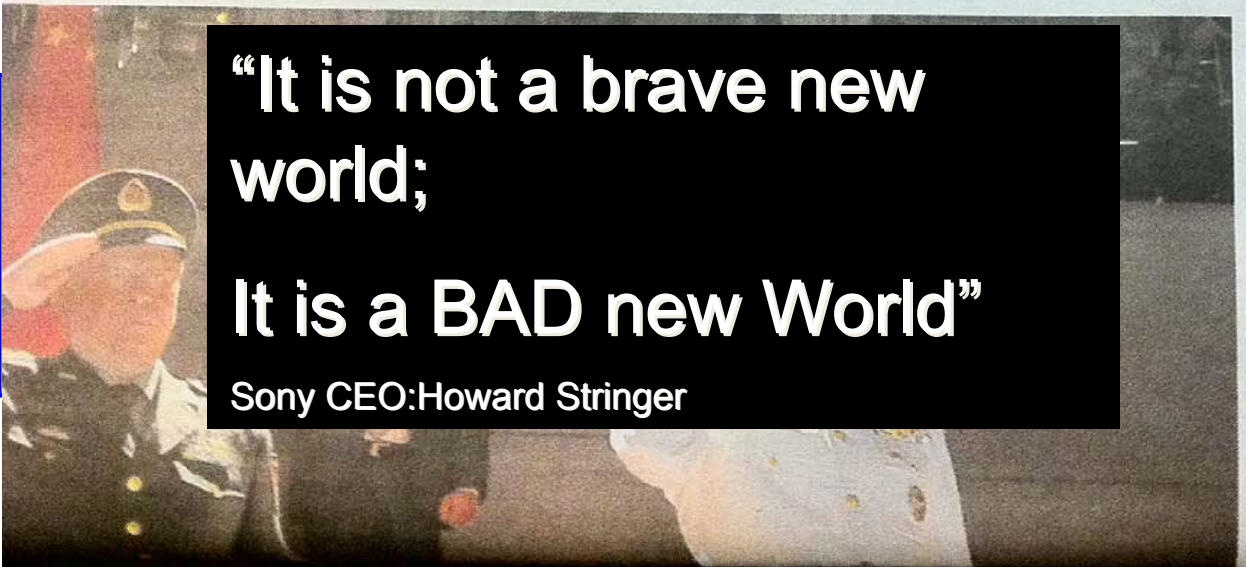


"It is not a brave new world;

It is a BAD new World"

Sony CEO:Howard Stringer

Sony Chief Cautions on Cybercrime

By Daisuke Wakabayashi

TOKYO—Despite spending weeks to resolve a massive Internet security breach, Sony Corp. Chief Executive Howard ing video and music network could lead the way to bigger problems well beyond Sony, or the gaming industry. He warned the attacks may one

What is at Risk ?

- Interruption of business operations (Lost Revenues)
- Decreased productivity due to additional strain placed on network resources (Lost Revenues)
- Loss of confidential information (Lost Competitive Advantage)
- Increased recruiting and staffing costs (Lost Profits)

두통

Mission

To protect our customers from security threats on the Internet by developing a comprehensive knowledge of vulnerabilities and attack methodologies and applying that knowledge through effective protection technologies.

IBM X-Force Research and Development

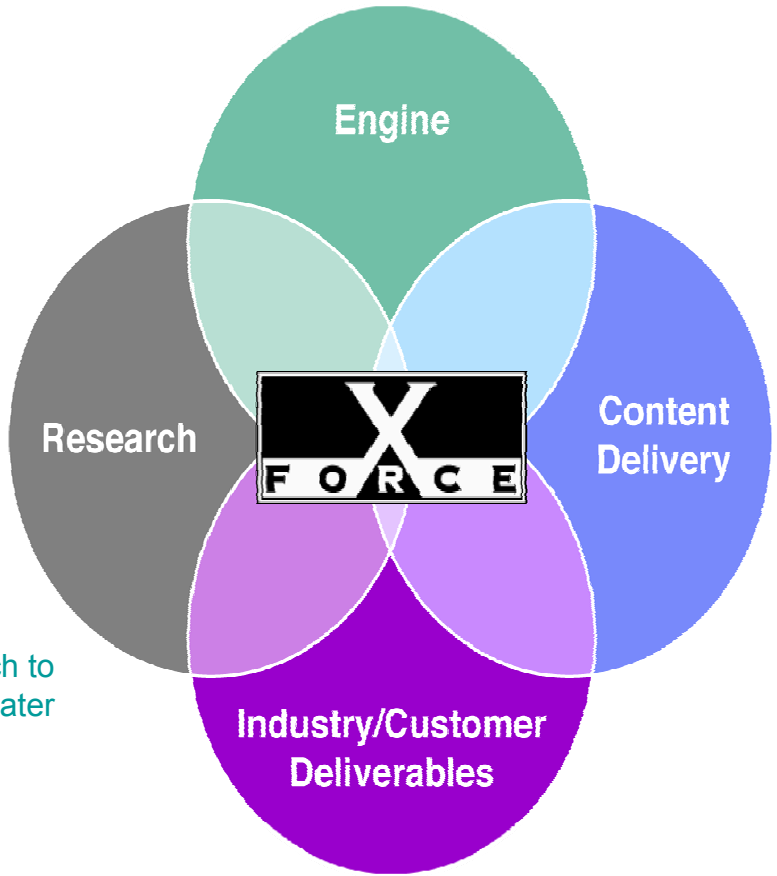
The world's leading enterprise security R&D organization

Engine

- Support content stream needs and capabilities
- Support requirements for engine enhancement
- Maintenance and tool development

Research

- Support content streams
- Expand current capabilities in research to provide industry knowledge to the greater IBM



Global security operations center (infrastructure monitoring)

Content Delivery

- Continue third party testing Dominance
- Execute to deliver new content streams for new engines

Industry/Customer Deliverables

- Blog, Marketing and Industry Speaking Engagements
- X-Force Database Vulnerability Tracking
- Trend Analysis and Security Analytics

X-Force R&D - Unmatched Security Leadership

X-Force Research

14B analyzed Web pages & images

40M spam & phishing attacks

54K documented vulnerabilities

Billions of intrusion attempts daily

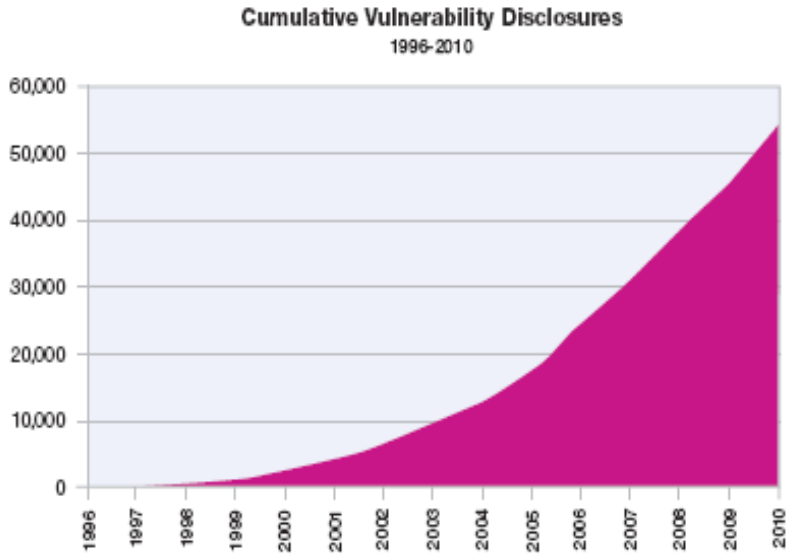
Millions of unique malware samples

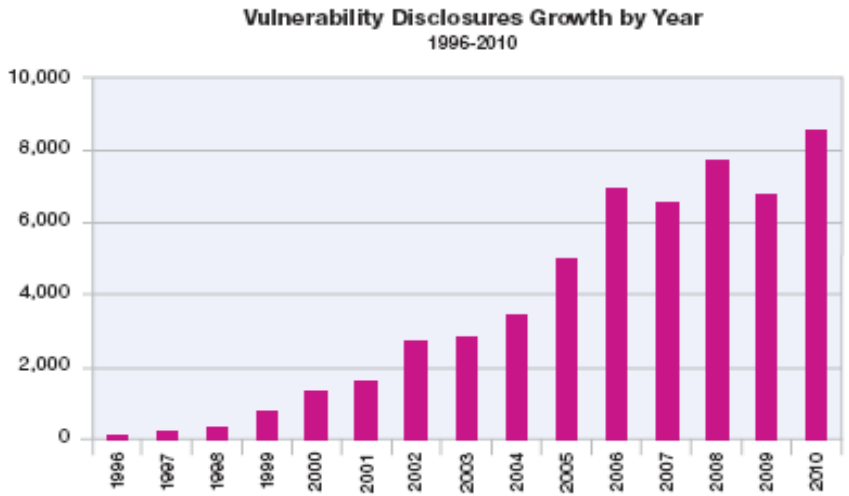
Provides Specific Analysis of:

- Vulnerabilities & exploits
- Malicious/Unwanted websites
- Spam and phishing
- Malware
- Other emerging trends

Vendors Reporting the Largest Number of Vulnerability Disclosures in History

- Vulnerability disclosures up **27%.**
  - Web applications continue to be the largest category of disclosure.
- Significant increase across the board signifies efforts that are going on throughout the software industry to improve software quality and identify and patch vulnerabilities.





Patches Still Unavailable for Many Vulnerabilities

- **44%** of all vulnerabilities disclosed in 2010 had no vendor-supplied patches to remedy the vulnerability.
  - Most patches become available for most vulnerabilities at the same time that they are publicly disclosed.
  - However some vulnerabilities are publicly disclosed for many weeks before patches are released.

Patch Release Timing – First 8 Weeks of 2010

Patch Timeline	All	Top Vendors
Same Day	3400	1814
Week 1	192	34
Week 2	55	11
Week 3	57	12
Week 4	33	7
Week 5	27	7
Week 6	22	4
Week 7	17	3
Week 8	16	8

Public Exploit Exposures Up in 2010

- Public exploit disclosures up **21%** in 2010 versus 2009
  - Approximately **14.9%** of the vulnerabilities disclosed in 2010 had public exploits, which is down slightly from the 15.7% last year
  - However more vulnerabilities were disclosed this year, so the total number of exploits increased.
  - The vast majority of public exploits are released the same day or in conjunction with public disclosure of the vulnerability.

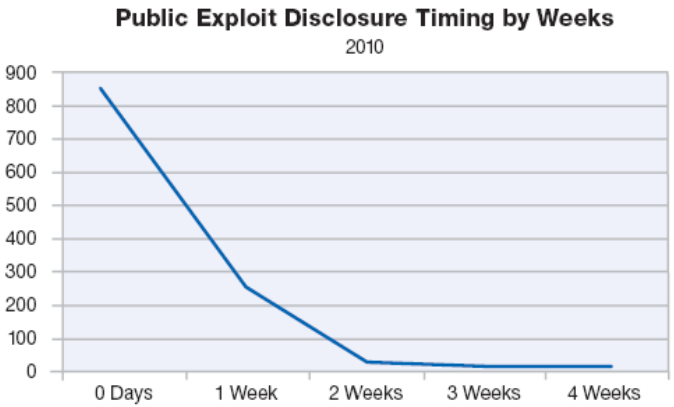


Figure 54: Public Exploit Disclosure Timing by Weeks – 2010

Exploit Timing	0 Days	1 Week	2 Weeks	3 Weeks	4 Weeks
0 Days	854	270	18	9	9

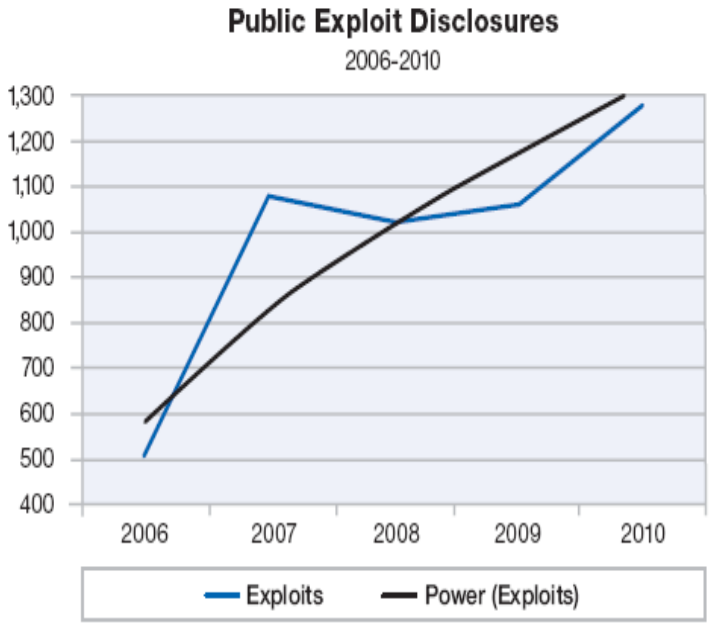


Figure 53: Public Exploit Disclosures – 2006-2010

	2006	2007	2008	2009	2010
True Exploits	504	1078	1025	1059	1280
Percentage of Total	7.3%	16.5%	13.4%	15.7%	14.9%

New exploit packs show up all the time

2 Weeks Ago #1

BleedingLife ○
Junior Member

Join Date: Mar 2011
Posts: 2
Reputation: 0

Bleeding Life v2: RELOADED **Exploit Pack**

INTRODUCTION:

BleedingLife Exploit Pack was looked down upon in the beginning of its start.
As time went on and users began to take a chance with this pack, they've eventually understood BL is no normal pack.
With less exploits and a higher rate than other packs, BL has really made a name for itself.
Now, BL has turned into a series. BL v1, BL v2, BL Mini-Java, BL Java Edition, BL Adobe Edition.
And... Here before us, BL v2 Reloaded.
If you want a low cost, high rate and great quality pack... Purchase BleedingLife v2 Reloaded!

EXPLOITS:

[x] CVE-2008-2992
[x] CVE-2010-0188
[x] CVE-2010-0842
[x] CVE-2010-1297
[x] CVE-2010-2884
[x] CVE-2010-3552
[x] JavaSignedApplet (Requires user interaction but can be disabled.)
[x] All exploits bypass ASLR and DEP where needed.

AVERAGE RATE:

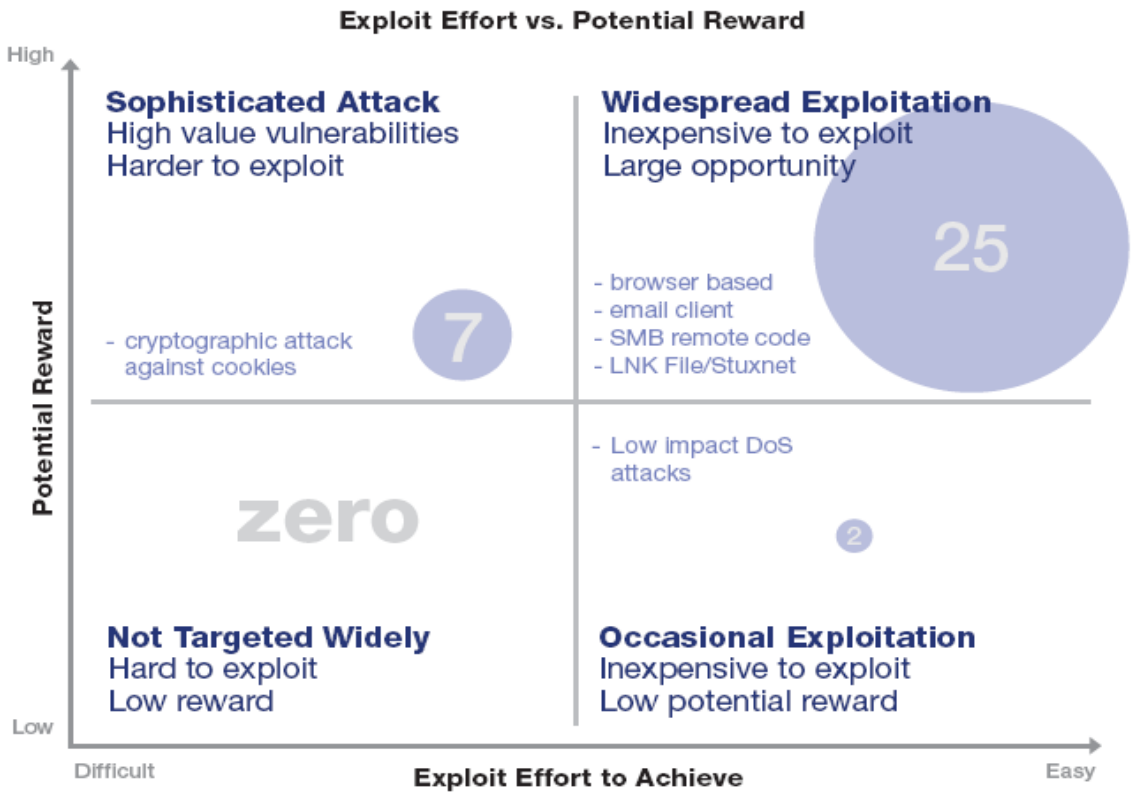
[x] BL v2 has an average rate between 30% - 40%
[x] SS/Proof coming soon ...

PAYMENT OPTIONS:

[x] BleedingLife v2 Reloaded - $400.00
[x] FUD Update - $50.00
[x] Domain Change - $50.00
[x] Liberty Reserve & WebMoney ONLY!
[x] Previous v2 Buyers - FREE Update!

Exploit Effort vs. Potential Reward

- Economics continue to play heavily into the exploitation probability of a vulnerability
- All but one of the 25 vulnerabilities in the top right are vulnerabilities in the browser, the browser environment, or in email clients.
- The only vulnerability in this category that is not a browser or email client side issue is the LNK file vulnerability that the Stuxnet worm used to exploit computers via malicious USB keys.



Top Attacks seen by X-Force in 2010

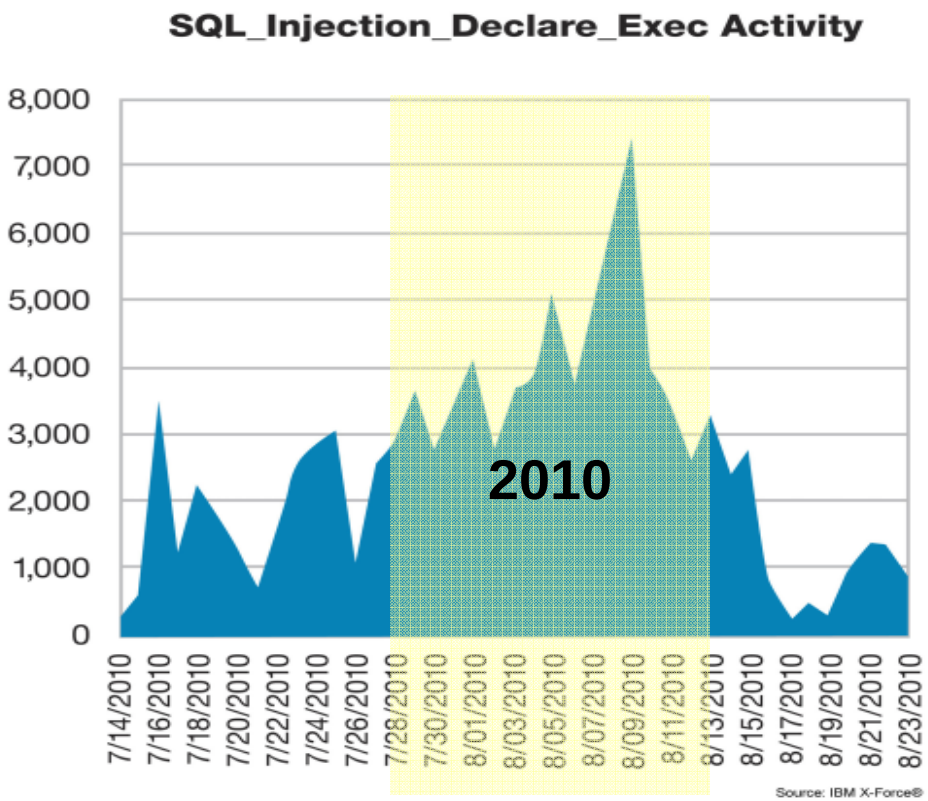
- Automated SQL Injection attacks
- Lateral scanning of the entire Internet for services with weak passwords
- The SQL Slammer worm was responsible for a huge amount of malicious traffic in 2010 but traffic levels dropped off significantly in March, 2011

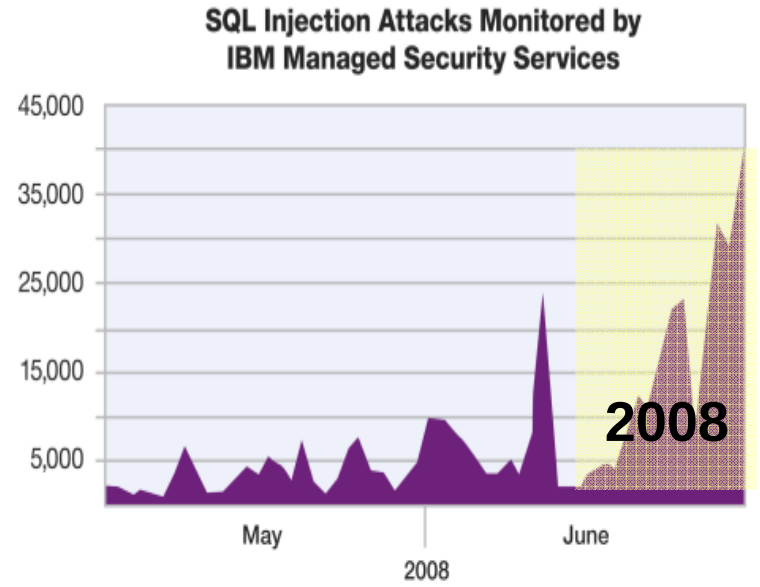
Rank	Event Name	Trend Line
1	SQL_SSRP_Slammer_Worm	Down
2	SQL_injection	Down
3	PsExec_Service_Accessed	Slightly Up
4	SSH_Brute_Force	Slightly Down
5	JScript_CollectGarbage	Up
6	HTTP_Unix_Passwords	Slightly Up
7	SMB_Mass_Login	Down
8	SMB_Empty_Password	No Change
9	SQL_Empty_Password	Up

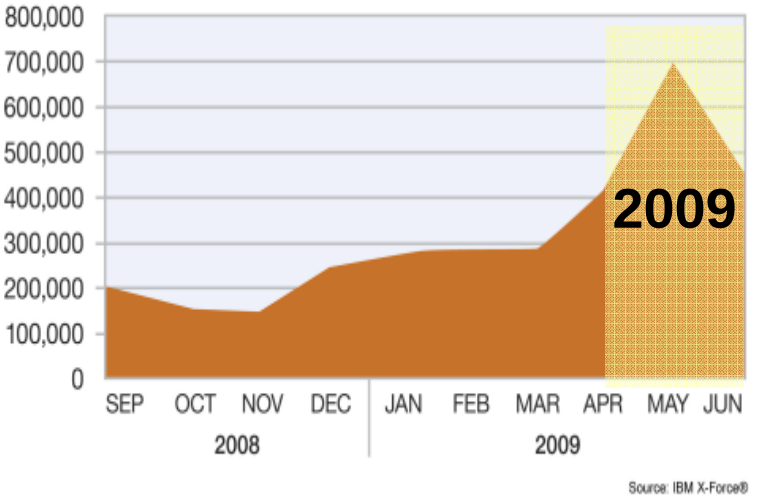
Table 1: Top MSS high volume signatures and trend line

SQL Injection Attacks

- During each of the past three years, there has been a globally scaled SQL injection attack some time during the months of May through August.
- The anatomy of these attacks is generally the same: they target .ASP pages that are vulnerable to SQL injection.





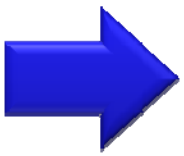


The drive-by-download process

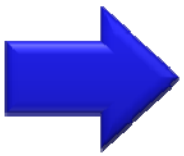
Desktop Users

Browse The Internet

Web server with embedded iframe



Malicious iframe host



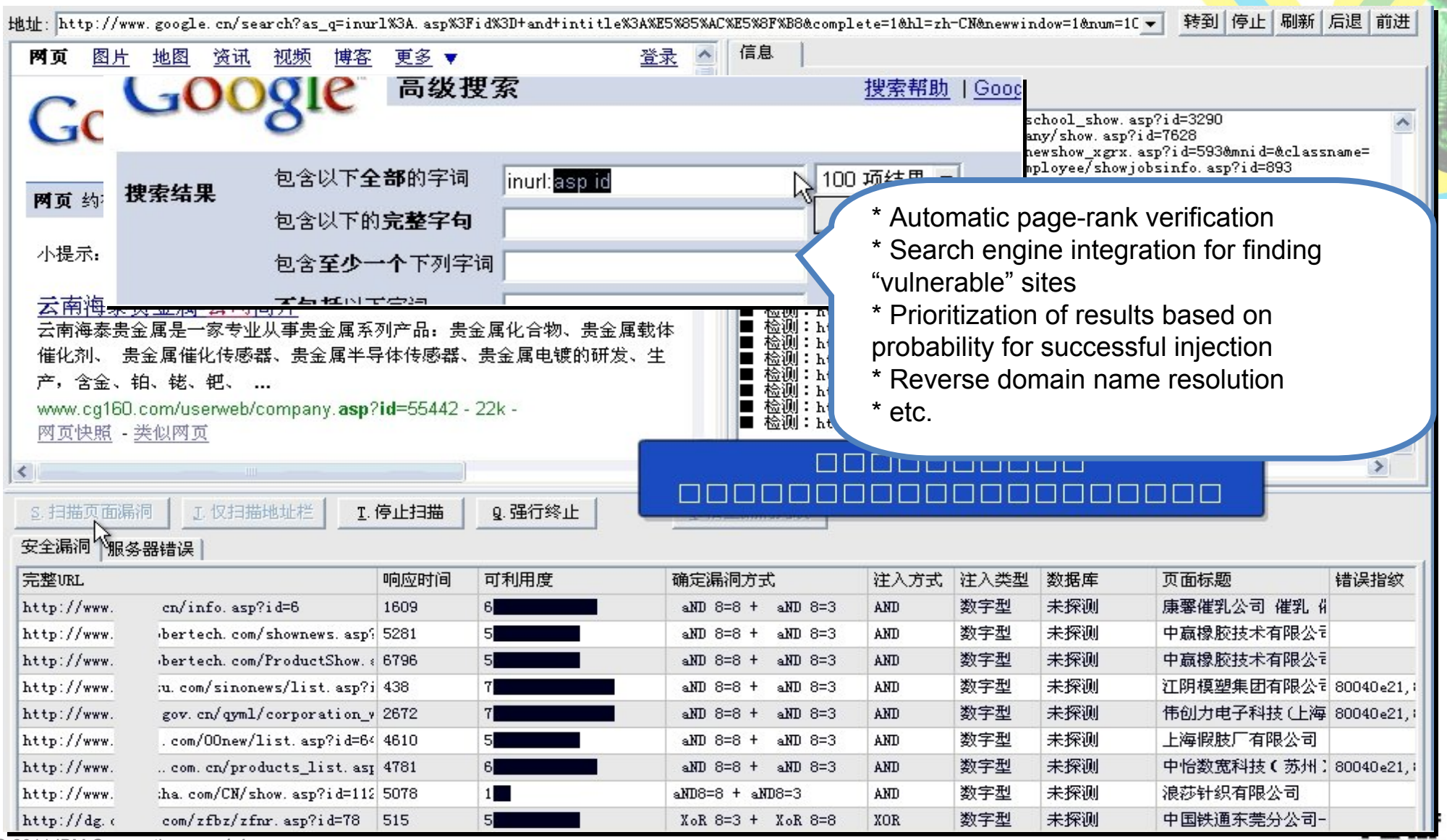
Web browser targeted

Malware installed and activated

Downloader installed

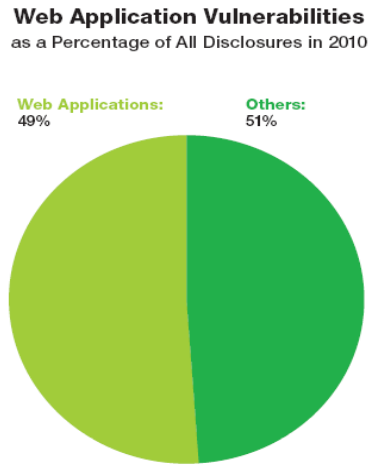
Exploit material Served

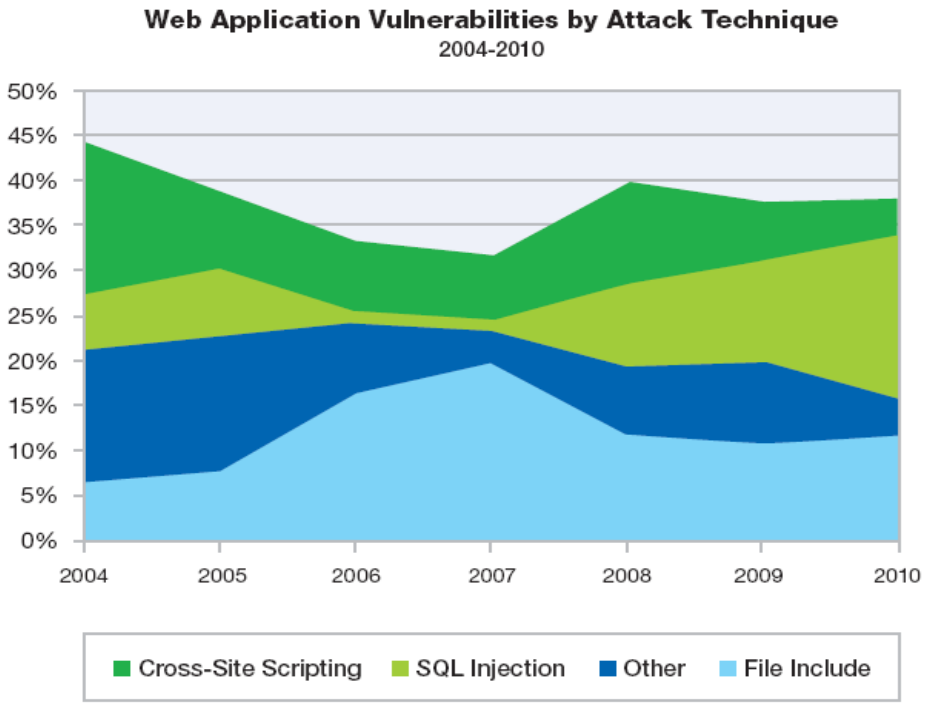
SQL Injection Attack Tools

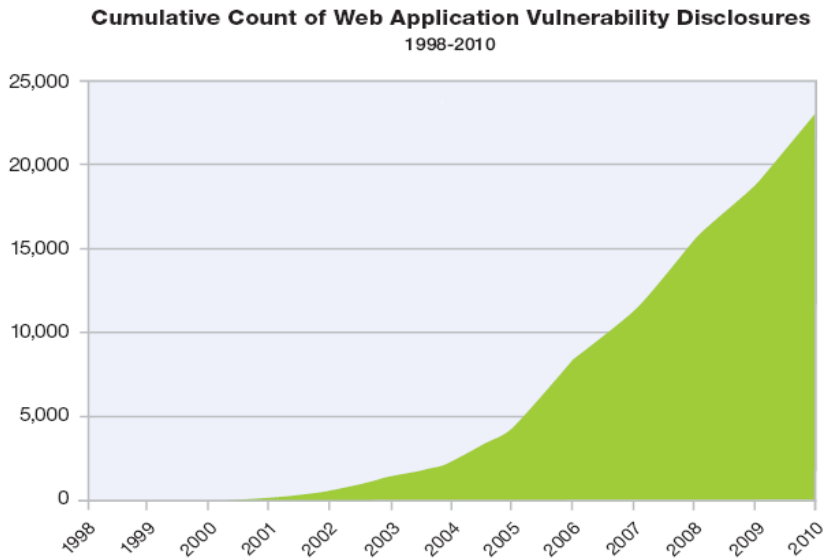


Web App Vulnerabilities Continue to Dominate

- Nearly half (**49%**) of all vulnerabilities are Web application vulnerabilities.
- Cross-Site Scripting & SQL

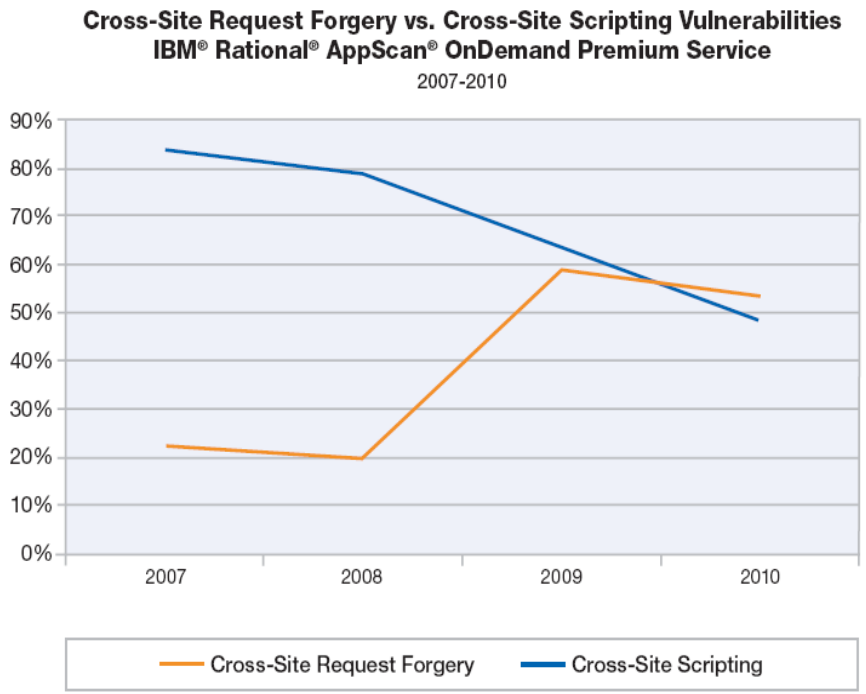


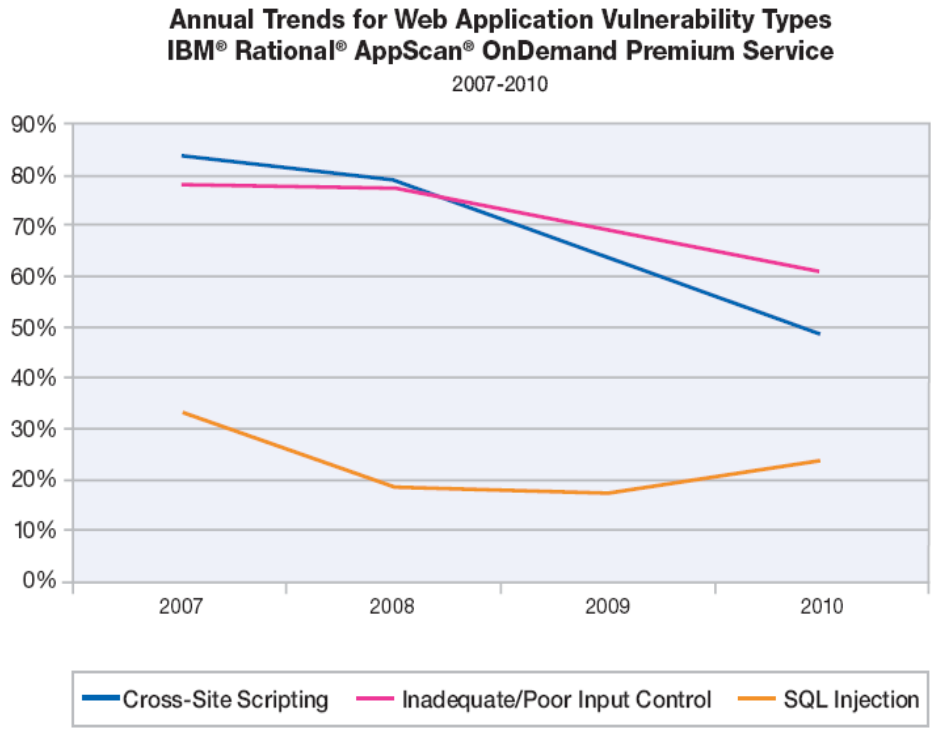




Real World Conclusions from Web App Assessments

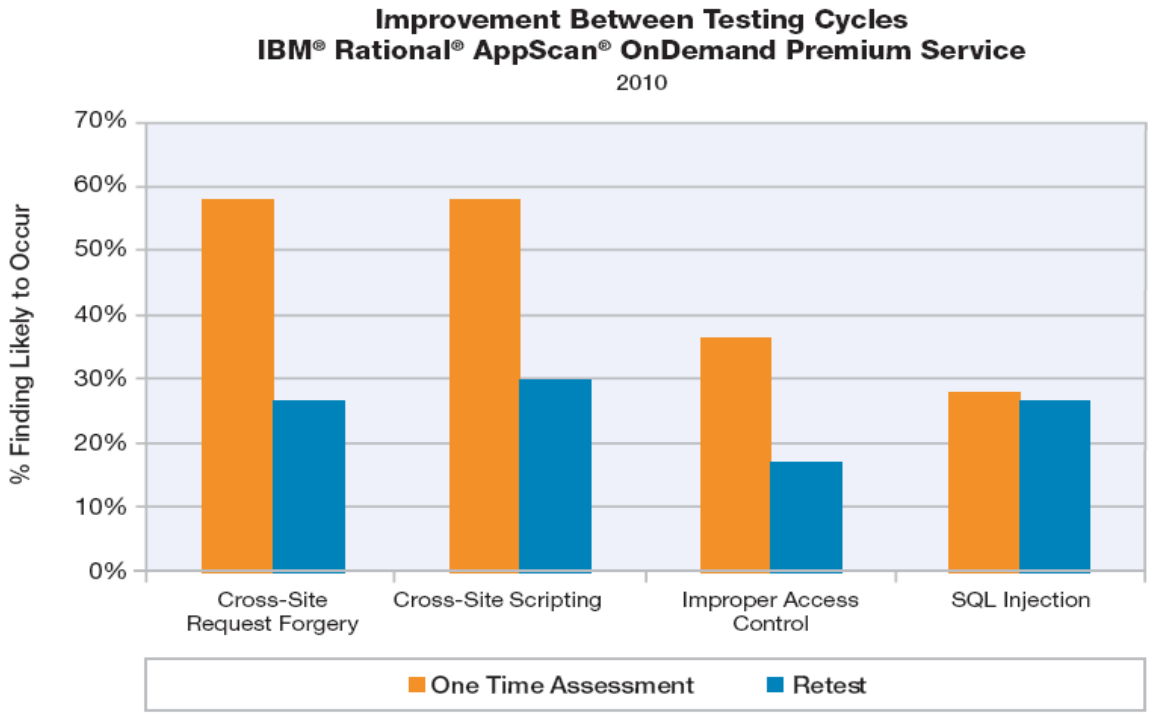
- In 2010, for the first time, we now find that Cross-Site Request Forgery (CRSF) vulnerabilities are more likely to be found in our testing than Cross-Site Scripting (XSS) vulnerabilities.
- XSS and SQL injection are both attributed directly to a lack of input control. The likelihood of finding it in 2010 is more than **60%**.





Improvement Between Application Testing Cycles

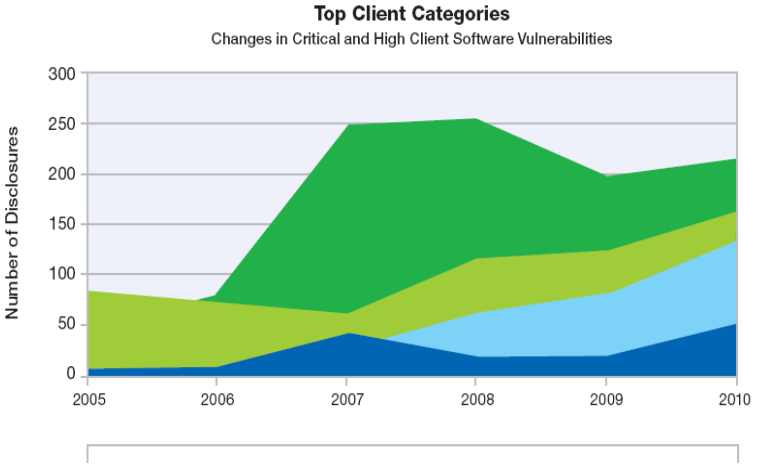
- There is a significant decline in the likelihood of finding application vulnerabilities in a retest.
- In many cases this reduction is more than half that of the original.
- Demonstrates the importance of testing applications but also follow up and mitigation.

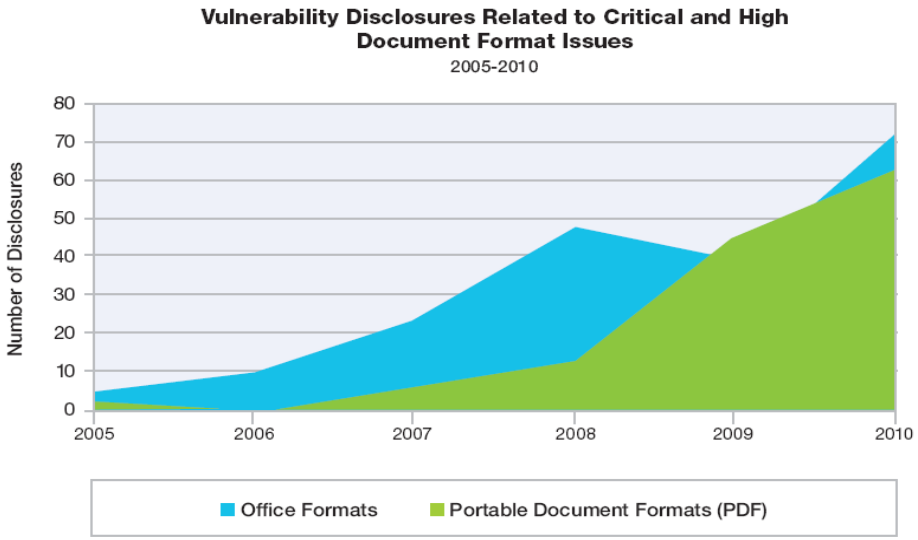


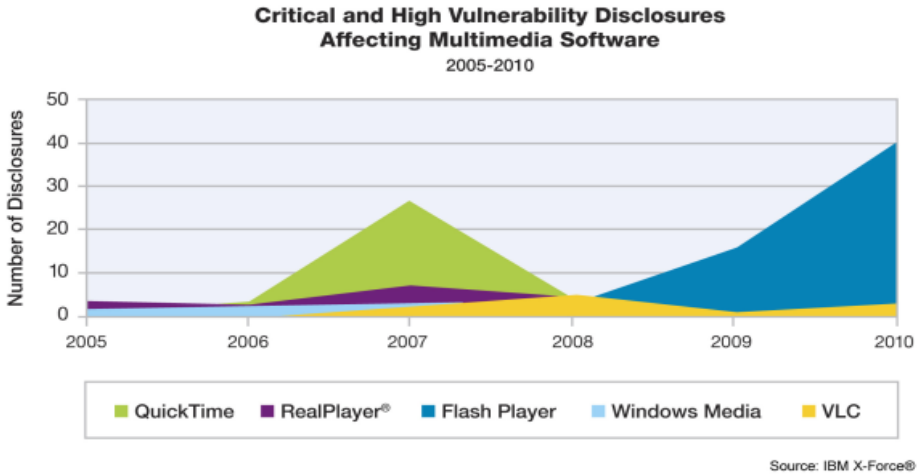
Note: Charts show which vulnerabilities were 50% or more likely to appear in a Web assessment for each industry

Client-Side Vulnerabilities: Web Browser, Document Reader & Multimedia Player Vulnerabilities Continue to Impact End Users

- Web browsers and their plug-ins continue to be the largest category of client-side vulnerabilities.
- 2010 saw an increase in the volume of disclosures in document readers and editors as well as multimedia players.

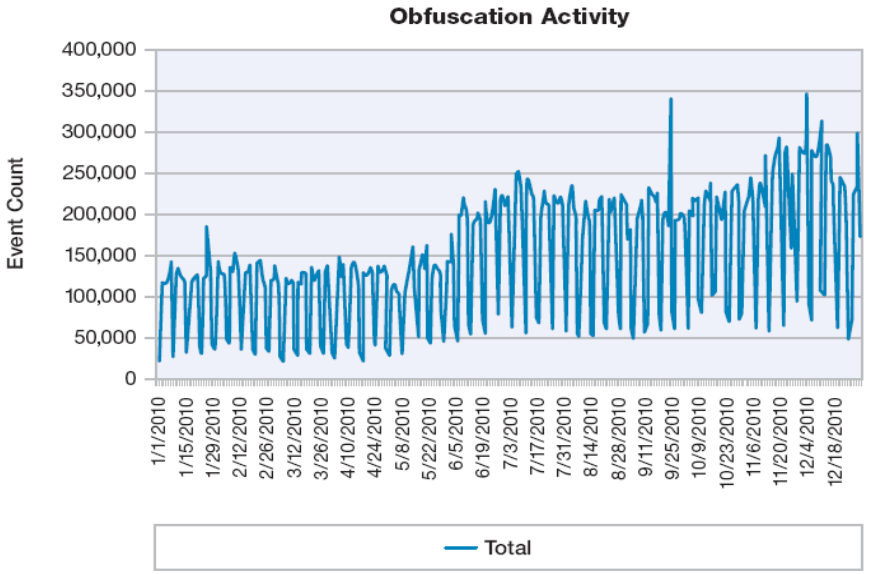


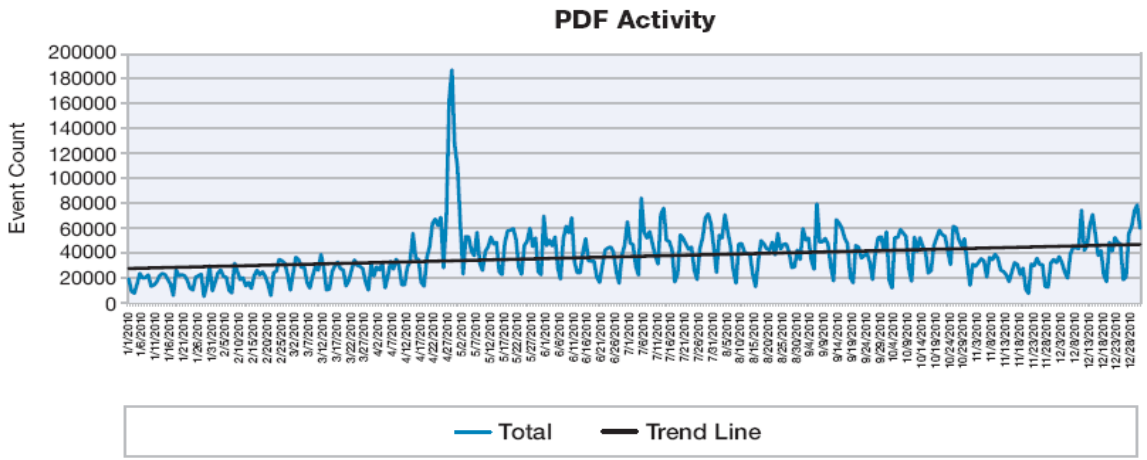




Suspicious Web Pages and Files

- Obfuscation activity continued to increase during 2010.
- Attackers never cease to find new ways to disguise their malicious traffic via JavaScript and PDF obfuscation.
  - Obfuscation is a technique used by software developers and attackers alike to hide or mask the code used to develop their applications.

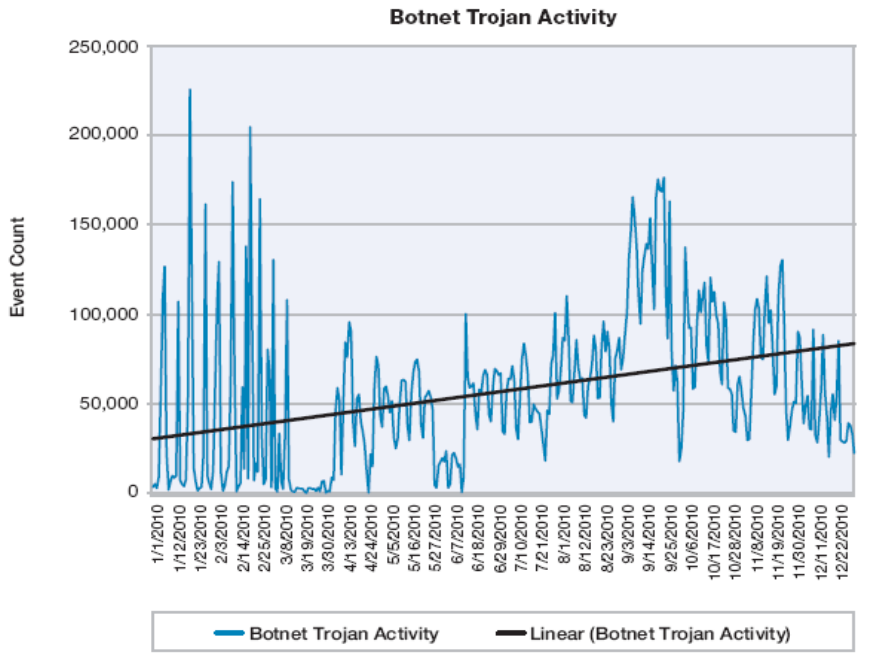




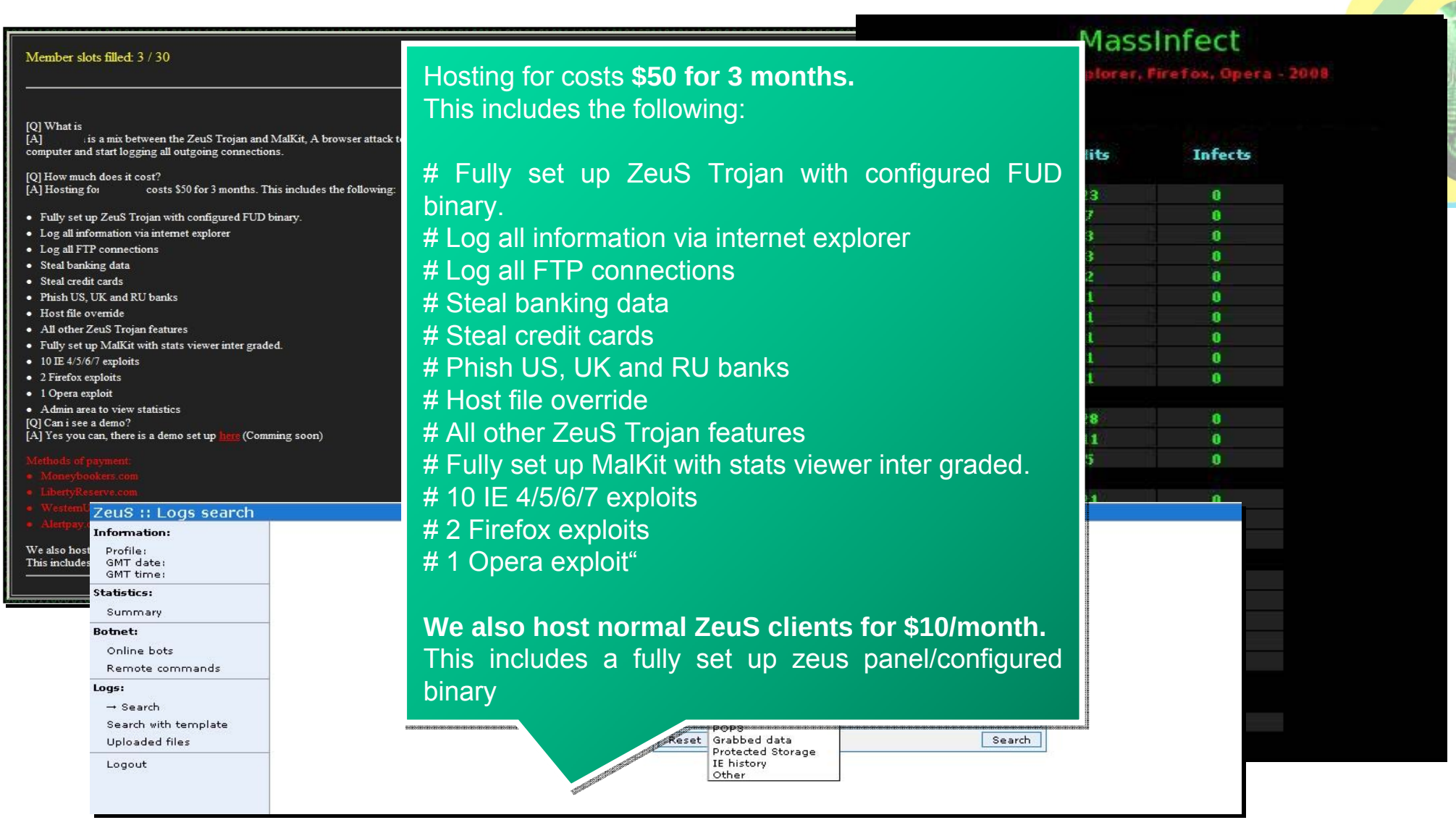
Proliferation of Mobile Devices Raises Security Concerns

Bot Network Activity on the Rise in 2010

- Trojan Bot networks continued to evolve in 2010 by widespread usage and availability.
- Zeus (also known as Zbot and Kneber) continue to evolve through intrinsic and plugin advances.
- Various bot networks based on Zeus were responsible for millions of dollars in losses over the last few years.
- Microsoft led operation resulted in the takedown of a majority of Waldec botnet in late February.
  - Communication between Waledac's command and control centers and its thousands of zombie computers was cut off in a matter of days.
- Much of the other activity seen is Zeus.



Zeus Crimeware Service



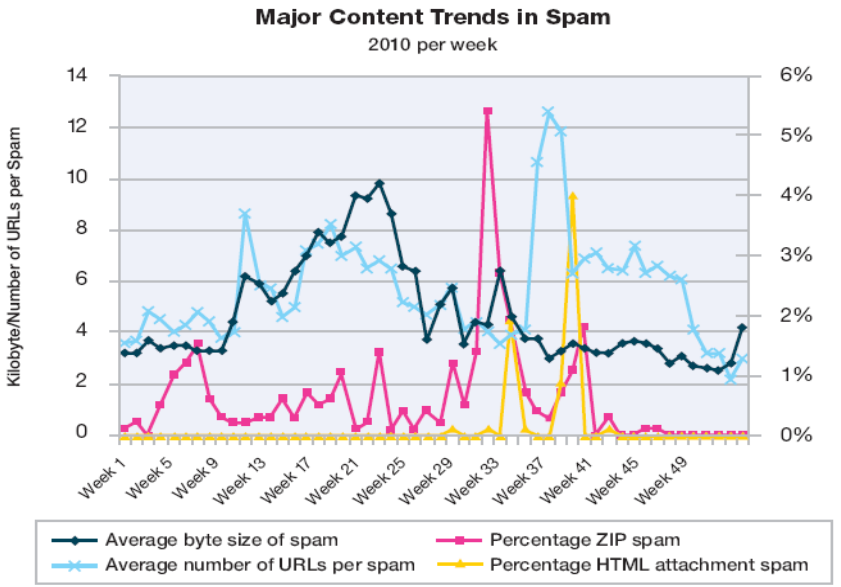
Hosting for costs **$50 for 3 months.**
This includes the following:

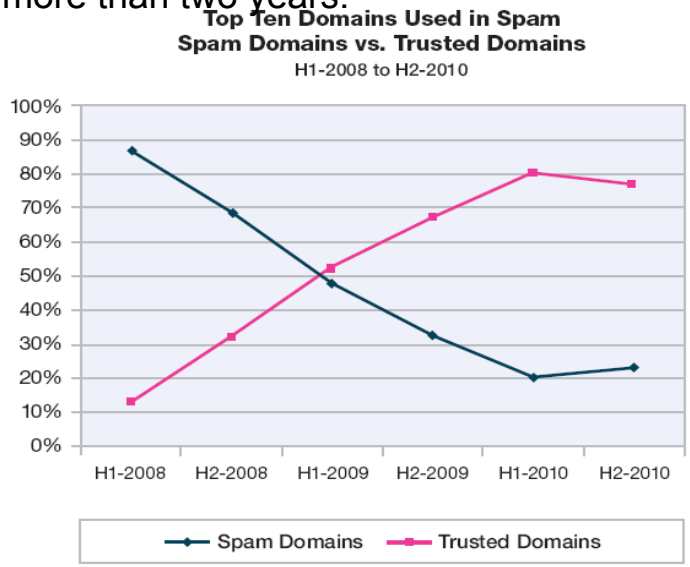
Fully set up ZeuS Trojan with configured FUD binary.
Log all information via internet explorer
Log all FTP connections
Steal banking data
Steal credit cards
Phish US, UK and RU banks
Host file override
All other ZeuS Trojan features
Fully set up MalKit with stats viewer inter graded.
10 IE 4/5/6/7 exploits
2 Firefox exploits
1 Opera exploit“

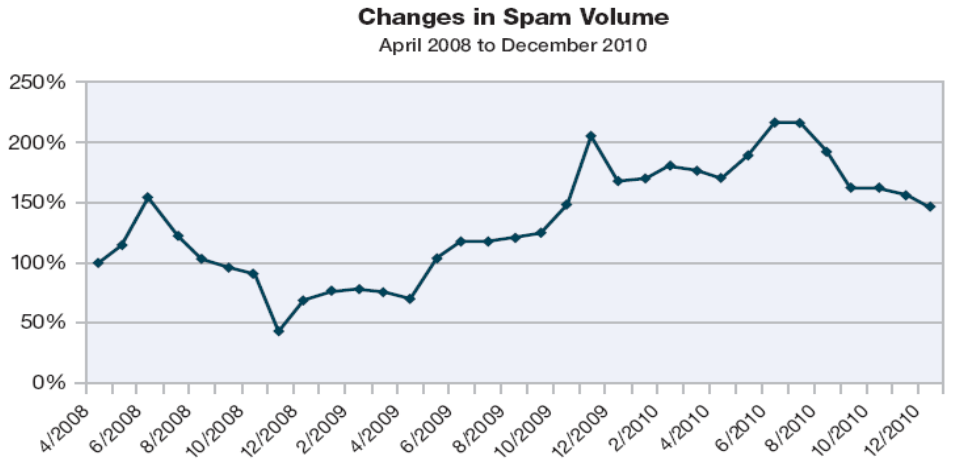
We also host normal ZeuS clients for $10/month.
This includes a fully set up zeus panel/configured binary

Spammers Focus on Content Rather than Volume

- Spammers made a continuous effort in 2010 to regularly change technical contents of spam messages rather than increasing volume.
  - Moving from random text spam combined with random URLs, ZIP Attachments, HTML attachments, to significantly increasing the average byte size of spam.
  - The amount of URL spam using well-known and trusted domain names declined slightly in the 2nd half of 2010, for the first time in more than two years.







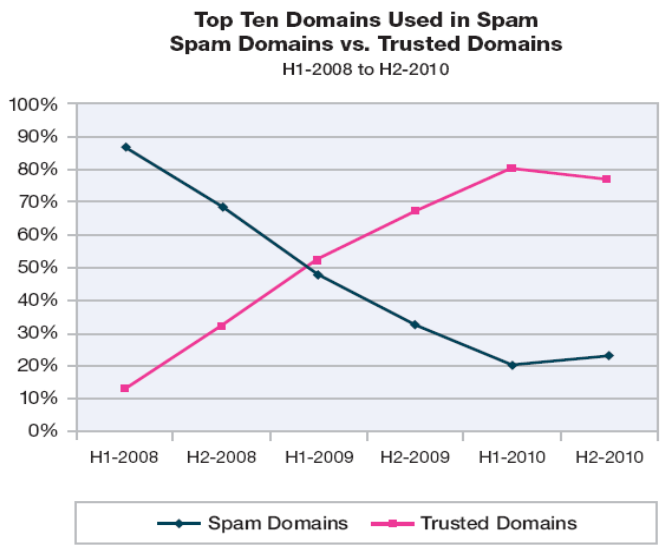
Spam Continues to Change to Avoid Detection

- **90%** of spam is classified as URL spam.
- Spammers continue to use “trusted” domains and “legitimate links” in spam messages to avoid anti-spam technologies.
- US, India, Brazil, and Vietnam were the top four spam-sending countries, accounting for nearly one-third of worldwide spam.
  - The US once again takes the

Rank	January 2010	February 2010	March 2010	April 2010	May 2010	June 2010
1.	flickr.com	radikal.ru	livefilestore.com	livefilestore.com	imageshack.us	imageshack.us
2.	imageshack.us	imageshack.us	imageboo.com	imageshack.us	imageshost.ru	imageshost.ru
3.	radikal.ru	livefilestore.com	radikal.ru	imageshost.ru	myimg.de	pikucha.ru
4.	livefilestore.com	flickr.com	imageshack.us	imgur.com	xs.to	imgur.com
5.	webmd.com	live.com	googlegroups.com	myimg.de	imgur.com	mytasvir.com
6.	picsochka.ru	imageboo.com	live.com	xs.to	tinypic.com	mojoimage.com
7.	live.com	capalola.biz	akamaitech.net	icontact.com	livefilestore.com	myimg.de
8.	superbshore.com	feetorder.ru	gonestory.com	tinypic.com	icontact.com	twimg.com
9.	tumblr.com	laughexcite.ru	bestanswer.ru	live.com	googlegroups.com	icontact.com
10.	fairgreat.com	hismouth.ru	wrotelike.ru	binkyou.net	images-amazon.com	twitter.com

Rank	July 2010	August 2010	September 2010	October 2010	November 2010	December 2010
1.	imageshack.us	yahoo.com	the.com	businessinsider.com	rolex.com	pfizer.com
2.	icontact.com	the.com	of.com	migre.me	msn.com	viagra.com
3.	the.com	icontact.com	msn.com	4freeimagehost.com	bit.ly	msn.com
4.	myimg.de	feetspicy.com	pfizerhelpfulanswers.com	bit.ly	pfizer.com	rolex.com
5.	of.com	of.com	and.com	postimage.org	co.cc	bit.ly
6.	imgur.com	ratherwent.com	bit.ly	imgur.com	royalfoote.com	product45h.com
7.	by.ru	and.com	in.com	pfizer.com	royalbelie.com	newpfizermed5k.com
8.	and.com	facebook.com	yahoo.com	viagra.com	royalreleasable.com	xmages.net
9.	in.com	in.com	a.com	uploadgeek.com	luxurystorewatch.com	cordfork.com
10.	tastymighty.com	a.com	x-misc.com	vipplayerq.com	basincook.com	onlinepfizersoft2.com

Table 3: Most common domains in URL spam, 2010



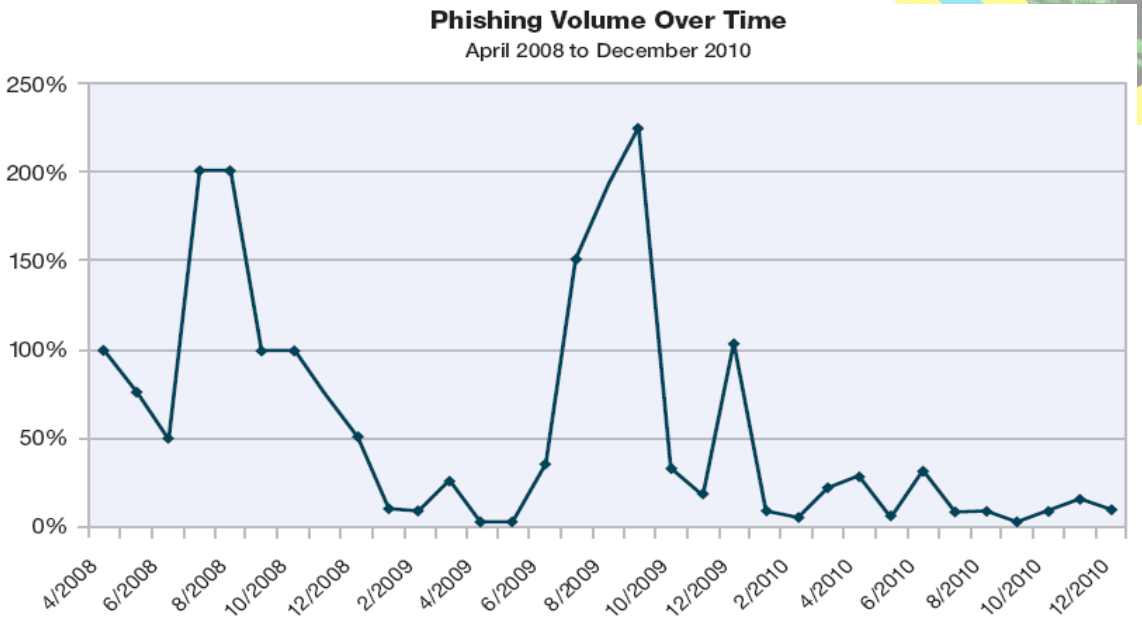
Country	% of Spam
USA	10.9%
India	8.2%
Brazil	8.1%
Vietnam	5.4%
Russia	5.2%

Country	% of Spam
United Kingdom	4.4%
Germany	3.7%
South Korea	3.3%
Ukraine	3.0%
Romania	2.9%

Table 5: Geographical Distribution of Spam Senders – 2010

Phishing Attacks Continue to Decline

- In 2010, Phishing emails slowed and the volume did not reach the levels seen at the end of 2009.
- India is the top sender in terms of phishing volume, while Russia is in second place, and Brazil holds third place.
  - Newcomers in the top 10 are Ukraine, Taiwan, and Vietnam, while Argentina, Turkey, and Chile disappeared from this list.
- Over time popular subject lines continue to drop in importance.
  - By 2010, the top 10 most popular



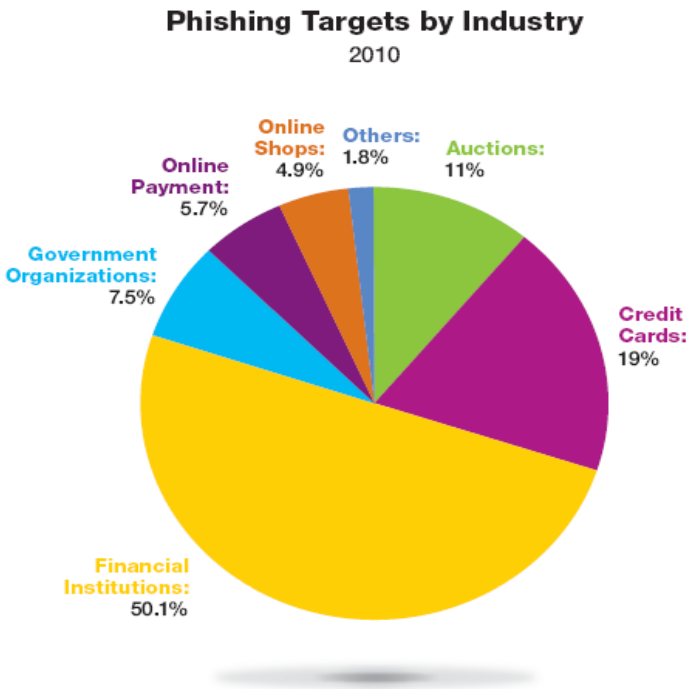
Country	% of Phishing
India	15.5%
Russia	10.4%
Brazil	7.6%
USA	7.5%
Ukraine	6.3%

Country	% of Phishing
South Korea	4.7%
Colombia	3.0%
Taiwan	2.2%
Vietnam	2.2%
Poland	1.8%

Table 7: Geographical Distribution of Phishing Senders – 2010

Phishing Targets Financial & Credit Card Industries

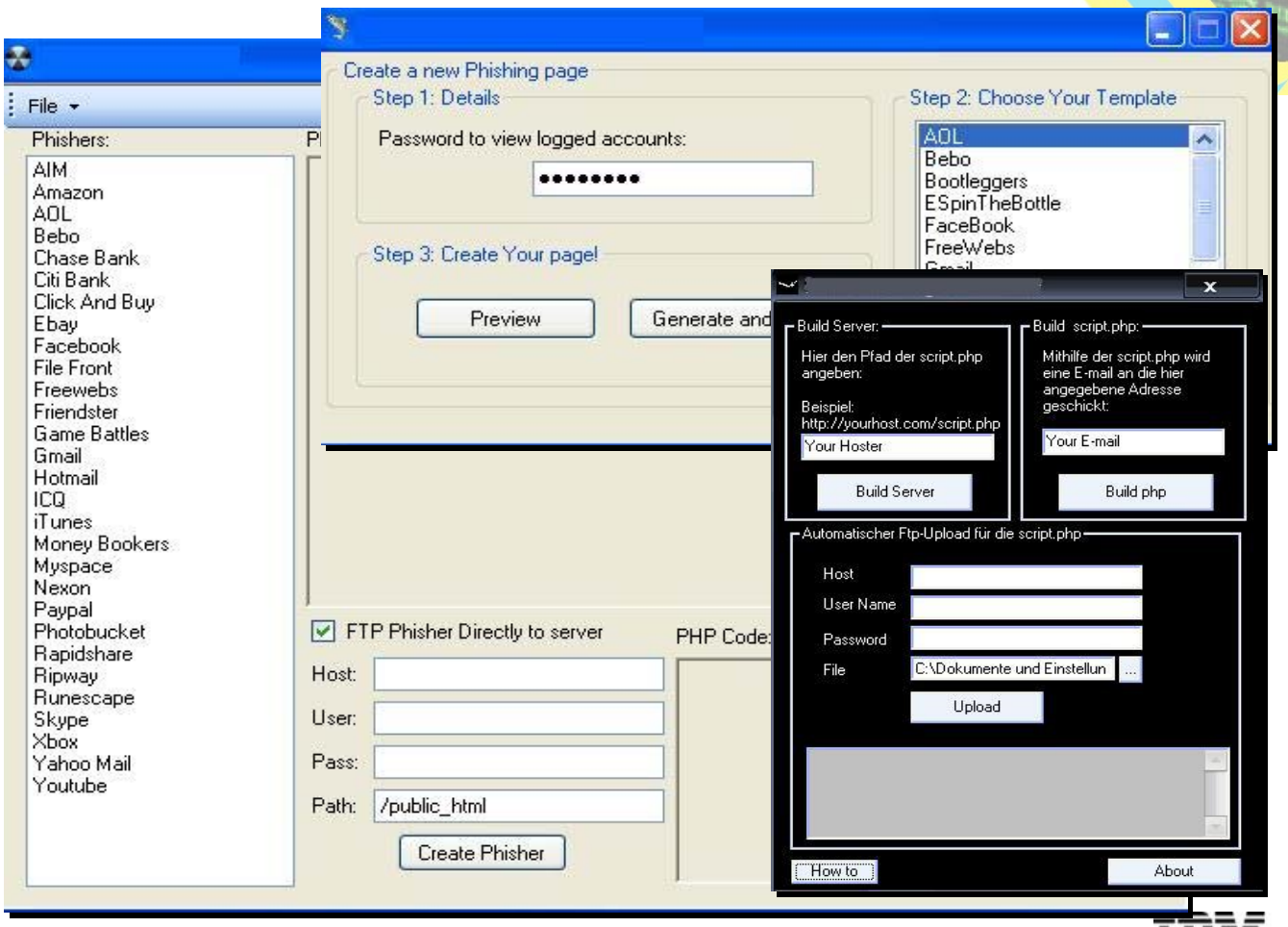
- **50.1%** of phishing is targeted at the financial industry vs. **60.9%** in 2009.
- **77%** of all financial phishing targets in the 2010 are located in North America vs. **95%** in 2009.
  - **22%** of financial phishing targets are located in Europe
- **19%** of phishing emails were targeted at credit cards



Phishing Tools

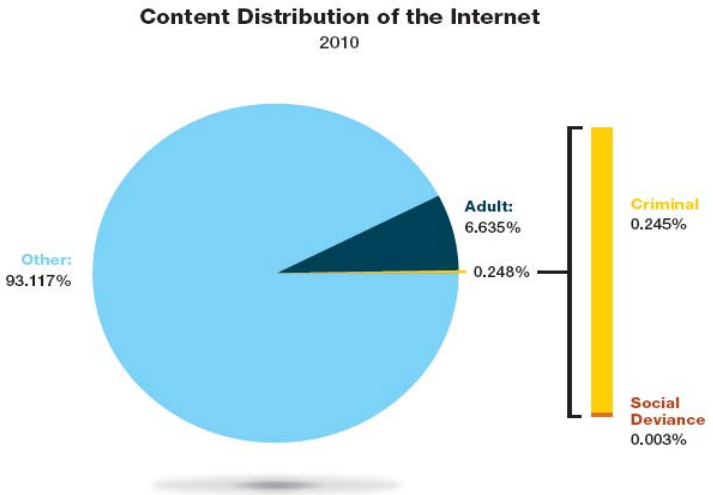
aol.data	23 KB	DATA File
aol.phish	1 KB	PHISH File
bebo.data	69 KB	DATA File
bebo.phish	1 KB	PHISH File
bootleggers.data	5 KB	DATA File
bootleggers.phish	1 KB	PHISH File
ESpinTheBottle.data	60 KB	DATA File
ESpinTheBottle.phish	1 KB	PHISH File
facebook.data	25 KB	DATA File
facebook.phish	1 KB	PHISH File
freewebs.data	20 KB	DATA File
freewebs.phish	1 KB	PHISH File
gmail.data	21 KB	DATA File
gmail.phish	1 KB	PHISH File
hi5.data	78 KB	DATA File
hi5.phish	1 KB	PHISH File
hotmail.data	26 KB	DATA File
hotmail.phish	1 KB	PHISH File
live.data	85 KB	DATA File
live.phish	1 KB	PHISH File
livelogin.data	11 KB	DATA File
livelogin.phish	1 KB	PHISH File
messblack.data	53 KB	DATA File
messblack.phish	1 KB	PHISH File
millersmiles.data	20 KB	DATA File
millersmiles.phish	1 KB	PHISH File
moblife.data	7 KB	DATA File
moblife.phish	1 KB	PHISH File
msndelchkr.data	17 KB	DATA File
msndelchkr.phish	1 KB	PHISH File
myspace.data	50 KB	DATA File
myspace.phish	1 KB	PHISH File
plugins	1 KB	Text Document
rs.data	5 KB	DATA File
rs.phish	1 KB	PHISH File
WoW.data	11 KB	DATA File
WoW.phish	1 KB	PHISH File

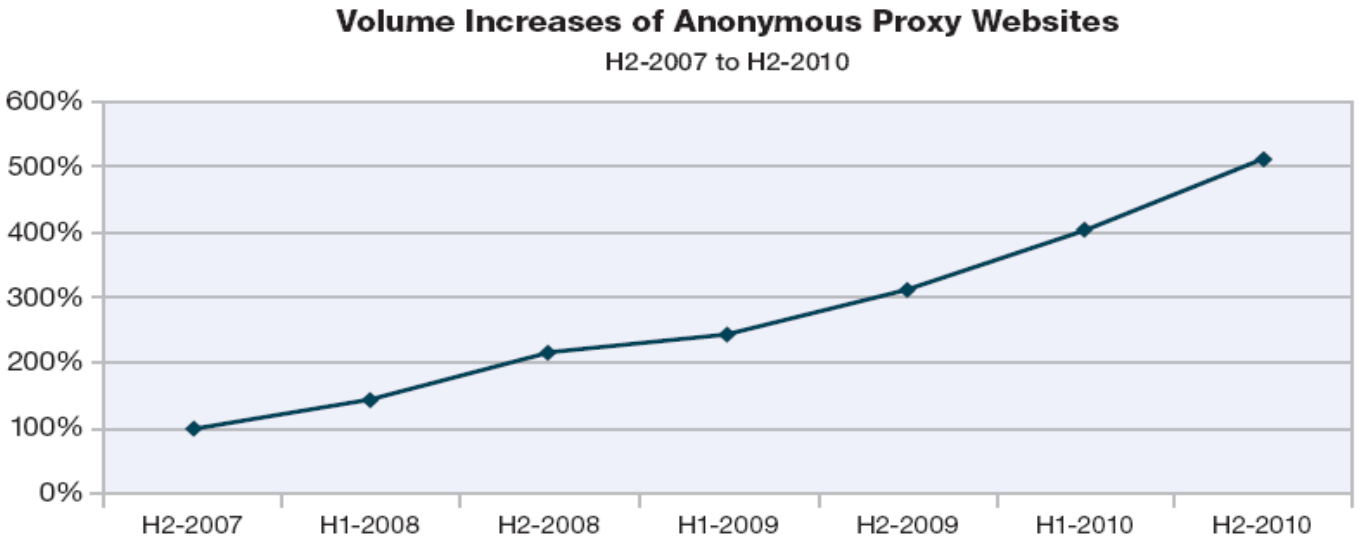
- Commercial phishing kits make it easy for a novice to start in the business



“Bad” Web Content Tries to Evade Filters

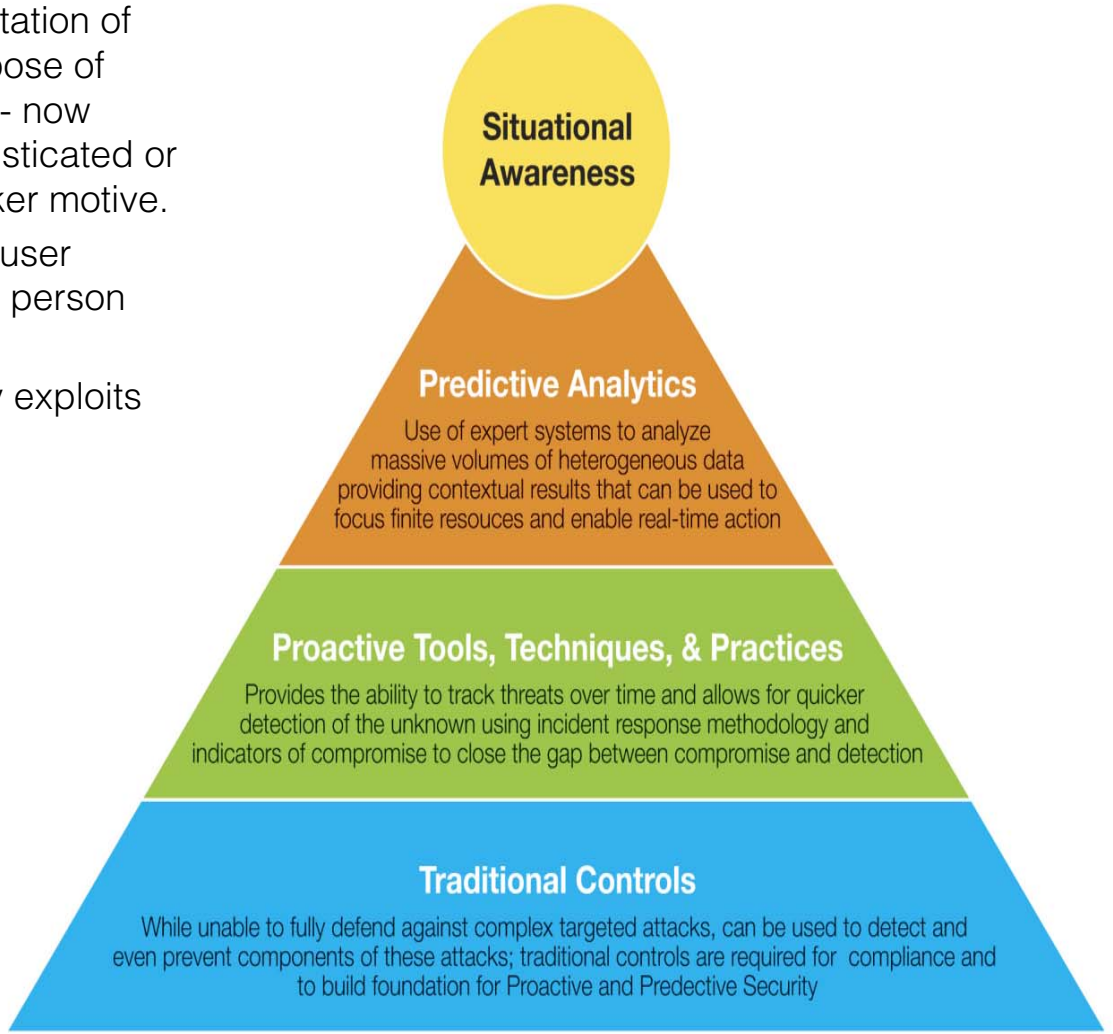
- Approximately **7%** of the Internet contains unwanted content such as pornographic or criminal Web sites.
- Anonymous proxies, which hide a target URL from a Web filter, have steadily increased more than quintupling in number since 2007.





Stuxnet and Advanced Persistent Threats (APT)

- APT previously thought to be exploitation of cyber-defense systems for the purpose of economic, political or military gain -- now associated with any targeted, sophisticated or complex attack regardless of attacker motive.
- Often a high-value target is an end-user system such as one that belongs to person who has access to sensitive data.
- Stuxnet took advantage of Zero day exploits with no work around or patch



Source: IBM X-Force®

Avoiding AV Technology – Malware Testing

Report Summary -- Attacks Continue Across all Security Domains

- 2010 saw the largest number of vulnerability disclosures in history, up **27%**. This increase has had a significant operational impact for anyone managing large IT infrastructures. More vulnerability disclosures can mean more time patching and remediating vulnerable systems.
- **49%** of the vulnerabilities disclosed in 2010 were web application vulnerabilities.
- **44%** of all vulnerabilities disclosed had no vendor-supplied patches available at the end of 2010.

- Bot network activity continued to grow in 2010. Consolidation among Trojan botnets is expected to be an emerging trend.
- The term “Advanced Persistent Threat” became an everyday part of the corporate security lexicon after high profile attacks on corporate enterprises by sophisticated, targeted attackers.
- Anonymous proxy websites continue to increase in volume, quintupling since 2007.

- The SQL Slammer worm first surfaced in January 2003 and became known as one of the most devastating Internet threats of the past decade. This worm continued to generate a great deal of traffic on the Internet in 2010.
- Obfuscation, whereby attackers attempt to hide their activities and disguise their programming, continued to increase over 2010 and shows no signs of waning.
- SQL injection is one of the leading attack vectors seen in 2010 because of its simplicity to execute and its scalability to compromise large amounts of Web servers across the Internet.

- USA, India, Brazil, Vietnam, and Russia are the top five countries for spam origination in 2010.
- The vast majority of spam, more than **90%**, is still classified as URL spam.
- The amount of URL spam using well-known and trusted domain names declined slightly in the 2nd half of 2010, for the first time in more than two years.
- In 2010, financial institutions continue to climb as the number one target for phishing attempts, representing **50%** of the targeted industries.

IBM X-Force Security Leadership

X-Force Trend Reports

The IBM X-Force Trend & Risk Reports provide statistical information about all aspects of threats that affect Internet security,. Find out more at http://www-935.ibm.com/services/us/iss/xforce/trendreports/

X-Force Security Alerts and Advisories

Only IBM X-Force can deliver preemptive security due to our unwavering commitment to research and development and 24/7 global attack monitoring. Find out more at http://xforce.iss.net/

X-Force Blogs and Feeds

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