

# Personal Security Online: Protecting Yourself

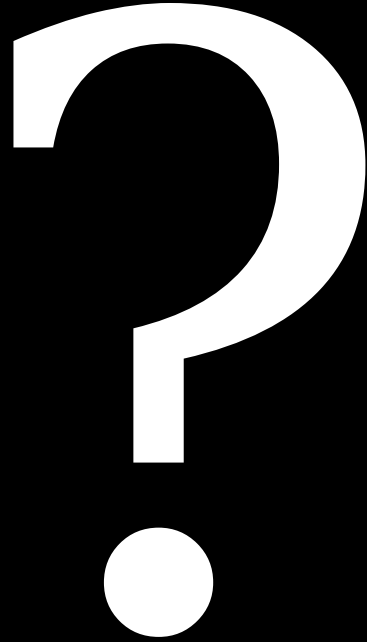
Ladue Chapel Presbyterian Church

R. Scott Granneman

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Last updated 20120505

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# ABOUT WUSTL

## Leadership

## Facts, History and Traditions

## Campus Stores

## About St. Louis

## Logos, Symbols & Marks

## Print & Digital Media

## Commencement

## Technology

## Compliance & Policies

## Visitors, Tours & Maps

The mission of Washington University in St. Louis is the promotion of learning — learning by students and by faculty. Teaching, the transmission of knowledge, is central to our mission, as is research, the creation of new knowledge.

**Faculty** — composed of scholars, scientists, artists and members of the learned professions — serve society by teaching; by adding to the store of human art, creativity, understanding, and wisdom; and by providing direct services, such as **health care**.

The university offers more than 90 programs and almost 1,500 courses leading to bachelor's, master's and doctoral degrees in a broad spectrum of **traditional and interdisciplinary** fields, with additional opportunities for minor concentrations and individualized programs.



**Brookings Hall**  
Washington University's signature building



Washington University in St. Louis

Technology in Our Changing Society

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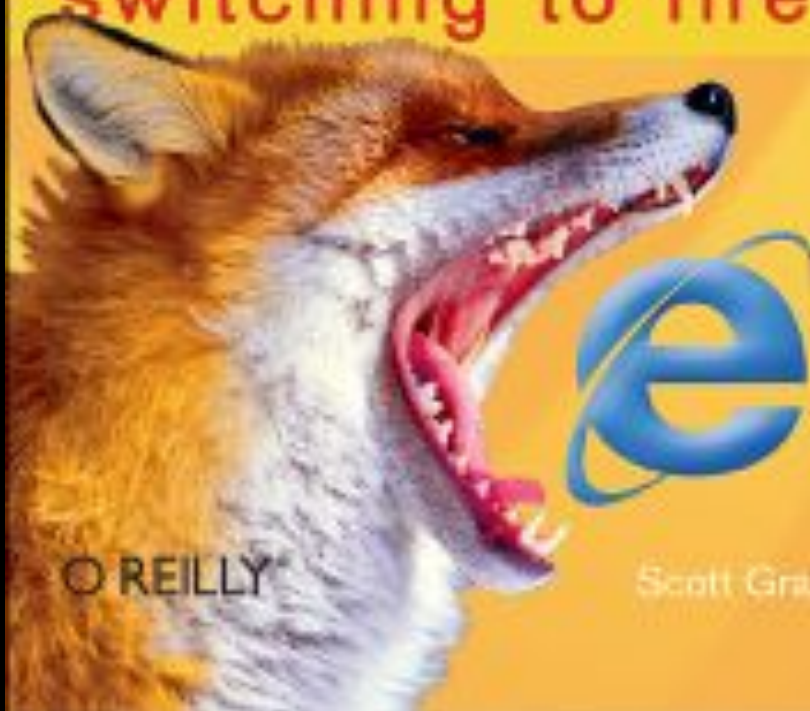
From Blogs to Wikis:  
Building Community  
in a Virtual Environment

Technology & the Law

Practical Security

don't  
on the click  
blue e!

switching to firefox



O'REILLY

Scott Granneman

# Hacking Knoppix



Look through any Windows

Build tools to repair and recover what you thought Windows had lost



**IT'S ALL HERE**

bootable Live CD features Knoppix Light 4.0.2

## This one's MINE

▣ Customize a Knoppix distro just for your needs

Scott Granneman

ESSENTIAL CODE  
AND COMMANDS

# Linux<sup>®</sup>

PHRASEBOOK



# UBUNTU HACKS

*Tips & Tools for Exploring,  
Using, and Tuning Linux*



O'REILLY®

*Kyle Rankin,  
Jonathan Oser & Bill Childers*



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WITH SOLUTIONS MEMBERSHIP



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**The Book Professional Sys Admins MUST Own to Safely Deploy Vista**

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Scott Granneman



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Mac and iPhone book for  
users and developers



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Advanced Capabilities and Techniques

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Browsers, phishing, and user interface design - Mozilla Firefox <2>

File Edit View Go Bookmarks Tools Help

Back Forward Home Stop Reload Go

http://www.securityfocus.com/columnists/405

Browsers, phishing, and user int...

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Level 2: Elevated

Threat level definition

Home Bugtraq Vulnerabilities Mailing Lists Tools Search: SEARCH

News (page 1 of 2) next

Infocus

- Foundations
- Microsoft
- Linux
- IDS
- Incidents
- Virus
- Pen-Test
- Firewalls

Columnists

Mailing Lists

- Newsletters
- Bugtraq
- Focus on IDS
- Focus on Linux
- Focus on Microsoft
- Forensics
- Pen-test
- Security Basics

PRINT EMAIL COMMENT

 **Browsers, phishing, and user interface design**  
 Scott Granneman, 2005-05-05

Phishing works for so many reasons, we need to rethink browser and user interface design to provide some real-life security to the average user who doesn't see or understand the security cues.

Occasionally a criminal is so, well, clever that you have to admire him even as you wish that he spends the rest of his life in jail. Take Arnold Rothstein, for instance. One of the kingpins of organized crime in New York City during Prohibition and before, the "Great Brain," as he was termed, was more than likely behind the infamous Black Sox scandal, in which the 1919 World Series was fixed in favor of the Cincinnati Reds. He is also widely credited with inventing the floating crap game immortalized in *Guys and Dolls*. Like some character out of a Damon Runyon story, Rothstein's "office" was outside of Lindy's Restaurant, at Broadway and 49th Street, and he

**\* Answer me this truthfully: do you really trust Aunt Sally or Steve in Accounting or your kid sister Brooke to carefully read an anti-phishing warning, ponder the ramifications, and then make a wise choice? If you answer in the affirmative, then you haven't read Why Phishing Works. \***

Scott Granneman

Done 2.517s 5 Errors PageRank Alexa

# LINUX

## MAGAZINE

OPEN SOURCE. OPEN STANDARDS.

# THE MYSQL DATABASE LEAPS AHEAD

## INTERVIEW WITH MARTEN MICKOS

The MySQL AB CEO  
on Open Source,  
Staying Competitive

## APPLICATION DEVELOPMENT WITH MYSQL 5

Coding with Triggers, Views,  
and Stored Procedures

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# WebSanity

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## Design for a Better World

WebSanity provides user-centric Web design [solutions](#), with a focus on working with non-profit organizations, including:

- Web Design, Planning and Consulting
  - Content Management Systems
  - E-commerce
  - Online Membership and Marketing
  - Online Multimedia & Interactive Interpretives

Successful Web design and development is more than meets the eye. Our proven process helps ensure you get the most out of your Web site, regardless of how large or small your organization is.

This site is designed as an introduction not only to what we do, but best Web development practices in general.



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# Department of Neurology





# 4 Talks


Personal Security on the Internet

The Future of Journalism  
& the Media

*With Denise Lieberman:*

Voting: Technical & Legal Issues

Technology & the Limits  
of Censorship & Free Speech



Once a technology  
makes something possible,  
it gets applied,  
whether for good or bad.

Donald A. Norman

Security is a *process*,  
not a product



What to  
Believe?











Yesterday a lot of you  
alerted me to a picture  
of a Taliban propaganda poster  
with Bert!

Reality is imitating the Web!  
I am honestly freaked out!

“Bert Is Evil”  
Webmaster





# Malware

Virus  
Worm  
Trojan Horse  
Spyware

# *Virus*

Self-replicating

Infects another program  
& uses that to spread

Alters the way a computer operates

# *Worm*

Self-replicating

Uses a network  
to send copies of itself  
to other computers

Spreads without human intervention



## *Trojan Horse*

Malicious program  
that disguises itself as  
legitimate software

Looks harmless or useful,  
but hides something harmful

# *Spyware*

Gathers information  
about you & your computer use

Transmits information  
to an external entity  
without your knowledge  
or informed consent

# Wireless



What's a *packet sniffer*?

A program and/or device  
that monitors the data  
passing through a network

It can tell the user  
where data is coming from,  
where data is going,  
and what the data is



[www.wireshark.org](http://www.wireshark.org)



(Untitled) - Ethereal

File Edit View Go Capture Analyze Statistics Help

Filter: imap contains LOGIN

No.	Time	Source	Destination	Protocol	Info
390	46.182676	66.39.82.33	192.168.2.111	IMAP	Response: * OK [CAPABILITY IMAP4-REV1 LITERAL+ SASL-IR LOGIN-REFERRALS AUTHENTICATE] B
395	46.254808	66.39.82.33	192.168.2.111	IMAP	Response: * CAPABILITY IMAP4-REV1 LITERAL+ IDLE IMAP4-REFERRALS BINARY B
396	46.309116	66.39.82.33	192.168.2.111	IMAP	Response: * OK [CAPABILITY IMAP4-REV1 LITERAL+ SASL-IR LOGIN-REFERRALS AUTHENTICATE] B

Frame 396 (98 bytes on wire, 98 bytes captured)

- Ethernet II, Src: 80:02:3d:26:e7:34, Dst: 80:01:3d:04:44:37
- Internet Protocol, Src Addr: 192.168.2.111 (192.168.2.111), Dst Addr: 66.39.82.33 (66.39.82.33)
- Transmission Control Protocol, Src Port: 58527 (58527), Dst Port: imap2 (143), Seq: 371, Len: 52
- Internet Message Access Protocol

```

0000  80 01 3d 04 44 37 80 02 2d 26 e7 34 08 00 45 80  . . . . .
0010  80 54 4c 1e 40 08 40 08 e7 25 c8 e6 02 8f 42 27  . . . . .
0020  52 23 c5 51 80 01 80 71 de ed f3 34 d1 ce 28 35  . . . . .
0030  87 cc cd 01 80 08 81 03 08 8e 08 29 23 9d 0e 84  . . . . .
0040  5f 18 31 28 4c 44 47 48 4e 30 22 75 63 8f 74 74  . . . . .
0050  22 28 22 5c 5c 38 37 28 68 4f 54 81 28 5c 5c 22  . . . . .
0060  8d 0a
  
```

File: (Untitled) 1185 KB @ 31.51 Drops/s



20100511.pcap - Wireshark

File Edit View Go Capture Analyze Statistics Telephony Tools Help

Ffilter: http contains facebook

No.	Time	Source	Destination	Protocol	Info
13	6.294614	192.168.1.114	66.220.145.13	HTTP	GET /ajax/intent.php?_a=1&filter=&pending=true&request_type=...
168	186.564880	192.168.1.114	69.63.176.174	HTTP	GET /x/3886658556/false/p_504568267=3 HTTP/1.1
364	272.187522	192.168.1.114	69.63.176.174	HTTP	GET /x/2084290339/false/p_504568267=3 HTTP/1.1
4334	298.940563	192.168.1.139	66.220.145.35	HTTP	GET /p HTTP/1.1
4336	299.056349	192.168.1.139	66.220.145.35	HTTP	GET /x/1262269991/false/p_1158900097=29 HTTP/1.1
4349	299.223074	192.168.1.139	69.63.189.34	HTTP	GET /ajax/presence/reconnect.php?__a=1&reason=0&iframe_loaded=t...
4432	299.514930	192.168.1.139	66.220.145.35	HTTP	GET /x/3366637175/false/p_1158900097=0 HTTP/1.1
4433	299.515794	192.168.1.139	66.220.145.35	HTTP	[TCP out of order] GET /x/3366637175/false/p_1158900097=0 HTTP...
4444	299.732803	192.168.1.139	69.63.189.34	HTTP	POST /ajax/chat/buddy_list.php?__a=1 HTTP/1.1 (application/x-y...
4760	302.490790	192.168.1.139	69.63.189.34	HTTP	GET /ajax/chat/history.php?__a=1&id=1348823550 HTTP/1.1
5088	305.877586	192.168.1.114	69.63.189.31	HTTP	GET /ajax/intent.php?__a=1&filter=&pending=true&request_type=...
6639	324.403128	192.168.1.139	77.67.87.122	HTTP	GET /hprofile-ak-sf2p/hs649_snc3/27486_10000479785789_586_e.js...
7053	335.333305	192.168.1.139	77.67.87.122	HTTP	GET /hprofile-ak-sf2p/hs309_ash1/23244_883125579_9824_o.jpg HT...

Keep-Alive: 115\r\n  
 Connection: keep-alive\r\n  
 X-SVN-Rev: 244938\r\n  
 Referrer: http://www.facebook.com/profile.php?id=504568267&wall&history\_fbid=1158900097&fbid=1158900097\r\n  
 [truncated] Cookie: \_\_utma=87286159.1316193368.1226010709.1257630126.1257734728.87; datr=L233161259-6735bad27959d744d1218866ad8da792d7b1eb02acc1c\r\n

01c0 2c 2a 3b 71 3d 30 2e 37 0d 0a 4b 65 65 70 2d 41 .+;q=0.7 ..Keep-A  
 01d0 6c 69 76 65 3a 20 31 31 35 0d 0a 43 6f 6e 6e 65 live: 11 5..Conne  
 01e0 63 74 69 6f 6e 3a 20 6b 65 65 70 2d 61 6c 69 76 ction: k eep-aliv  
 01f0 65 0d 0a 58 2d 53 56 4e 2d 52 65 76 3a 20 32 34 e..X-SVN -Rev: 24  
 0200 34 39 33 38 0d 0a 52 65 66 65 72 65 72 3a 20 68 4938..Re ferer: h  
 0210 74 74 78 3a 2f 2f 77 77 77 2e 66 61 63 65 62 6f ttp://ww w.facebo  
 0220 8f 8b 2e 63 6f 6d 2f 70 72 6f 66 69 6c 65 2e 70 ok.com/p rofile.p  
 0230 88 78 3f 69 64 3d 35 30 34 35 36 38 32 36 37 26 hp?id=50 4568267&  
 0240 76 3d 77 61 6c 6c 26 73 74 6f 72 79 5f 66 62 69 vwall& history\_fbi  
 0250 64 3d 31 31 38 33 38 34 38 33 34 38 36 31 34 33 dn=118384 83486143  
 0260 39 0d 0a 43 6f 6f 6b 69 65 3a 20 5f 5f 75 74 6d 9..Cooki e: \_\_utm  
 0270 61 3d 38 37 32 38 36 31 35 39 2e 31 33 31 36 31 a=872861 59.13161  
 0280 39 33 33 36 38 2e 31 32 32 36 30 31 30 37 30 39 93368.12 26010709  
 0290 2e 31 32 35 37 36 33 30 31 32 36 2e 31 32 35 37 .1257630 126.1257

HTTP Referer (http.referer),... Packets: 52773 Displayed: 133 Marked: 0 Profile: Default

20100511.pcap - Wireshark

File Edit View Go Capture Analyze Statistics Telephony Tools Help

Filter: http contains facebook

No.	Time	Source	Destination	Protocol	Info
13	6.294614	192.168.1.114	66.220.145.13	HTTP	GET /ajax/integration.php?_a=1&filter=hi&pending=true&request_type=...
160	186.564880	192.168.1.114	69.63.176.174	HTTP	GET /p_504568267=3 HTTP/1.1
364	272.187522	192.168.1.114	69.63.176.174	HTTP	GET /p_504568267=3 HTTP/1.1
4334	298.940663	192.168.1.139	66.220.145.35	HTTP	GET /p_1158900097=29 HTTP/1.1
4336	299.056349	192.168.1.139	66.220.145.35	HTTP	CONNECT.php?__a=1&reason=0&iframe_loaded=...
4349	299.223074	192.168.1.139	69.63.189.34	HTTP	GET /p_1158900097=0 HTTP/1.1
4432	299.514930	192.168.1.139	66.220.145.35	HTTP	GET /x/3366637175/false/p_1158900097=0 HTTP...
4433	299.513794	192.168.1.139	66.220.145.35	HTTP	list.php?__a=1 HTTP/1.1 (application/x-...
4444	299.732803	192.168.1.139	69.63.189.34	HTTP	...php?__a=1&id=1340823550 HTTP/1.1
4760	302.490790	192.168.1.139	69.63.189.34	HTTP	..._a=1&filter=hi&pending=true&request_type=...
5088	305.877586	192.168.1.114	69.63.189.31	HTTP	hs649.sec3/27486_100000479785789_566_q.jp...
6639	324.403128	192.168.1.139	77.67.87.122	HTTP	hs309.ash1/23244_883125579_9824_q.jpg HT...
7053	335.303305	192.168.1.139	77.67.87.122	HTTP	

Keep-Alive: 115\r\n  
 Connection: keep-alive\r\n  
 X-SW-Rev: 244938\r\n  
 Referer: http://www.facebook.com/profile.php?id=504568267&v=wall&story...  
 [truncated] Cookie: \_\_utma=87286159.1316193368.1226910769.1257638126.1...  
 \r\n

```

0000 00 21 29 c8 71 84 90 1f 5b d0 be 27 08 00 45 00  .!.q... {...'..E.
0010 04 cf 51 22 40 00 40 06 4f 03 c0 a8 01 72 42 dc  ..Q*Q.Q. 0....rB.
0020 91 0d e8 25 00 50 a8 01 8d a8 55 fa 64 2e 80 18  ...%.P... ..U.d...
0030 ff ff 7b af 90 00 01 01 08 0a 2e 40 90 e4 89 1b  ..{..... ..@....
0040 8d f1 47 45 54 20 2f 61 6a 61 78 2f 69 6e 74 65  ..GET /a jax/inte
0050 6e 74 2e 70 68 70 3f 5f 5f 61 3d 31 26 66 69 6c  nt.php?__a=1&fil
0060 74 65 72 3d 68 26 70 65 6e 64 69 6e 67 3d 74 72  ter=hi&pe nding=tr
0070 75 65 26 72 65 71 75 65 73 74 5f 74 79 70 65 3d  ue&reque st_type=
0080 31 20 48 54 54 50 2f 31 2e 31 0d 0a 48 0f 73 74  1 HTTP/1 ..l..Host
0090 3a 20 77 77 77 2e 66 61 63 65 62 6f 6f 6b 2e 63  : www.fa cebook.c
00a0 6f 6d 0d 0a 55 73 65 72 2d 41 67 65 6e 74 3a 20  om..User -Agent:
00b0 4d 0f 7a 09 6c 6c 61 2f 35 2e 30 20 28 4d 61 63  Mozilla/ 5.0 (Mac
00c0 09 0e 74 0f 73 08 3b 20 55 3b 20 49 6e 74 65 6c  intosh; U: Intel
00d0 20 4d 61 63 20 4f 53 20 58 20 31 20 2e 35 3b 20  Mac OS X 10.5:
00e0 28 4e 74 88 87 76 70 75 76 7a 71 7a 70 73 7a  ..@... .. . . .
  
```

Ready to load or capture | Packets: 52773 Displayed: 133 Marked: 0 | Profile: Default

Follow TCP Stream

Stream Content

```

GET /ajax/intent.php?__a=1&filter=hpending=true&request_type=1 HTTP/1.1
Host: www.facebook.com
User-Agent: Mozilla/5.0 (Macintosh; U; Intel Mac OS X 10.5; en-US; rv:1.9.2.3) Gecko/20100401 Firefox/3.6.3
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: en-us,en;q=0.5
Accept-Encoding: gzip,deflate
Accept-Charset: ISO-8859-1,utf-8;q=0.7,*;q=0.7
Keep-Alive: 115
Connection: keep-alive
X-SVN-Rev: 244938
Referer: http://www.facebook.com/profile.php?id=504568267&v=wall&story_fbid=118384834861439
Cookie: __utma=87286159.1316193368.1226010709.1257630126.1257734728.87;
datr=1233161259-6735bad27950d744d1218866ad8da792d7b1eb02acclc4400588c; lxe=yunicomecha@yahoo.com; xs=6937dd979d5f3e2ae4e4ae22912f65c9;
lo=ExjWSXqW0yly5VASX0eQ; lxr=1; locale=en_US; c_user=504568267; sct=1272591698; sid=3; x-referer=http%3A%2F%2Fwww.facebook.com%2F%3Fref%
3Dlogo%23%2Fprofile.php%3Fid%3D504568267%26v%3Dwall%26story_fbid%3D118384834861439;
presence=DJ273608322614H0L504568267A3BF273608325110Wb1cMsdP8bl0MbvTP2735906698cTP2736044568sbP8tA_7bQbuctP273608321B5A008b1ADacA29V27360
82222284BlcPBcrrADrAB.968tsP273588495000; cur_max_lag=2; e=

```

[12968 bytes missing in capture file]Ys....X....  
m..Z.....ek..!  
J\*%k.....I.....W..!  
.....105...d.k.z.x..2.gv!..0.....].\*...+  
...S...e...b...+..M...-B...>.6...tEa...f...K/...z...2w...a.....0...#6...t..0.\$.....r.....l..  
.....K..w.p.....a[.....].>

Find Save As Print Entire conversation (10512 bytes) [v] ASCII [o] EBCDIC [o] Hex Dump [o] C Arrays [x] Raw

Help [x] Filter Out This Stream [x] Close

Follow TCP Stream

### Stream Content

```
GET /ajax/intent.php?__a=1&filter=hipending=true&request_type=1 HTTP/1.1
Host: www.facebook.com
User-Agent: Mozilla/5.0 (Macintosh; U; Intel Mac OS X 10.5; en-US; rv:1.9.2.3) Gecko/20100401 Firefox/3.6.3
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: en-us,en;q=0.5
Accept-Encoding: gzip,deflate
Accept-Charset: ISO-8859-1,utf-8;q=0.7,*;q=0.7
Keep-Alive: 115
Connection: keep-alive
X-SVN-Rev: 244938
Referer: http://www.facebook.com/profile.php?id=504568267&v=wall&story_fbid=118384834861439
Cookie: __utma=87286159.1316193368.1226010709.1257630126.1257734728.87;
datr=1233161259-6735bad27959d744d1218866ad8da792d7b1eb02ac1c44d0588c; lxe=yunicomecha%40yahoo.com; xs=6937dd979d5f3e2ae4e4ae22912f65c9;
lo=ExjwSxqWly5VASKeUe0; lxr=1; locale=en_US; c_user=504568267; sct=1272591688; sid=3; x-referer=http%3A%2F%2Fwww.facebook.com%2F%3Fref%
3Dlogo%23%2Fprofile.php%3Fid%3D504568267%26v%3Dwall%26story_fbid%3D118384834861439;
presence=0J273608322614H0L504568267A3BF273608325110Wb1cMsdP8blombvtP2735906698ctP2736044568sbP8tA_7bQbuctP2736083218sA008b1ADacA29V27360
822222848lcPBcrrADrAB.968tsP273588495000; cur_max_lag=2; em
```

[12968 bytes missing in capture file]Ys...x....  
m..Z.....ek.-!  
J+k.....I.....W..!  
... 105...d.k.z.x..2.gvl..0.....].\*...+.  
... S...e...b...+...M.....-B.....>.6...tEu...f...K/...z...2w...a.....0...#6...t...0.\$.....r.....l..

Find Save As Print Entire conversation (10512 bytes) ASCII EBCDIC Hex Dump C Arrays Raw

Help Filter Out This Stream Close

Follow TCP Stream

### Stream Content

```
GET /ajax/intent.php?__a=1&filter=hipending=true&request_type=1 HTTP/1.1
Host: www.facebook.com
User-Agent: Mozilla/5.0 (Macintosh; U; Intel Mac OS X 10.5; en-US; rv:1.9.2.3) Gecko/20100401 Firefox/3.6.3
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: en-us,en;q=0.5
Accept-Encoding: gzip,deflate
Accept-Charset: ISO-8859-1,utf-8;q=0.7,*;q=0.7
Keep-Alive: 115
Connection: keep-alive
X-SVN-Rev: 244938
Referer: http://www.facebook.com/profile.php?id=504568267&v=wall&story_fbid=118384834861439
Cookie: __utma=87286159.1316193368.1226010709.1257630126.1257734728.87;
datr=123161259-6735bad27959d744d1218866ad8da792d7b1eb02ac1c44d0588c; lxe=yunicomecha%40yahoo.com; xs=6937dd979d5f3e2ae4e4ae22912f65c9;
lo=ExjwSXqWly5VAXXeU0; lxr=1; locale=en_US; c_user=504568267; sct=1272591688; sid=3; x-referer=http%3A%2F%2Fwww.facebook.com%2F%3Fref%
3Dlogo%23%2Fprofile.php%3Fid%3D504568267%26v%3Dwall%26story_fbid%3D118384834861439;
presence=0J273608322614H0L504568267A3BF273608325110Wb1cMsdP8blombvtP2735906698ctP2736044568sbP8tA_7bQbucTP2736083218sA008b1ADacA29V27360
822222848lcPBcrrADrAB.968tsP273588495000; cur_max_lag=2; em
```

[12968 bytes missing in capture file]Ys...x....  
m..Z.....ek.-!  
J+k.....I.....W..!  
...105...d.k.z.x..2.gvl..0.....].\*...+  
...S...e...b...+...M.....-B.....>.6...tEu...f...K/...z...2w...a.....0...#6...t...0.\$.....r.....l...  
...K...w.p.....a[.....].>

Find Save As Print Entire conversation (10512 bytes) ASCII EBCDIC Hex Dump C Arrays Raw

Help Filter Out This Stream Close

Follow TCP Stream

### Stream Content

```
GET /ajax/intent.php?__a=1&filter=hipending=true&request_type=1 HTTP/1.1
Host: www.facebook.com
User-Agent: Mozilla/5.0 (Macintosh; U; Intel Mac OS X 10.5; en-US; rv:1.9.2.3) Gecko/20100401 Firefox/3.6.3
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: en-us,en;q=0.5
Accept-Encoding: gzip,deflate
Accept-Charset: ISO-8859-1,utf-8;q=0.7,*;q=0.7
Keep-Alive: 115
Connection: keep-alive
X-CSR-Token: 216538
Referer: http://www.facebook.com/profile.php?id=504568267&v=wall&story_fbid=118384834861439
Cookie: __gda=87286159_1316193368_1228816789_1257638126_1237734728_87;
datr=1233161259_6735bad27959d744d1218866ad8da792d7b1eb02ac1c44d0588c; lxe=yunicomecha%40yahoo.com; xs=6937dd979d5f3e2ae4e4ae22912f65c9;
lo=ExjwSXqWly5VASKeUe0; lxr=1; locale=en_US; c_user=504568267; sct=1272591688; sid=3; x-referer=http%3A%2F%2Fwww.facebook.com%2F%3Fref%
3Dlogo%23%2Fprofile.php%3Fid%3D504568267%26v%3Dwall%26story_fbid%3D118384834861439;
presence=0J273608322614H0L504568267A3BF273608325110Wb1cMsdP8blombvtP2735906698ctP2736044568sbP8tA_7bQbucTP2736083218sA008b1ADacA29V27360
822222848lcPBcrrADrAB.968tsP273588495000; cur_max_lag=2; em
```

[12968 bytes missing in capture file]Ys...x....  
m..Z.....ek.-!  
J+%k.....I.....W..!  
.....105...d.k.z.x..2.gvl..0.....].\*...+.  
...S...e...b...+...M.....-B.....>.6...tEv...f...K/...z...2w...a.....0...#6...t...0.\$.....r.....l..

Find Save As Print Entire conversation (10512 bytes) ASCII EBCDIC Hex Dump C Arrays Raw

Help Filter Out This Stream Close

Follow TCP Stream

### Stream Content

```
GET /ajax/intent.php?__a=1&filter=hipending=true&request_type=1 HTTP/1.1
Host: www.facebook.com
User-Agent: Mozilla/5.0 (Macintosh; U; Intel Mac OS X 10.5; en-US; rv:1.9.2.3) Gecko/20100401 Firefox/3.6.3
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: en-us,en;q=0.5
Accept-Encoding: gzip,deflate
Accept-Charset: ISO-8859-1,utf-8;q=0.7,*;q=0.7
Keep-Alive: 115
Connection: keep-alive
X-CSR-Token: 216538
Referer: http://www.facebook.com/profile.php?id=504568267&v=wall&story_fbid=118384834861439
Cookie: __gcl__=1233161259-6735bad27959d744d1218866ad8da792d7b1eb02acc1c44d0588c; lxe=yunicomecha%40yahoo.com; xs=6937dd979d5f3e2ae4e4ae22912f65c9;
datr=1233161259-6735bad27959d744d1218866ad8da792d7b1eb02acc1c44d0588c; lxr=1; locale=en_US; c_user=504568267; sct=627292088; sld=0; x-referer=http%3A%2F%2Fwww.facebook.com%2F%3Fref%
3Dlogo%23%2Fprofile.php%3Fid%3D504568267%26v%3Dwall%26story_fbid%3D118384834861439;
presence=0J273608322614H0L504568267A3BF273608325110Wb1cMsdP8blombvtP2735906698ctP2736044568sbP8tA_7bQbucTP2736083218sA008b1ADacA29V27360
822222848lcPBcrrADrAB.968tsP273588495000; cur_max_lag=2; em
```

[12968 bytes missing in capture file]Ys...x....  
m..Z.....ek.-!  
J+%k.....I.....W..!  
.....105...d.k.z.x..2.gvl..0.....].\*...+.  
...S...e...b...+...M.....-B.....>.6...tEv...f...K/...z...2w...a.....0...#6...t...0.\$.....r.....l..  
.....K...w.p.....a[.....].>

Find Save As Print Entire conversation (10512 bytes) ASCII EBCDIC Hex Dump C Arrays Raw

Help Filter Out This Stream Close



Kathryn Austin

Add as Friend

Wall Info

Kathryn only shares some of her profile information with everyone. If you know Kathryn, send her a message or add her as a friend.

View Photos of Kathryn (936)

View Videos of Kathryn (3)

Send Kathryn a Message

And when things start to happen, don't worry. Don't stress. Just go right along. You'll start happening too.

## Information

## Networks:

Washington University in St. Louis '09  
Vanderbilt Grad Student '12

## Relationship Status:

Married to  
Rebecca Estee

## Birthday:

November 25, 1986

## Current City:

Saint Louis, MO

## Friends

464 friends

See All



## About Me

## Basic Info

Sex: Female

Birthday: November 25, 1986

Siblings: Jay Austin

Parents: Gene Austin

Relationship Status: Married to Rebecca Estee

Anniversary: August 20, 2006

Current City: Saint Louis, Missouri

Hometown: Austin, Texas

Religious Views: everything and nothing, including but not limited to: DDR

## Bio

There is always a reason to celebrate.

## Favorite

## Quotations

How very special are we,  
for just a moment to be,  
part of life's eternal rhyme,  
how very special are we,  
to have on our family tree,  
Mother Earth and Father Time.  
-Charlotte's Web

## Work and Education

Grad School: Vanderbilt University '12 M.Ed.

## Create an Ad

## St Louis Bucket List x

Things to do in St Louis before you die. One huge coupon emailed daily.

Like

## Aspiring Photographer? x

Earn your degree 100% online. Over 40 courses to choose from. Request FREE Information Today!

Like

## Self-Publish Your Book x

New book design, editing & marketing programs available to help you successfully self-publish. Click for 555 free book promotion tips.

Like

More Ads

Chat (43)





Raymond Coletti



Mario Trebo Jr.



Tony Renner



Amy Trimmer



Andy Day



Jennifer Serendipitous Minkovitz

Report/Block this Person



### Work and Education

Grad School **Vanderbilt University '12** M.Ed.  
Human Development Counseling

College **Washington University in St. Louis '09**

High School **Westlake High School '05**

### Likes and Interests

Activities **Mentoring, Singing, Geocaching**



Mentoring

Interests **Complexity, Simplicity**



Complexity

Music **More Fools than Wise, The Bright Light Social Hour, Beastpower**



More Fools than Wise

Books **Oh, the Places You'll Go!**



Oh, the Places You'll Go!

Television **SpongeBob SquarePants, Degrassi**

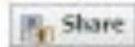


SpongeBob SquarePants

Show other Pages

Chat (43)

Report/Block this Person



Activities Mentoring, Singing, Geocaching



Mentoring

Interests Complexity, Simplicity



Complexity

Music More Pools than Wise, The Bright Light Social Hour, Beastpower



More Pools than Wise

Books Oh, the Places You'll Go!



Oh, the Places You'll Go!

Television SpongeBob SquarePants, Degrassi



SpongeBob SquarePants

Show other Pages

### Contact Information

Contact Info

Mobile Number:

5126651475

Website:

<http://flook.wustl.edu>

Facebook Profile:

<http://www.facebook.com/austin.kathryn>

# Firesheep

Appeared October 27, 2010

Firefox extension

Makes cookie sidejacking *easy*

amazon.com  
Prime

Hello, Ralph S. Granneman. We have recommendations for you. (Not Ralph?)  
Ralph's Amazon.com | Today's Deals | Gifts & Wish Lists | Gift Cards

The All-New Kindle: \$139

Your Account | Help

Shop All Departments

Search All Departments

GO

Cart

Your Lists

- Books >
- Movies, Music & Games >
- Digital Downloads >
- Kindle >
- Computers & Office >
- Electronics >
- Home, Garden & Pets >
- Grocery, Health & Beauty >
- Toys, Kids & Baby >
- Clothing, Shoes & Jewelry >
- Sports & Outdoors >
- Tools & Home Improvement >
- Automotive & Industrial >

# Outfit Your Kindle



Colorful new covers and sleeves. [Shop now](#)

## Fight the Cold

Visit Our Winter Warm-Up Store  
[Shop now](#)



## Something for Everyone

[Shop Gifts & Wish Lists](#)



## Great Features, Low Prices

### HDTVs under \$499

[Shop now](#)



## Amazon Windowshop for iPad

Explore and shop like never before  
[Learn more](#)

### Inspired by Your Shopping Trends



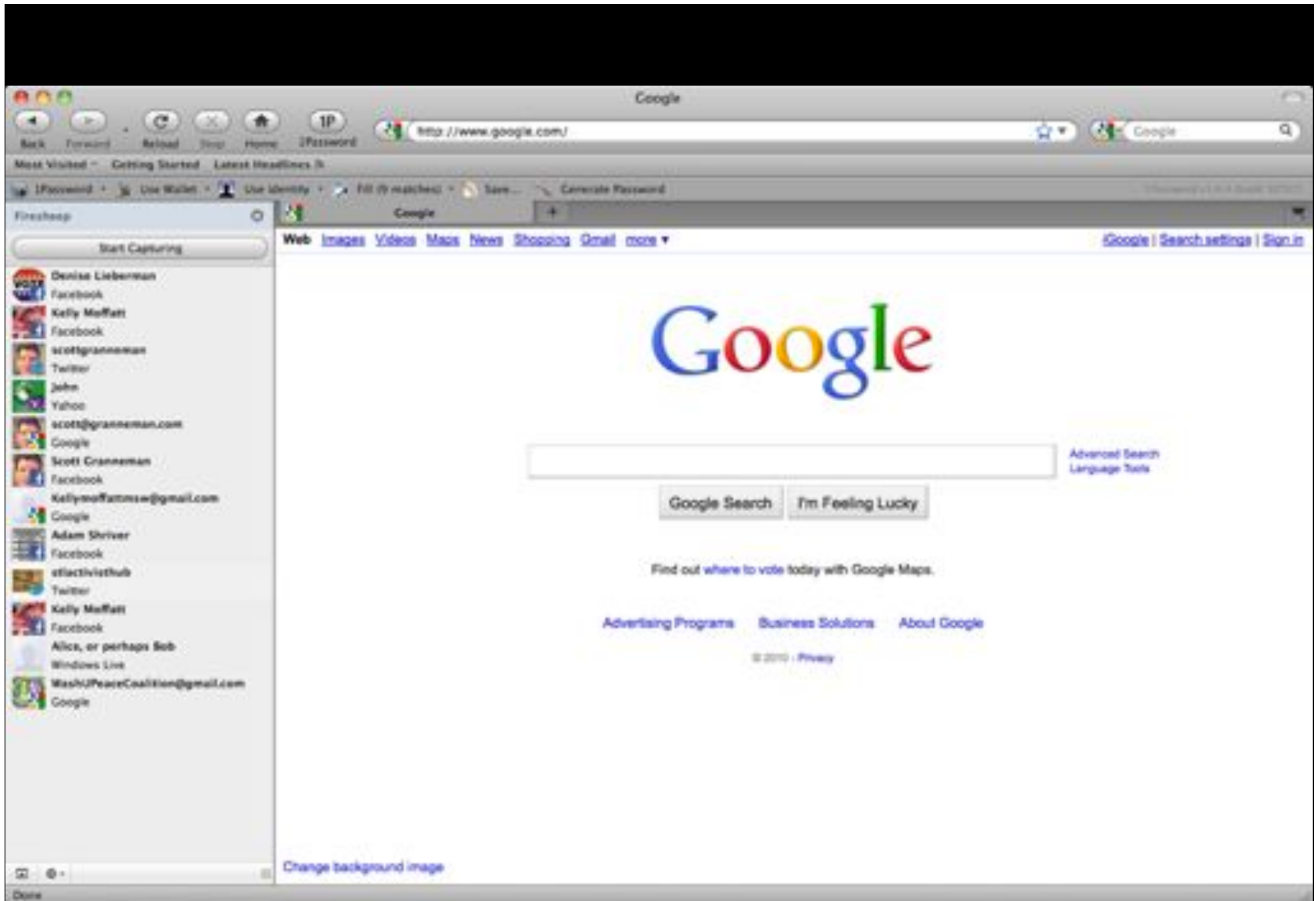
### Get a Free Gund Bear



For a limited time, when you







Facebook (5)

http://www.facebook.com/home.php

Most Visited - Getting Started - Latest Headlines

Fireheap

Start Capturing

Denise Lieberman  
Facebook

Kelly Moffatt  
Facebook

scottgranneman  
Twitter

John  
Yahoo

scott@granneman.com  
Google

Scott Granneman  
Facebook

Kellymoffattnew@gmail.com  
Google

Adam Shriver  
Facebook

effectivisthub  
Twitter

Kelly Moffatt  
Facebook

Alice, or perhaps Bob  
Windows Live

WashUPeaceCoalition@gmail.com  
Google

facebook

Search

Home Profile Account

Adam Shriver  
Edit My Profile

News Feed

Messages 3,449

Events 313

Friends 386

Responsible Publ... 33

STACS (Student A... 4

Liberals/Progress... 4

PROGRESSIVES 3

Create Group...  
See All

Game Requests 49

Application Requests 39  
More + 33

You are currently offline.  
To chat with your friends,  
go online.

Today is Election Day

What's this? • close

Find your polling place on the U.S. Politics Page and click the "I Voted" button to tell your friends you voted.

7347211  
People on Facebook Voted

Thanks for voting!

AMY CRABAM, LAURA WERN, and 712 other friends have voted.

News Feed

Top News • Most Recent 100+

Share: Status Question Photo Link Video

Emily Smith Leroyer and 18 other friends like a link.

WTF has Obama done so far?  
whatthefuckhasobamadonesofar.com

9 hours ago • Share

Stephen Balen A lot, actually.  
9 hours ago • Comment • Like

Adam David Scott pardon the address language...still an informative/entertaining site for those okay with strong language.  
9 hours ago • Comment • Like

Events

See All

What are you planning?

111 event invitations

VOTE to help MedFlow Clin...  
Happening Now

Random Acts of Kindness  
Happening Now

Support the Maya Cafe in...  
Happening Now

See More ▾

Birthdays: Andy Semler, Brian Hammond, Charles Formel, Courtney Strout, Jenny Vuksan, Jeremy Grossberg, Nikki Spencer Show all (8)

Sponsored

Create an Ad

Access Exclusive Benefits

Like American Express to be in-the-know about Cardmember events, offers, and more.

Scott Intaglietta, Arnie E. Neidham, and Maly Domagalovic like American Express.

Like

Questions

See All

What's Up Chat (Offline)

Done



Hotmail - carlaallen11@hotmail.com - Windows Live

http://by154w.bay154.mail.live.com/?rr=+inbox

Windows Live™ Hotmail Messenger Office Photos MSN

Carla Allen write | sign out

Options +

### Hotmail

New Delete Junk Sweep Mark as Move to

Inbox (16)

Search email bing

Show: All Unread From contacts Arrange by

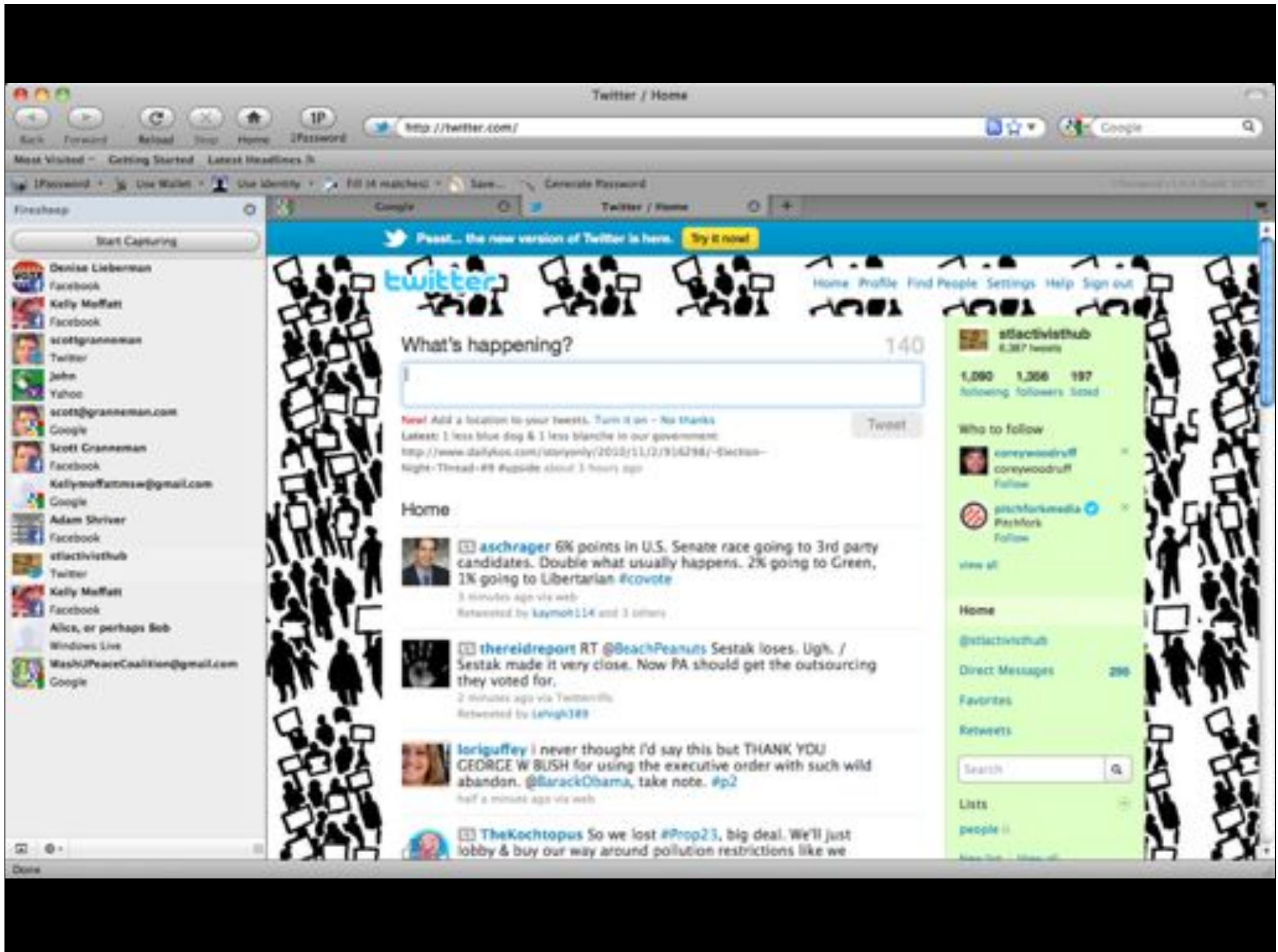
Denise Lieberman Facebook  
 Kelly Muffatt Facebook  
 scottgranneman Twitter  
 John Yahoo  
 scott@granneman.com Google  
 Scott Granneman Facebook  
 Kellymuffattnew@gmail.com Google  
 Adam Shriver Facebook  
 effectivisthub Twitter  
 Kelly Muffatt Facebook  
 Alice, or perhaps Bob Windows Live  
 WashUPeaceCoalition@gmail.com Google

Junk (485)  
 Drafts (4)  
 Sent  
 Deleted (565)  
 Adjunct Teaching Mate  
 Arlington Grove  
 AOL  
 B. Willis re Unpaid Invoice  
 Best Buy  
 Brenda Joyce Dissolution  
 Business Expenses (1)  
 Casino Night  
 City of Weirton (3)  
 Client Files  
 Delta Academy  
 Delta Dues Confirmation  
 Discover  
 DST-SLMAC (4)  
 FACC Jr. Board (3)  
 Family Pictures  
 FTNBC (3)  
 General (2)  
 Harry Stone

Inbox

<input type="checkbox"/>	Brandi Byrd Lamar	[sfig] Referral - Arkansas Real Estate Issue	3:08 PM
<input type="checkbox"/>	Gregg Larson	Re: [sfig] FAM: Wife Quits Husband from RE Hold	3:05 PM
<input type="checkbox"/>	Shelby_Watson@unigros	Speaker Opportunity	3:01 PM
<input type="checkbox"/>	P. Seligfreid	RE: [sfig] My law practice disappears and I really r	3:01 PM
<input type="checkbox"/>	Rob Pennell	Re: [sfig] *POL* Senators	3:00 PM
<input type="checkbox"/>	Charles McCloskey	RE: [sfig] New lawyer and new member - book ke	4:30 PM
<input type="checkbox"/>	Gaston, Sheree S	RE: Oct Deposits	4:34 PM
<input type="checkbox"/>	sgardner@gardnerlawfir	Re: [sfig] *POL* Senators	4:24 PM
<input type="checkbox"/>	Paul Stormont	Re: [sfig] NLS-Test	4:23 PM
<input type="checkbox"/>	Joe DeWoskin	[sfig] Structural Engineer or Architect as an experi	4:18 PM
<input type="checkbox"/>	Rob Pennell	Re: [sfig] *POL* Senators	3:58 PM
<input type="checkbox"/>	Rita Holmes-Bobe	Re: ROP	3:57 PM
<input type="checkbox"/>	Natalie Foster, BarackOB	Carla -- how many calls can you make right now?	3:54 PM
<input type="checkbox"/>	Kirsten Staples	Election Protection Hotline Reports	3:23 PM
<input type="checkbox"/>	Johnson, Mark	Kamie Flowers MV Report	10:23 AM
<input type="checkbox"/>	Trina Dyan Clark James	Financial reports- November 11, 2010 Jamaa Lean	8:57 AM
<input type="checkbox"/>	ms.hamilton@gmail.com	Contract Case	11/01/10
<input type="checkbox"/>	G S	FW: 2010 Homecoming Line Up (Please Forward)	11/01/10
<input type="checkbox"/>	N A Lyonn	Re: E-Script Donor Transfers	10/28/10

Windows Live



# The solution: encryption



Service providers  
(Facebook, Yahoo Mail, Twitter)  
need to use HTTPS everywhere

Send email using encryption

Read email using encryption

IM using encryption

Conduct e-commerce  
using HTTPS

VPN  
(Virtual Private Network)  
encrypts all Internet traffic

StrongVPN  
[www.strongvpn.com](http://www.strongvpn.com)  
\$7/month

# Email

- ✓ Gmail
- ✓ Hotmail

IM

✓ Skype

✓ Google Chat



## Firefox extensions

- ✓ HTTPS Everywhere
  - ✓ Force-TLS

# Google Chrome extensions

- ✓ Secure Login Helper
- ✓ KB SSL Enforcer

For more info, see my  
“Coffee shop WiFi for dummies”

[www.securityfocus.com/  
columnists/385](http://www.securityfocus.com/columnists/385)

# Backup

Why?

How much data  
can you afford to lose?

1 hour?

1 day?

1 week?

A problem has been detected and windows has been shut down to prevent damage to your computer.

DRIVER\_IRQL\_NOT\_LESS\_OR\_EQUAL

If this is the first time you've seen this Stop error screen, restart your computer, If this screen appears again, follow these steps:

Check to make sure any new hardware or software is properly installed. If this is a new installation, ask your hardware or software manufacturer for any windows updates you might need.

If problems continue, disable or remove any newly installed hardware or software. Disable BIOS memory options such as caching or shadowing. If you need to use Safe Mode to remove or disable components, restart your computer, press F8 to select Advanced Startup options, and then select Safe Mode.

Technical information:

\*\*\* STOP: 0x000000D1 (0x0000000C,0x00000002,0x00000000,0xF86B5A89)

\*\*\* gv3.sys - Address F86B5A89 base at F86B5000, DateStamp 3dd991eb

Beginning dump of physical memory

Physical memory dump complete.

Contact your system administrator or technical support group for further assistance.













Accessibility

Security

Cost

# Backing Up Online

Dropbox  
[www.dropbox.com](http://www.dropbox.com)

Mozy  
[www.mozy.com](http://www.mozy.com)

Backblaze  
[www.backblaze.com](http://www.backblaze.com)



CrashPlan  
[www.crashplan.com](http://www.crashplan.com)



CrashPlan

CRASHPLAN™ 

 Backup

 Restore

 Settings

 History

 Friends

 Destinations



Need more storage?  
Check out Drobo—instantly expandable & redundant.



The Casper Suite simplifies the life of system administrators with one tool to inventory, image, update, and maintain Macs.

**Welcome to CrashPlan**

Click **Start Backup** to back up your files to [CrashPlan Central](#) or choose other [destinations](#) for greater speed, security and no monthly fees.

**Backup Destinations**

- [CrashPlan Central](#) Backup passed — resuming in 23.7 hours
- [Friend](#) (Free)
- [Another Computer](#) (Free)
- [Folder](#) (Free)

**Files to Back Up**

<a href="#">Users &gt; rsgarner &gt; .bash_aliases</a>	1 file 5.7 KB
<a href="#">Users &gt; rsgarner &gt; .bash_history</a>	1 file 13.4 KB
<a href="#">Users &gt; rsgarner &gt; .bashrc</a>	1 file 1.1 KB
<a href="#">Users &gt; rsgarner &gt; .group</a>	33 files 8.4 MB
<a href="#">Users &gt; rsgarner &gt; .keepassx</a>	2 files 1.4 KB
<a href="#">Users &gt; rsgarner &gt; .profile</a>	1 file 742 Bytes
<a href="#">Users &gt; rsgarner &gt; .ssh</a>	8 files 57.2 KB
<a href="#">Users &gt; rsgarner &gt; .vim</a>	89 files 520.3 KB
<a href="#">Users &gt; rsgarner &gt; .viminfo</a>	1 file 15.5 KB
<a href="#">Users &gt; rsgarner &gt; .vimrc</a>	7 files 11.2 KB
<a href="#">Users &gt; rsgarner &gt; .vimrc</a>	1 file 15.3 KB
<a href="#">Users &gt; rsgarner &gt; .vimrcrcd</a>	1 file 656 Bytes
<a href="#">Users &gt; rsgarner &gt; .word</a>	1 file 34 Bytes
<a href="#">Users &gt; rsgarner &gt; bin</a>	1,040 files 14.4 MB
<a href="#">Users &gt; rsgarner &gt; Documents &gt; Documents</a>	2 files 0 MB
<a href="#">Users &gt; rsgarner &gt; Documents &gt; Clients</a>	7,794 files 1.4 GB

CrashPlan provides secure unlimited backup to multiple destinations. Add destinations to improve your CrashPlan:



Back up to a friend's computer and pay no monthly fees. Need more room? Attach an external drive to the PC.



Back up between your computers. Laptop to desktop, home to office, Mac to PC... it all works!



Back up directly to an attached drive. Move drive to a remote PC to continue offsite protection.



Back up to your favorite third-party provider online.



Data encrypted  
during transport  
& in storage





CrashPlan+

1 PC/\$50/year

2-10 PCs/\$120/year

Unlimited data

[www.crashplan.com](http://www.crashplan.com)

# Backing Up Locally



# Time Machine







# Backup and Restore Center



System and Maintenance > Backup and Restore Center

Tasks

- Repair Windows using System Restore
- Create a restore point or change settings

See also

- Windows Easy Transfer

### Protect your files and computer by backing them up

#### Back up files or your entire computer

Create backup copies of your files and folders. [Back up files](#)

Create a Windows Complete PC Backup and Restore image of your entire computer, which can be used to recover from a hardware failure. [Back up computer](#)

Last backup: 2/28/08 12:45 AM  
Where to save files: |

[Which type of backup should I make?](#)

#### Restore files or your entire computer

Restore files and folders from a backup. [Restore files](#)

You can use shadow copies to restore previous versions of files that have been accidentally modified or deleted. [What are shadow copies?](#) [Advanced restore](#)

Restore your entire computer from a Windows Complete PC Backup and Restore image. [Restore computer](#)

Use System Restore to fix problems and undo changes to Windows.

	Backup Personal Files	Backup System Files	Complete PC Backup	Automated Backup
Home Basic	✓			
Home Premium	✓			✓
Business	✓	✓	✓	✓
Enterprise	✓	✓	✓	✓
Ultimate	✓	✓	✓	✓

# CrashPlan





CrashPlan provides secure unlimited backup to multiple destinations. Add destinations to improve your CrashPlan:



Friends

Back up to a friend's computer and pay no monthly fees. Need more room? Attach an external drive to the PC.



Computers

Back up between your computers. Laptop to desktop, home to office, Mac to PC... it all works!



Folders

Back up directly to an attached drive. Move drive to a remote PC to continue offsite protection.



Online

Back up to your favorite third-party provider online.

# Cloning



Carbon Copy Cloner

Free

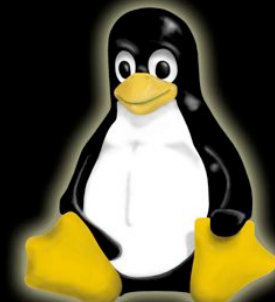
[www.bombich.com](http://www.bombich.com)



Acronis True Image

\$50 for Home

[www.acronis.com](http://www.acronis.com)







# Clonezilla

## Free

[clonezilla.org](http://clonezilla.org)



# Backup locally & off-site!



Backup locally & off-site!



Backup locally & off-site!



Backup locally & off-site!



Backup locally & off-site!



# Passwords

Pick a good password

*Password crackers*  
will make mincemeat  
of poor passwords



# Guidelines for a good password

1. Don't use easy passwords
2. Mix of 3 of these 4:

A a 1 #

3. At least 8 characters
4. Easy to remember  
& hard to guess

Here's a good method  
for picking a good password:

“Where it began,  
I can't begin to know when”

Wib,Icbtkw



W16,Ic6tkw



W16,Ic6tkw!

Here's a good method  
for picking a good password:

“Where it began,  
I can't begin to know when”

Wib,Icbtkw

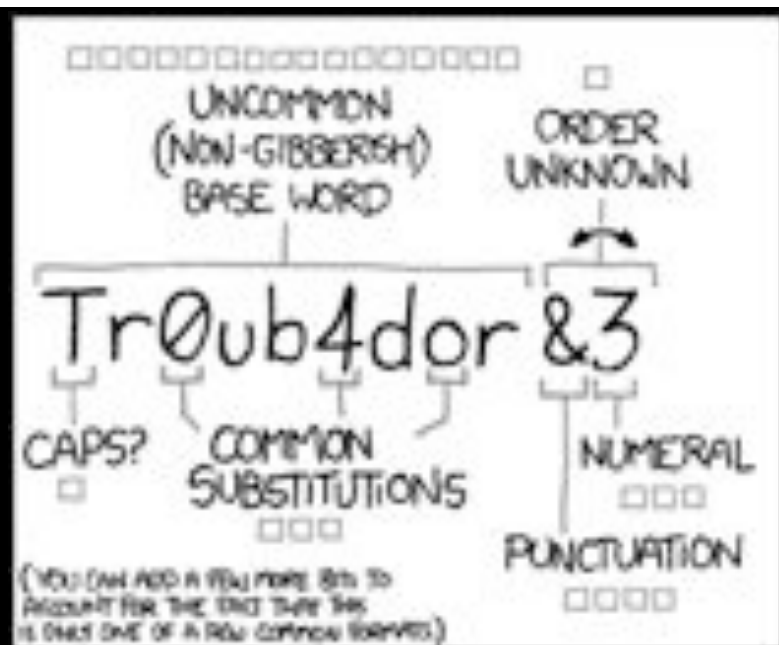


W16,Ic6tkw



W16,Ic6tkw!

Passphrases are great!



~28 BITS OF ENTROPY

$2^{28} = 3 \text{ DAYS AT } 1000 \text{ GUESSES/SEC}$

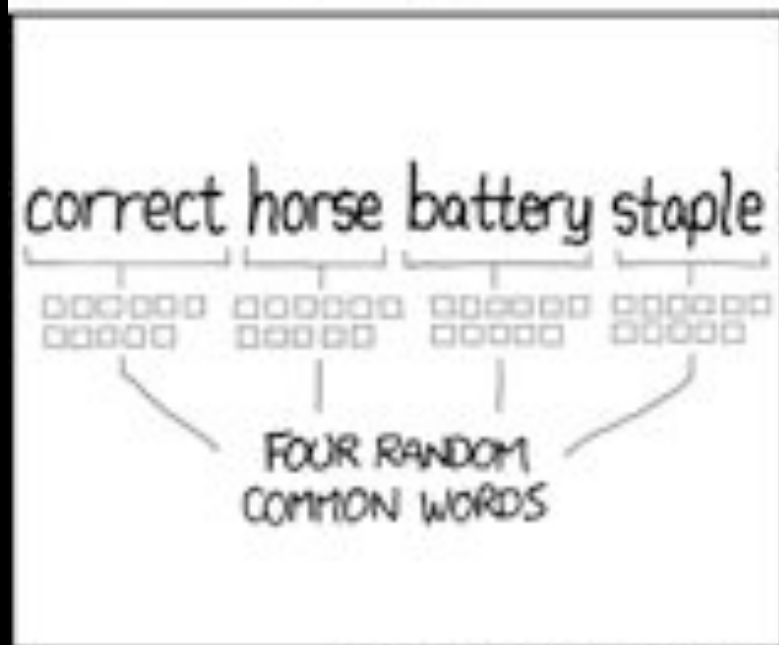
(PLAUSIBLE ATTACK ON A WEAK REMOTE WEB SERVICE. YES, CRAWLING A STORM HAWK IS FRODO, BUT IT'S NOT WHAT THE WEBSITE OPERATORS SHOULD WORRY ABOUT.)

DIFFICULTY TO GUESS: **EASY**

WAS IT TROMBONE? NO, TROUBADOR. AND ONE OF THE 0s WAS A ZERO?

AND THERE WAS SOME SYMBOL...

DIFFICULTY TO REMEMBER: **HARD**



~44 BITS OF ENTROPY

$2^{44} = 530 \text{ YEARS AT } 1000 \text{ GUESSES/SEC}$

DIFFICULTY TO GUESS: **HARD**

THAT'S A BATTERY STAPLE.

CORRECT!

DIFFICULTY TO REMEMBER: YOU'VE ALREADY MEMORIZED IT

THROUGH 20 YEARS OF EFFORT, WE'VE SUCCESSFULLY TRAINED EVERYONE TO USE PASSWORDS THAT ARE HARD FOR HUMANS TO REMEMBER, BUT EASY FOR COMPUTERS TO GUESS.

robins2006porsche  
17 characters

number of passwords	$\approx 2^{88} \approx 2.865 \times 10^{26}$
time to enumerate	$\approx 90.85$ trillion years (at 100 000 passwords per second)
password entropy	87.89 bits

robins2006porsche911  
20 characters

number of passwords	$\approx 2^{103} \approx 1.337 \times 10^{31}$
time to enumerate	$\approx 4.239 \times 10^{18}$ years (at 100 000 passwords per second)
password entropy	103.4 bits

Use a *password safe*

Generate lengthy, difficult passwords

Securely store passwords



The image shows a password generator application window. At the top left is a key icon. The 'Title' field contains 'Login' and the 'Where' field contains 'http://www.website.com'. A password field displays 'sIgle5943D51Sew<(kf1bltxs'. Below it, a 'Strength' indicator shows a green bar labeled 'Fantastic' and a 'Copy' button. A 'Length' slider is set to 25. An 'Advanced Options' section is expanded, showing 'Pronounceable' and 'Random' radio buttons, with 'Random' selected. Underneath, 'Digits' is set to 5 and 'Symbols' to 3. There are checkboxes for 'Avoid ambiguous characters' (unchecked) and 'Allow characters to repeat' (checked). At the bottom, there is a checked checkbox for 'Copy password to clipboard on completion', a help icon, and 'Cancel' and 'Fill' buttons.

Title: Login

Where: http://www.website.com

sIgle5943D51Sew<(kf1bltxs

Strength: Fantastic

Length: 25

Advanced Options

Pronounceable Random

Digits: 5 Symbols: 3

Avoid ambiguous characters

Allow characters to repeat

Copy password to clipboard on completion

Cancel Fill

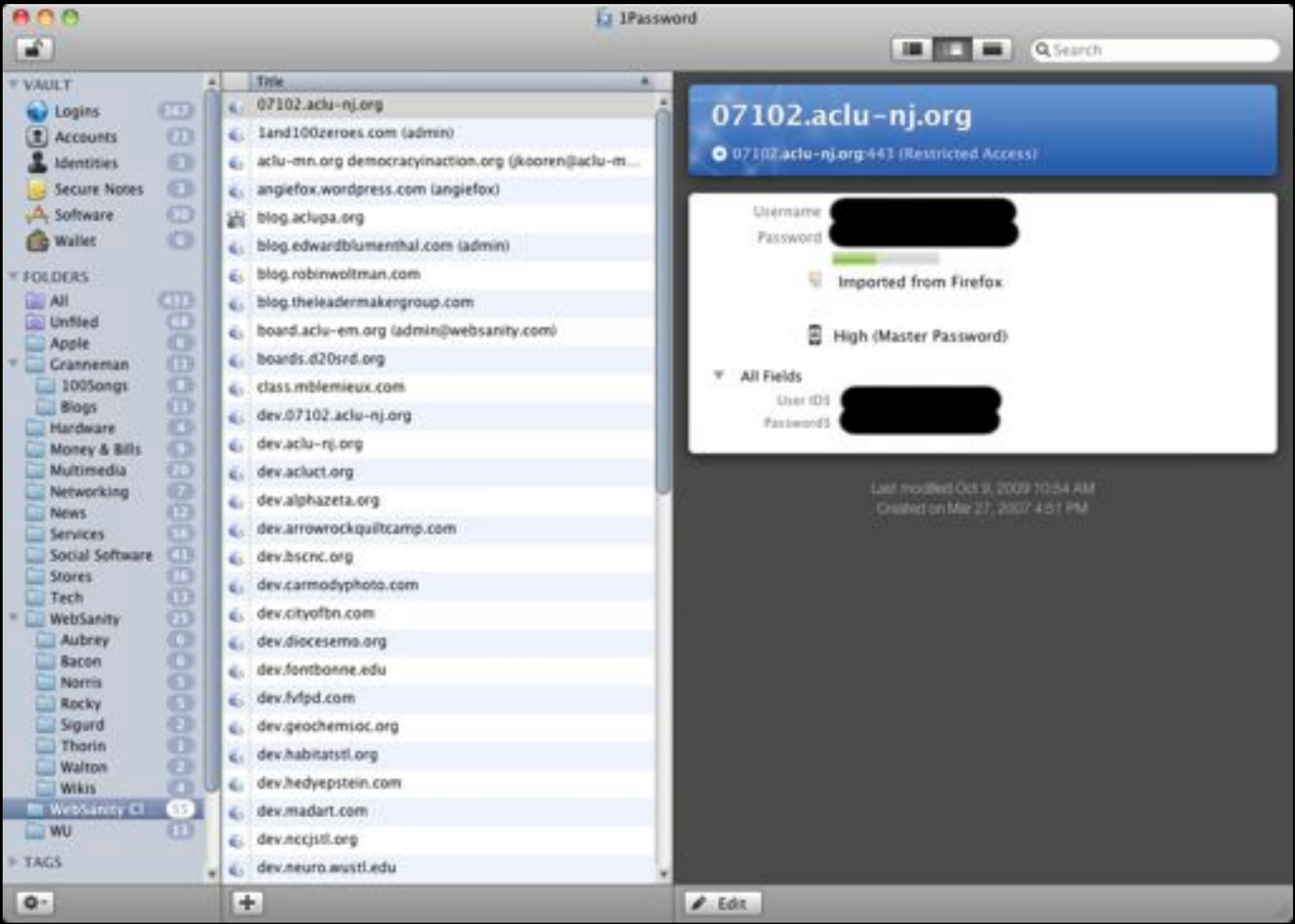


1Password

[agilewebsolutions.com/  
products/1Password](http://agilewebsolutions.com/products/1Password)

iPhone/iPad/Android apps too!

\$40





KeePassX

[www.keepassx.org](http://www.keepassx.org)

MyPasswordSafe

[www.semanticgap.com/myps/](http://www.semanticgap.com/myps/)

Password Gorilla

[www.fpx.de/fp/Software/Gorilla/](http://www.fpx.de/fp/Software/Gorilla/)

All are free & open source

Don't forget to change  
the default administrator password  
on your firewall!

Default passwords are well known

Maker	Device	Login	Password
Apple	Airport 1.1	-	public
D-Link	DI-704	-	admin
Intel	Wireless 2011	-	Intel
Linksys	Cable/DSL router	-	admin
Netgear	RT311	admin	1234
SonicWall	Any	admin	password

[www.governmentsecurity.org/articles/DefaultLoginsandPasswordsforNetworkedDevices.php](http://www.governmentsecurity.org/articles/DefaultLoginsandPasswordsforNetworkedDevices.php)

To Review...

# What to Believe?

Malware

Wireless

Backup

Passwords



You *can* be secure!\*

\* If you use your head, act carefully,  
& understand that security  
is a continuous process that never stops



# Thank you!

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# Personal Security Online: Protecting Yourself

Ladue Chapel Presbyterian Church

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