Getting Started In Information Security

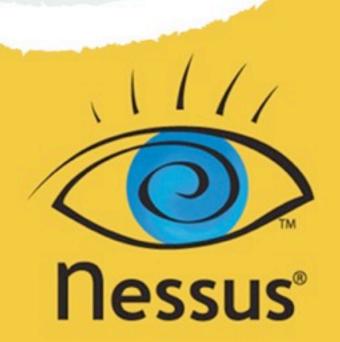


Paul Asadoorian

PaulDotCom | Tenable Security http://pauldotcom.com | http://www.tenable.com

whoami





Tenable Netowrk Security

- Local company in Columbia, MD
- Flagship product is Nessus, a vulnerability scanner
 - Founder wrote Nessus as a college project!
- Nessus is freely available for home use, feel free to download and use it
- Enterprise products allow organizations to correlate vulnerability data with system and network logs











http://www.pauldotcom.com



PaulDotCom

- I provided a monthly briefing for systems adminstrators at a university
- Podcasts became popular, and I said "I can do that!"
- Episode 1 was recorded at a security conference in October 2005
- We just recorded episode 234
- We've won "Best security podcast" for the third year in a row

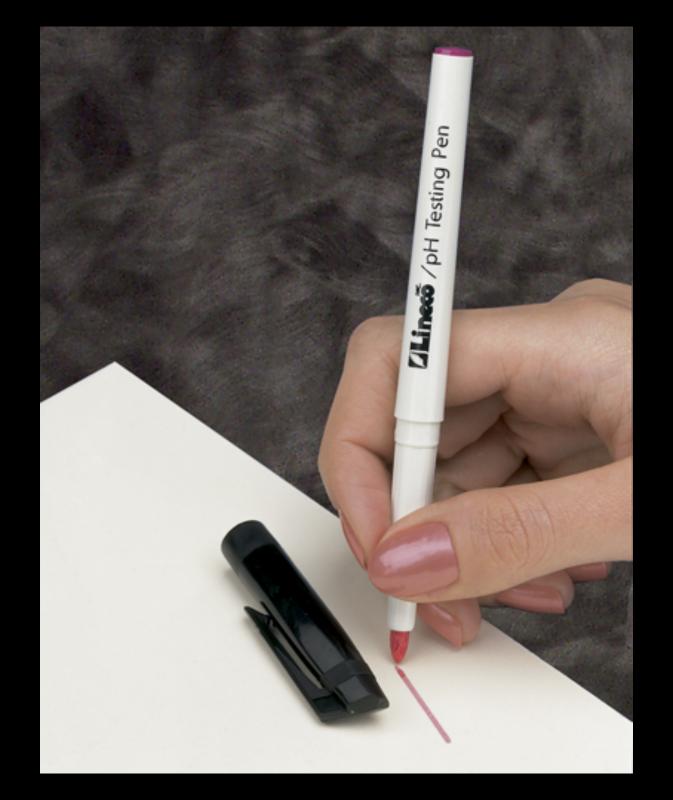
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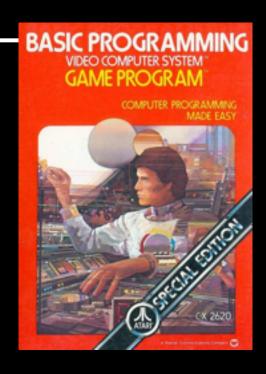


Surround yourself with smart people



How I Got My Start

- The firewall adminstrator got sick, so I stepped in
- Fell in love with security, took all of my effort and put to use all of my skills
- I went to a SANS training conference, then studied for a certification
- I received honors for my paper on intrusion detection and write-up of buffer overflows
- Began working for SANS and writing articles



I stink at math



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"How to become a hacker in 8 steps"

- 1. Embody the "hacker spirit"
- 2. Setup a home hacking lab
- 3. Work in the IT department
- 4. Attend local user groups & security conferences
- 5. Read security blogs & listen to podcasts
- 6. Write about security
- 7. Socially network yourself
- 8. Get hacked



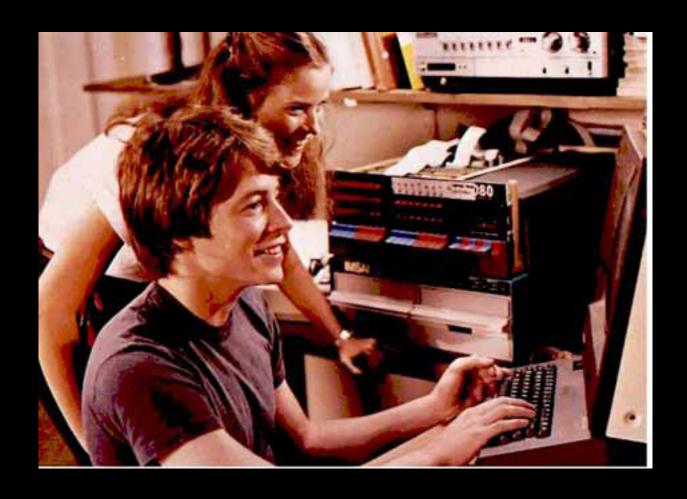


How NOT to become a hacker

- Choosing a really cool NIM like "ZeroCool"
- Write 3v3ryth1ng in 1337sp3@k (translated: Write everything in "leetspeak")
- Break into your friends computers and change their backgrounds to images of Barney and blast Justin Beiber 24/7
- Violate state, federal, or international law
- Wear black all the time
- Take the "8 steps to becoming a hacker" seminar you found on the Internet



The "hacker spirit"

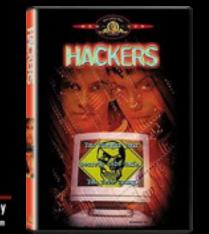


"Would you like to play global thermonuclear war?"

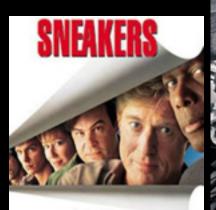
Before we go any further...

Top ten best/worst hacker movies of all time:

- 1. War Games My parents wouldn't let me get a modem
- 2. Sneakers "It's all about the information"
- 3. Tron Cool body suits
- 4. Hackers Angelina Jolie, do I need to say more?
- 5. Swordfish Halle Berry, notice a trend?









Continued...

- 6. The Net Ruining people's lives is not cool
- 7. **The Matrix** Believe whatever you want to believe
- 8. Johnny Mnemonic Don't format my brain
- 9. Antitrust More about software than hacking
- 10. Takedown Read the book instead





So You've Watched 10 movies

- Hopefully not in one sitting, but whatever
- What does it mean to be a hacker? (Note: it should have nothing to do with rollerblades or "hacking the gibson")
- Hacking really means being curious and exploring that curiosity
- Making things do stuff they were not intended to do

Be curious about technology!





Setup A Home Hacking Lab



Preferably **NOT** in your Mom's living room, like I did...

Computers Are Cheap

- You can find old computers everywhere
- Set them up, install Linux on them (thats free too)
- You can find archives of old software to exploit:
 - www.oldapps.com
- VMware is also free, cheap, and easy to use
 - This also helps you learn virtualization



Work In the IT Department



"Hello IT, did you turn it off then on again?"

By The Way...

- Paul's Top 5 Hacker TV Shows:
 - 1. The IT Crowd British people are funny
 - 2. Tiger Team Don't forget your USB cable
 - 3. Prototype This Build it!
 - 4. Battlestar Galactica Yea, its a stretch...
 - 5. Hak.5 Technology and hacking stuff
- *Honorable Mentions: Myth Busters and To Catch A Thief!



Seriously, Get A Job

- There is not better preparation for information security than working in the IT department
- Programming experience helps too, depends on where you want your career to go
- Ideally you work on the help desk, networking, systems adminstration
- Then move into security with a solid foundation of skills and experiences



Go To The Con



Just don't pass out at the con (when you are of legal drinking age of course)

No Shortage of Cons

- Shmoocon
- HOPE

Defcon

Blackhat

DEFC®N

Toorcon

- Derbycon
- Quahogcon
- and more...

Brucon





- Bsides
- Cansecwest



Local Groups

- Defcon groups DC<your area code>
- ISSA
- ISACA
- NAISG
- 2600 groups
- Infraguard chapters
- OWASP meetings



http://site.infosecmentors.com/



Read & Listen to Everything



Listen to Security Podcasts

- We do a weekly show called PaulDotCom Security Weekly
- Several others:
 - Risky Business
 - Securabit
 - Exotic Liability (Parental Advisory!)
 - Network Security Podcast
 - Go to http://getmon.com// for a complete list



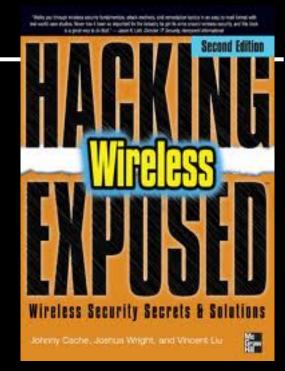
Read Stuff

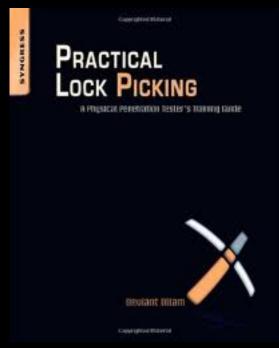
Blogs

- I subscribe to over 500 blogs
- You should too
- Read them, assimilate knowledge
- http://pauldotcom.com/PaulFeeds.opml

Books

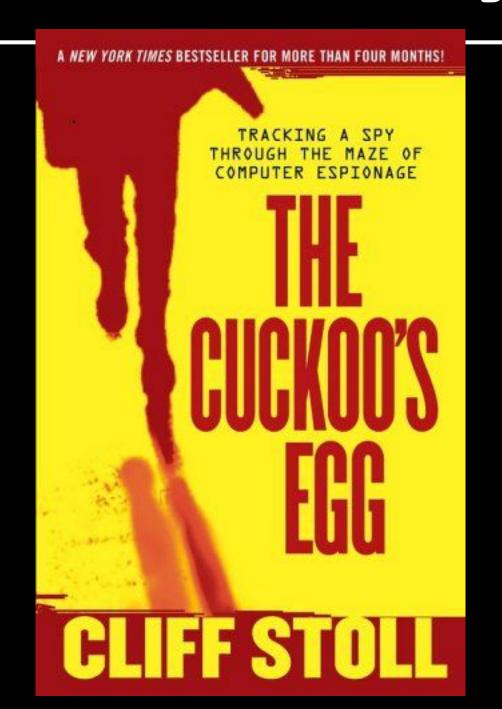
- So many great books, Wireless Hacking Exposed and Lockpicking by Deviant Ollom
- I co-authored a book called "WRT54G Ultimate Hacking"



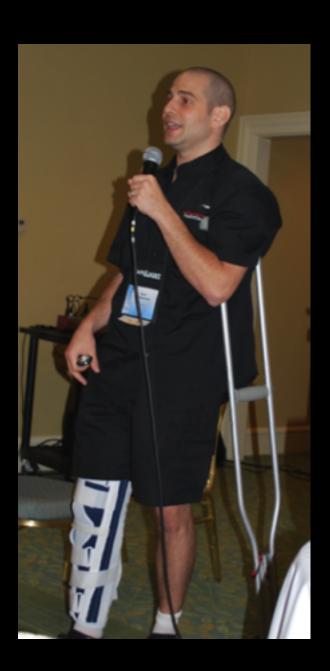




My Favorite Hacking Book



Write About Security



Speaking at conferences is cool too! (not so cool 1 week out from ACL surgery)

Start a Blog!

- But please don't use Livejournal, ever
- Write about your experiences
- The best blogs are the "notes" of the author on how they got stuff working
- Don't be afraid to write about stuff:
 - Setup a Linux system and write about how you configured it





Submit Articles

- Take on a project that creates a new project, or extends an existing one
- There are tons of online publications that would be happy to publish you
- In fact, if you write a post PaulDotCom would be happy to post it to our blog
- Or, help you get it published on another site



Don't Be Afraid to Talk

- Submit a talk to a conference
- Don't think this is something you cannot attain
- There are tons of conferences looking for "fresh" talent
- Submitting to a conference is good practice



Socially Network Yourself

How not to socially network yourself:



Remember, whatever you put on the Internet is public forever

Social Network Productivity

Twitter

- LOTS of security professionals on Twitter
- Many events, like CCDC, are "live Tweeted"
- Several events have a "Tweetup"

Facebook

- Most users BY FAR
- Can be productive
- Don't play farmville





PaulDotCom On Facebook

- PaulDotCom Fan Page
 - https://www.facebook.com/pages/PaulDotCom-Security/56074056651
- PaulDotCom Facebook Group
 - https://www.facebook.com/group.php?gid=6678027341



Get Hacked



No seriously, the best security people I know got started 'cuz they got hacked

No Seriously, Get Hacked

- Attend CCDC and get attacked and hacked in a controlled environment
- Or just run a system that gets hacked
 - Friend had Red Hat systems that kept serving files via
 FTP
 - First week as sysadmin, had to deal with Sysadmind
 - So many security pros say, "I had a machine, it got hacked, I got sucked into security, been there since"



Computer Destruction













http://pauldotcom.com/gettingstarted.pdf

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- Podcast in iTunes

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- IRC: irc.freenode.net #pauldotcom

Read

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