HOUSTON PUBLIC
LIBRARY

Computer Security

Keeping you and your computer safe in the digital world.

Objectives

After completing this class, you should be able to:

- Explain the terms security and privacy as applied to the digital world
- Identify digital threats and know how to prevent them
- Know common methods for protecting your computer system and personal data

Definitions

- Computer Threat: Anything that can damage your computer or the information on it
- Computer Security: The measures you can take to avoid damage or data loss

Computer Privacy

- Ensuring your data, such as personal files and email, is not accessible to anyone without your permission
- Includes measures you can take to restrict access to your data and personal information both on your computer and the internet

Digital Threats

Categories

- Viruses, RootKits, Malware
- Spyware
- Online Scams
- Online Predators
- Identity Theft

Prevention

- Virus, malware, and spyware protection
- Password protection
- Prudence in giving out information

Viruses, Malware, Spyware

- Difference between Viruses, Malware, and Spyware
  - Malware = Malicious Software
    - non-specific; covers a wide variety of threats
  - Viruses = a program that copies itself and spreads through computers and files, locking down the machine
    - designed to wreck havoc and cause chaos
  - Spyware = software that collects your information without your knowledge and sends it back to the creator
    - designed to make money at your expense

Rootkits

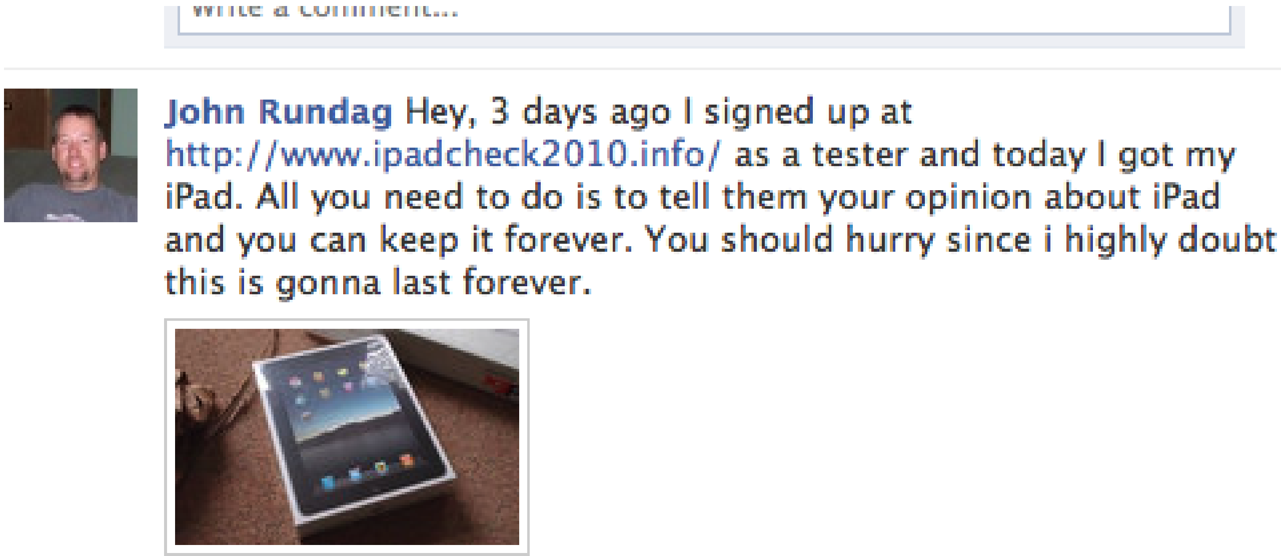
- Designed to hide that a PC has been compromised
  - Allows malware to hide in plain sight by disguising themselves as necessary files
- Not harmful in and of themselves – what they hide is!
- Notoriously difficult to detect so hackers can access the targeted computer without the user noticing
- Very difficult to remove

How Malware Spreads

- Clicking on a corrupted email attachment
- Clicking on a downloadable file from a website that contains a virus or spyware
- Clicking on a link in an email, on a website, or on a social networking site. The link redirects to a website that automatically forces the browser to download a piece of malware

Beware!

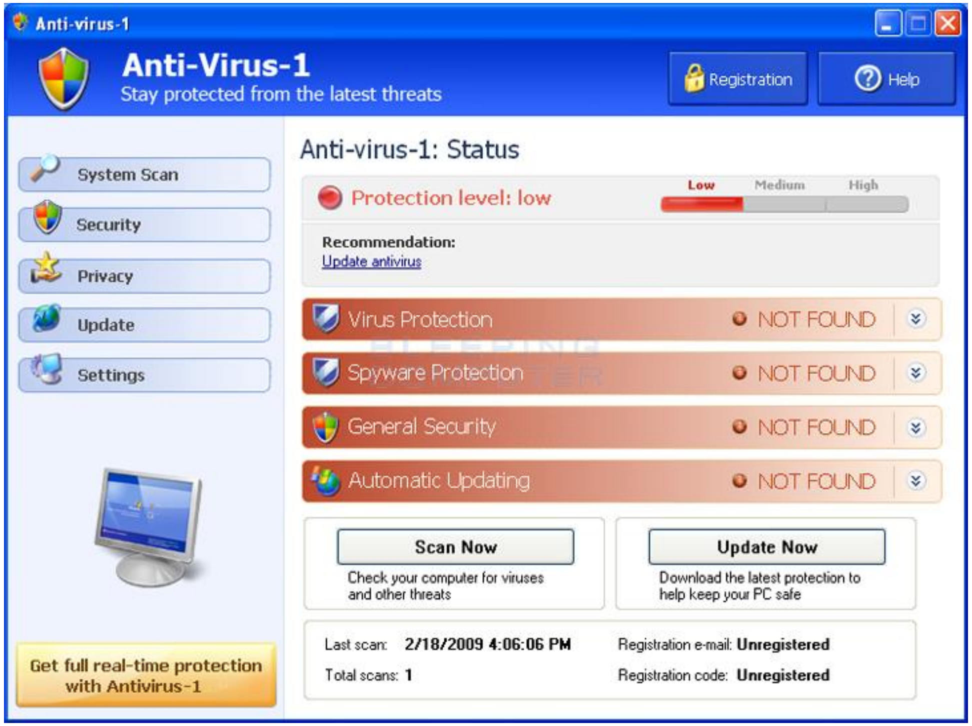
- Fake antivirus programs
  - Famous Examples: Security Suite, Internet Security 2010
- New toolbars or default search engines installed without your permission
- Homepage changes
- Suspicious file names (i.e., .mp3.exe instead of .mp3)
- Pop up windows you cannot stop
- Loss of control of your PC
- Redirects or new windows to sites you did not open



Write a comment...

John Rundag Hey, 3 days ago I signed up at http://www.ipadcheck2010.info/ as a tester and today I got my iPad. All you need to do is to tell them your opinion about iPad and you can keep it forever. You should hurry since i highly doubt this is gonna last forever.

July 27 at 5:10am · Comment · Like · Se



Anti-virus-1
Anti-Virus-1
Stay protected from the latest threats
Registration
Help
System Scan
Security
Privacy
Update
Settings
Get full real-time protection with Antivirus-1

Anti-virus-1: Status

Protection level: low

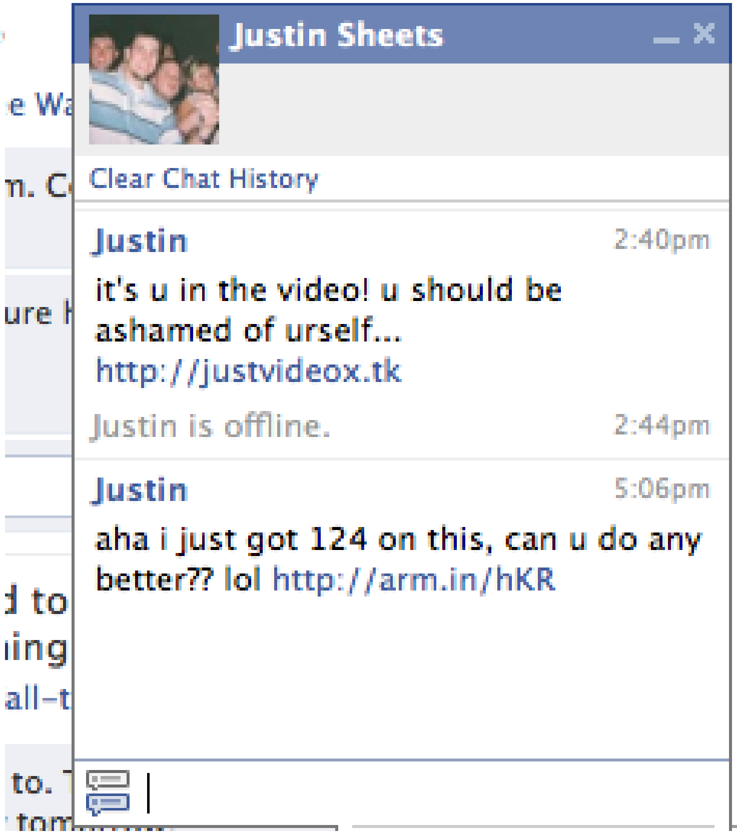
Recommendation:
Update antivirus

Virus Protection	NOT FOUND
Spyware Protection	NOT FOUND
General Security	NOT FOUND
Automatic Updating	NOT FOUND

Scan Now
Check your computer for viruses and other threats

Update Now
Download the latest protection to help keep your PC safe

Last scan: 2/18/2009 4:06:06 PM
Total scans: 1
Registration e-mail: Unregistered
Registration code: Unregistered



Justin Sheets

Justin 2:40pm
it's u in the video! u should be ashamed of urself... http://justvideox.tk

Justin is offline. 2:44pm

Justin 5:06pm
aha i just got 124 on this, can u do any better?? lol http://arm.in/hKR

Prevention Tips

- Keep all your operating system and all software updated. Most virus and spyware attacks occur through security holes in popular software applications
- For your browser, use Firefox, Chrome or Safari rather than Internet Explorer (IE). Because IE is so popular, malware creators target security holes
- Don’t click on any pop ups or ads offering you anything for free
- Know the name and display of your antivirus program

If something looks suspicious:

DO NOT OPEN IT

Top Free Software

- Antivirus software that checks downloaded files & monitors websites for possible malware. Do not use more than one antivirus.
  - AVAST
- Manual scan that searches out rootkits and other potential problems and threats
  - Malwarebytes
- Spyware scanner to identify and remove spyware
  - Spybot Search & Destroy

Realities of the Digital World

- Deleting a post does not mean it disappears
- Digital content is easily forwarded and reposted
- Social networks & email providers do not make your private information private by default. It is up to you to look for the privacy settings
- Your online reputation has offline implications

Privacy In Social Networking

- Know the default privacy settings and how to change them
- You can control who sees what content, but it is easily forwarded by the tech savvy
- Assume what you post can be seen by everyone

Identity Theft

When someone uses your personal information without your knowledge, usually for monetary gain.

- Do not store personal financial information on laptops of USB/Flash drives
- Delete all personal information before disposing of computers, hard drives, or portable drives
- Review privacy policies
- Never give out your password or personal information, especially if the company contacted you to request it

Thanks To

http://www.netliteracy.org/