

# Web Security @ Home

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#### Me

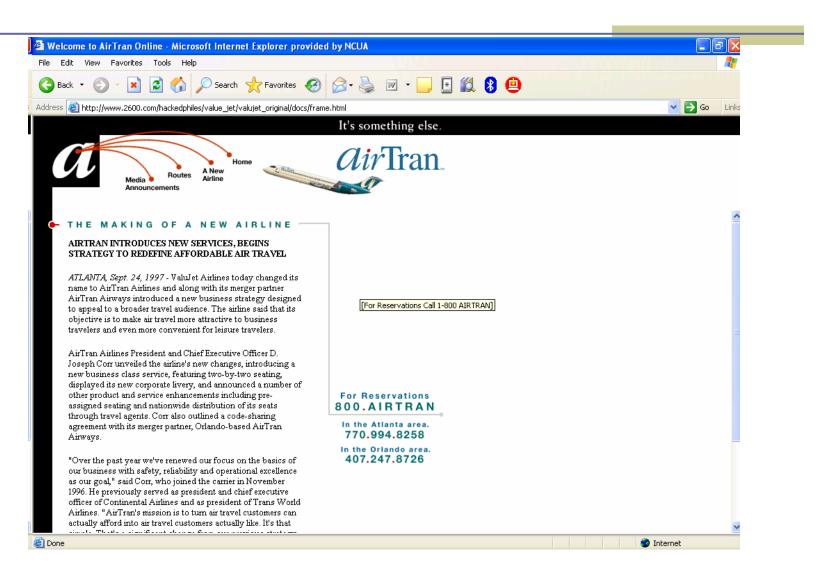
- Illinois State University (2000) Bachelor of Science – Agribusiness (Economics Minor)
- Missouri Division of Credit Unions
- Home St. Charles, MO
- HUGE LA Lakers & Seinfeld Fan
- Married....
- and a lovely daughter on the way.



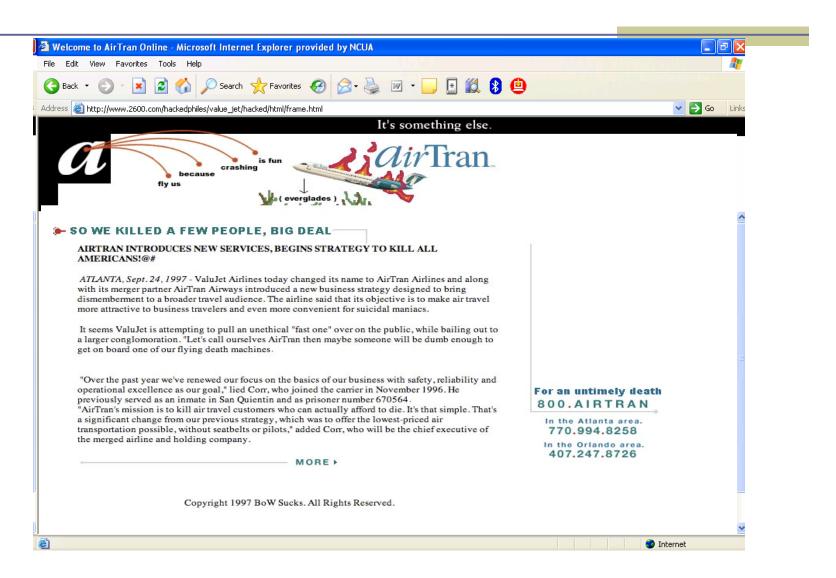
#### The Internet

- Born January 1983 –National Science Foundation
  - 1993 First Full TextSearch Engine Lycos
  - 9/2006, 1.08 billion people use the internet
- Web vs. Internet
  - Internet connection of wired and wireless networks
  - The World Wide Web connection of documents, linked by hyperlinks
- How it works
  - Video

## Is Web Security Important?



## Yes, It's Important

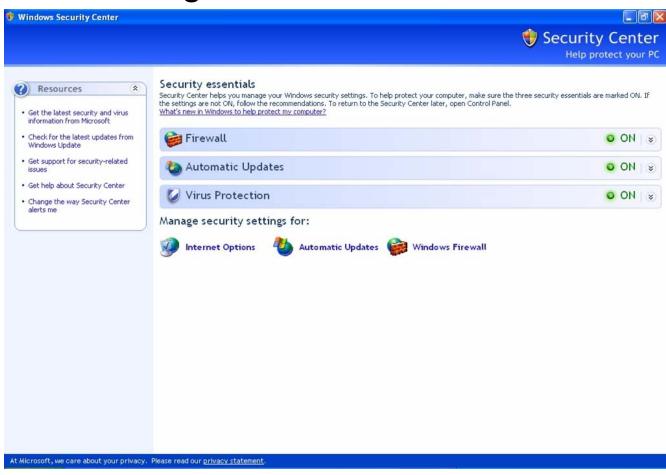


## Basic Security Settings

- Windows Updates
  - Internet Explorer Vulnerabilities
  - Firefox
- Virus/Spam/Spy ware Protection
  - http://www.microsoft.com/security/malwarerem ove/default.mspx
  - http://www.microsoft.com/athome/security/spyware/soft ware/default.mspx
  - McAfee, Norton, Zone Alarm
- Firewall
  - Security Suites
- Passwords

## Microsoft Updates

Set it and forget it



#### Firewall

- The First Step
- Robert Tappan Morris & the Morris Worm
- Helps screen hackers and worms
- Cannot protect against viruses that spread through e-mail, such as Trojan horses
- Software & Hardware
- All Security Suites have firewall capabilities



### Spyware

- Spyware software that advertises, collects personal information, or changes the configuration of your computer, generally without appropriately obtaining your consent.
- Good or Bad?
  - Good Netzero (discount for internet)
  - Bad Unknowingly changes your settings
- Security Suites

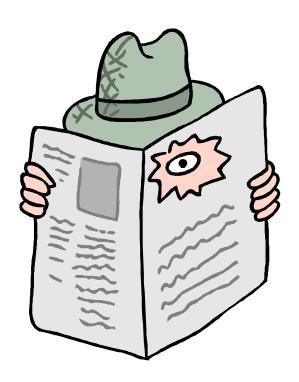


## Are you being watched?

- Popup advertisements
- Settings have changed
  - Homepage
  - Favorites
- Browser contains additional programs
- Sluggish Computer

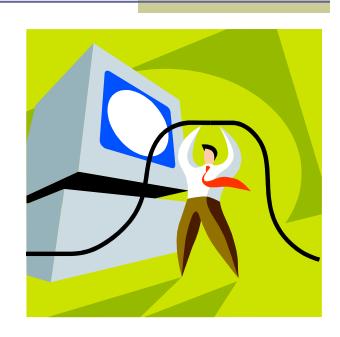






### Backup

- Hard disk Partition C to D
- Zip drive or other removable media
- A shared network drive. You're limited only by the amount of free space on the network.
- An external hard disk drive. These drives are no longer as expensive as they once were and work well as an external backup device.



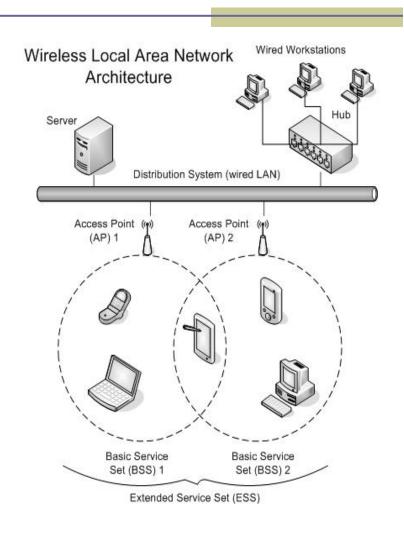
## Physical Security

- Laptop Security
  - Basic Security Settings
  - Passwords
  - Encryption
  - Hotels
- Cell Phones / PDA's
  - Backup info to your computer
- Thumbdrives
- Trash Shred it!!



### Wireless Connectivity

- "A World Without Wires"
- Uses a radio signal to communicate
- Advantages
  - Cost Effective
  - Easy to use
  - No Wires
  - Popular & Mainstream
- Disadvantage
  - Weak Security



#### Wireless Security

- Proactive & Knowledge
  - You must understand the technology before you implement it
- Steps to securing your wireless
  - Enable WEP, WPA, WPA2
  - Change the Router's Default Password
  - Enable MAC Address Filtering
  - Change the SSID
  - Disable the SSID

#### Wireless – Is it Secure?

- NO!
- Encryption Keys can be cracked, SSID's can be found, and MAC Addresses can be spoofed.
  - Air snort & Netstumbler SSID
  - WEP Crack WEP & MAC
- However, if you secure your wireless network, the cracker will generally leave you alone and move onto the next unsecured network
- Businesses, Financial Institutions, ect are more susceptible to hacking than home users – More to lose.

#### Internet Controls For Children

- Keep Internet-connected computers in an open area and out of your kids' bedrooms.
- Investigate Internet-filtering tools as a complement not a replacement—for parental supervision.
- Insist on access to your kids' e-mail and instant messaging accounts
- Keystroke loggers
- Teach your kids to never give out personal information
- MySpace Child Predators

### Identity Theft

#### Phishing

- Fastest growing cybercrime
- Rely on Ignorance
- Financial Institutions & Multi-Factor Authentication
- Spot a fake http://www.sonicwall.com/p hishing/

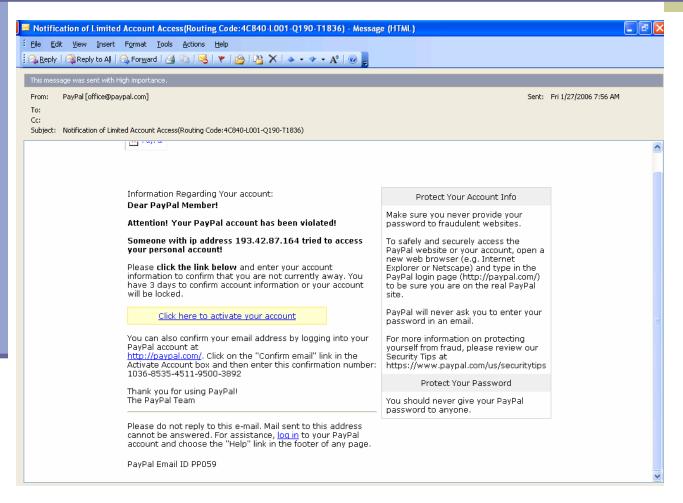
#### Trojan Horses

- Embedded program to monitor your activity
- Keystroke loggers



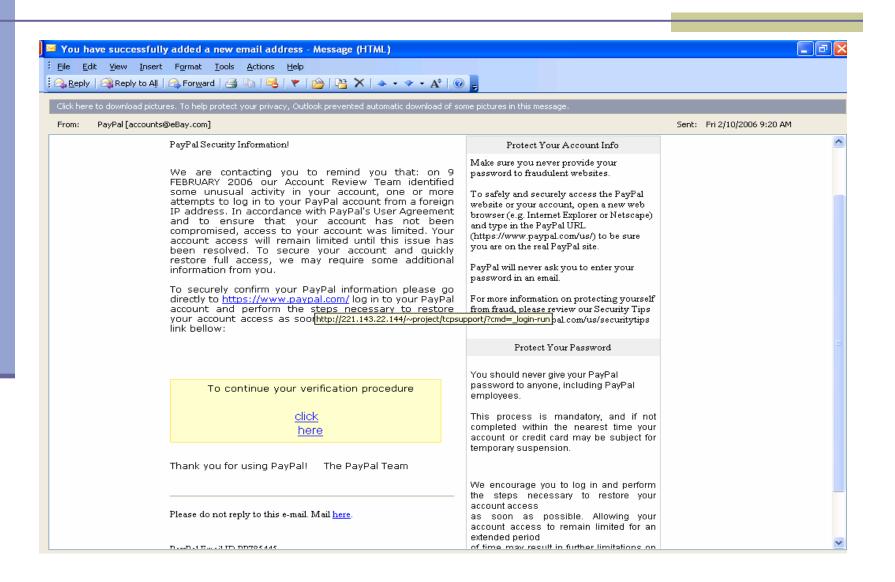


## **Buying Online**





## Buying Online, cont...



### Tips for Buying Online

- Make sure the site is secure
  - SSL (HTTPS)
  - Closed Lock <a>a</a>
- Know your merchant
- Document, Document, Document
- Use your credit card
  - Unauthorized charges are limited to \$50 under Federal Law
- Pricerunner, Bizrate, Pricegrabber, Cnet,
   Ebay, ect. all rate their sellers

### Bill Pay

- Advantages
  - Easy
  - No stamps
  - Quick
- Disadvantages
  - Fees
  - No payment coupon delays?
  - Trust your bank
- What I Think...
  - Too much confidential information on a personal check



### Technology of the Future

- Moore's Law
  - Gordon Moore Co-Founder, Chief Research Scientist, & Ex-Chairman of Intel
  - The processing power and speed of any electronic calculating device would double every 18 months, while at the same time the price for that technology would decline by about 50% a year, relative to the power.
  - May continue for the next 50 years
- By 2030, every child will carry a device the size of a palm containing the sum total of all human intelligence
  - Is there a point where we must focus less on power and potential of technology and more on using the technology that we have?

# Questions???



