

Home Computer Security Awareness

Alicia Coon, Tute Ehinlaiye, Melissa Karolewski, Sarah Raffensperger





Why do we need to protect our home computers?

- Today we use our computers for many important parts of our lives.
- With uses such as online shopping, encryption and digital certificates are used to protect our banking information.
- There are many programs that can hack into your system.



Ways to protect home computer

- Anti-Virus Software
- Anti-Spyware Software
- Firewalls
- Back-ups
- Updating Programs
- Password Protection
- Multiple User Computer
- Encryption



Important Facts

- Before downloading any programs be sure to check that you have administrator privileges.
- If you do not have administrator privileges contact your system administrator or refer to you computer's user guide.



Anti-Virus Software

- Anti-Virus software is a program used for detecting harmful programs and files that are either on the computer or attempting to install on the computer.
- Two major programs for purchase
 - McAfee Virus Scan
 - Norton Anti-virus Scan



Anti-Virus Software contd.

- It is important to download the updates for the virus definitions for your virus program.
- The virus definitions are the rules by which the virus scan program searches for potentially harmful files.
- Just installing virus scan without updating the virus definitions (.dat) does not continue to protect your computer.



Anti-Virus Software contd.

- With McAfee you can
 - Feel secure because it has Always-on Protection.
 - Auto Cleaning
 - Email Scanning
 - Instant message scanning



Anti-Spyware Software

- Anti-spyware programs are used to detect malicious programs such as
- Two popular Anti-spyware programs are
 - Aluria Software Security Center's Spyware-Eliminator
 - Lavasoft's Ad-aware SE Personal



Anti-spyware tutorials

- Spyware Eliminator
 - <http://www.aluriasoftware.com/support/dut>
 - http://www.aluriasoftware.com/files/ASE40_Help.pdf



Firewalls

- Firewalls are programs used to protect unauthorized computer traffic.
- A firewall can be seen as a guard for your computer, watching the traffic in and out of it.
- Popular firewalls are
 - Windows Firewall
 - Zone Alarm
 - McAfee Personal Firewall



Firewalls contd.

- The firewall controls the door to your computer and allows only traffic you want to go in and out of your computer.
- When running XP Service pack 2, the Windows Firewall is automatically turned on.



Firewall Tutorials

- ZoneAlarm firewall
 - <http://help.bnsi.net/zone/zone.php>
- Windows firewall
 - www.microsoft.com/athome/security/protect/windowsxp/firewall.msp.



Back-ups

- It is important to back up all important data to an external media.
 - External hard drives
 - CD-R's, DVD-R's
- Backing up data can save a computer owner the grief and aggravation of losing files do too virus and other malicious activity.



Updating Programs

- It is important that you have your OS automatically update its security patches.
- To update security packages you must be connected to the internet.
- Patches can be compared to recalls on cars, they are necessary fixes to an operating system to keep it at its maximum, safe performance.



Passwords

- It is important to keep passwords safe, just like you would your social security number.
- There are many programs out there that can sniff for your passwords, so it is important that you do not use words in the dictionary, common dates (ie birthdays) and/or any other information that the public can access.



Passwords contd.

- Do not use the same password for multiple accounts and/or programs
- Make sure that each password is unique.
- Use combinations of uppercase & lowercase letters, numbers, and characters.



Multiple User Computers

- In most home settings, computers are not for the sole use of one person.
- It is important that limit access to your important files.
- Make sure that your passwords are secure.



Encryption

- Encryption is a form of cryptography
- There are many programs on the market for securing email and file transfers.
 - PGP (Pretty Good Privacy)



Conclusion

- Home Computer Security is a must in our technological society.
- With the use of good password, firewalls, anti-spyware, virus scans, and encryption software computer users can feel more secure when using their computers.



Resources

1. <http://www.cert.org/homeusers/HomeComputerSecurity/>
2. <http://www.lavasoftusa.com/>
3. <http://www.cosc.iup.edu>