NUIIT Tech Talk: Get to Know Your Computer

January 16, 2007

Jay Bagley
Assistant Manager, Distributed Support Services

Information Technology
Agenda

• A Word About Security
  – Staying Secure
  – 7 Steps for New Computers

• Maximizing Performance
  – Completing functional upgrades
  – Keeping your hard disk clean
A Word About Security
YOU are the KEY to keeping your computer secure...
Your PC

Think about the data on your PC and how it may be accessed.

• Sensitive information
  - Social Security Numbers
  - Credit card numbers
  - Personal information financial information (Quicken, Microsoft Money)

• Important, irreplaceable information

• Encryption: a viable solution
Basic Survival

Before you start…

• Allow enough time
• Backup data before you make changes
• Registry changes—not for the novice
• Write down EXACTLY the steps you take
• Copy text of any error messages received
Passphrases/Passwords

• NetID passphrase/password
  – Be creative
  • Wtwi$mf (Willy the Wildcat is my friend)
  – Longer is better

• Windows passphrase/password
  – For separate accounts use separate (long & strong) passphrases/passwords
  – Change them regularly
Physical Controls

• A PC is that is “powered off” can’t be compromised
• Use the power-on password
• Use a cable lock for laptops (desktops) to prevent theft
• Lock the computer when you leave.
  – Windows Users: Hold down the Windows Key and press “L”
  – Macintosh Users: Require a password when coming back from a screensaver and set your screensaver to be activated via a hot corner
Firewall Protection

• Standard with Windows XP SP 2, Vista and Mac OS X
• Always keep your firewall active, current
• Commercially available products:
  – Zone Alarm (free – personal)
    http://www.zonealarm.com
  – Tiny Personal Firewall ($30 for 3 – personal)
    http://www.ca.com
  – Home use ONLY: Router w/ firewall
    http://www.firewallguide.com
Antivirus Software

• Keep AV software up-to-date and active
  – Set to auto-update, check manually – be online
  – Symantec/Norton AntiVirus – available to NU community for free

• Run regular scans (weekly)
  – Try it from Safe Mode (reboot, hold F8)

• Never open unexpected files

• Always delete files from quarantine
Spyware

• Disable ActiveX and Javascript
  – Tools > Internet Options > Security
• **Be careful** when downloading programs
• Use spyware detection/removal programs
  – Spybot - Search & Destroy
    [http://www.it.northwestern.edu/security/spyware](http://www.it.northwestern.edu/security/spyware)
  – Microsoft Windows Defender
Other Useful Scans

- Symantec (IE, Netscape, Safari)
  [http://security.symantec.com](http://security.symantec.com)
- Shields Up!
  [http://www.grc.com](http://www.grc.com)
- TrendMicro
  [http://housecall.trendmicro.com](http://housecall.trendmicro.com)
Updates & Patches

• Operating System and Applications
  – Administrator privilege may be required
  – Windows Update (IE): Set to run automatically, check manually – be online

• Software: the list is endless…
  – E-mail software: Outlook, Thunderbird…
  – Web browser: IE, Firefox, Opera…
  – Suites: Microsoft Office, StarOffice…
  – Adobe, Instant Messenger, RealPlayer…
Before you connect to the network or Internet…

**Step 1:** Create user account (non-admin)

**Step 2:** Use passphrases for all accounts

**Step 3:** Turn on your operating system firewall
Security for New Computers

Continued…

**Step 4:** Load antivirus software and disable system restore

**Step 5:** Upload updates and patches
Security for New Computers

Once connected…

Step 6: Download & install virus definitions, OS and application updates

Step 7: Load anti-spyware tools

For more information, visit US-CERT:  
www.us-cert.gov/reading_room/before_you_plug_in.html
Security Mindset

Always question:

- New sites
- New services
- Unusual ads and pop-ups
- Things that seem too good to be true
- E-mail with unusual or foreign characters
- Unexpected e-mail or IM
Security Mindset

Check that link:

• Hover your mouse over any link in an e-mail; the actual URL will show up in your status bar
Maximizing Performance
Poor Performance

- Lack of free disk space
- Disk fragmentation
- Spyware
- Add-ons
- Out-dated software
Cleaning Your Hard Disk

Regular disk cleanup can improve system performance.

- Determines which files are no longer needed and delete them
- Frees up potentially significant amounts of disk space
Disk Cleanup

- Downloaded program files
- Temporary Internet files
- Recycling bin or trash can
- Temporary remote desktop files
- Setup log files
- Back-up files
- Offline files
- Compressed old/unused files
Disk Fragmentation

Fragmentation:
• Builds rapidly
• Causes system slowdowns and crashes
• Slows boot times
• Can result in system failure
Disk Defragmentation

It’s not your imagination—
Computer systems do slow down over time.

Weekly defragmentation will keep your computer running with optimal performance!
Does software slow my computer?

- Inherently—no; software has no real impact on system performance
- Applets may be installed in the system tray by some applications; these may degrade performance
Software Updates

- Functional changes in software
- Programming changes to address “bugs”
- Programming changes to address security issues
Need Support?

• No Support Specialist in your area?
• Call NUIT: 847-491-HELP (4357)
• Contact DSS Ad Hoc, submit request
• Will provide appropriate vendor referrals
• Priority service available
NUIIIT Resources

• “Get Control” Web site
  www.it.northwestern.edu/5steps/

• E-mail Defense System
  www.it.northwestern.edu/security/eds/

• Computer and Network Security
  www.it.northwestern.edu/security/
Essential Software

• Symantec/Norton AntiVirus
  www.it.northwestern.edu/software/staff/free/antivirus/

• Spybot – Search and Destroy
  www.it.northwestern.edu/security/spyware/win-spybot-install.html
Contact

Jay Bagley

j-bagley@northwestern.edu
Questions?
Save the date!

February 6: Get Prepared: Emergency Preparedness Month

March 5: Protecting Privacy: Safe Disposal of Computers and Personal Private Information

Same locations, 12:30 – 1:15 p.m.