

Computer and Internet Security



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10-17-2013

Today's Discussion

- Overview of Computer and Internet Security
- What is Computer and Internet Security
- Who Should be Concerned
- Why Should I Care
- General Computer Security Tips
- Securing Mobile Devices and Social Networks
- Mobile Devices – Risks
- How are Location Sharing Technologies used
 - Risks of Location Sharing Technologies
 - Examples of Location Sharing Technologies

What is Computer and Internet Security

- Computer Security
 - Protecting computers, information, and services from unauthorized access, change or destruction.
 - Internet security extends this concept to systems that are connected to the Internet
 - Browsing the Internet
 - Electronic Commerce
 - Social Networking
 - Emailing

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Who Should be concerned

- Anyone who uses
 - Computers
 - Mobile Devices
 - The Internet
 - Email
 - Social Networks



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Why Should I Care?

- Infections from viruses, spyware, or malware
 - Virus - Program designed to infect your computer, replicates itself, and usually causes lost or corrupt data
 - Spyware is a type of malicious code that tracks your habits on the internet without you knowing it; usually collects personal information

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Why Should I Care.. Cont'd

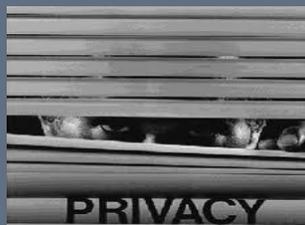
- Phishing, Hoaxes, Malware, Scams and Spam
 - The most prevalent and persistent threats to your security come to you in your Inbox. They come by different names and may even appear legitimate and even supposedly from people you may know.
 - They all have this in common: they are designed to get you to click on an item like an attachment, link or picture.

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Why Should I Care.. Cont'd

- Broken device
 - Devices that do not work when needed or as expected.
- Privacy and personal security concerns
 - Preventing private, personal, or sensitive information from being disclosed



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Basic Approaches to Security

- Use anti-virus and anti-spyware Software
 - Detects and removes viruses and spyware from your computer
 - Must be kept up to date
- Install security patches
- Enable Firewalls
 - Protects computers by preventing unauthorized access



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Basic Approaches to Security

- Use strong passwords to protect computers
- Be cautious about downloading free software or files from untrusted sites
- Most prevalent threats to your security come to you in your Inbox; are all designed to get you to click on an item like an attachment, link or picture.
- If you click, you could launch harmful programs or be directed to a harmful web site.



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Basic Approaches to Security

- Think before you click on links
 - Most threats are targeted in hopes that you will click on a harmful link, attachment, picture, video or icon in an email or web page
 - Stop: Do not automatically click on Internet links until you have confidence in them.
 - Think: Look at the actual address for the links in question. For instance if the link indicates "Click Here" be sure to hover your mouse pointer over the link and investigate before you proceed.
 - Click: Only after you are confident that the site is safe.



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Security for Mobile Devices and Social Networks

- Mobile Devices have become the devices of choice for communicating and connecting to the Internet
 - Smartphones
 - Tablets
 - Laptop Computers
- Social Networks
 - Foursquare, Google Latitude, Twitter
 - Facebook, Google +
 - Pinterest, Gowalla



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Mobile Devices - Risks

- Mobile devices are easy to lose or steal
- Can carry large amount of data
 - If stolen, an unsecured Smartphone grants access to your private information: email correspondence, address books, and any unsecured documents.
- Often unprotected
- Data may be “sniffed” during unprotected wireless communications

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Mobile Devices - Risks

- Location Sharing
 - Location-aware applications deliver online content to users based on their physical location.
 - Technologies employ GPS, cell phone infrastructure or wireless access points to identify where cell phones or laptops are located and users can share that information with location-aware applications.



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Mobile Devices - How are Location Sharing Technologies used?

- Apps might provide you with information on nearby restaurants, notify you of traffic jams, or let your friends in a social network know where you are, prompting increased social connectivity.



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Risks of Location Sharing Technologies

- Makes users “human homing beacons”
- Increases the chances of being stalked
- May reveal when you are home or away

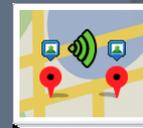
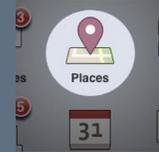


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Examples of Location-Sharing Technologies

- GPS Geo-tagging of photos
 - Location details added to photographs
- Facebook places
 - Allows users to "share where you are with your friends, see where your friends are and discover new places around you.
- Blip – Blackberry application updates location every 15 minutes.
- Google Latitude – Allows you to see where your friends are and what they doing



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Security Guidelines for Location Sharing Technologies

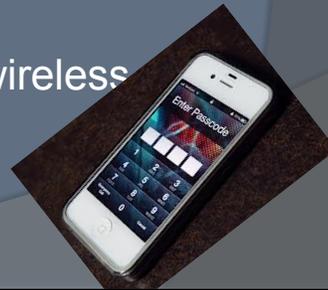
- Most apps offer privacy controls – enable them
 - Some privacy controls are not always easy to access
- Defaults may be too open
- Know what applications you have and research privacy controls
- Disable GPS capabilities and geo-tagging features

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Security Guidelines - Mobile Devices

- Enable auto-lock
- Enable password protection
- Keep the phone OS and apps up-to-date
- Enable remote wipe feature where possible
- Avoid connecting to public wireless network when possible.



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Security Guidelines - Social Networks

- Security Guidelines
 - Before you post, ask the following:
 - Will this post/picture cause a problem for me?
 - Would I say this in front of my mother?
 - Limit the number of people that see it
 - Share public information with the public
 - Share inner thoughts and personal feelings with close friends

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Security Guidelines - Social Networks

- Limit your visibility on services
- Do not Friend or Connect with people that you have not met in person or know well
- Limit your check-in information to friends only
- Never check in at your home, school, work
- A mayorship is a public “office”

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Security Guidelines - Social Networks

- Avoid public lists for a location
- Review posts you are tagged in
- Turn off geo location data in photos
- Turn off “find my face” in photos and videos
- Disable location data for tweets
 - Delete old location data too

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Stay Safe

Think before you click and try to be mysterious when online

