Computer Maintenance & Problem Prevention

Prevention

BACKUP!

- Always always always backup your data.

- Always

- Strategy?
  - One backup of important files right on your computer
    - In a different location
  - One backup of on a different medium
  - One backup of on yet another different medium OFFSITE

Prevention

Your power

- An Uninterrupted Power Supply (UPS)!
    - Or at the very least, a <u>good</u> surge protector

Prevention

Antivirus

- Always make sure you have some kind of antivirus running
    - (if you are using a Windows machine)

- There are several free versions of good quality software that automatically update themselves
    - AVG Free
    - Avast

- Norton Utilities?

Prevention

Firewalls

- If your computer is connected to the internet, make sure there is a firewall somewhere between it and you.

- Most home routers (Linksys, etc) have built-in firewalls, but if you are connected directly, make sure the firewall is turned on.
  - This is actually turned off by default on many versions of both Windows and MacOS

Prevention   **Maintenance**

Keep some room free on C:

- Some of you have only this drive, others have many.

- Either way, your computer needs room to 'wiggle'
  - Needs some room to do things temporarily

- Lack of room can make things very slow

- Try to keep at least 1GB free.

- Maybe remove that game you haven't played in 6 months?

Scandisk

- Running scandisk helps make sure all your files are complete and pointing to the right things.

- Sometimes data gets corrupted, or shortcuts get broken and a file no longer points where it is supposed to.

- Scandisk scans all your files and checks their integrity.

Fragmentation

- Sometimes it just gets clogged up!

- Defragmenting helps put all the parts of files together sequentially, making loading much faster.

- So when loading a big program feels like it is taking much longer than it used to, try defragmenting your hard drive.

Watch out for running applications

Maintenance

System Configuration Utility — Startup tab
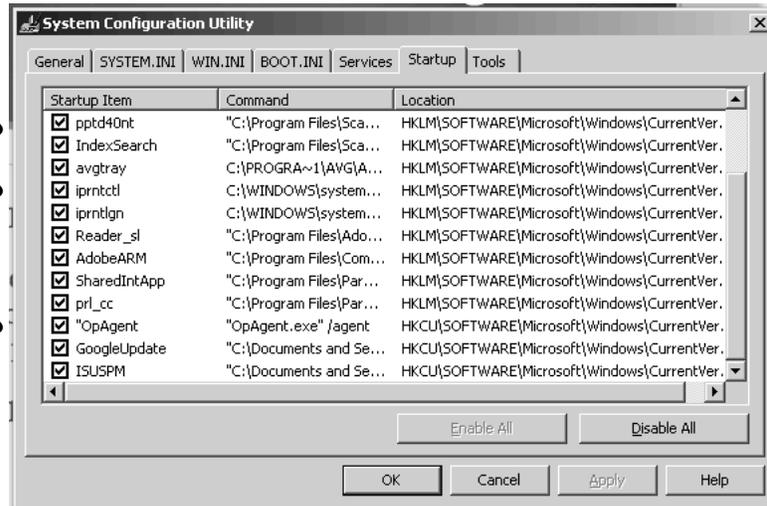
Remember:

♦ Backup your data!

♦ Good power

♦ Antivirus

♦ Firewalls

♦ Keep some space free

♦ Scandisk / Defragment

♦ Watch your processes (programs running)

Which one(s) do you think are most important?

Prevention

Security

- Begins with good Antivirus & Firewall software

- But is dependent on good passwords!

Prevention

Password statistics

- Number of online accounts that an average user has: 25

- Number of passwords that an average user has: 6.5

- % of US consumers that use 1-2 password across all sites: 66%

- Number of times an average user login per day: 8

- Average password length: 8

- Most commonly used password: password1

- % of users that use personally meaningful words: 54.9%

- % of users that use the 'Remember my password' function: 28.6%

- % of users that write down their password: 15%

- Average time users maintain the same password: 31 months.

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Prevention

Passwords

Does your password have eight or more characters?
Does your password include letters, numerals, and symbols?
Does your password include both uppercase and lowercase letters?
Have you changed your password in the last six months?

Does your password include obvious sequences of numbers
(such as 123) or letters (xyz)?
Does your password contain repeated characters (such as 3333333)?
Does your password use three or more keys on your
keyboard in sequence (such as qwe or xcv)?
Does your password use private identity information about you
(such as your logon name, your street address, or your birth date)?
Do you use this password for multiple accounts?

Password strength?

Prevention

Who wants your password?

- You'd be surprised.

- Your little brother might try to get into your online gaming account.

- Another teen might try to cause trouble for you or just play a "joke" by impersonating you on a social networking site.

- Career criminals guess or crack passwords for a living. Once criminals gain access to your private identity information, they can sell it to the highest bidder.

Prevention

How do people crack them?

- There are free programs on the Internet that crack passwords by trying every word in the dictionary.

- Serious hackers write their own password-cracking software.

- Someone you know might try using information they know about you, such as the name of your pet or your address.

Prevention

How are they stolen?

- No matter how strong your password is, it can still be stolen or copied.

- Someone can look over your shoulder when you are at school or at the library and see the keys you type.

- There are programs that keep track of which keys you used when you last typed at a computer in a public place, such as a library.

- Others steal passwords by *phishing*.

Prevention

Good passwords?

- Create passwords that are easy for you to remember but that will be hard for others to crack.

- Start with memorable words that don't normally go together

- Then change some letters into numerals, symbols, or spaces.

Prevention

Tips?

- Don't keep written copies of your passwords near your computer.

- Never share passwords with other people.

- Don't use personal information in passwords, such as the name of your boyfriend or girlfriend, your pet's name, or your phone number.

- Use a password and keypad lock features on your cell phone

- This will stop others from using or looking through your phone without your permission.

- Don't use the same password for all accounts.