

$\Delta I \Phi$

Lesson 05:

Computer

Maintenance

# Keep Software Up-To-Date

- Patches Security Holes
- Improves Software Stability
- Improves Software Performance
- Adds Features

# Update Microsoft Windows

1. Open Internet Explorer and navigate to <http://www.microsoft.com>
2. Click on “Microsoft Update”
3. Click “Express”
4. Follow the Instructions as they appear.
5. This process may require multiple reboots and returns to microsoft.com

# Disk Maintenance – Error Check

1. Go to “My Computer”, right-click on the C: drive, and select “Properties”.
2. Click on the “Tools” tab.
3. Click “Check Now...” under Error-Checking.
4. Check “Automatically fix file system errors”.
5. Check “Scan for and attempt recovery of bad sectors”.
6. Click “Start”.
7. This may not always work due to Windows not having exclusive access to the drive, then schedule it to run on reboot.

# Disk Maintenance – Defragment



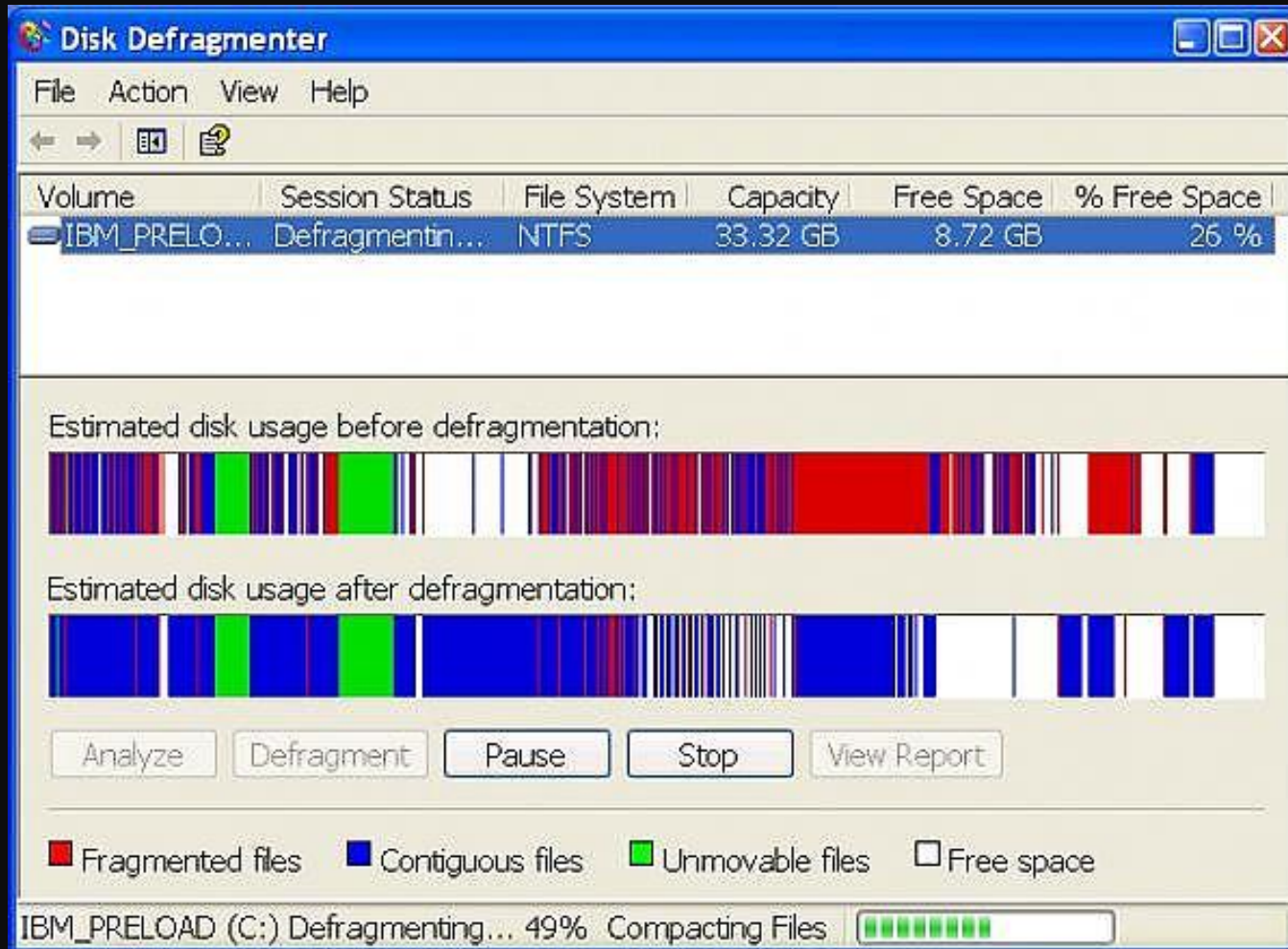
My Atomic Robo Collection is Fragmented

# Disk Maintenance – Defragment



My Atomic Robo Collection Defragmented

# Disk Maintenance – Defragment



A Fragmented Drive is an Inefficient Drive.

# Disk Maintenance – Defragment

1. Go to “My Computer”, right-click on the C: drive, and select “Properties”.
2. Click on the “Tools” tab.
3. Click “Defragment Now...” under Defragmentation.
4. Click “Analyze”.
5. Click “View Report”. Note the percentage of fragmentation.
6. Click “Defragment”.

Defragmentation and Error Checking on Disks applies to all disks, all hard drives and all thumb drives. All of these are subject to errors and fragmentation.

# Backups

- Documents, Music, Video and Games can all be lost if your hard drive crashes or laptop breaks.
- Regularly burn your libraries of files to CD, DVD, or thumb drive.
- Store files online when possible. E-mail them to yourself as an attachment or sign up for free online storage.

# Computer Viruses

```
:-) {:-&} ;:-
```

Fork Bomb

# Computer Viruses

- **Adware**: plays advertisements after software is installed
- **Worms**: self-replicating program that copies itself across network nodes
- **Rootkit**: a concealed malicious program (Sony Rootkit)

# Computer Viruses



Beast Rootkit

# Computer Viruses

- **Spam**: unsolicited e-mails, sometimes fraudulent, attempts to get personal details or recipient to open file
- **Spyware**: collects information without user's knowledge
- **Trojan Horse**: pretend useful software that is actually harmful.

# Anna Kournikova Virus

- Sent Via E-mail as “AnnaKournikova.jpg.vbs”
- Once Opened, it sends an e-mail to everyone in the recipient’s address book with a copy of itself.
- Why do you think people opened the file?

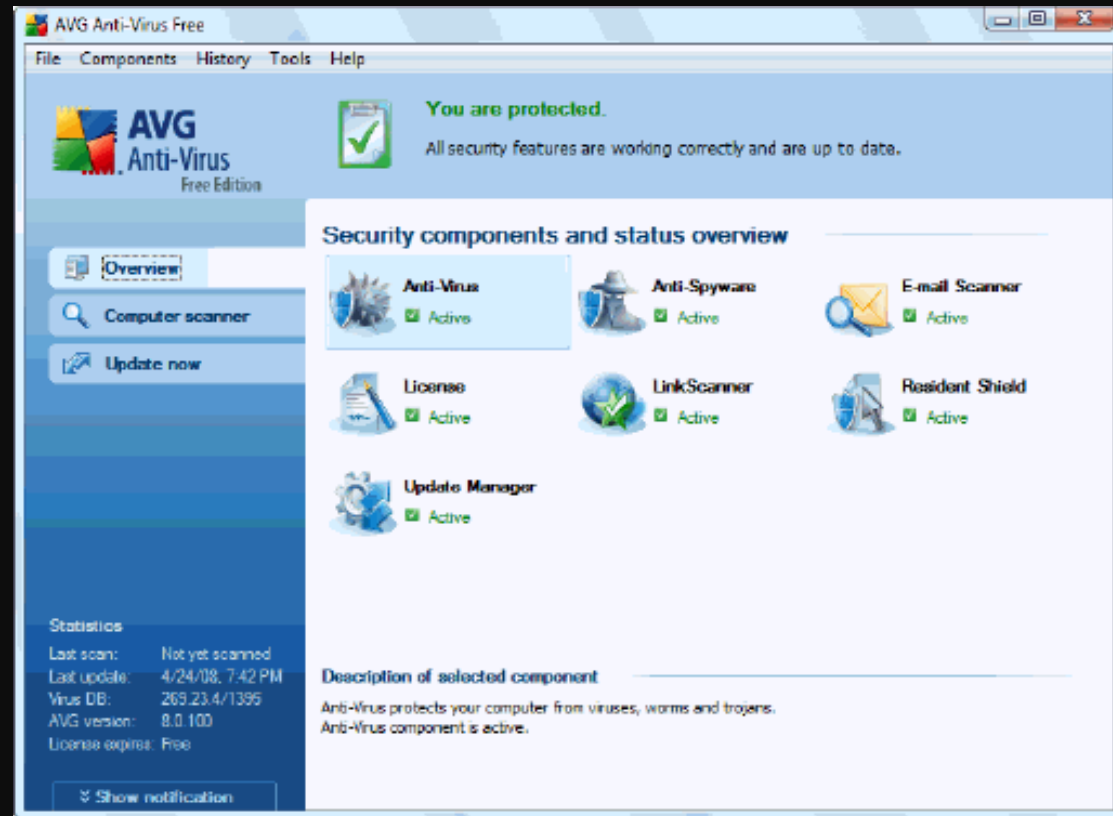


# Computer Viruses

Watch out for file extensions when opening e-mails! Never ever ever ever open EXE, BAT, or VBS files.

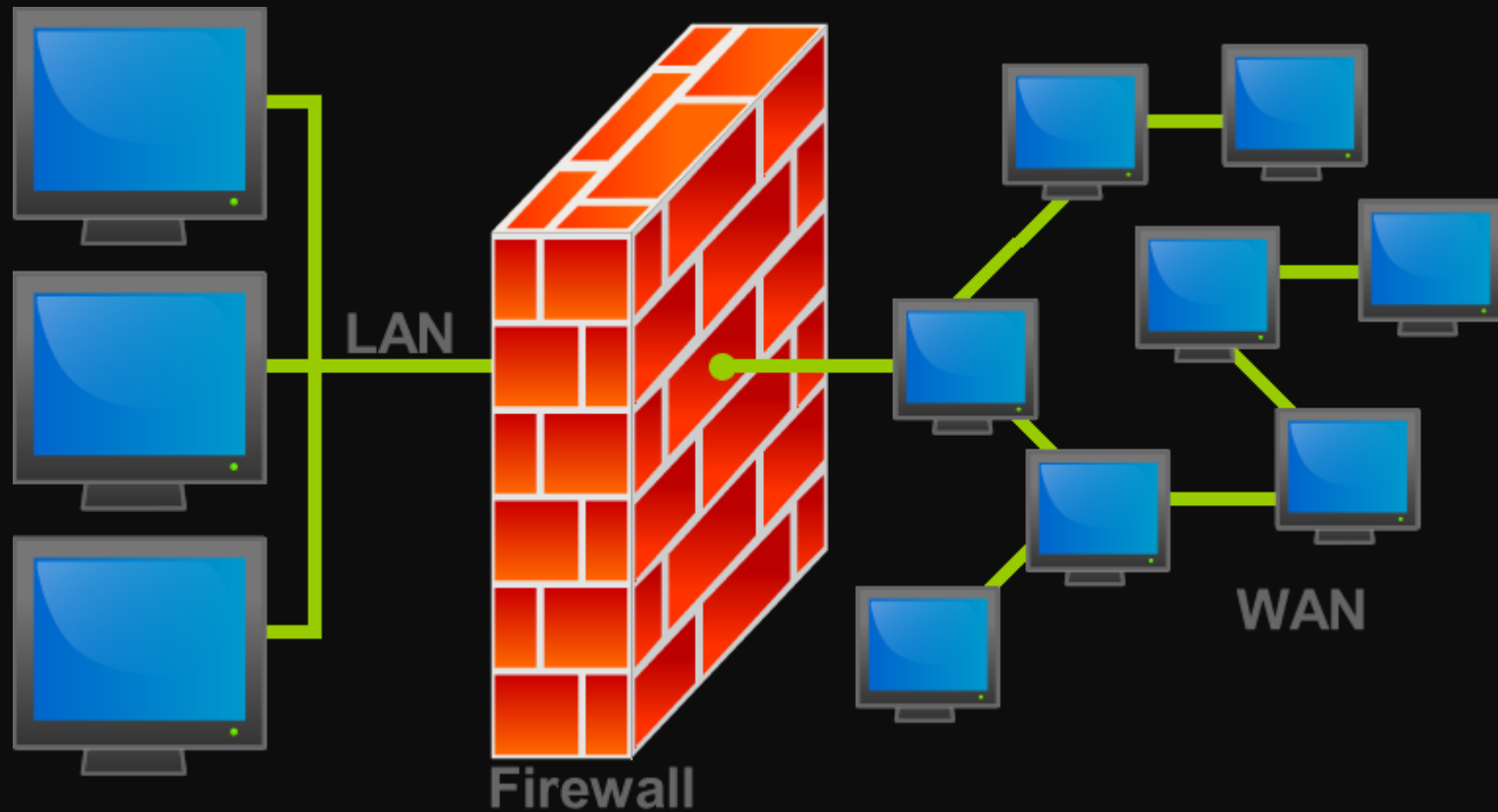
# Computer Viruses – AntiVirus Software

- AVG Free 8.5
- “Update Now”
- “Computer Scanner>Scan Whole Computer”



Do This Every Week!!!

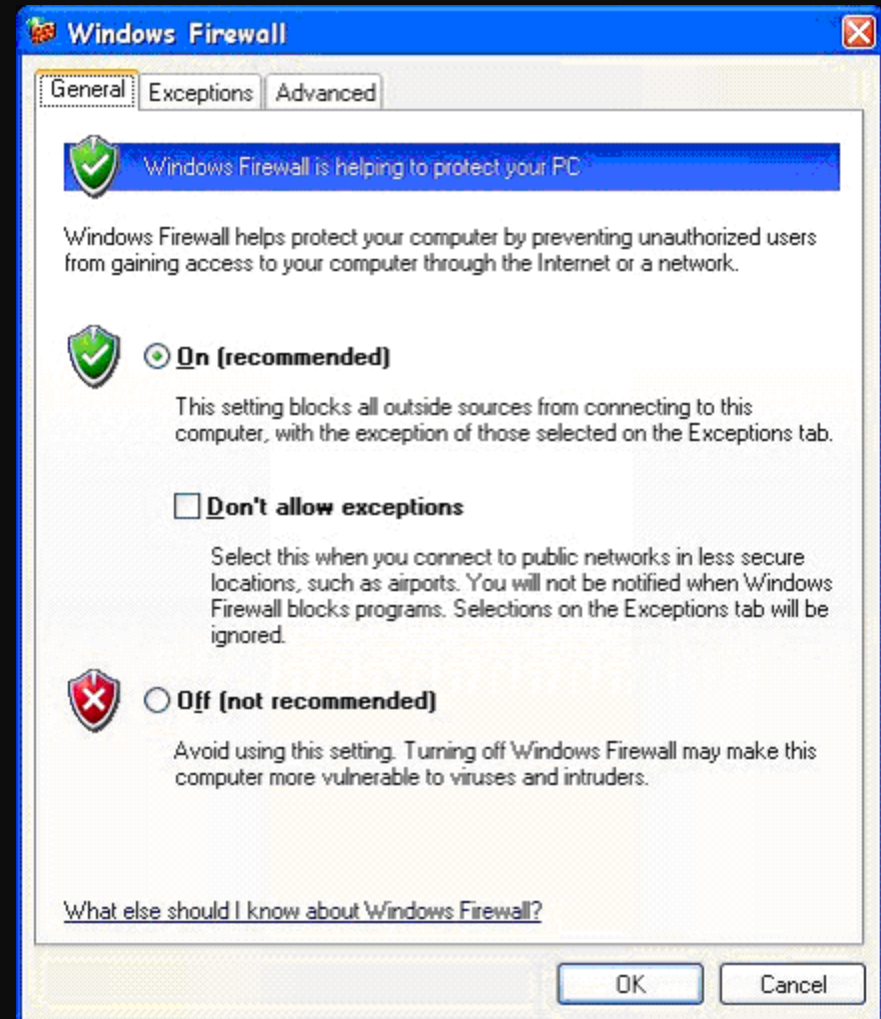
# Computer Viruses –Firewalls



Prevents Outside Programs from accessing your computer and Inside Programs from accessing the Internet Unless Authorized.

# Computer Viruses – Windows Firewall

- “Control Panel > Windows Firewall”
- Only allow exceptions for program you installed or recognize as safe.



# Account Management

- Go to “Control Panel>User Accounts”
- Click on “Guest Account” and then click “Turn On the Guest Account”
- This way you can let friends use your computer without messing anything up.

# Account Management

- Click on “Create New Account”
- Name it “support”
- Pick “Computer administrator” for the account type and click “Create Account”
- Let an Instructor choose the password.
- This will give us a way into your computer in case you mess it up.

# Account Management

- Click on “Admin” click “Create a password”
- **VERY IMPORTANT:** If you forget your Admin password:

**YOU ARE OUT OF LUCK!!!!**