PC Security

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Lab 2

Task 1: Patching your OS: Write a paragraph on the importance of patching your computer systems. This should include your OS, browser and end-user applications.

Software updates are important, updates are necessary. Computers and the software they house require regular updates to insure they go forward to operate safely and smoothly. Updates add value to your Os, your antivirus and everything else on your computer that keep your computer working. Software makers are interested in keeping their software up to date and fully working.

Web browser's patches and updates serve a very great need, keeping the user safe and there computer from online attacks(stolen information, viruses, new attacks and more). Keeping your software updated to the most recent version could save your computer and your personal information from getting in the hands of hackers and script kiddies.

As said above viruses are ever-evolving, which too means you're running system, antivirus and other applications (like web browsers) should continuously develop as well. Everyone ignores system updates for a bit of time but this makes your computer more of threat to new viruses.

Updates serve a number of functions. Examples are below:

- Fix security holes
- Optimize the utilisation of resources on the operating system
- Add newer and more secure features
- Remove old and unprotected features
- Update drivers to increase software efficiency
- How new browser versions benefit you and your company:
- Increased security benefits
- Avoid compatibility problems associated with older versions
- Allow access to the newest applications
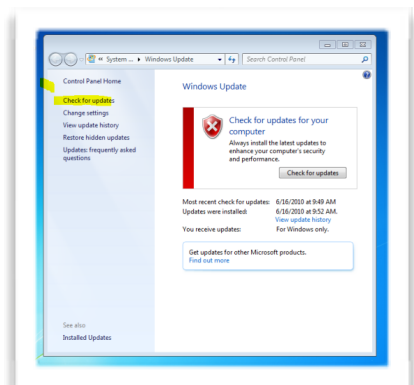- Many new websites function only in newer browser versions.

Task 2: Automatic updates, Show how you would check for updates. Show how you would set up Automatic Updates.
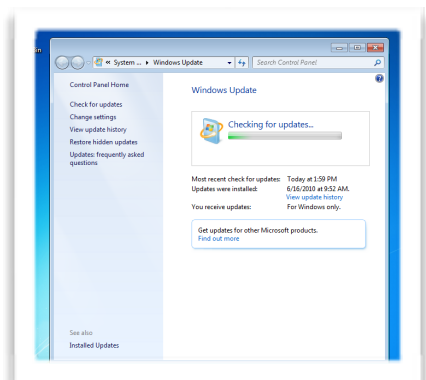
Check for updates.

1. Click on the Start button. In the lookup box, type Update, and then, in the list of results, click Windows Update.

2. In the left panel on the left side, click Check for updates.

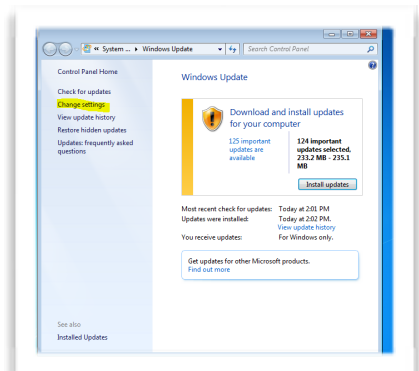3. Windows will look for the latest updates for your computer at are avabile online.
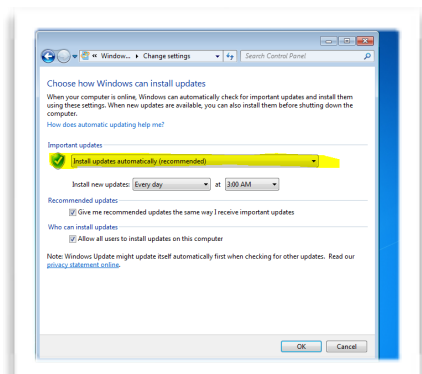
To enable Automatic Updates

1. Click the Start button in the task bar

2. Search for windows update in the search panel.

3. On the left panel, click change settings.

4. Select automatic update automatically.

5. Click Apply and then click OK to accept the changes and close the window.

Task 3: Microsoft Baseline Security Analyser (15 marks)

What is MBSA used for?

MBSA stands for Microsoft Baseline Security Analyser. It is a software tool built by Microsoft to help determine the security state of a user's computer. It checks and gets it rating by assessing missing security updates and less-secure security settings within Microsoft Windows, Windows components such as Internet Explorer and all other Microsoft products on the users machine.

Download, Install and run MBSA against your machine and discuss the results.

Discuss some of the items scanned for in the Windows check portion of the scan.

Set up and details.

After I downloaded and install MBSA, onto my computer and ran it for the first time. It asked me did I want to scan the computer or a network.

I clicked on just the one machine (as I was using a virtual machine). Next it asked me what I wanted to scan; the options can be seen on the picture on the right. I did a full scan with all options, it searched for poor passwords, administrative vulnerabilities, along with other sercity.

The search itself took about 20 minutes for it to complete. The results can be seen, let it be noted, there was a few updates waiting to be installed along with that I was using a virtual machine.

The major notices were that there were 80 updates waiting to be installed along with 3 service packs. Showing the computer isn't up to date. This can be fixed using the windows update featured earlier in this report. The other failure it spotted was due to the virtual machine.

Administrative Vulnerabilities

Score	Issue	Result
❌	Local Account Password Test	Some user accounts (2 of 2) have blank or simple passwords, or could not be analyzed. What was scanned Result details How to correct this
❌	Autologon	Autologon is configured on this computer. What was scanned How to correct this
⚠️	Password Expiration	All user accounts (2) have non-expiring passwords. What was scanned Result details How to correct this
ℹ️	Incomplete Updates	No incomplete software update installations were found. What was scanned
✅	Automatic Updates	Updates are automatically downloaded and installed on this computer. What was scanned
✅	File System	All hard drives (1) are using the NTFS file system. What was scanned Result details
✅	Guest Account	The Guest account is disabled on this computer. What was scanned
✅	Restrict Anonymous	Computer is properly restricting anonymous access. What was scanned
✅	Administrators	No more than 2 Administrators were found on this computer. What was scanned Result details
✅	Windows Firewall	Windows Firewall is enabled on all network connections. What was scanned Result details

Additional System Information

Score	Issue	Result
ℹ️	Auditing	Neither Logon Success nor Logon Failure auditing are enabled. Enable auditing and turn on auditing for specific events such as logon and logoff. Be sure to monitor your event log to watch for unauthorized access. What was scanned How to correct this

Note

Some of the other failures where due to the fact of how the virtual machine is set up. This is the auto login, having no passwords on the accounts. I would include these as false positives.

Windows check portion of the scan.

The windows check portion checks if the pc configurations makes your machine vulnerable to attacks. These things include weak passwords, Automatic Updates not turned on, Firewall not turned on, or applications that are in need of update.

In the windows check portion of the scan it checked the following areas

- The file systems

- Administrative Vulenarbityes.

- The windows firewall system.

Some notes to take away:

- This computer was all passed beside the areas below. Mostly cause of the virtual machine.

- It saw that auto download and install of updates was turned on.

- There were updates avable.

- This is where it came across the problems with the login and the virtual machine.

- It noted that there were some uncompleted updates on the machine.

- Note in the patches the internet explorer is updated to version 10 , Helping against attacks though the web and hardening the os.

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Task 4: (10 marks)

Show how to use the Windows 7 built in Backup and Restore utility, including setting up scheduled Backups.
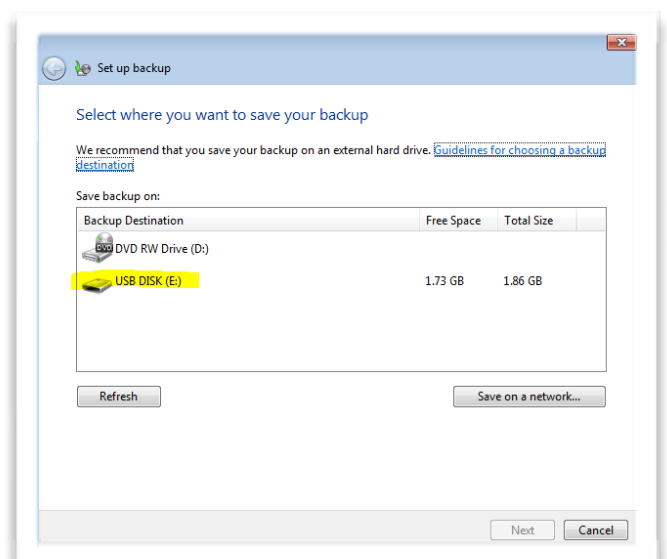**You can backup up a small folder to demonstrate.**
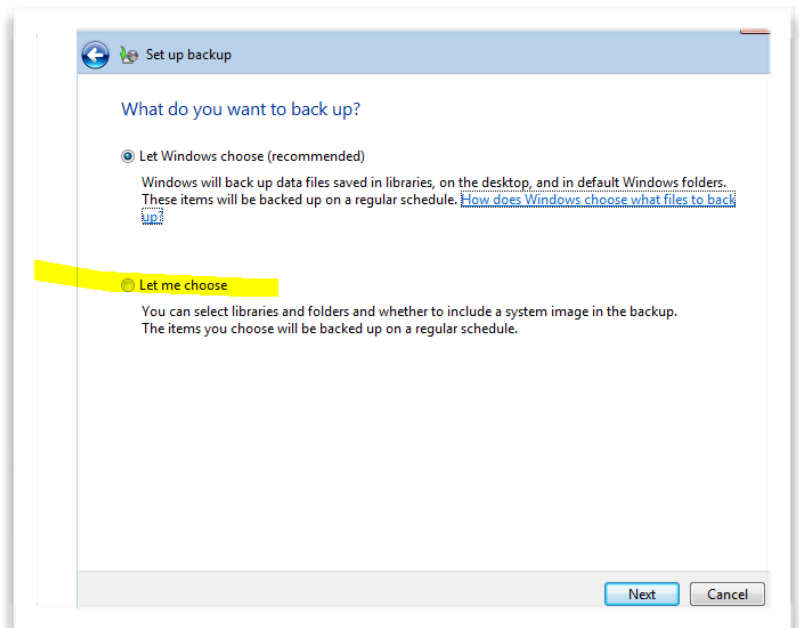
To back up your files

1. Open Backup and Restore by clicking the Start button.

2. Click Control Panel.
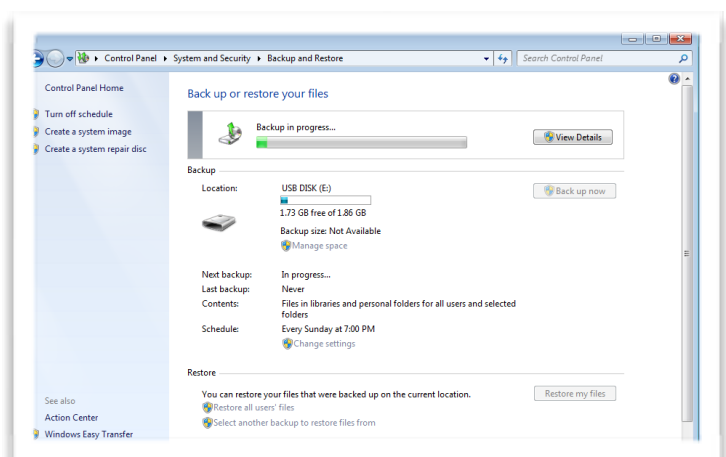
3. Click Backup and Restore.

4. Click Set up Backup
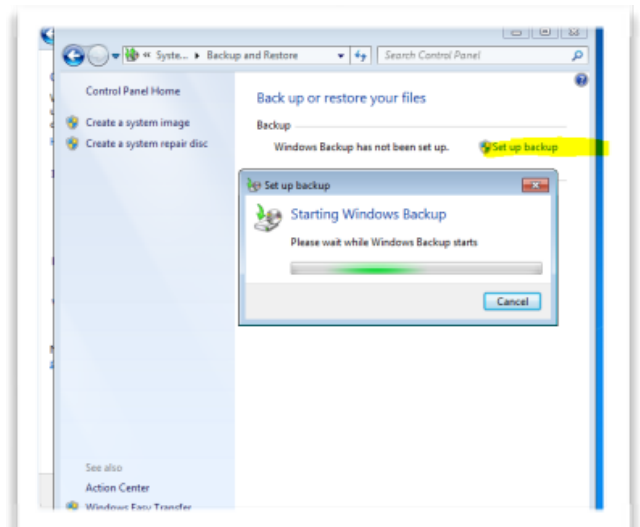
5. Click the drive/harddrive you want to back up to . Click next .

6. Next, click Let me choose. Pick the folder you want to back up and click ok.Then click next.

7. All finished, now just wait until the back up is finished.
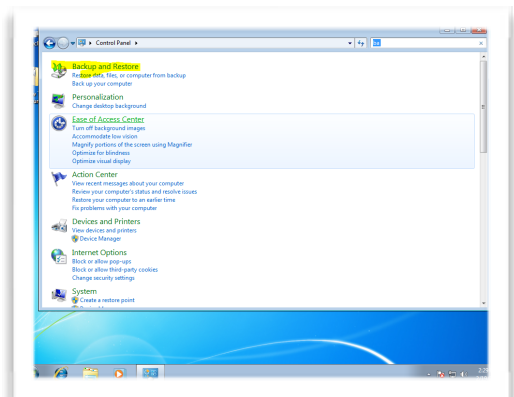
8. You know have made a back up.

To set up automatic backups

The Windows Backup wizard automatically creates a schedule for you, which you can change.
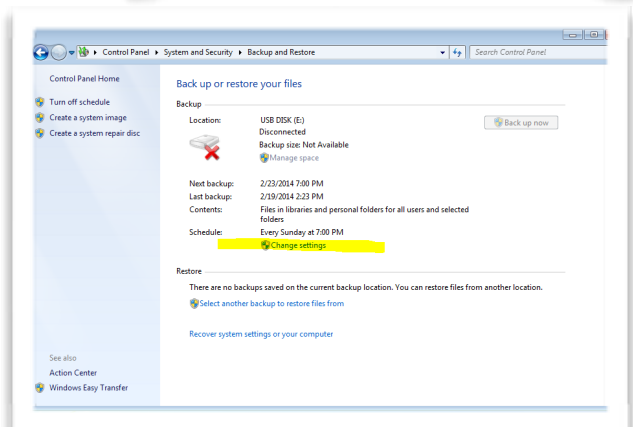
1. Open Backup and Restore by clicking the **Start** button.
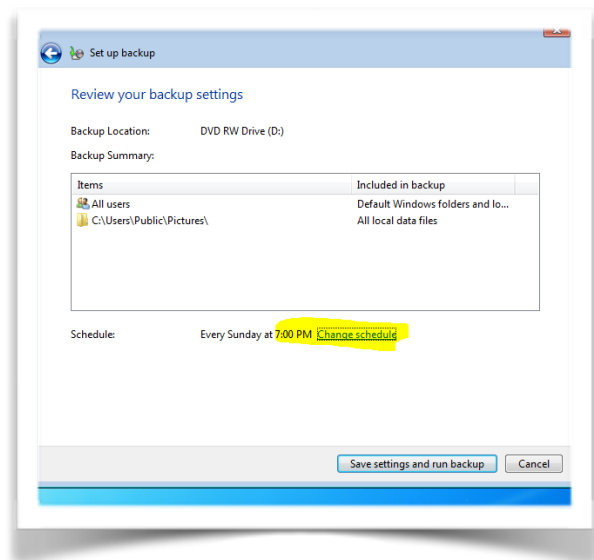
2. Click Control Panel

3. Click Backup and Restore.

4. Click change settings.

5. Click next and click change schedule

6. Click perform auto backups.

7. Click ok and your all okay and finished.