Module Six: Using your Computer Safely

In Module Six we will explore techniques that reduce your possibility of encountering a problem caused by unsafe Internet, e-mail, or device access. We’ll look closer at how the Internet works and how you can be protected from viruses and other common problems you will most likely see using your PC.

Topics

- Introduction to the Internet.
- Internet Browser safety.
- Managing your Internet settings.
- Using the Snipping Tool
- Anti-virus software
- Using Windows and the Internet safely.

Exercises

- Exercise 6A: Clean up the Browser Settings
- Exercise 6B: Using the Snipping Tool

Objectives

At the end of this module you will be able to:

- Understand how to safely use the Internet.
- Know how to manage your Browser for efficiency and safety.
- Know how to use the snipping tool.
- Understand the threat of viruses and how to guard against them.
- Know where to find the Action Center.
- Prepare for safe computing.
1. Introduction to the Internet

The Internet is a massive network of networks that connects millions of computers together globally. It forms a network in which any computer can communicate with any other computer as long as they are both connected to the Internet. Information that travels over the Internet does so via a variety of languages known as protocols.

![Diagram of the Internet and World Wide Web](image)

2. The World Wide Web (Web).

The World Wide Web, or simply Web, is a way of accessing information over the Internet. It is an information-sharing model that is built on top of the Internet. The Web uses a special language, only one of the languages spoken over the Internet, to transmit data. Web services, allow applications to communicate in order to exchange and share information. The Web also utilizes Browsers, such as Internet Explorer, Google Chrome, Firefox and Edge to access Web documents called Web pages. Web documents also contain graphics, sounds, text and video.
Glossary of Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internet</strong></td>
<td>The Internet spreads across the globe and consists of countless networks and computers, allowing millions of people to share information.</td>
</tr>
<tr>
<td><strong>Web</strong></td>
<td>The Web is the ability to connect Browsers to Web sites in order to view, enter, and conduct business with companies, organizations, schools, and a variety of other entities.</td>
</tr>
<tr>
<td><strong>ISP</strong></td>
<td>Stands for &quot;Internet Service Provider.&quot; You connect to the Internet through the ISP and you pay a monthly fee for the service.</td>
</tr>
<tr>
<td><strong>Web Site</strong></td>
<td>Web site is a collection of Web pages. For example, Amazon.com is a Web site, but there are millions of Web pages that make up the site.</td>
</tr>
<tr>
<td><strong>IP Address</strong></td>
<td>Also known as an &quot;IP number&quot; or simply an &quot;IP,&quot; this is a code made up of four numbers separated by three dots that identifies your computer's connection to the Internet.</td>
</tr>
<tr>
<td><strong>World Wide Web</strong></td>
<td>Network of computer connections that interconnect web sites, services, and ISPs. It is highly reliable and widely available.</td>
</tr>
<tr>
<td><strong>E-Mail Service</strong></td>
<td>Internet service that maintains individual mail box accounts and is responsible for sending and receiving e-mail messages.</td>
</tr>
<tr>
<td><strong>Firewall</strong></td>
<td>An integrated collection of security measures designed to prevent unauthorized electronic access to a networked computer system.</td>
</tr>
<tr>
<td><strong>Browser</strong></td>
<td>A software program that allows the user to find and display documents and images retrieved from the World Wide Web.</td>
</tr>
<tr>
<td><strong>Cookies</strong></td>
<td>A small piece of data created by a Web site sent to your Browser. The Browser stores the data in a file on your computer. The web site uses cookies to recognize you and remember things about your browsing history.</td>
</tr>
</tbody>
</table>

The Internet offers a wide range of useful services but it also increases the opportunities for identity loss and damage to your computer caused by viruses and abusive software.

The ISP charges each user a monthly fee that can sometimes be quite expensive. An alternative low cost Internet connection is offered by everyoneon.org. Please refer to everyoneon.org for more detail.
3. Using the Browser

Computer access to the Internet is handled by a software application called a Browser. The Windows 10 operating system supports both the Internet Explorer and Edge. Google provides Chrome and Mozilla supports Firefox. All the Browsers are offered free of charge. Since all Browsers operate in a similar manner, we’ll focus on the Internet Explorer.

Note: Windows 10 installed on computers distributed by the Peoples Resource Center will use Bing as the default Browser.

Figure 6.2- Internet Explorer
## Glossary of Terms

<table>
<thead>
<tr>
<th>Tool</th>
<th>What does it do?</th>
<th>When do I use it?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Back</td>
<td>Displays the previous web page in the sequence.</td>
<td>Whenever you need to return to the previous web page in the same display Tab...</td>
</tr>
<tr>
<td>Forward</td>
<td>Displays the next web page in the sequence.</td>
<td>Whenever you need to display a web page you have previously viewed during the same display session.</td>
</tr>
<tr>
<td>URL</td>
<td>Provides the name of the web site you are viewing.</td>
<td>Whenever you need to access a web page by its Universal Resource Locator (URL) address such as “<a href="https://google.com%E2%80%9D">https://google.com”</a> “<a href="https://chase.com%E2%80%9D">https://chase.com”</a>, etc.</td>
</tr>
<tr>
<td>Display Tab</td>
<td>Identifies the current display page</td>
<td>You may open several web pages in the Browser each contained on a separate Browser Tab...</td>
</tr>
<tr>
<td>Additional Tabs</td>
<td>Creates another display tab in the Browser</td>
<td>When you wish to visit another web site during the same Browser session.</td>
</tr>
<tr>
<td>Home</td>
<td>Requests and displays the home page contents defined by your Browser.</td>
<td>When you wish to reposition the Browser at the beginning of a display session sequence.</td>
</tr>
<tr>
<td>Favorites</td>
<td>Stores the URL address of the currently page for future access.</td>
<td>When the contents of the web page need to be stored after the Browser session is ended.</td>
</tr>
<tr>
<td>Tools</td>
<td>Displays the Browser menu of settings</td>
<td>Clicking the left mouse on the Tools menu gives you access to several key options that reduce your potential of personal identity loss and increased Browser performance</td>
</tr>
</tbody>
</table>
3. The Browser Settings

The Browser has a number of settings that control its behavior and how it interacts with the computer. In addition to effecting the computer speed, the Browser can increase your risk to viruses and hackers. You should review your Browser settings and make adjustments as needed.

Exercise 6A: Clean up the Browser Settings

<table>
<thead>
<tr>
<th>Follow Me</th>
</tr>
</thead>
<tbody>
<tr>
<td>This exercise demonstrates how to apply the proper adjustments to the Browser settings.</td>
</tr>
</tbody>
</table>

1. Open the Internet Explorer and allow the Home Page to appear.
2. Left-click on the Tools icon on the right of the tool bar. (See figure 6.2).
3. Left-click on the Internet Options entry in the Menu.

4. The Internet Options window will appear.
5. Left-click on the Delete Browsing History on exit check box. This will remove the history of your web site access from the **Browser**.

6. Left-click on the Delete History button.

7. Left-click the box next to Temporary Internet Files and web files. This will considerably increase your **Browser** performance.

8. Left-click the box next to Cookies and website data. This will remove the potential of tracking your **Browser** activity.

9. Left-click the box next to Passwords. Passwords should never be stored in the **Browser**. If they are, this will remove them.

10. Left-click the box next to Tracking Protection.

11. Left-click the **Delete** button. The selected data will be removed from your **Browser**.
Several key points to keep in mind while your surfing the Internet

- Do not click on links to other sites without knowing the URL address. The actual address (URL) will appear at the bottom of the Browser window. Make sure you can confirm the validity of the site shown in the address. **Never go to sites that are just numbers.**

- Use the Pop up Blocker setting to reduce the number of pop-up windows during your online session. **Do not click on a Pop-up link or any advertisement claiming to correct a problem on your computer.**

- To change the Popup Blocker setting, open the Internet Options window as described in steps 1 – 4 in Exercise “6A – Clean up the Browser Settings”.

![Privacy Tab](image)

![Pop up blocker](image)

*Figure 6.5 - Pop up blocker control*

**Note:** There will be times when Pop Up windows are required to complete a Web-based action like downloading files. You should temporarily allow Pop Ups in that specific situation.

- **Do not save your passwords in the Browser.** When you click the “remember me” option on a website you store your password in your Browser. That makes it easier for a virus to see your personal information!
3. Using the Snipping Tool

Windows 10 contains an application called the Snipping tool that can help you enhance your documents and presentations by taking a picture of selected areas on your desktop and saving them as images to be placed in documents or presentations.

Exercise 6B: Snipping Tool exercise

In this exercise, we will “snip” an image from the desktop, save it in the “Pictures” permanent folder, and insert it into a Word document.


10. Left-click on the “Snipping Tool Desktop app” and the Snipping Tool panel will appear.

11. Left-click the “New” button in the Snipping Tool application window and a Target (+) tool will appear. The desktop color will dim.

12. Use the row of Icons on the left hand side of the screen as a target.

13. Move the Target (+) designator to the upper left of the Icon to be “snipped”.

14. While holding the left mouse button down surround the top three icons on the desktop.

15. Release the left mouse button and the contents of the icons surrounded will appear in a window. (See below)

Note: We will now use the Snipping Tool to capture a portion of the Desktop display and insert the resulting image into a Word document.

16. Left-click on the “Start” button and begin typing “Snip” again. The Snipping Tool...
8. Left-click on the “File” menu and select the “Save As” option. The Save As dialog window will appear with the Pictures permanent folder selected.
9. Click the left mouse button on the “File” menu and select the “Save As” option. The Save As dialog window will appear with the Pictures permanent folder selected.

9. Enter “Icon image” in the File name input field and left-click the “Save” button.

10. Left-click the Red X in the upper right corner of the Snipping Tool window.

11. Open the MS Word 2010 application using the Search box.

12. Select the “Insert” tab on the Word Menu and select “Pictures” from the Illustrations group.

13. Select the ‘Icon image” file from the “This PC > Pictures” folder and the image will appear in the Word Document.
Results of exercise 6B

Figure 6.8 - Save Snipping Tool graphic

Figure 6.9 - Snipping tool insert into Word
4. Anti-Virus Software

Windows 10 provides free virus protection software called Windows Defender. Because this software comes with Windows 10, you don’t need to purchase any other anti-virus software.

![Windows Defender](image)

*Figure 6.10 - Windows Defender*

The Windows Defender maintains a current list of virus and spyware definitions that are retrieved daily from Microsoft. Periodically, Windows Defender scans your computer looking for malicious software. If found the virus and the associated files are quarantined and removed from your computer.

**Note:** The color of the Windows Defender screen indicates the level of risk the Computer has. *Green* means no risk, *yellow* means moderate risk and action is needed, *red* means severe risk and immediate action should be taken.

**Instructor Note:** The Windows Defender is automatically updated on the Azure server and will not require virus scans. Virus scanning will be required when the students receive their own Windows 10 computers.
5. Windows 10 Operating Indicators

On the right end of the Task Bar are several displays that are very helpful when the computer is experiencing problems.

![Operating Indicators](image)

*Figure 6.11- Operating Indicators*
## Glossary of Terms

<table>
<thead>
<tr>
<th>Symbol</th>
<th>What does it do?</th>
<th>When do I use it?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Connection</td>
<td>Displays the current <em>Internet</em> connection status.</td>
<td>When the computer loses connection to the <em>Internet</em> this symbol will show a small (x) indicating attention is needed.</td>
</tr>
<tr>
<td>Ink Workspace</td>
<td>Opens a panel of options to draw on the desktop using a variety of pens and objects.</td>
<td>This feature is not covered in the Windows 10 Fundamentals course.</td>
</tr>
<tr>
<td>Date and Time</td>
<td>Shows the current date and time used by the computer.</td>
<td>The date and time are automatically set depending upon the time zone. Clicking the symbol will display a calendar.</td>
</tr>
<tr>
<td>Desktop Display</td>
<td>Clicking on the far right edge of the Task bar will display the desktop icons and wallpaper...</td>
<td>When many application windows are open this is a very quick way to view the desktop without minimizing the open windows.</td>
</tr>
<tr>
<td>Action Center</td>
<td>Contains a list of the last activities that occurred on the computer. This includes e-mail, application messages and weather alerts.</td>
<td>When you click on the message box, a large panel will appear and provide description about the events. This is very useful if you feel the computer is not working properly.</td>
</tr>
<tr>
<td>Touch Keyboard</td>
<td>Displays a keyboard on the desktop that can be used to enter data.</td>
<td>This feature is not covered in the Windows 10 Fundamentals course.</td>
</tr>
<tr>
<td>Speaker Volume</td>
<td>Shows whether the Speakers are muted or active.</td>
<td>If there is a need to mute the speakers clicking this button will display the speaker volume control.</td>
</tr>
<tr>
<td>More Icons</td>
<td>Allows access to additional icons that do not fit on the Task Bar. At present only Windows Defender's Icon is present.</td>
<td>When you wish to open Windows Defender using a Quick Access Icon.</td>
</tr>
</tbody>
</table>
The Action Center reports currently implemented application events such as e-mail delivery, software revisions, and system problems as messages in the window above. The buttons at the bottom provide quick access to the settings that are related to connectivity and operating mode.
6. Using the PC Safely

When using e-mail:
1. Don’t reply to e-mail messages from unknown sources.
2. Don’t “click” on links to unknown URL addresses.
3. Don’t open attachments with the following file types:
   “.eml”, “.url”, “.exe”, “.dll”, “.lnk”.
4. Don’t forward messages to all of the recipients. (Reply All)
5. Keep your Inbox free of unwanted messages.
6. Don’t “unsubscribe” to e-mail messages from unknown senders.
7. Don’t send personal information.
8. Delete messages that you do not want to permanently save.
9. Don’t share your e-mail with friends and family members.
10. Change your password every 60 days.

When surfing the Internet:
1. Make sure that you’re using a secure connection (https://) when you accessing sites with your personal information.
2. Don’t send money when asked by a stranger.
3. Don’t respond to requests for personal information.
4. Don’t save Passwords in your Browser.
5. Don’t play games that involve payment over the Internet.
6. Read you monthly Internet bills and question any unexpected charges.
7. Don’t send money to unfamiliar charities.
8. Don’t buy products that are from unfamiliar companies.
9. Don’t be drawn into investments and opportunities that are too good to be true!
10. Remember, the Internet is public domain. Nothing is private on the Internet.
7. Weekly Quiz

Each Module will have a document containing a quiz covering the material presented in the lesson. The quiz document can be found in the current week’s folder within the “Training resources > Windows Fundamental > Week 6” Folder on the Shared drive (S:)

Use the File Explorer to locate the current Week’s quiz.

1. Select Shared Drive (S:)
2. Enter “Week X Quiz” (X = lesson number)
3. Open the file.

![Image of File Explorer with folder structure and quiz file]

*Figure 6.13- Search for Weekly quiz*

Have the students answer the quiz questions and save (Save As) a copy in “This PC > Documents > your name” folder.