

IT Fundamentals

Unit - Hardware

Lesson 3.2.3 - File System Management

IT Fundamentals Objectives (FC0-U61)

Objective 3.2 - Compare and contrast components of an operating system.

- · File management
 - · Folders/directories
 - · File types and extensions
 - Permissions

Grade Level(s)

8,9

Cyber Connections

Hardware & Software

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Teacher Notes:

File System Features

Folders/Directories

One of the most noticeable parts to a file system is the *directories*, more commonly known as *folders*. These are where files are stored on systems and they help keep all the documents organized to the users. Two of the most common folders/directories on every operating system is the Desktop folder and the Downloads folder. The Desktop folder houses all of the files located on the system's desktop while the downloads folder is the default folder for where files downloaded from the internet are located.

File Types and Extensions

Files types and extensions are the letters after the filename for a file. For example, pandapicture.jpg signifies a JPEG image by the file extension .jpg. Some other common file types and extensions are Microsoft Word documents (.doc or .docx), MP3 audio files (.mp3), Zip compressed files (.zip), HTML file (.html), or text files (.txt). These extensions do not only signify the file type to the user, they also tell the system how the file is encoded for storage, specifically how the bits are stored.

Permissions

Attached to every file is an access control list which tells the operating system who all has access to this file. This is known as the *permissions*. Remember, access to a file grants viewing rights, editing rights, executing rights, etc.



