

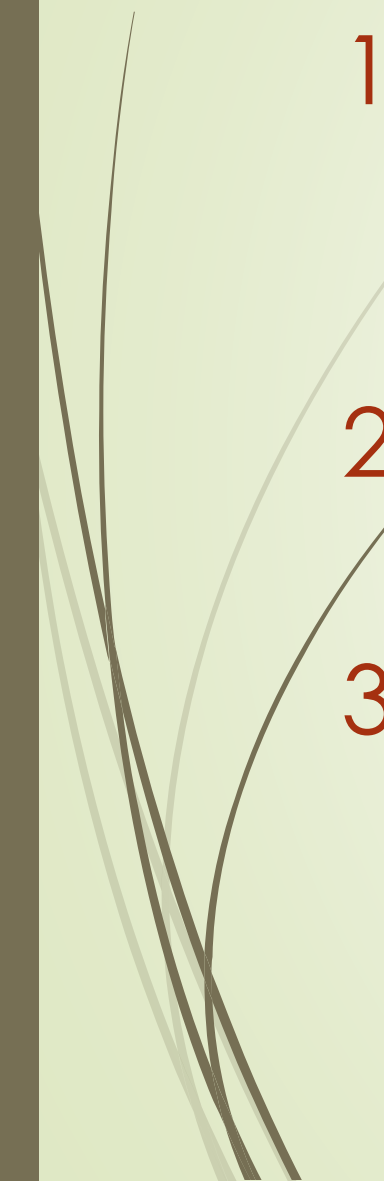
Practice file management techniques (Drive Management)

Demonstrate the file management techniques such as defragmentation, compression of files etc.

2. Explore ways of partitioning a hard disk



FILE MANAGEMENT

1. The process of naming, storing and organizing files in a system so that it's easier to locate the files.
 2. The process of organizing and storing information in an easily retrievable manner.
 3. The process of creating an organized structure in which you store information for easy retrieval.
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Importance of file management

1. Enhance data/information security
2. Increases productivity
3. Reduce cost of production
4. Reduce risk of losing important files
5. Minimizes work delay



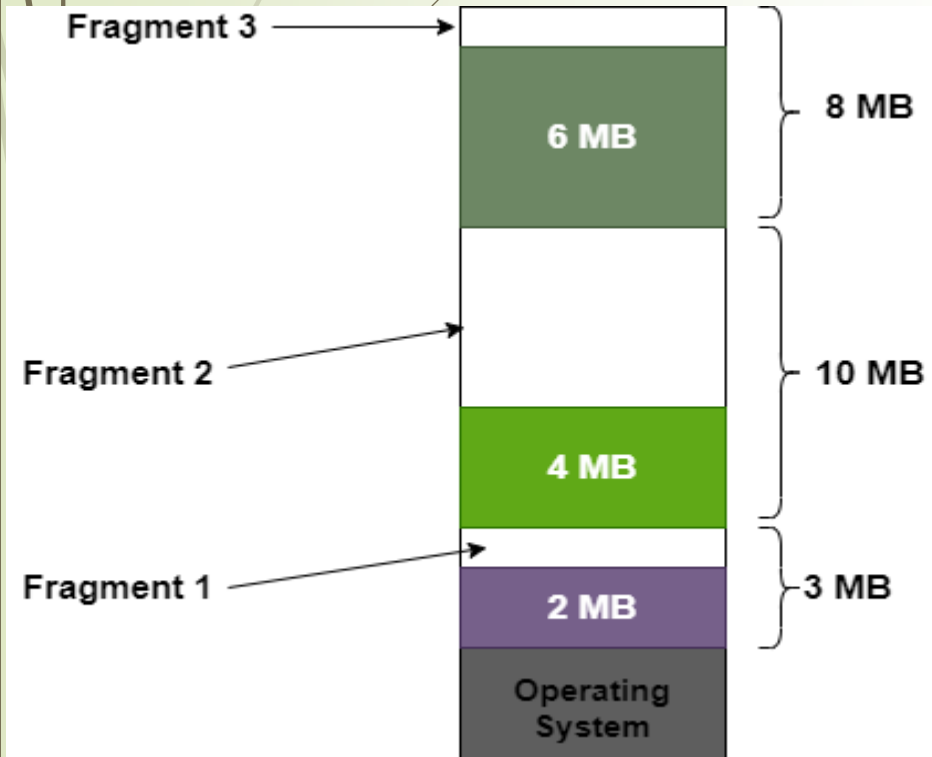


File Management Practices

- The basic practices involved in file management include; organizing, storing, naming and deleting of files and folders.
 - Continuous storing and deleting of files from the computer hard drive can bring about **fragmentation**
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Fragmentation

- Fragmentation can be defined as the storing of a file in several separate areas of memory scattered throughout a hard disk.
- This usually happens when information is deleted from a hard drive and small gaps are left behind to be filled by new data.



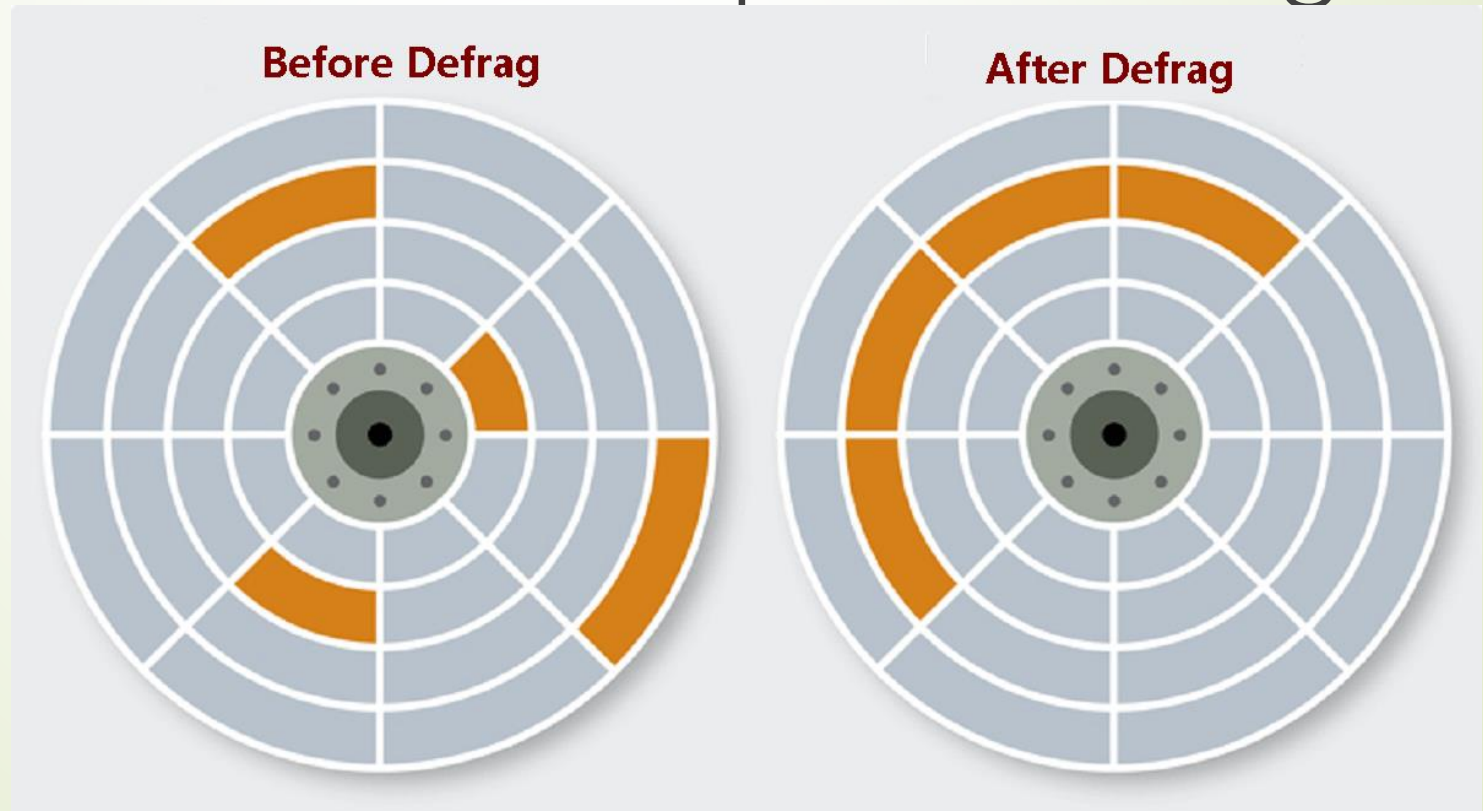


Disadvantages of Fragmentation

1. Slows down the general speed of the computer
2. It extends backup time
3. Create long virus scan time
4. Can cause data corruption

Defragmentation

1. The process of reorganizing the data stored on the hard drive so that related pieces of data are put back together.





Importance of Defragmentation

1. It increases computer performance
 2. It reduces backup time
 3. It reduces virus scan time
 4. It prevent potential data lost/corruption
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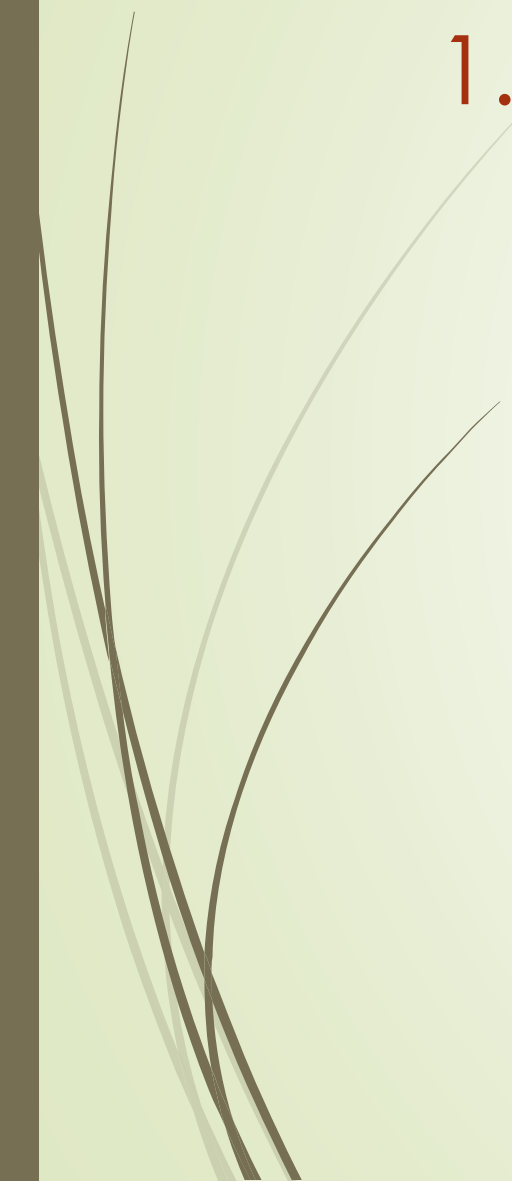


How to Defragment a Hard Drive

1. Locate and click on the search bar on the taskbar
 2. Type 'defrag' and press the enter key
 3. Select 'Defragment and Optimize Drive'
 4. Select the disk drive you want to optimize
 5. Select the Optimize button.
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Compression of Files

1. File compression is the process of reducing the size of a file.
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Compression of Files

- There are two types of compression.
 - Lossless compression – reduces the size of the file without losing any information in the file.
 - Lossy compression – reduces the size of the file by throwing away the less important information in the file.
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Techniques in File Compression

- ➡ Open the file explorer and then select the file(s) you want to compress.
 - ➡ Right-click the file you want to zip and then select.
 - ➡ This will compress the files together in a ZIP folder.
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How to Unzip a File .

- Open File explorer and find the Zipped folder/file
 - To unzip the entire folder , right click and select 'Extract All '.
 - Select a desire location to save the file
 - Click on extract.
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Advantages of file Compression

- It reduces large file size to a smaller size which can be stored on a smaller storage space.
 - Compressed data is read/written faster than original data.
 - File transfer of smaller files are faster than large files
 - Zipped files are best for mails and other medium of transfer.
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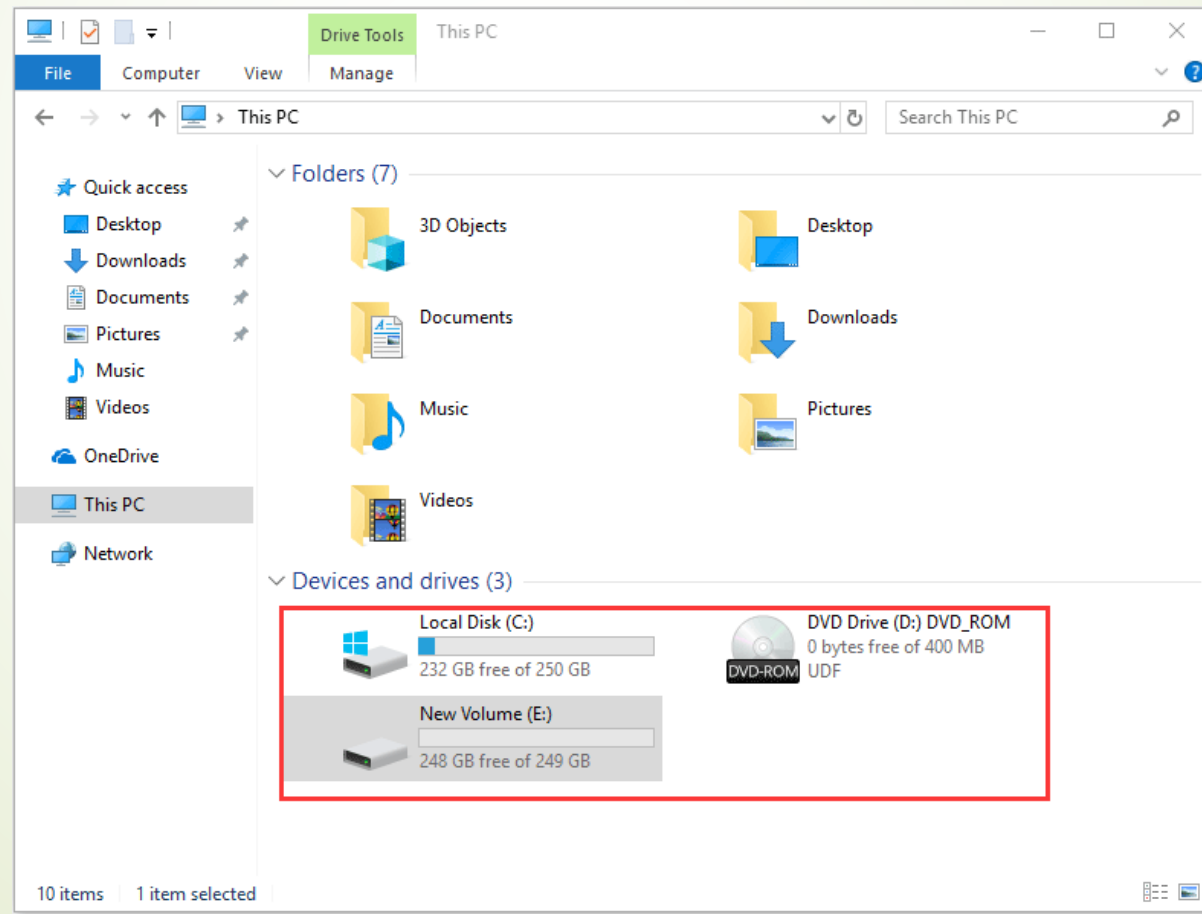


Disadvantages of File Compression

- File compression can be time consuming
 - Large data can corrupt during compressing when the appropriate software are not used.
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Hard Disk Partitioning

- ➡ It is the process of dividing a disk into one or more regions.



What's the Purpose of Partitioning a Hard Drive

1. Ease of Windows Reinstallation
2. Better Organization
3. Easier Backup
4. Simpler Data Recovery



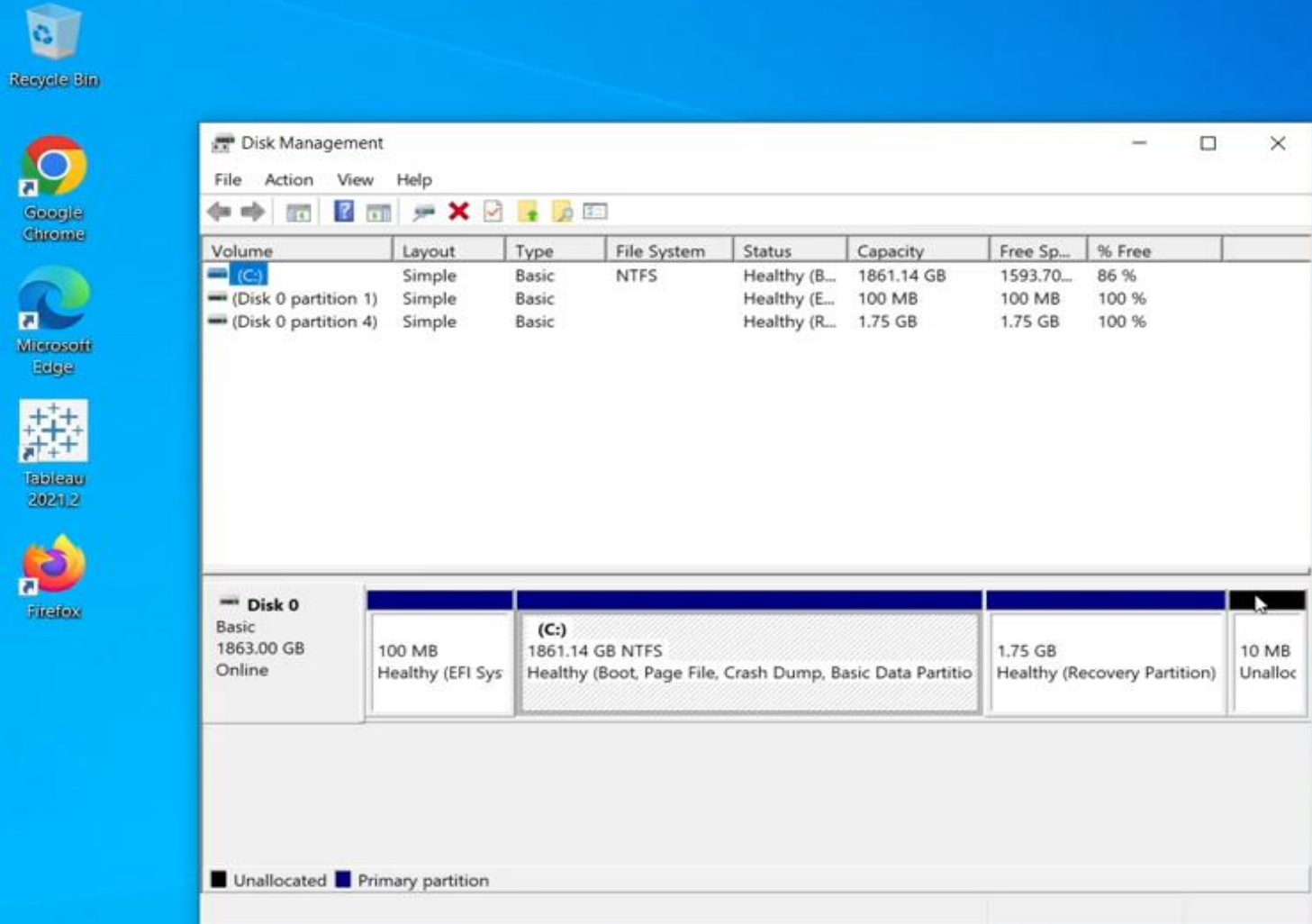
How to Partition a Hard Drive

- Launch Disk Management by right clicking the windows start button and selecting “disk management”
- Select the disk you want to partition
- Right click the drive to bring up options
- Select ‘shrink’ to free up space from the exiting volume

How to Partition a Hard Drive

- ➡ Enter the size of the new partition you wish to make
- ➡ You should have an area that now says. “unallocated space”
- ➡ Right click this area and select “New simple volume”
- ➡ A Wizard will guide you to finish the process.

How to Partition a Hard Drive



The screenshot shows a Windows 10 desktop with a blue background. On the left side, there are icons for Recycle Bin, Google Chrome, Microsoft Edge, Tableau 2021.2, and Firefox. The taskbar at the bottom contains the Start button, a search bar, and icons for File Explorer, Microsoft Edge, Google Chrome, and the Task View button. The system tray on the right shows the date and time as 4:55 PM on 4/27/2022, along with icons for network, volume, and power.

The Disk Management window is open, displaying the following table:

Volume	Layout	Type	File System	Status	Capacity	Free Sp...	% Free
(C:)	Simple	Basic	NTFS	Healthy (B...	1861.14 GB	1593.70...	86 %
(Disk 0 partition 1)	Simple	Basic		Healthy (E...	100 MB	100 MB	100 %
(Disk 0 partition 4)	Simple	Basic		Healthy (R...	1.75 GB	1.75 GB	100 %

Below the table, the Disk 0 details are shown:

Disk 0	100 MB	(C:)	1.75 GB	10 MB
Basic 1863.00 GB Online	Healthy (EFI Sys)	1861.14 GB NTFS Healthy (Boot, Page File, Crash Dump, Basic Data Partitio	Healthy (Recovery Partition)	Unalloc

Legend: ■ Unallocated ■ Primary partition