

FAMILIARIZATION OF DISK MANAGEMENT



TOPICS TO STUDY

- ☐ Introduction
- ☐ History of Disk Management
- ☐ What is Disk Management?
- ☐ Use of Disk Management and benefit
- ☐ How to Open Disk Management
- ☐ How to Partition a Hard Drive in Windows



INTRODUCTION

• Introduction

What is disk in a computer?

A computer hard disk drive (HDD) is a non-volatile data storage device.

Already we know about software's , and what is the purpose of software : software is used to manage the hardware peripherals

In that case how we can manage the hard disk ?

Some methods are used to manage the hard disk but in my topic I discuss about how we can manage a hard disk on windows?

Disk management utility software is used for managing the hard disk

Disk Management is an important functionality provided by the Operating System which can be used to create, delete, format disk partitions, and much more.

✓ Devices and drives (7)



Local Disk (C:)



Storage (D:)



DVD RW Drive (E:)



Removable Disk (F:)



Removable Disk (G:)



USB Stick (H:)

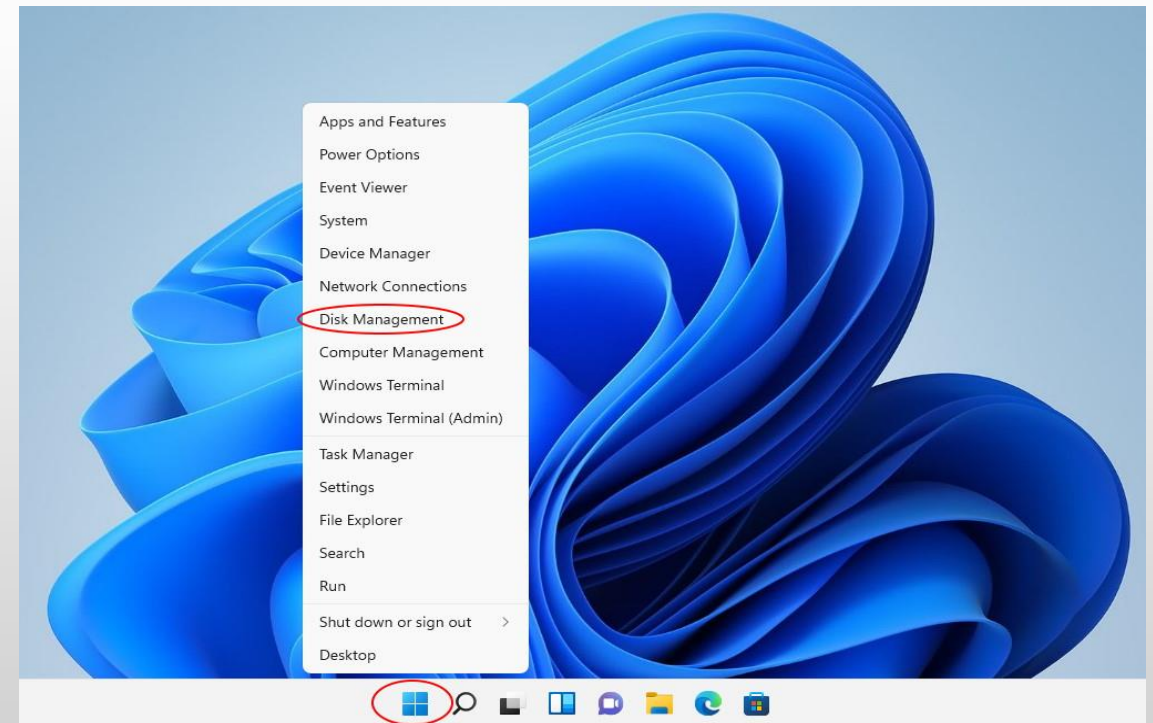


USB Drive (I:)

• History of Disk Management

Disk Management is a replacement for the fdisk command.

First introduced in Windows XP. (2001)



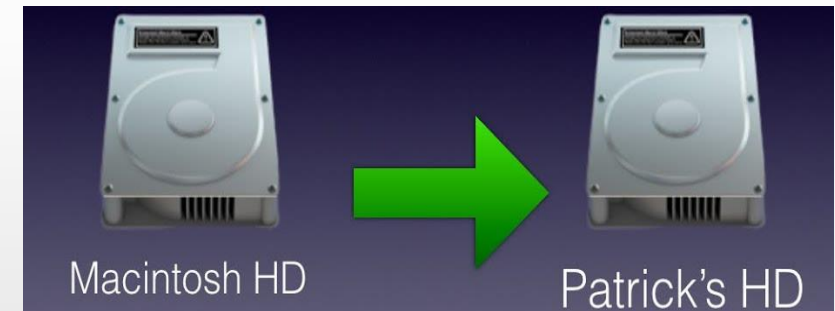
- What is Disk Management ?

Disk Management is an important functionality provided by the Operating System which can be used to create, delete, format disk partitions and much more.



- Use of disk management and benefit

1. Disk Management helps to format disk drives.
2. Disk Management enables the user to rename a disk.
3. Disk Management also use to partition our hard disk space and also shrink the drive volume.
4. Using Disk Management, the user can assign a Drive Letter to a disk. For example, C Drive or D drive, etc.

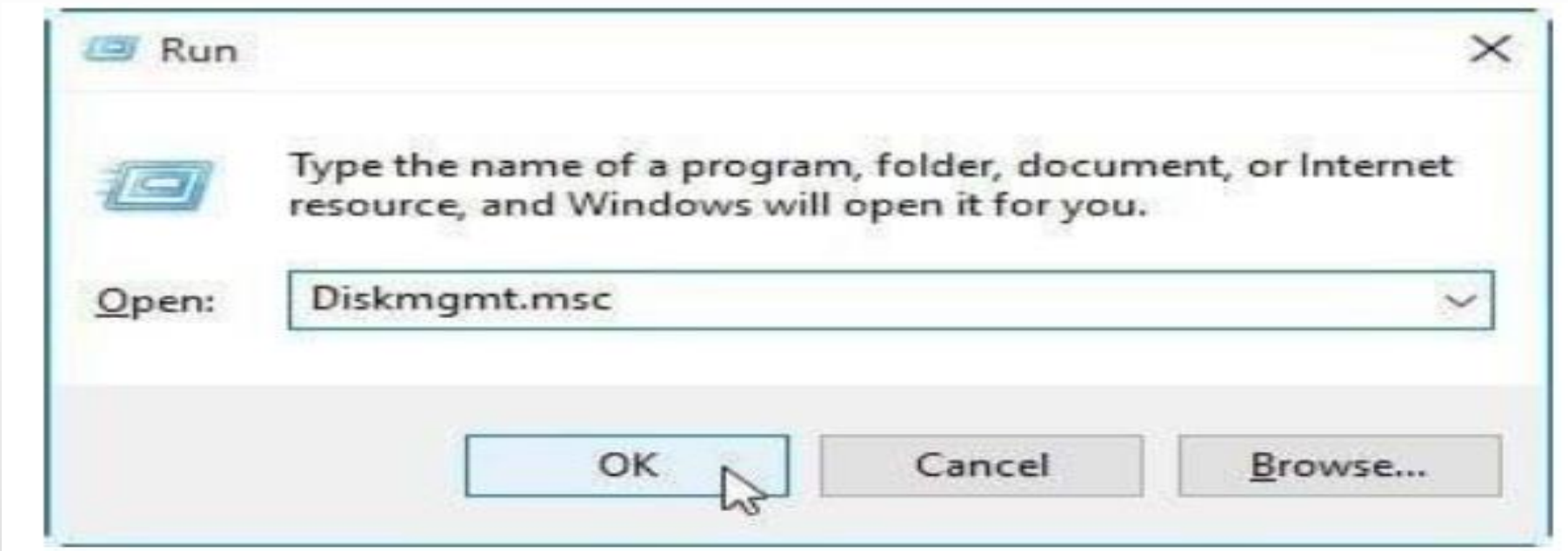


- How to Open Disk Management

Way 1: The easiest way to open Disk Management >Right click on Start Menu and then select "Disk Management". (or press Windows+X hotkey)



Way 2: Use Windows+R hotkey to open Run window. Then type "Diskmgmt.msc" and click "OK" or hit "Enter" key.

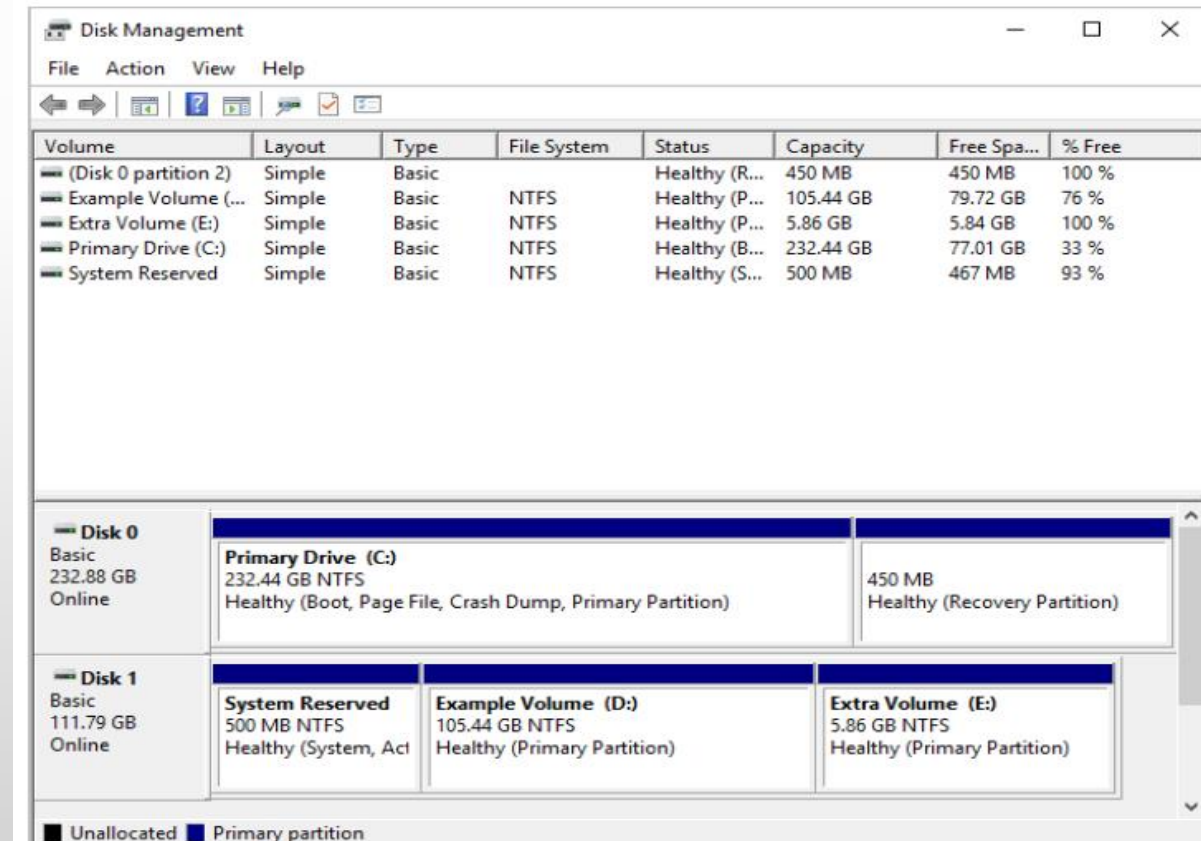
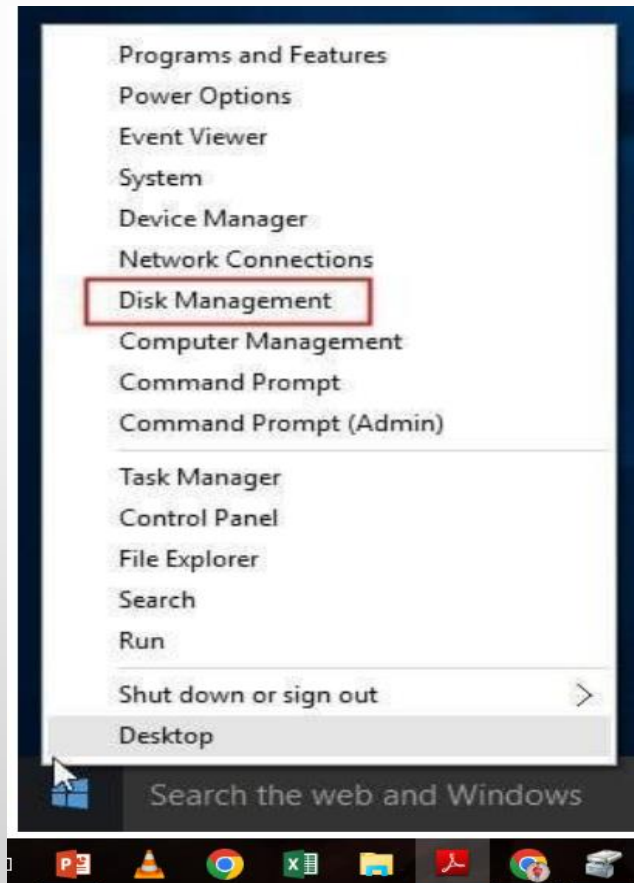


Way 3: Directly type "disk management" in the Search box and choose "Create and format hard disk partitions" from the results.

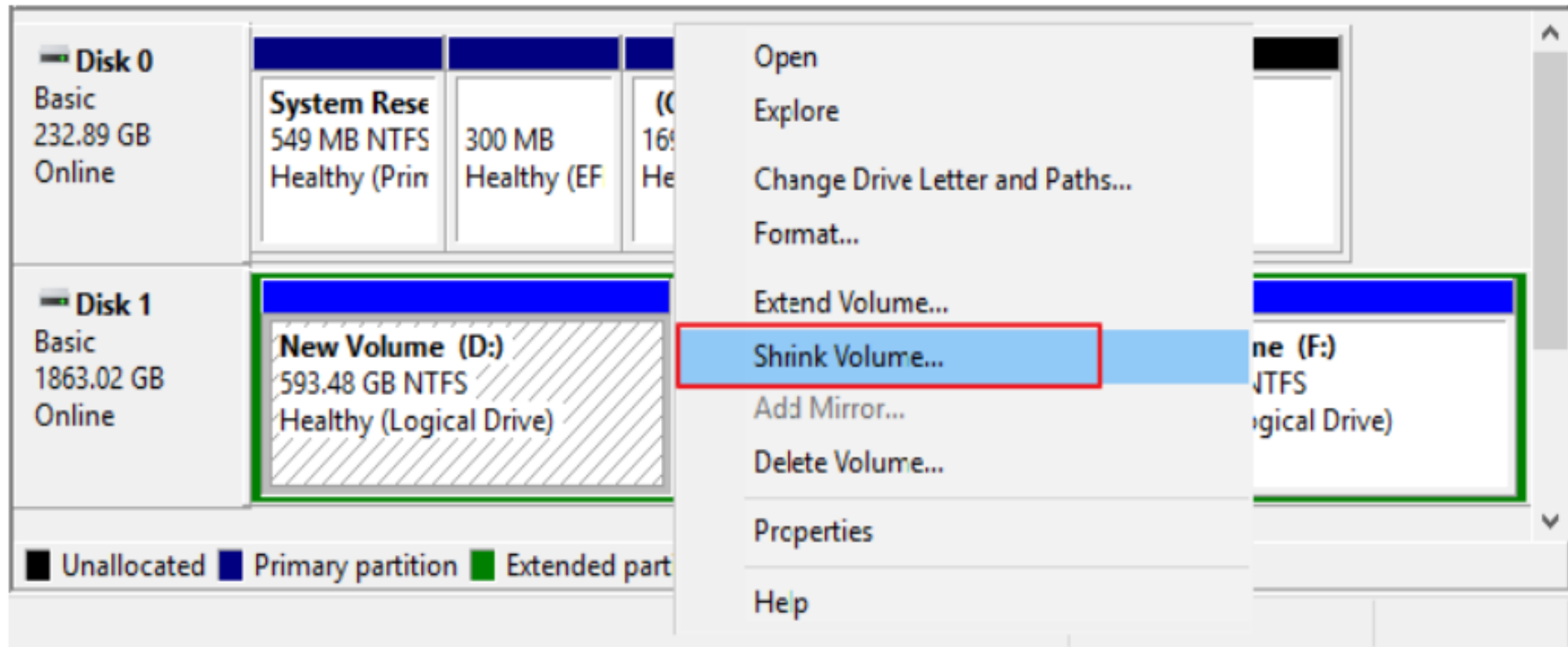


- How to Partition a Hard Drive in Windows

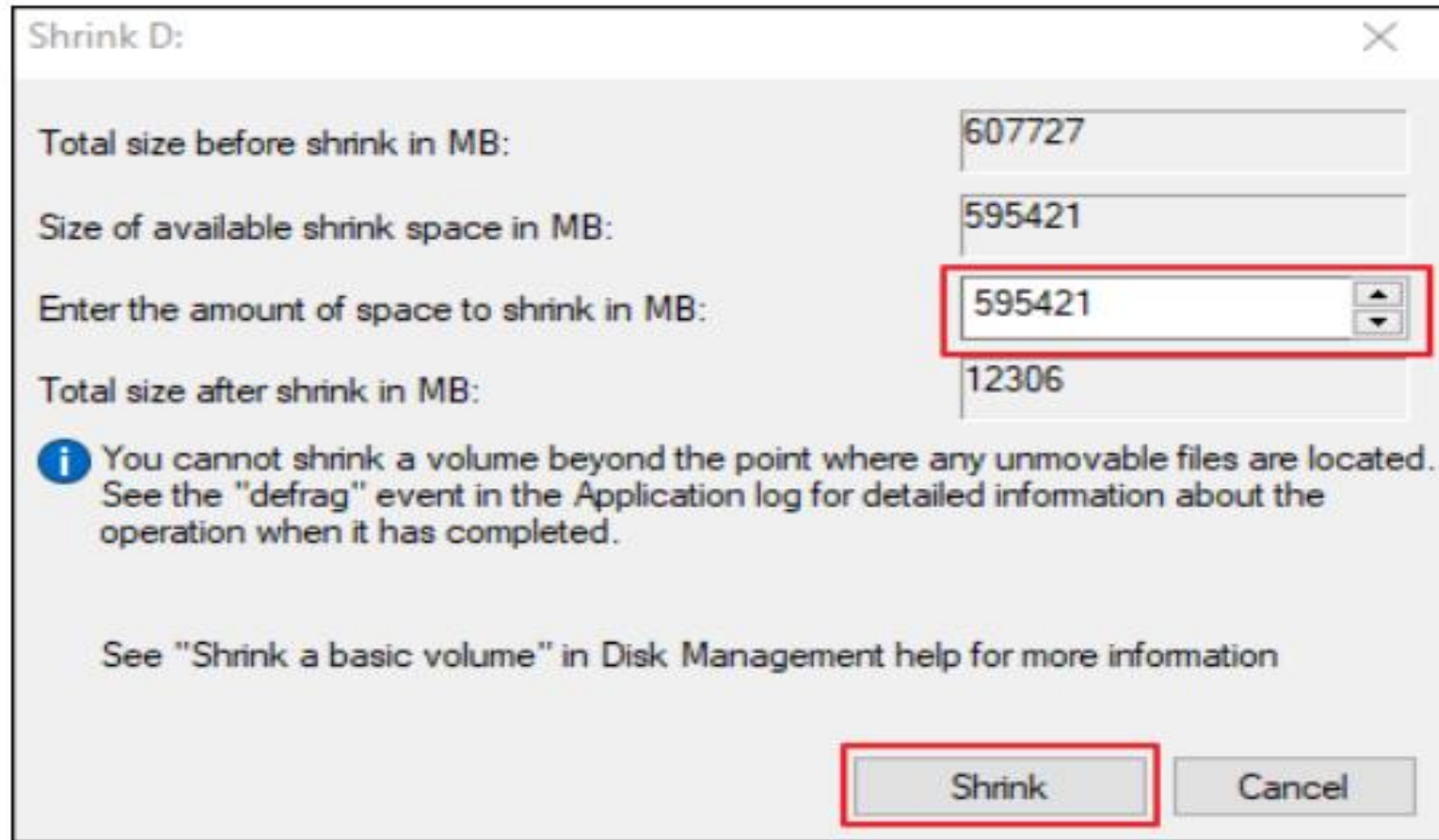
Step 1. Open Disk Management, Right-click the Windows icon, then click Disk Management



Step 2. Right-click the hard disk partition that you want to shrink, and select "Shrink Volume".



Step 3. Enter the amount of space you want to shrink in MB, then click on the "Shrink" button.



Shrink D:

Total size before shrink in MB: 607727

Size of available shrink space in MB: 595421

Enter the amount of space to shrink in MB: 595421

Total size after shrink in MB: 12306

i You cannot shrink a volume beyond the point where any unmovable files are located. See the "defrag" event in the Application log for detailed information about the operation when it has completed.

See "Shrink a basic volume" in Disk Management help for more information

Shrink Cancel

1024 bytes = 1 KB

1024 KB = 1 MB

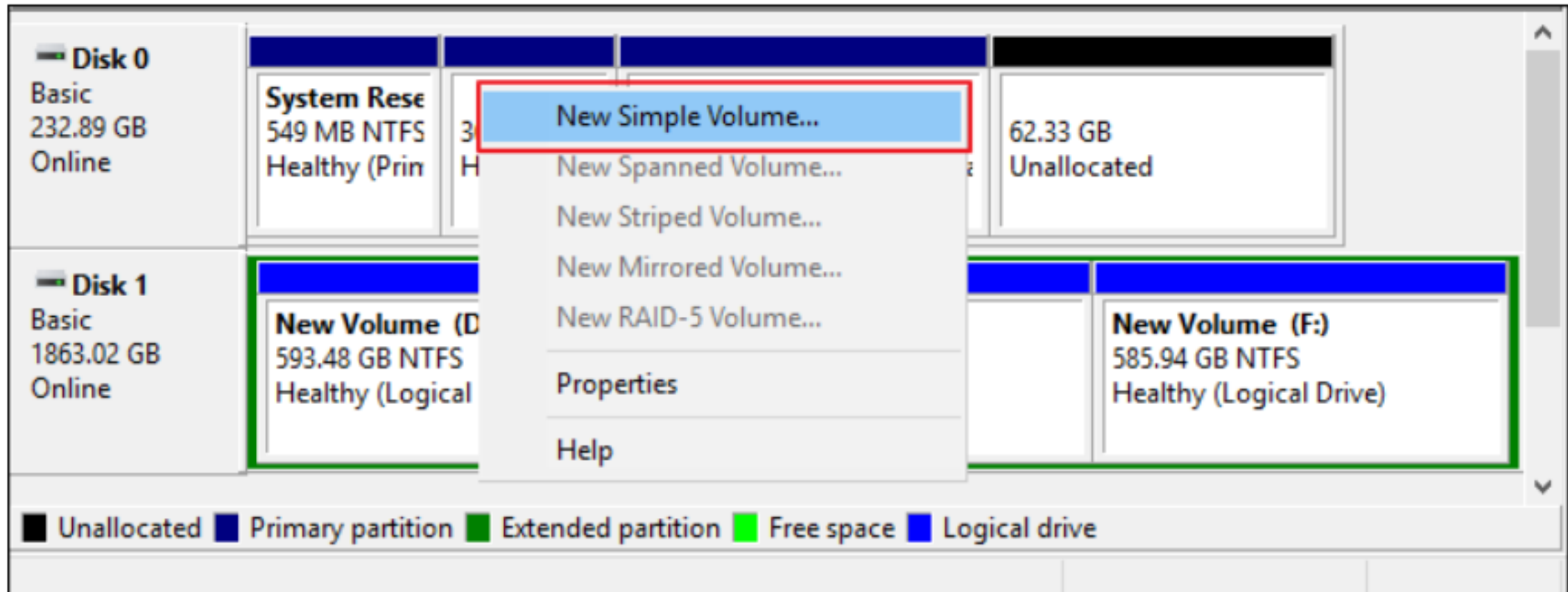
1024 MB = 1 GB

1024 GB = 1 TB

1024 TB = 1 PB

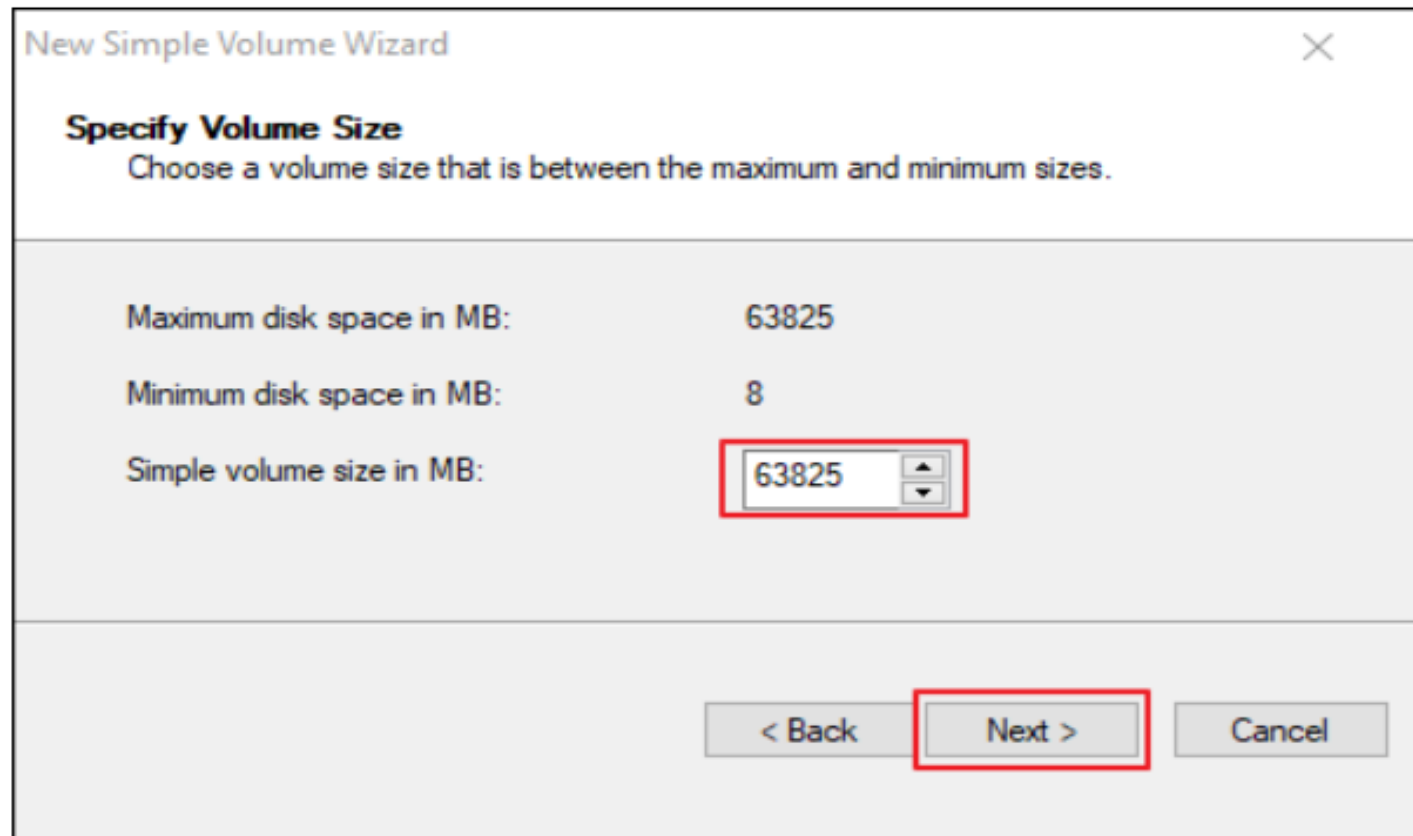
Wait for the process to complete

Step 4. Right-click on the unallocated space on your hard disk, and then select "New Simple Volume"



Step 5. In the New Simple Volume Wizard interface, click "Next".

Step 6. Enter the size of the volume you want to create in MB or accept the default size, and then select "Next".



New Simple Volume Wizard

Specify Volume Size
Choose a volume size that is between the maximum and minimum sizes.

Maximum disk space in MB: 63825

Minimum disk space in MB: 8

Simple volume size in MB: 63825

< Back Next > Cancel

1024 bytes = 1 KB

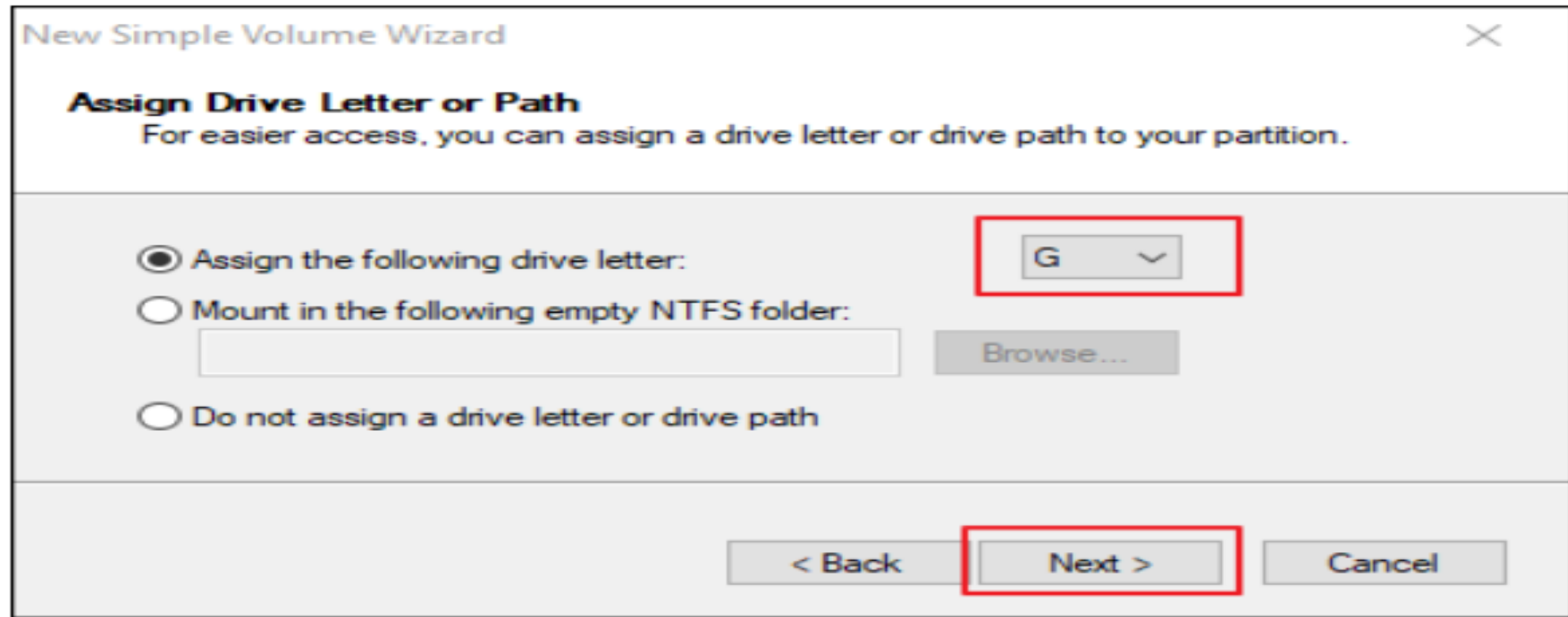
1024 KB = 1 MB

1024 MB = 1 GB

1024 GB = 1 TB

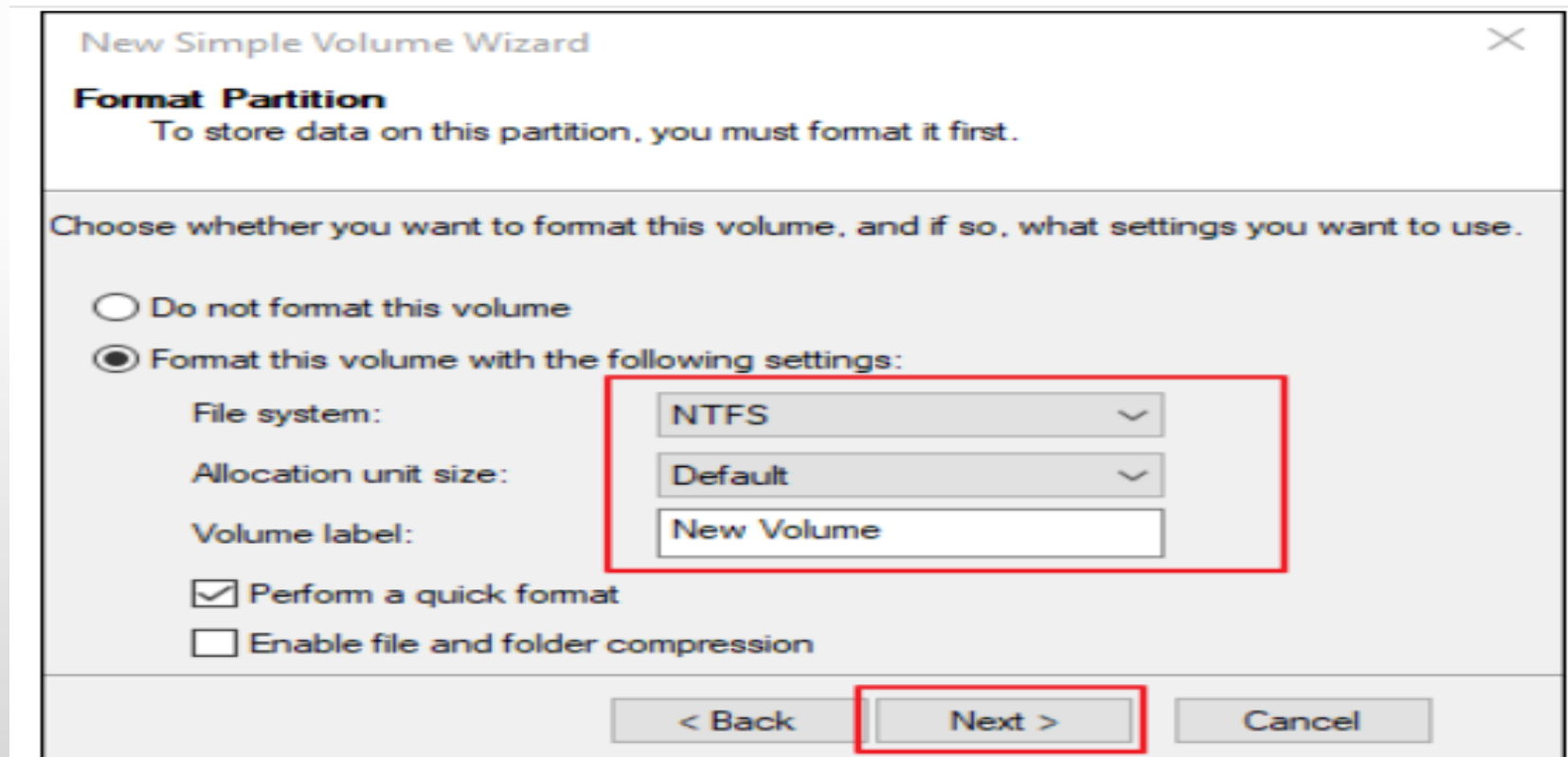
1024 TB = 1 PB

Step 7. Accept the default drive letter or choose a different letter for the partition, and then select "Next".



The screenshot shows the 'New Simple Volume Wizard' window, specifically the 'Assign Drive Letter or Path' step. The window title is 'New Simple Volume Wizard' with a close button (X) in the top right corner. The main heading is 'Assign Drive Letter or Path' followed by the instruction: 'For easier access, you can assign a drive letter or drive path to your partition.' There are three radio button options: 1. 'Assign the following drive letter:' (selected), with a dropdown menu showing 'G' and a downward arrow, which is highlighted with a red rectangle. 2. 'Mount in the following empty NTFS folder:', with an empty text box and a 'Browse...' button. 3. 'Do not assign a drive letter or drive path'. At the bottom, there are three buttons: '< Back', 'Next >' (highlighted with a red rectangle), and 'Cancel'.

Step 8. Set the default file system as NTFS and click "Next" to format the volume.



The screenshot shows the 'New Simple Volume Wizard' dialog box, specifically the 'Format Partition' step. The title bar reads 'New Simple Volume Wizard' with a close button. Below the title, the section is titled 'Format Partition' with the instruction 'To store data on this partition, you must format it first.' The main area contains the text 'Choose whether you want to format this volume, and if so, what settings you want to use.' There are two radio button options: 'Do not format this volume' (unselected) and 'Format this volume with the following settings:' (selected). Under the selected option, there are three settings: 'File system:' set to 'NTFS', 'Allocation unit size:' set to 'Default', and 'Volume label:' set to 'New Volume'. These three settings are enclosed in a red rectangular box. Below these settings are two checkboxes: 'Perform a quick format' (checked) and 'Enable file and folder compression' (unchecked). At the bottom of the dialog, there are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a red rectangular box.

New Simple Volume Wizard

Format Partition
To store data on this partition, you must format it first.

Choose whether you want to format this volume, and if so, what settings you want to use.

☐ Do not format this volume

☒ Format this volume with the following settings:

File system: NTFS

Allocation unit size: Default

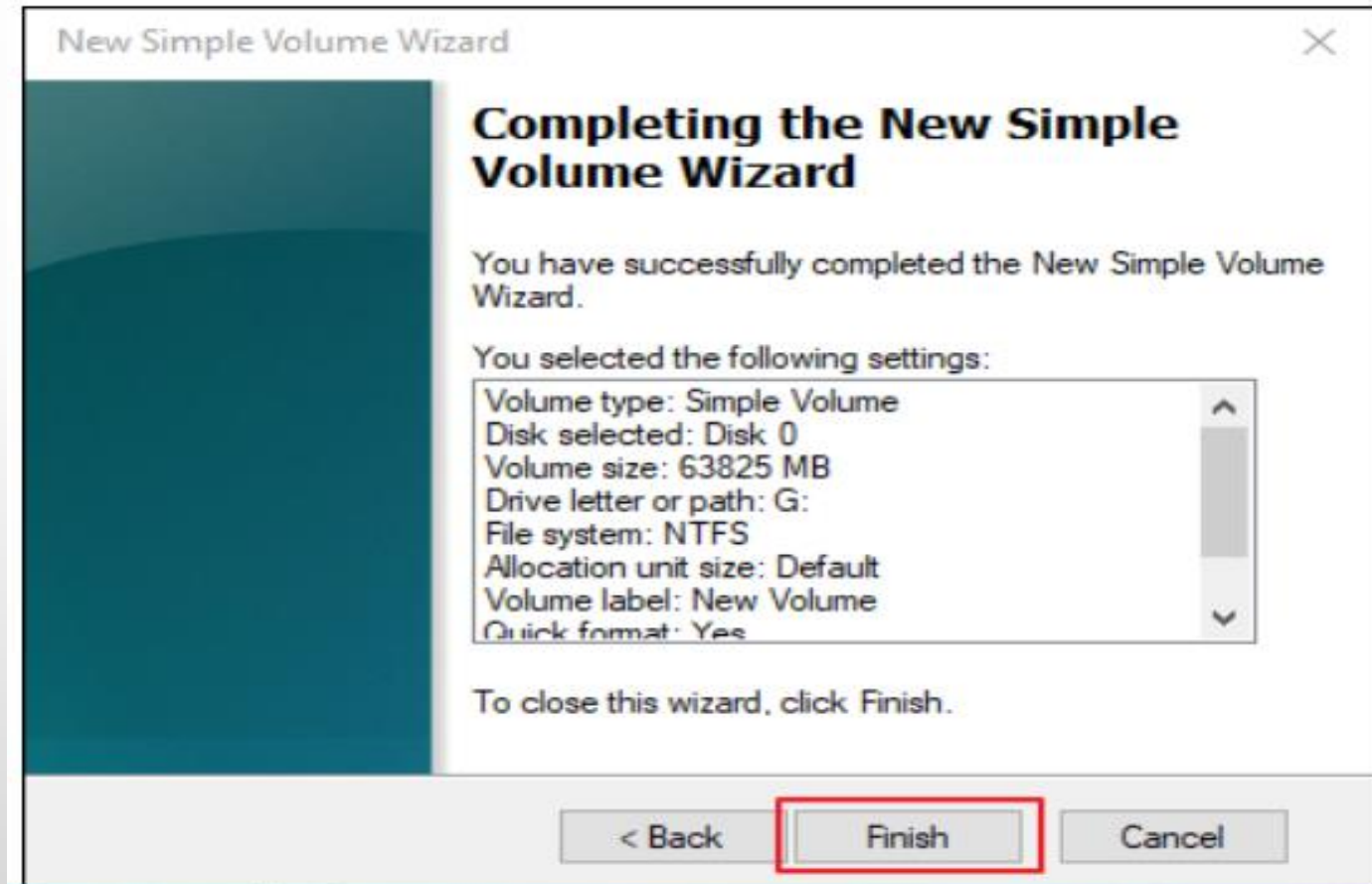
Volume label: New Volume

☒ Perform a quick format

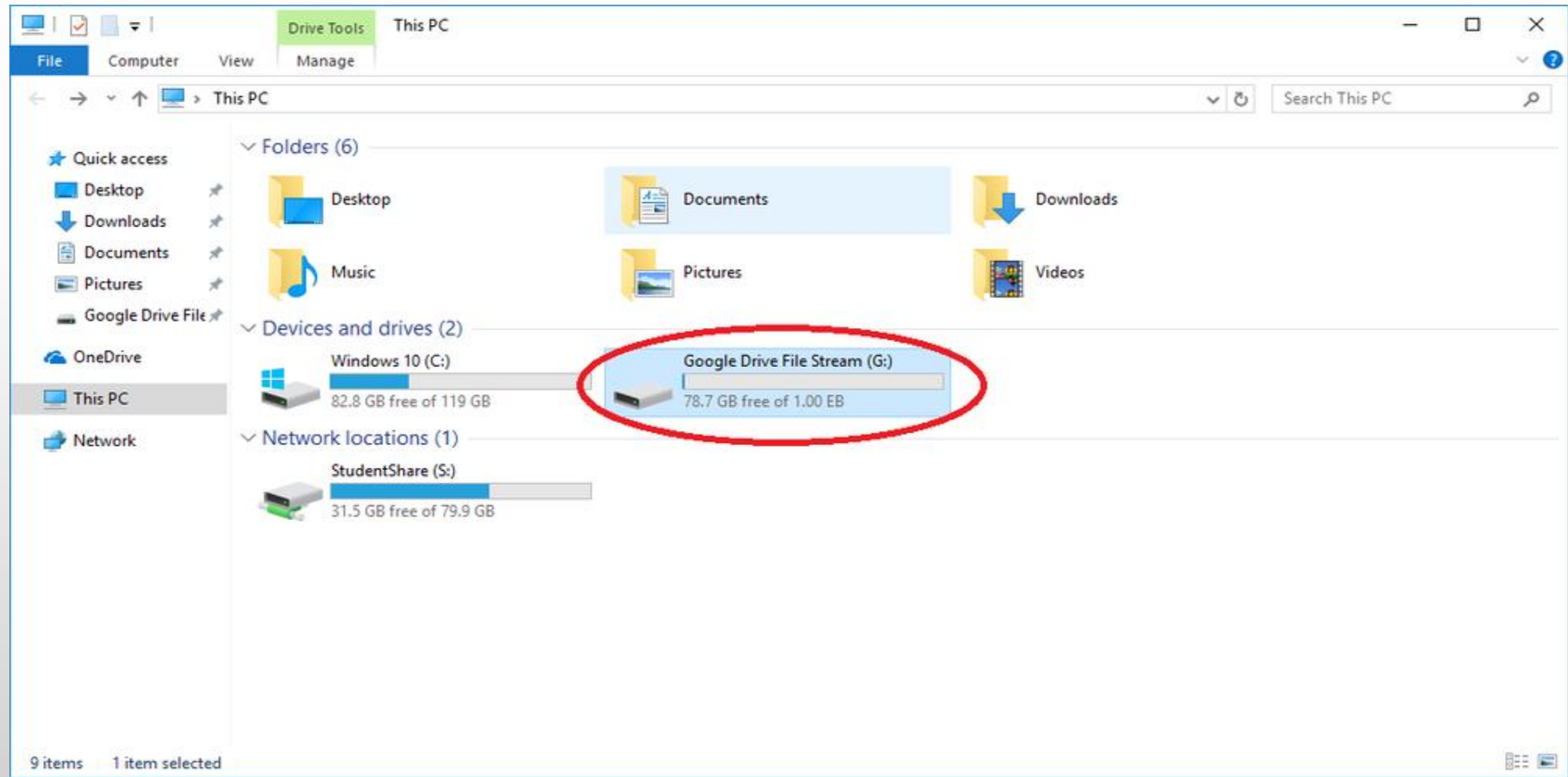
☐ Enable file and folder compression

< Back Next > Cancel

Step 9. Click "Finish" to complete creating a new partition in Drive.



- **Now**, we are go to THIS PC
- And cheek there new G Drive is available.



Can we done our Disk-Management in
another Operating System ??



✓ Access Disk Management in Different O S.

1. In Windows Operating System:

- Using Run Box: Click on Start Button ➤ Click on Run ➤ Type *diskmgmt.msc* ➤ Click OK. The Disk Management will open.



2. In Linux Operating System: There are several commands used to check Disk Partitions and Disk Space on the Linux operating system.

- Some of them are mentioned below:
 - a. fdisk b. sfdisk c. cfdisk d. parted e. df



3. In Mac Operating System:

- Using Launchpad: Click on Launchpad Icon ➤ Type *Disk Utility* ➤ Click on Disk Utility Icon. The Disk Utility will open.





THANK

YOU

FOR

YOUR

ATTENTION