

Lab - Create a Partition in Windows 8

Introduction

In this lab, you will create a FAT32 formatted partition on a disk. You will convert the partition to NTFS. You will then identify the differences between the FAT32 format and the NTFS format.

Recommended Equipment

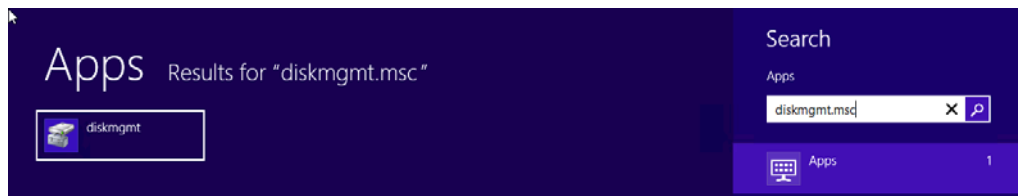
- Computer running Windows 8
- Un-partitioned space of at least 1 GB on the hard disk drive

Step 1: Start the Computer Management Utility program.

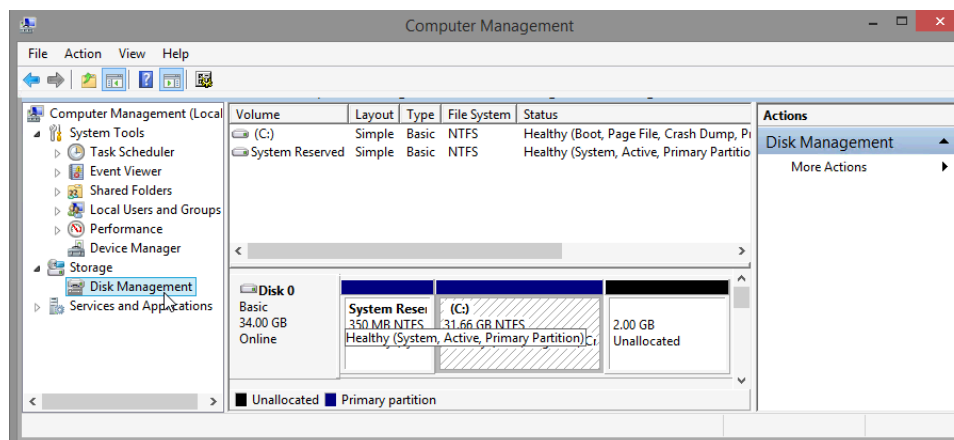
Note: You must have administrative rights to work with the Computer Management Utility program.

- Click **Control Panel > Administrative Tools > Computer Management**.

Note: To open the Disk Management window in Windows 8.0, click **Search** and then type **diskmgmt.msc** and press **Enter**.

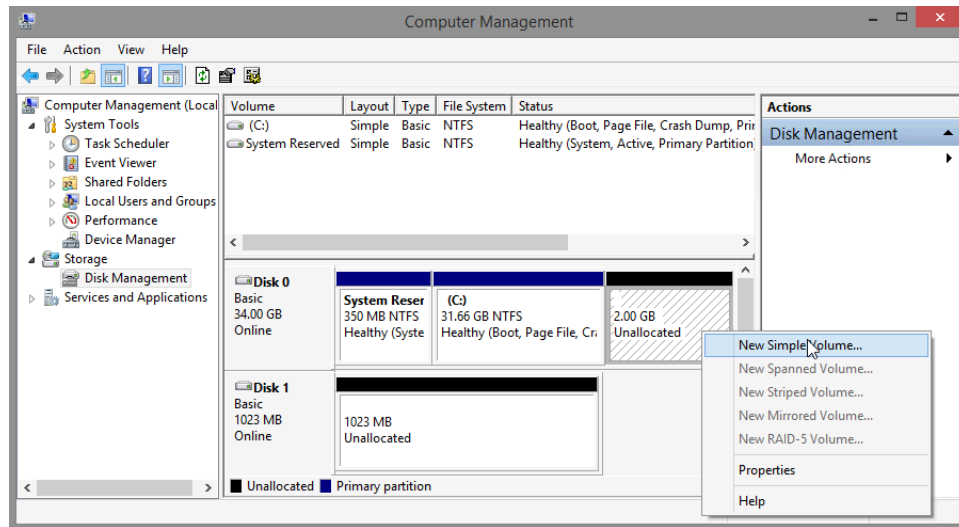


- In the **Computer Management** window, click **Disk Management**.

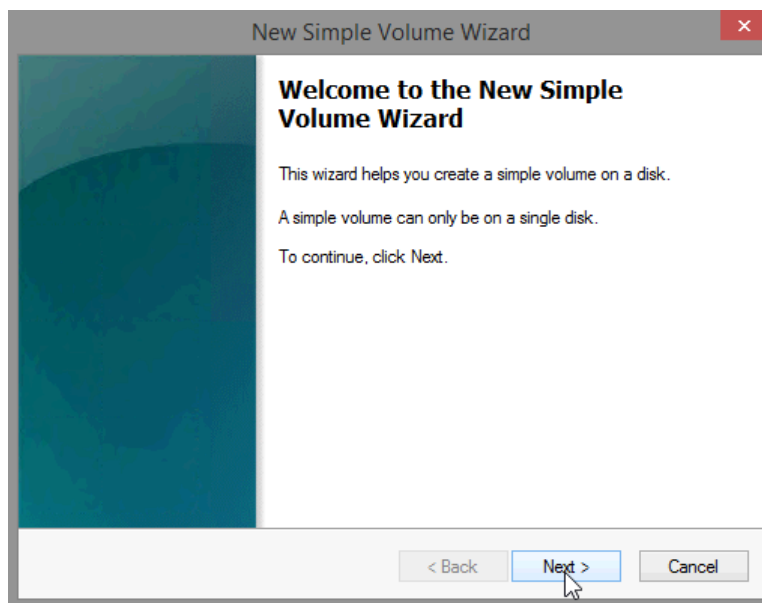


Step 2: Create a new disk volume in the free space.

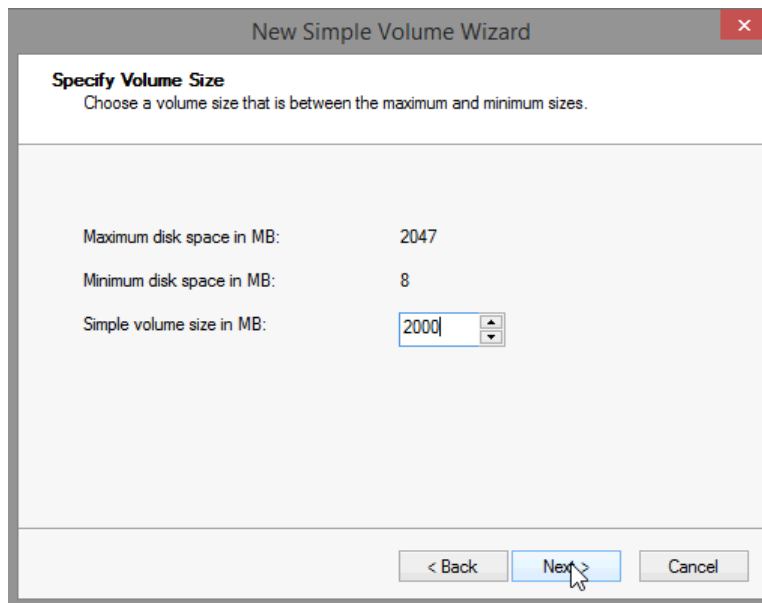
- Right-click on the block of **Free Space** or **Unallocated** space. Click **New Simple Volume**.



- The **New Simple Volume Wizard** window opens. Click **Next**.

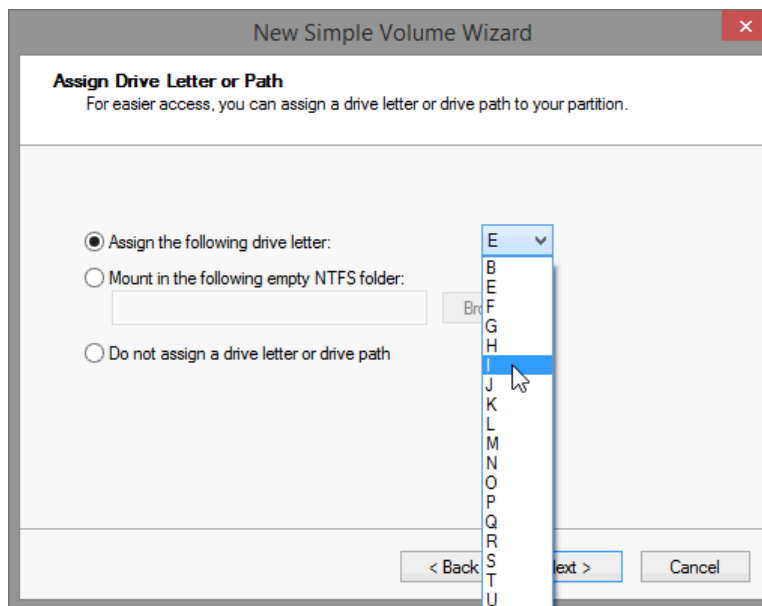


- c. Type **2000** in the **Simple volume size in MB** field, and then click **Next**.



The screenshot shows the 'New Simple Volume Wizard' window at the 'Specify Volume Size' step. The title bar says 'New Simple Volume Wizard' with a close button. The main heading is 'Specify Volume Size' with a subtitle 'Choose a volume size that is between the maximum and minimum sizes.' Below this, there are three labels and their corresponding values: 'Maximum disk space in MB:' with '2047', 'Minimum disk space in MB:' with '8', and 'Simple volume size in MB:' with a text box containing '2000'. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'. A mouse cursor is pointing at the 'Next >' button.

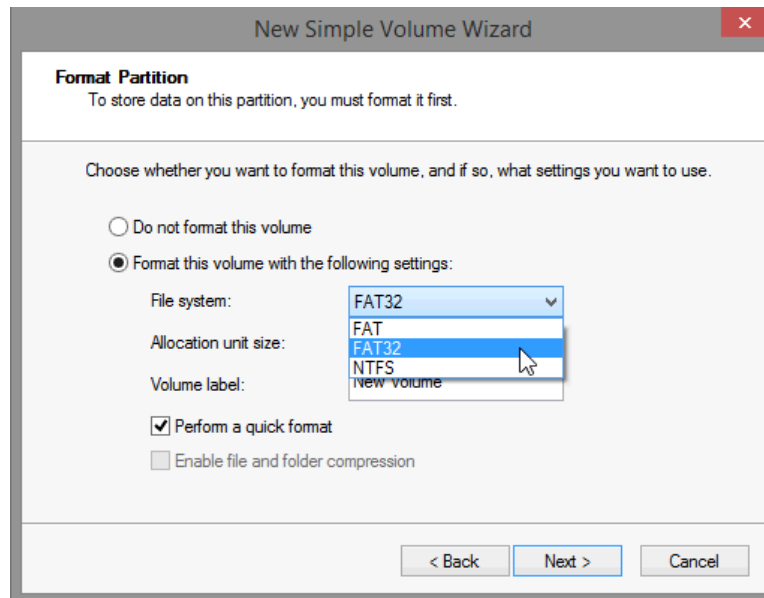
- d. Click the **Assign the following drive letter:** radio button. Select **I** from the drop-down menu, then click **Next**.



The screenshot shows the 'New Simple Volume Wizard' window at the 'Assign Drive Letter or Path' step. The title bar says 'New Simple Volume Wizard' with a close button. The main heading is 'Assign Drive Letter or Path' with a subtitle 'For easier access, you can assign a drive letter or drive path to your partition.' There are three radio button options: 'Assign the following drive letter:' (which is selected), 'Mount in the following empty NTFS folder:', and 'Do not assign a drive letter or drive path'. The 'Mount in the following empty NTFS folder:' option has a text box and a 'Browse...' button next to it. A drop-down menu is open for the selected option, showing a list of drive letters from E to U. A mouse cursor is pointing at the letter 'I'. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

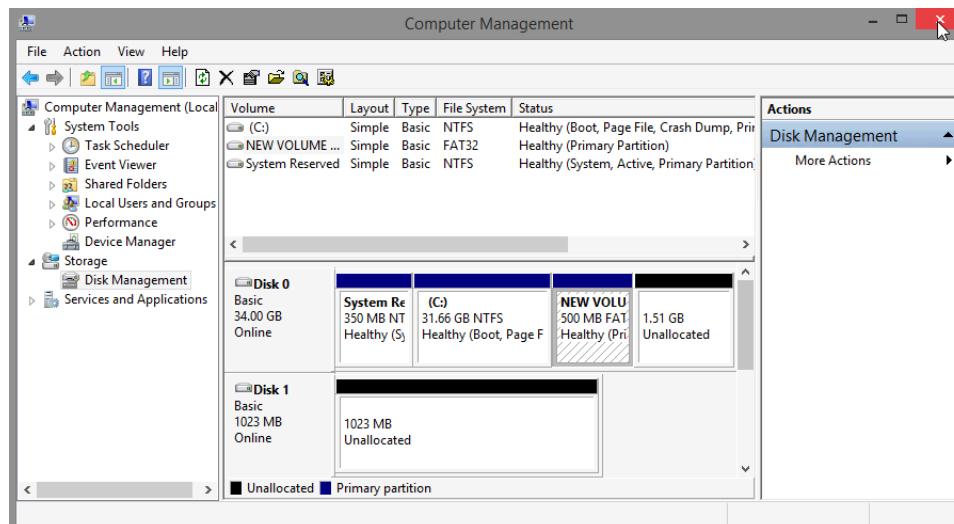
Note: You may need to substitute different drive letters for the letters shown in this lab.

- e. Click the **Format this volume with the following settings:** radio button. Select **FAT32** from the **File system** drop-down menu, and then click **Next**.



- f. Click **Finish** to complete the **New Simple Volume Wizard**.
- g. The **Computer Management** window will display the status of the **NEW VOLUME**. Close the **Computer Management** window.

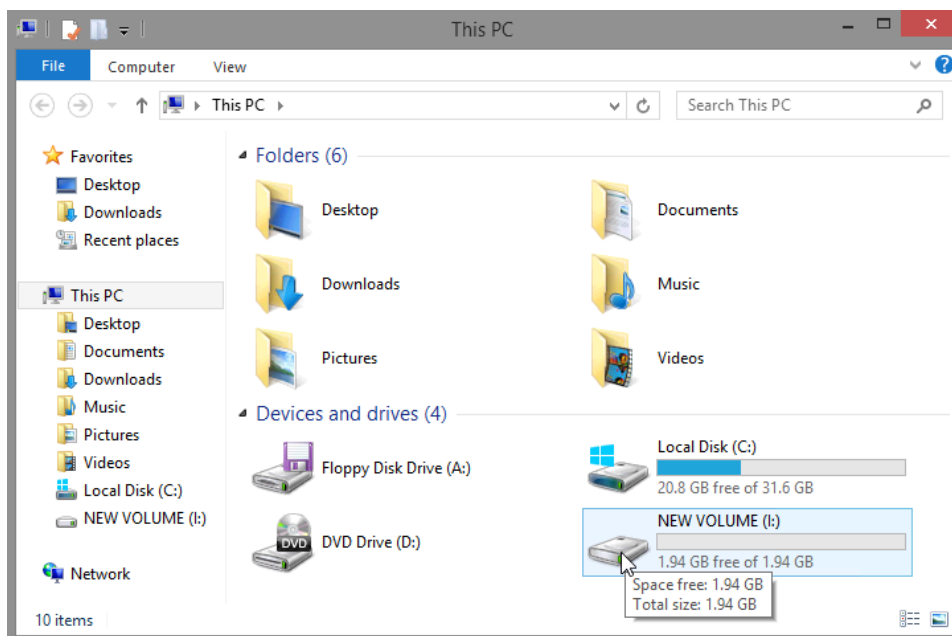
Note: In Windows 8.0, close the Disk Management window.



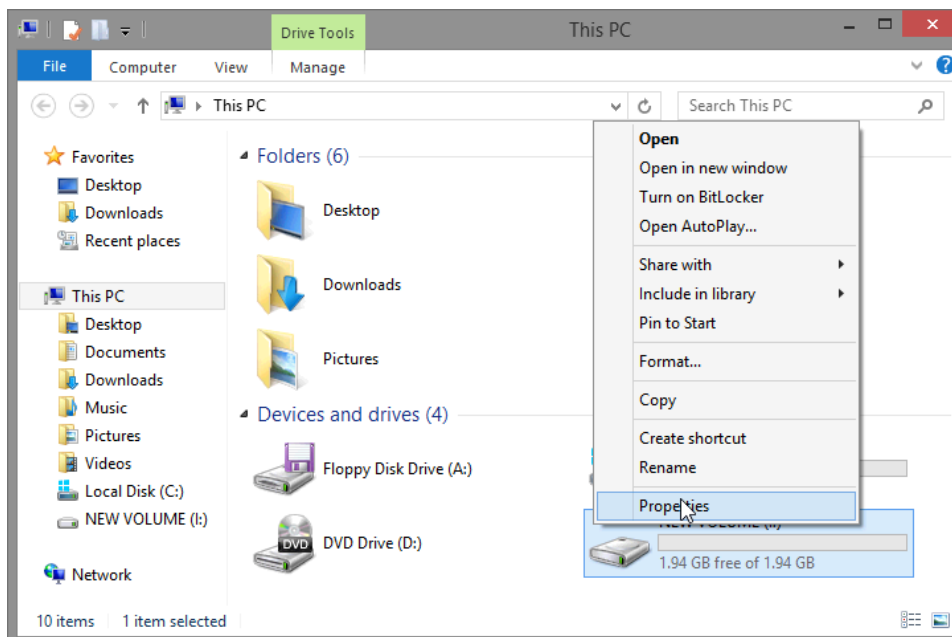
Step 3: Open the This PC window to review information about the new disk partition.

- a. Click **Start**, type **this pc**, and press **Enter** to open the **This PC** window.

Note: In Windows 8.0, click **Search**, type **computer** and then press **Enter** to open the **Computer** window. This window will allow you to do the same operations that the **This PC** windows does in Windows 8.1.



- b. Right-click on the **NEW VOLUME (I:)** drive and then select **Properties** from the drop-down menu.

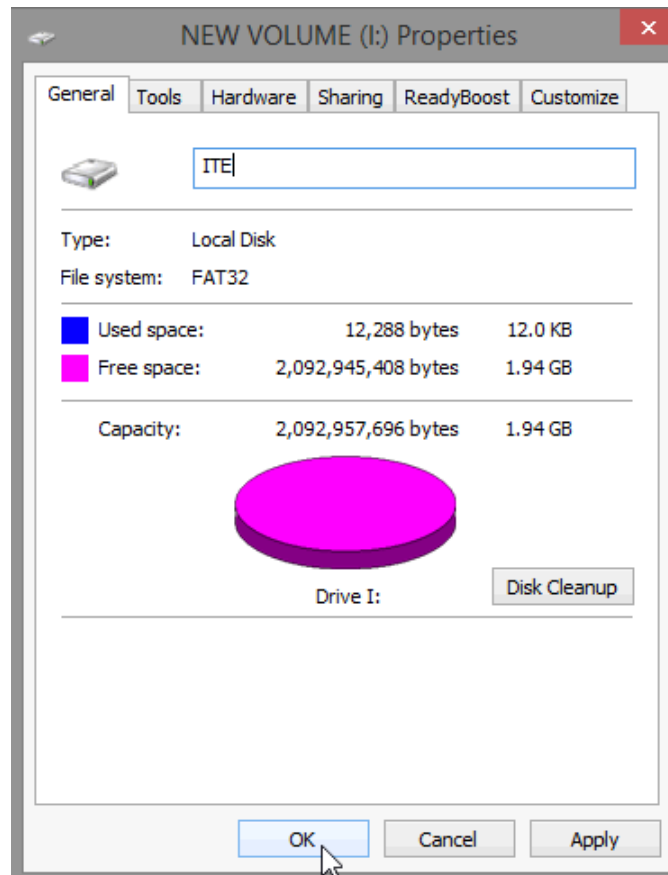


What type File System is used on the NEW VOLUME (I:)?

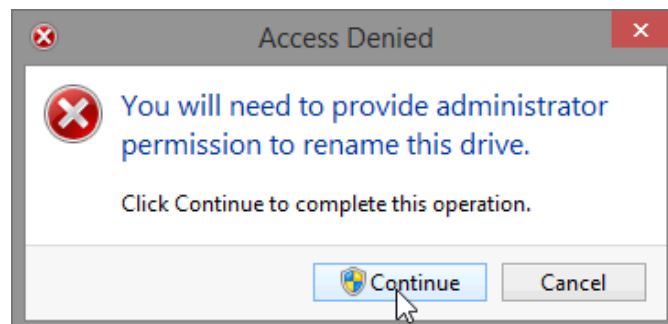
How much Free Space is shown?

List the tabs found in the **NEW VOLUME (I:) Properties** window.

- c. On the **General** Tab, rename the volume from **NEW VOLUME** to **ITE**, and then click **OK**.

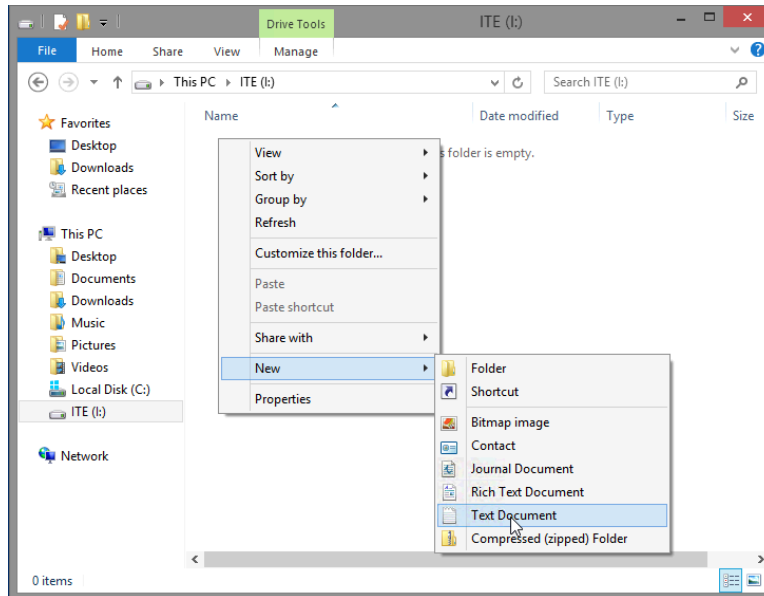


- d. If an **Access Denied** window opens, click **Continue** to complete the operation.

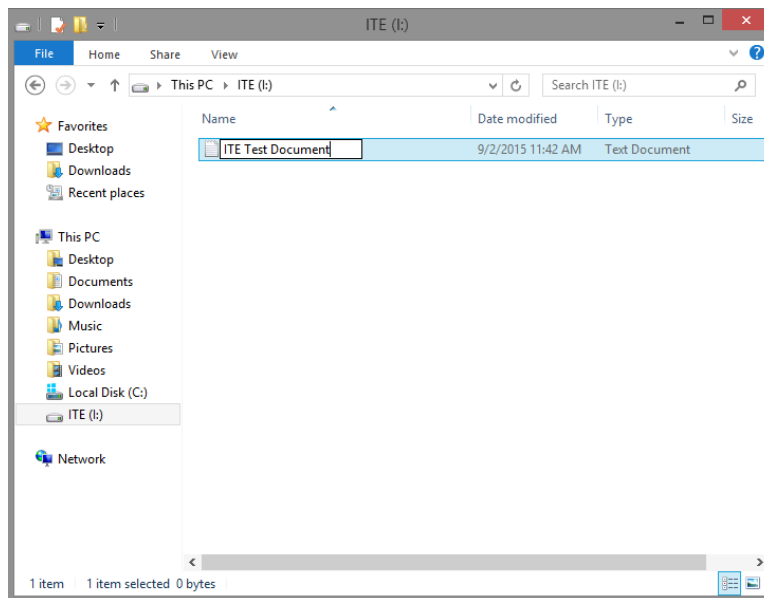


Step 4: Create a text document and save it to the ITE drive.

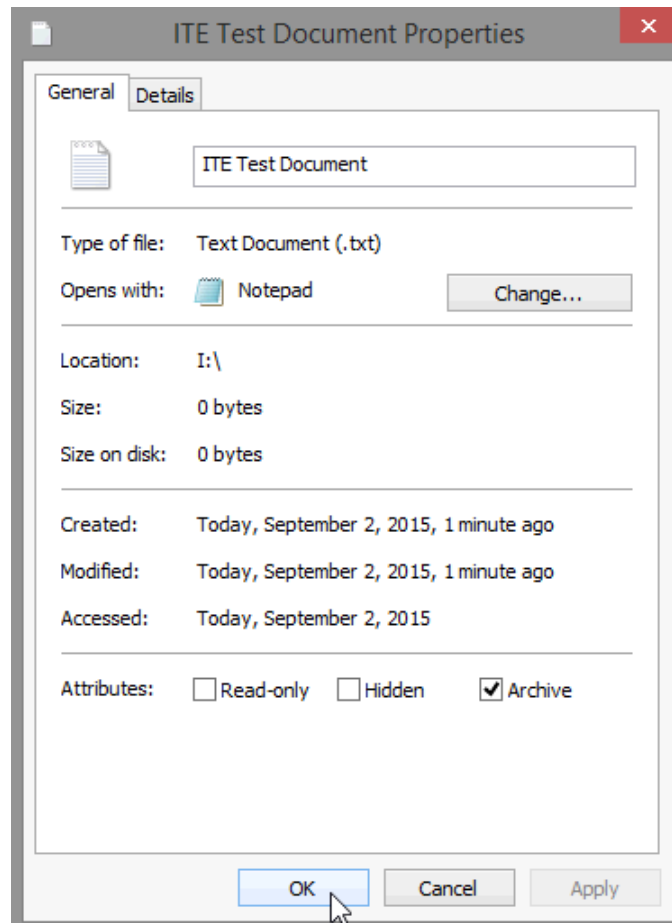
- a. Double-click on the **ITE (I:)** disk icon to view the contents of the drive. You should see a message in the middle of the screen stating that this folder is empty. Right-click anywhere in the white space below that message to bring up a drop-down menu. Click **New > Text Document**.



- b. Rename the **New Text Document** to **ITE Test Document** and press **Enter**.



- c. Right-click on the **ITE Test Document** and choose **Properties**. This opens the **ITE Test Document Properties** window.

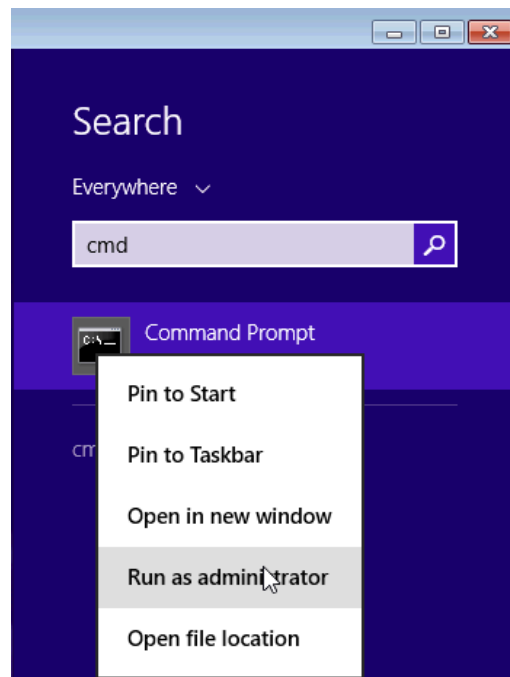


What tabs are listed in the ITE Test Document Properties window?

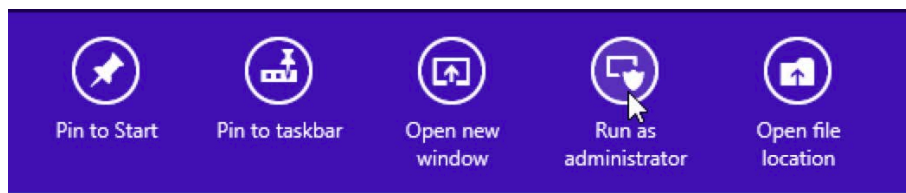
- d. Click **OK** to close the **ITE Test Document Properties** window. Close the **ITE (I:)** window.

Step 5: Convert the ITE Volume from FAT32 to NTFS without losing data.

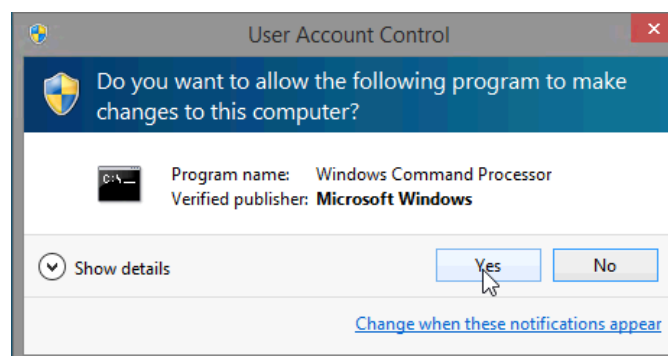
- a. Click **Start**, then type **cmd** (the search field will pop up as soon as you start typing). Right-click on the **Command Prompt** program that appears, and then click **Run as administrator**.



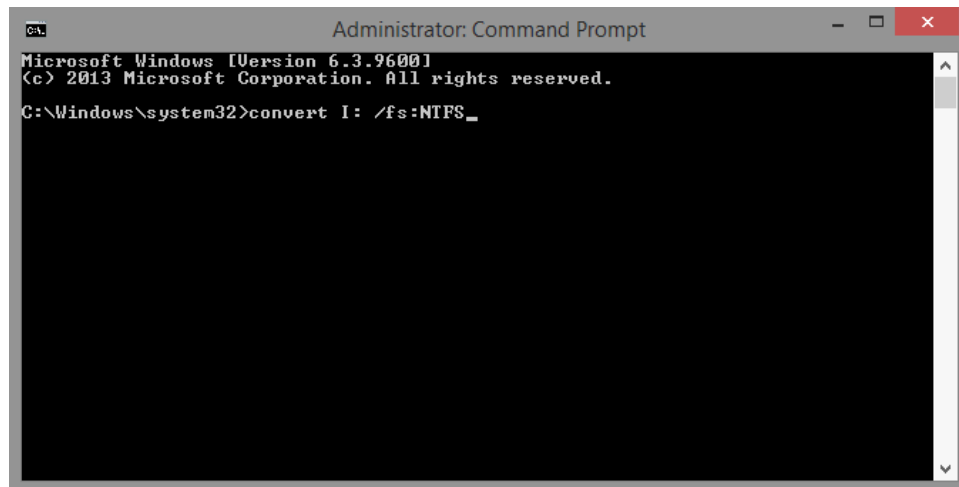
Note: In Windows 8.0, right-clicking on the **Command Prompt** will display options at the bottom of the screen. Click **Run as administrator**.



- b. The **User Account Control** window opens asking if you want to allow the following program to make changes to this computer. Click **Yes**.

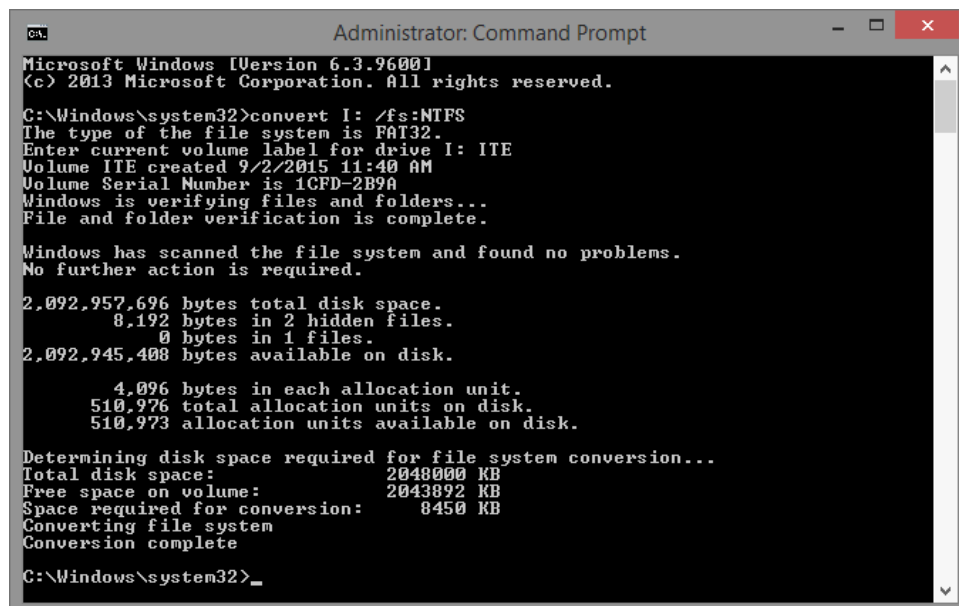


- c. The **Administrator: Command Prompt** window opens. At the command prompt, type **convert I: /fs:NTFS** and then press **Enter**.



```
C:\Windows\system32>convert I: /fs:NTFS_
```

- d. You will be prompted to enter the current volume label for drive I:. Type **ITE** and press **Enter**.



```
C:\Windows\system32>convert I: /fs:NTFS
The type of the file system is FAT32.
Enter current volume label for drive I: ITE
Volume ITE created 9/2/2015 11:40 AM
Volume Serial Number is 1CFD-2B9A
Windows is verifying files and folders...
File and folder verification is complete.

Windows has scanned the file system and found no problems.
No further action is required.

2,092,957,696 bytes total disk space.
    8,192 bytes in 2 hidden files.
         0 bytes in 1 files.
2,092,945,408 bytes available on disk.

    4,096 bytes in each allocation unit.
    510,976 total allocation units on disk.
    510,973 allocation units available on disk.

Determining disk space required for file system conversion...
Total disk space:          2048000 KB
Free space on volume:      2043892 KB
Space required for conversion:    8450 KB
Converting file system
Conversion complete

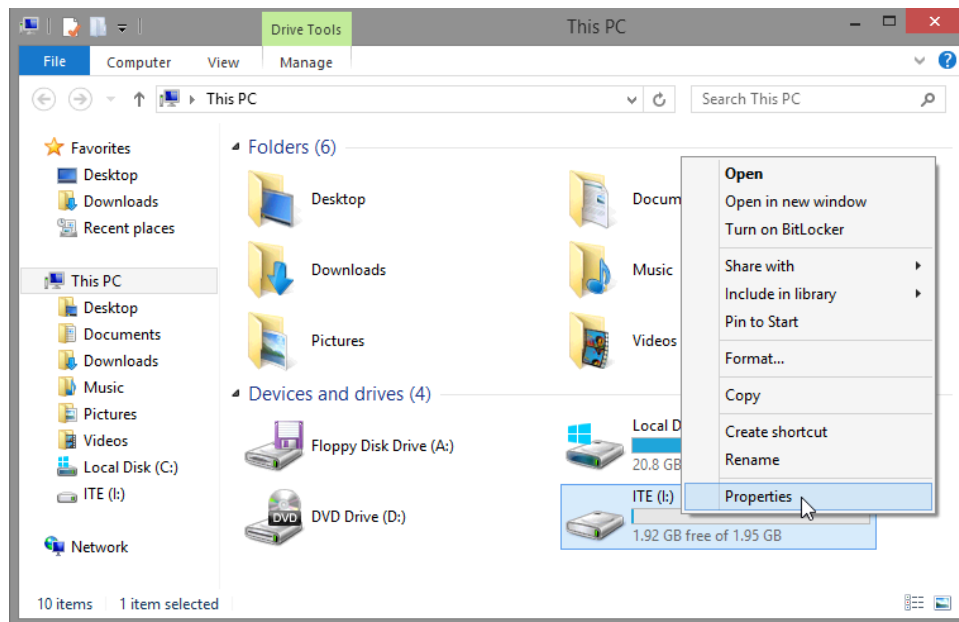
C:\Windows\system32>_
```

- e. Review the information displayed by the convert command. To close the **Administrator: Command Prompt** window, type **exit** at the command prompt and then press **Enter**.

Step 6: Open the This PC window to work with the ITE Volume.

- a. Click **Start**, then type **Computer** to open the **This PC** window.

- b. Right-click on the **ITE (I:)** volume, and select **Properties** from the drop-down menu.



What type of File System is used for the ITE (I:) drive?

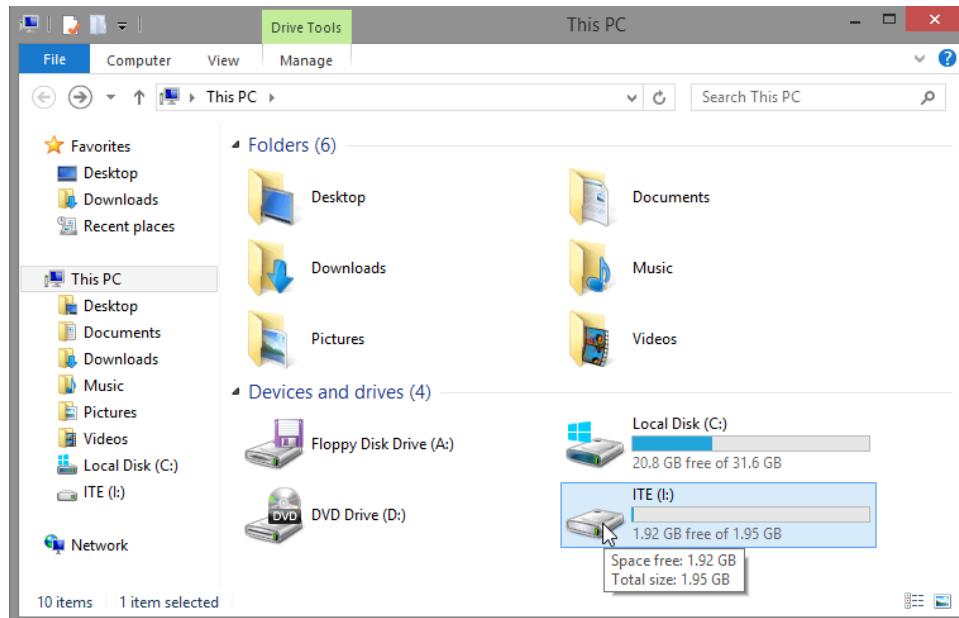
What are the tabs in the ITE (I:) Properties window?

When the volume was FAT32, there were six tabs. What are the names of the new tabs that were added after the volume was converted to NTFS?

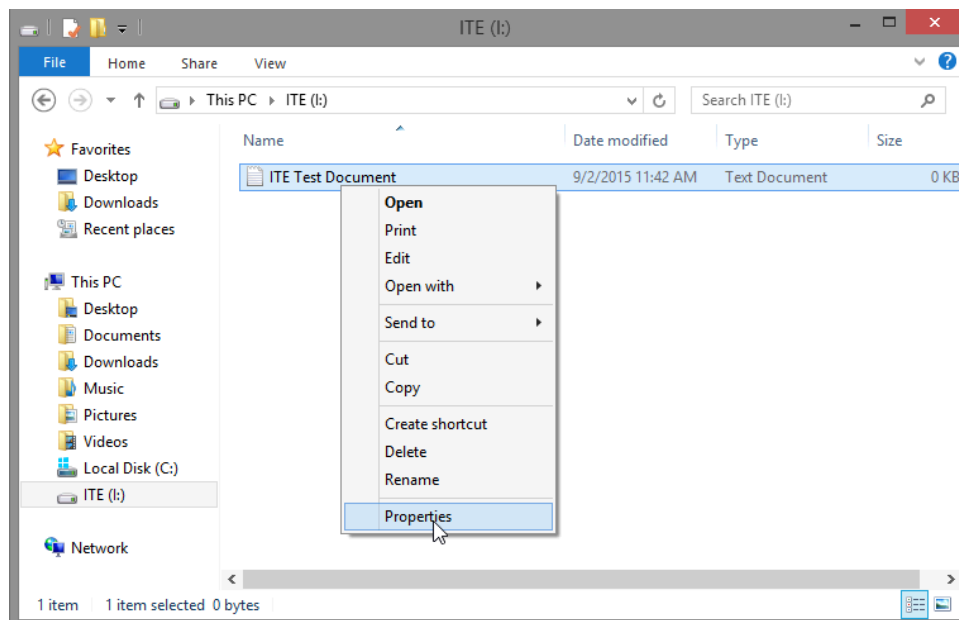
- c. Click **Cancel** to close the **ITE (I:) Properties** window.

Step 7: Display the properties of the ITE Test Document.

- a. In the **This PC** window, double-click on the **ITE (I:)** disk icon.



- b. Right-click on the **ITE Test Document**, then select **Properties** from the drop-down menu.



What are the tabs in the **ITE Test Document Properties** window?

When the volume was FAT32, there were three tabs. What is the name of the new tab that was added after the volume was converted to NTFS?

- c. Close all open windows.

Reflection:

Why is there an additional Security tab in the properties window of documents stored on an NTFS volume?