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How to Format a Hard Drive Using the Command Prompt

How-to By [Joshua Simenhoff](#) last updated July 12, 2023

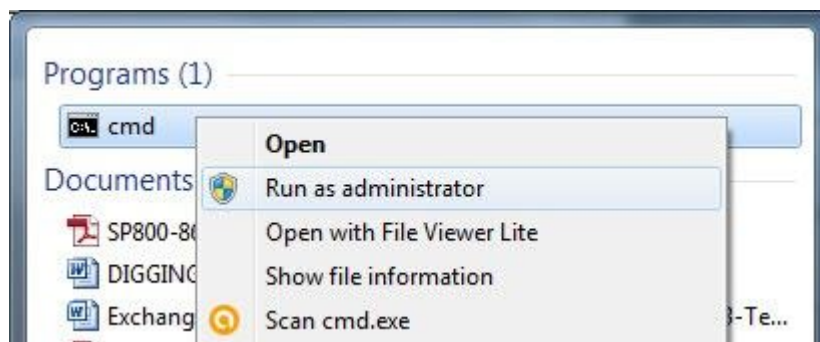


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Formatting one of the [best hard drives](#) or [SSDs](#) is the same as buying a new hard drive since the process erases all the data in one fell swoop. When you format your hard drive, you can clean internal as well as [external storage](#) media.

In this tutorial, we explain how you can format a [hard drive](#) using the command prompt. *Before proceeding further, make sure you backup all available data to prevent data loss. Follow the steps below to format a drive:*

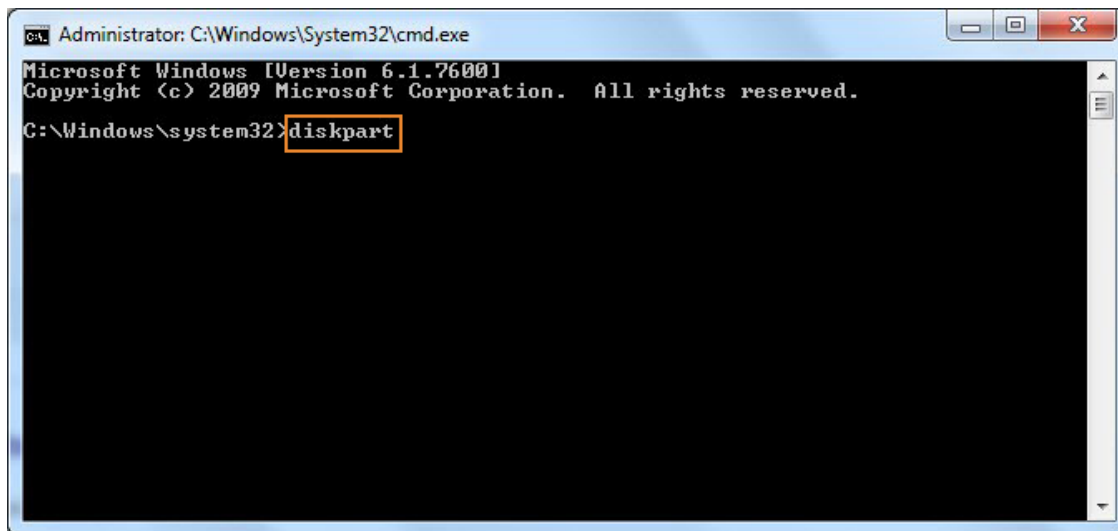
STEP 1: Open Command Prompt As Administrator



Opening the command prompt.

Search for command prompt, right click and run as Administrator.

STEP 2: Use Diskpart




```
Administrator: C:\Windows\System32\cmd.exe
Microsoft Windows [Version 6.1.7600]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Windows\system32>diskpart
```

Using diskpart

Once command line is open, type 'diskpart' and press Enter.

STEP 3: Type List Disk



```
Administrator: C:\Windows\System32\cmd.exe - diskpart
Microsoft Windows [Version 6.1.7600]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Windows\system32>diskpart

Microsoft DiskPart version 6.1.7600
Copyright (C) 1999-2008 Microsoft Corporation.
On computer: MAGGIESCOTT

DISKPART> list disk

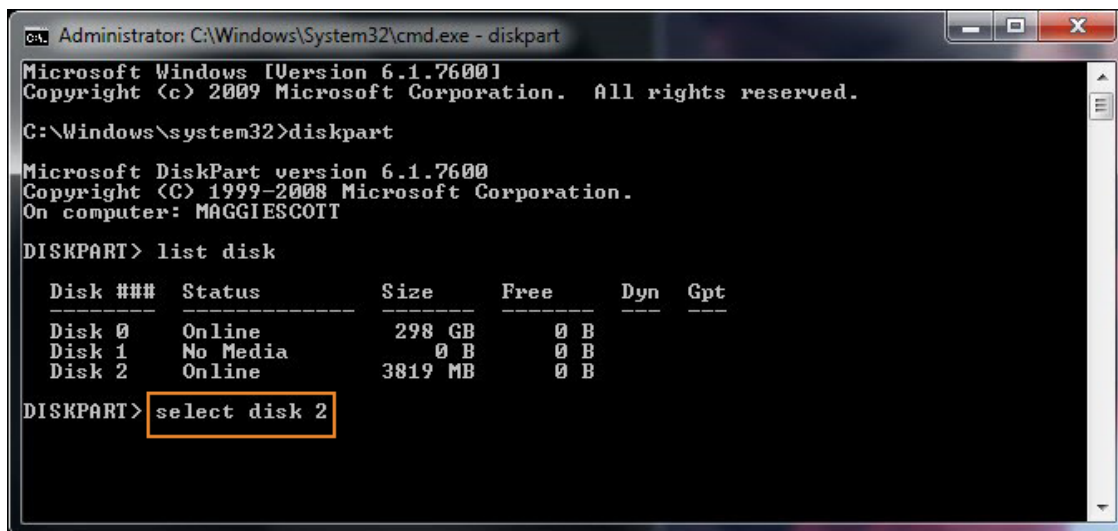
   Disk ###  Status              Size               Free                Dyn  Gpt
   -----  -
   Disk 0    Online              298 GB              0 B
   Disk 1    No Media            0 B                 0 B
   Disk 2    Online              3819 MB             0 B

DISKPART>
```

Using list disk

The above command will open a Diskpart window. In this window, type 'list disk' and press Enter. It will list all the available drives.

STEP 4: Select the Drive to Format



```
Administrator: C:\Windows\System32\cmd.exe - diskpart
Microsoft Windows [Version 6.1.7600]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Windows\system32>diskpart

Microsoft DiskPart version 6.1.7600
Copyright (C) 1999-2008 Microsoft Corporation.
On computer: MAGGIESCOTT

DISKPART> list disk

   Disk ###  Status              Size               Free               Dyn  Gpt
   -----  -
   Disk 0    Online              298 GB              0 B
   Disk 1    No Media            0 B                 0 B
   Disk 2    Online              3819 MB             0 B

DISKPART> select disk 2
```

Formatting a drive.

Now type 'select disk (disk number)' as shown above. Specify the drive number which needs to be formatted.

STEP 5: Clean the Disk



```
Administrator: C:\Windows\System32\cmd.exe - diskpart
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Windows\system32>diskpart

Microsoft DiskPart version 6.1.7600
Copyright (C) 1999-2008 Microsoft Corporation.
On computer: MAGGIESCOTT

DISKPART> list disk

   Disk ###  Status              Size               Free               Dyn  Gpt
   -----  -
   Disk 0    Online              298 GB              0 B
   Disk 1    No Media            0 B                 0 B
   Disk 2    Online              3819 MB             0 B

DISKPART> select disk 2
Disk 2 is now the selected disk.

DISKPART> clean

DiskPart succeeded in cleaning the disk.

DISKPART>
```

Using the clean function.

In this step, type 'clean'. This command will permanent delete all files and folders, and successfully clean up the disk.

Stay on the Cutting Edge

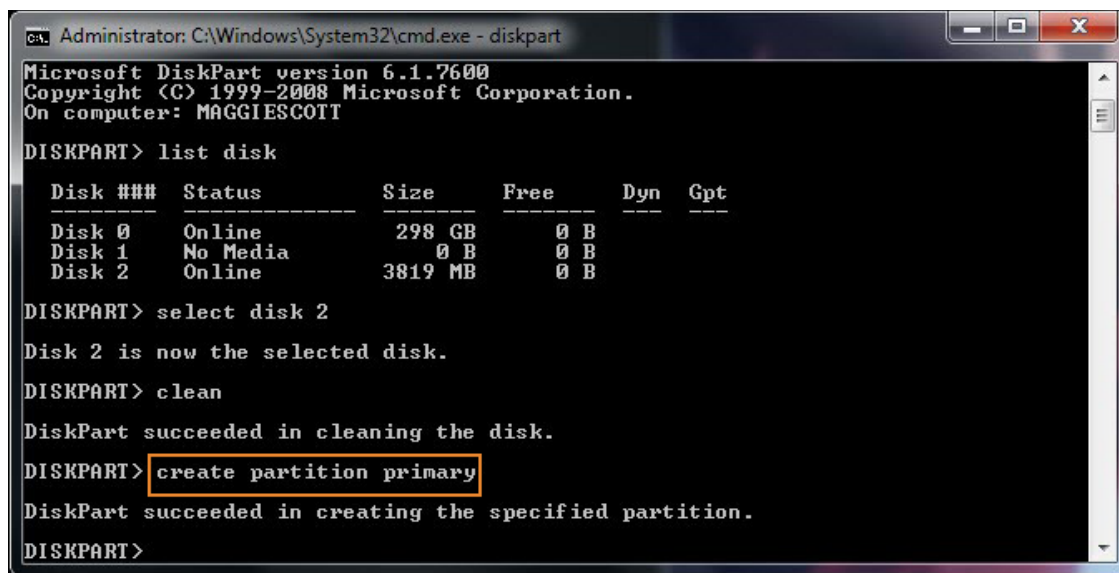
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STEP 6: Create Partition Primary



```
Administrator: C:\Windows\System32\cmd.exe - diskpart
Microsoft DiskPart version 6.1.7600
Copyright (C) 1999-2008 Microsoft Corporation.
On computer: MAGGIESCOTT

DISKPART> list disk

   Disk ###  Status              Size               Free               Dyn  Gpt
   -----  -
   Disk 0    Online              298 GB              0 B
   Disk 1    No Media            0 B                 0 B
   Disk 2    Online              3819 MB             0 B

DISKPART> select disk 2
Disk 2 is now the selected disk.

DISKPART> clean
DiskPart succeeded in cleaning the disk.

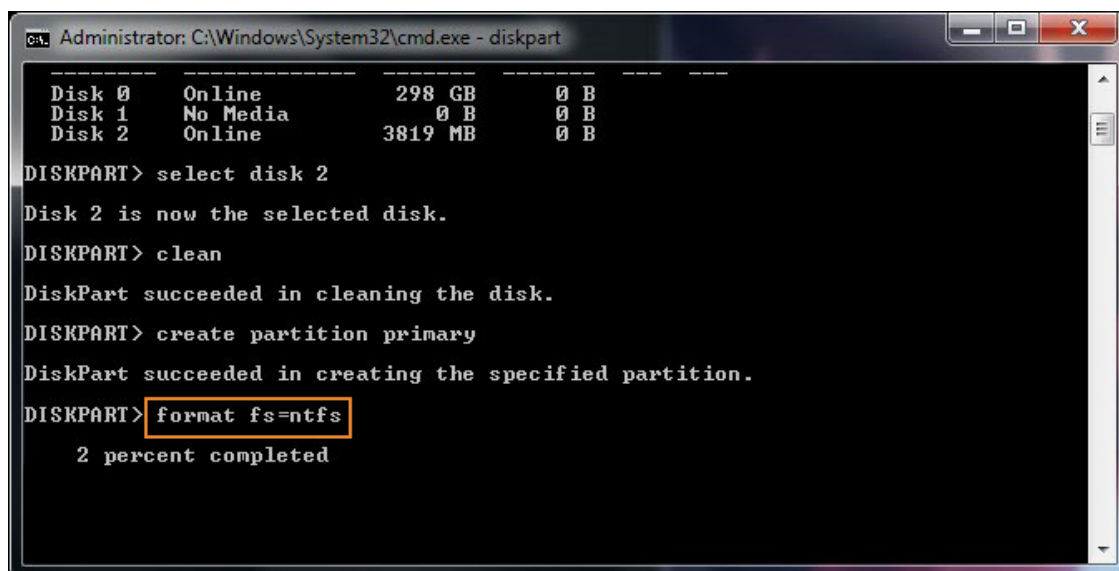
DISKPART> create partition primary
DiskPart succeeded in creating the specified partition.

DISKPART>
```

Creating primary partition.

To make the drive again accessible, type 'create partition primary'.

STEP 7: Format the Drive



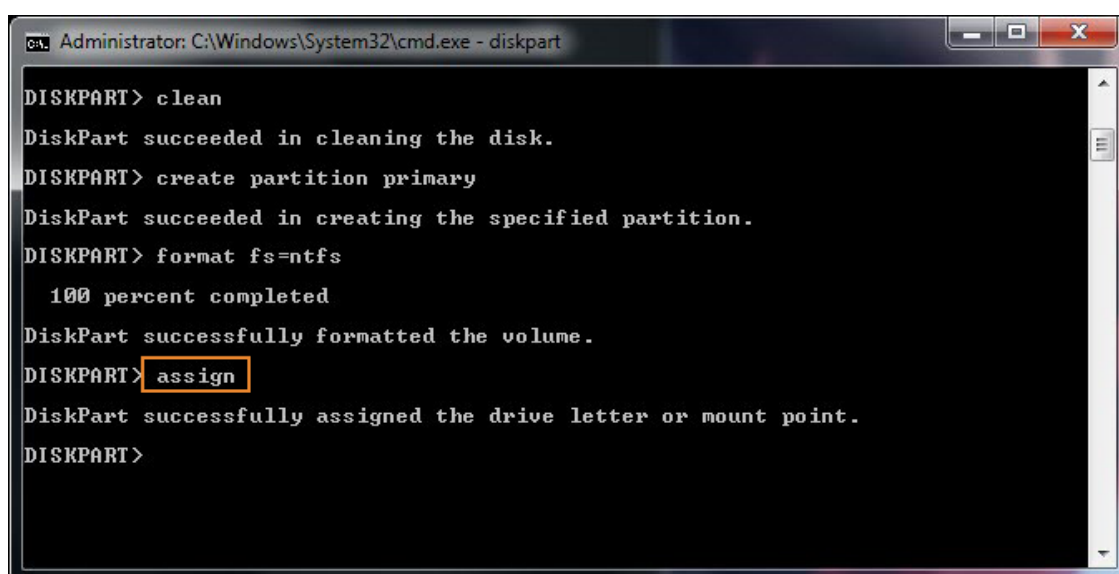
```
Administrator: C:\Windows\System32\cmd.exe - diskpart
-----
Disk 0      Online          298 GB      0 B
Disk 1      No Media        0 B         0 B
Disk 2      Online          3819 MB     0 B

DISKPART> select disk 2
Disk 2 is now the selected disk.
DISKPART> clean
DiskPart succeeded in cleaning the disk.
DISKPART> create partition primary
DiskPart succeeded in creating the specified partition.
DISKPART> format fs=ntfs
          2 percent completed
```

Formatting a drive.

Now format the drive with FAT or NTFS file system. Type 'format fs=ntfs' and press Enter.

STEP 8: Assign a Drive Letter



```
Administrator: C:\Windows\System32\cmd.exe - diskpart

DISKPART> clean
DiskPart succeeded in cleaning the disk.
DISKPART> create partition primary
DiskPart succeeded in creating the specified partition.
DISKPART> format fs=ntfs
          100 percent completed
DiskPart successfully formatted the volume.
DISKPART> assign
DiskPart successfully assigned the drive letter or mount point.
DISKPART>
```

Assigning a drive letter.

To assign a drive letter, you can type 'assign' as shown below.

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MORE: [Windows How-To Articles](#)

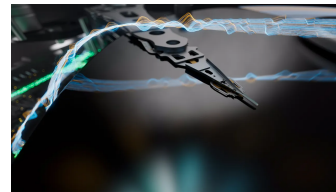
Joshua Simenhoff

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21 COMMENTS

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ehmkec

Am I missing something? Couldn't you just bring up a command prompt and type "format e:" - or some other drive letter?

REPLY ►

tcaster6263

would be kind of short for a tutorial don't you think?

REPLY ▶

polomint

Or use Computer Management -> Disk Management if you want to remove all partitions on a drive then format it...

REPLY ▶

shrapnel_indie

21240634 said:

Am I missing something? Couldn't you just bring up a command prompt and type "format e:" - or some other drive letter?

While I cannot guarantee this article does exactly what it claims it does (I haven't tried it, let alone heard about this way before) I can speak for the way format works now days.

Drives come pretty much preformatted now days as to its sectors and such. Format just basically wipes the file data/directory/folder content, not the data elsewhere on the drive. It's possible to recover the data with a little work, primarily on the "folders."

I would hope that this utility, DiskPart, issuing its "clean" command actually does more than clear the data partition info.

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