How to Partition and Format a WD Drive on Windows and macOS

External hard drives and external solid state drives come pre-formatted and ready for use. Internal HDD and internal SSD drives do not ship pre-formatted and will need to be Partitioned and formatted before being used.

Please note the instructions do not differ when formatting different capacity sizes, this is not capacity specific.

How to Partition and Format a Drive on Windows 10 and 8.1

Partitioning a hard drive means preparing it to be used by the Operating System (OS), creating a Volume for the OS to use. Formatting, however, deletes the content of a volume to clean it, and assigns a file system to it so that data can be moved into and out of the volume. Both processes are normally done together.

Critical: The instructions in the article below are designed to help repartition and format a hard drive. This process is Data Destructive and cannot be undone. Once the process begins, ALL THE DATA ON THE DRIVE WILL BE LOST!

Windows 10 includes a built in utility known as Disk Management that can be used to partition and format a hard drive. To partition and format the drive with Disk Management, follow these steps:

1. Right-click on Start, the Windows logo on the bottom-left of the screen, and click Disk Management.
2. In the **Disk Management** window, the lower pane will display a list of available drives. Identify the drive that needs to be partitioned and formatted, and make sure that all critical data on this drive has been backed up elsewhere. If there is already a partition on the drive, the bar above that drive will appear blue. If there is no critical data on the drive, or the data has been successfully backed up, right-click the bar and click **Delete Volume**.

**Important:** If Disk Management shows the drive as **Not Initialized**, the drive will have to be initialized. For assistance initializing a hard drive, please see [Answer ID 1018: How to initialize or write a signature to a secondary hard drive or Solid State drive in Windows (7, Vista, XP)](#).

3.
4. 
5. 
6. If there is no partition and data on the drive, it will appear as **Unallocated**, with a black bar on top. Right-click the **Unallocated** space or the black bar, and click **New Simple Volume**.

7. The **Welcome to the New Simple Volume Wizard** will open. Click **Next** to proceed.
8. Choose the volume size and click **Next**. By default, the maximum disk space is already selected and it is recommended to leave it at the maximum disk space.

   To create multiple partitions, select or type a specific number of megabytes (MB) for the first partition and continue to the next step. Once done with this process, the remaining space will display as unallocated space. Now, create another New Simple Volume in the remaining unallocated space for the next partition. For example, on a 2TB drive, set the volume size to 1000000 (1 TB) and continue to the next step. When done, begin the New Simple Volume process again and select the remaining capacity, the unallocated space, for another 1TB partition.

**Note:**
10.  
11.  
12. Assign a drive letter to represent the volume being created, and click **Next**. By default, this is the next available letter.
13. Next is the **File System**, which controls how the data is read and written. Set the file system to **NTFS**, which is the default Windows file system, and leave the **Allocation unit size** to **Default**. The **Volume Label** field can be customized in order to give the volume a desired name, such as *My Book* or *WD Black 1*. Check the box labeled **Perform a quick format** and click **Next**.

![New Simple Volume Wizard]

14. Click **Finish** to begin formatting the drive.
15. When complete, the drive will appear with a blue bar as in the image below.
How to Partition and Format a Drive on Windows 7 and Windows Vista

Critical: The instructions in the article below are designed to help repartition and format a hard drive. This process is Data Destructive and cannot be undone. Once the process begins, ALL THE DATA ON THE DRIVE WILL BE LOST!

Windows includes a built in utility known as Disk Management that can be used to partition and format a hard drive. To partition and format the drive with Disk Management, follow these steps:

1. Click on Start and right-click Computer.
2. Click on **Manage**.

![](image.png)

3. A window called **Computer Management** will open, displaying two panes. On the left-side pane, under **Storage**, click on **Disk Management**. This will load Disk Management on the right-side pane. Disk Management will proceed to display all the hard drives detected by Windows. The window may need to be maximized in order to see all the drives listed.
4. The lower pane will display a list of available drives. Identify the drive that needs to be partitioned and formatted. It typically has a black bar indicating unallocated space.

![Image of Disk Management window]

**Important:** If Disk Management shows the drive as *Not Initialized*, the drive will have to be initialized. For assistance initializing a hard drive, please see Answer ID 1018: How to initialize or write a signature to a secondary hard drive or Solid State drive in Windows (7, Vista, XP).

5.
6. If there is already a partition on the drive, the bar above that drive will appear blue. This indicates that the drive is already formatted and may contain data. Make sure that all critical data on this drive has been backed up elsewhere. When ready to proceed, right-click on the blue bar and choose **Delete Volume**. The bar should now be black.

9. Right-click on the unallocated space or the black bar to see a menu of available options, and click on **New Simple Volume**.
13. The **Welcome to the New Simple Volume Wizard** will appear. Left-click on **Next** to proceed to the next screen.
14. Choose the volume size and click **Next**. By default, the maximum disk space is already selected and it is recommended to leave it at the maximum disk space.

   To create multiple partitions, select or type a specific number of megabytes (MB) for the first partition and continue to the next step. Once done with this process, the remaining space will display as unallocated space. Now, create another New Simple Volume in the remaining unallocated space for the next partition. For example, on a 2TB drive, set the volume size to 1000000 (1 TB) and continue to the next step. When done, begin the New Simple Volume process again and select the remaining capacity, the unallocated space, for another 1TB partition.

15.
16. 
17. 
18. Assign a drive letter to represent the volume being created, and click **Next**. By default, this is the next available letter.
19. Next is the **File System**, which controls how data is read and written. Set the file system to **NTFS**, which is the default Windows file system, and set **Allocation unit size** to **Default**. The **Volume Label** field can be customized in order to give the volume a desired name, such as **My Passport** or **WD Black 1**. Check the box labeled **Perform a quick format** and click **Next**.
20. Click **Finish** to begin formatting the drive.
If an error message is received stating that Windows is unable to unmount the drive, this means that there is a program or service currently reading or writing data on the drive. Determine what program is accessing the drive and shut it down, and then try again. Please see Answer ID 274: Unable to safely remove (unmount) a WD external drive in Windows for assistance with this error under Windows.

Note: The listing for the drive (Disk 3 in the picture below) will say Formatting as it formats the drive. This process may take a few seconds.
22. When the drive is done (Disk 3 in the picture below), the bar will be blue and the drive will say *Healthy*.

How to format a drive on macOS 10.14.x (mojave)

**Critical**: The instructions in the article below are designed to help repartition and format a hard drive. This process is Data Destructive and cannot be undone. Once the process begins, **ALL THE DATA ON THE DRIVE WILL BE LOST!**

1. Open Disk Utility. Please See [Answer ID 1362: How to access Disk Utility on macOS](#)
2. From the left Column chose the **External** drive (My Passport, My Book, etc...)
3. Click the Erase Button
4. Type the drive new Name (My Passport, My Book, etc...)

5. Click the **Format** drop down

6. Choose a new Format: **Mac OS Extended (Journaled)**

7. Click **Erase** button
8. When finished, the drive will be formatted and repartitioned successfully. Click the Done button.

How to partition and format A DRIVE ON macOS 10.13.x (High Sierra)

**Critical:** The instructions in the article below are designed to help repartition and format a hard drive. This process is Data Destructive and cannot be undone. Once the process begins, **ALL THE DATA ON THE DRIVE WILL BE LOST!**

1. Open Disk Utility. Please See [Answer ID 1362: How to access Disk Utility on macOS](Answer ID 1362: How to access Disk Utility on macOS)
2. In the top menu bar, go to View, and choose Show All Devices.
3. Click the **eject** button next to the **drive volume** (My Passport, etc)

The **drive Volume** will now be **greyed out**
4. Select the drive (WD My Passport _____ Media, etc)

5. Click the **Erase** button
6. Choose a new Format: **Mac OS Extended (Journaled)**
   Choose Scheme: **GUID Partition Map**

7. Type the drive new Name
8. Click the **Erase** button

9. When finished, the drive will be formatted and repartitioned successfully. Click the **Done** button

**Steps for macOS 10.11.x (El Capitan) and macOS 10.12.x (Sierra)**
1. Open Disk Utility. Please See Answer ID 1362: How to access Disk Utility on macOS
2. Click the Eject button next to the external hard drive volume (My Passport, etc)

3. The drive will now be greyed out

4. Click the Erase button
5. Choose a new Format: **Mac OS Extended (Journaled)**
   Choose Scheme: **GUID Partition Map**

6. Type the drive new Name
7. Click the **Erase** button

8. When finished, the drive will be formatted and repartitioned successfully. Click the **Done** button
Partitioning a hard drive means preparing it to be used by the Operating System (OS), creating a Volume for the OS to use. Formatting, however, deletes the content of a volume to clean it, and assigns a file system to it so that data can be moved into and out of the volume. Both processes are normally done together.

Critical: The instructions in the article below are designed to help repartition and format a hard drive. This process is Data Destructive and cannot be undone. Once the process begins, ALL THE DATA ON THE DRIVE WILL BE LOST!

Mac OSX 10.9.x, and 10.10.x include a built in utility known as Disk Utility that can be used to partition and format a hard drive. To partition and format the drive with Disk Utility, follow these steps:

1. Double left-click on the Mac HD, the internal Mac hard drive visible on the top-right corner of the desktop screen. Choose Applications from the left-side panel. While in there, open Utilities, and lastly double-click on Disk Utility.

2. Disk Utility will now be open. In the left-side pane, choose the drive that is to be partitioned and formatted. Typically there are two listings for each drive unless more
than one partition exists on a particular drive. Choose the drive listing that is farthest to the left for the drive that will be formatted. It is usually directly above the name of the drive. In the example below, the one to be selected would be 495.78 GB WD My Passport 0830 Media.

3. After selecting the appropriate drive, additional options will appear on the right-side pane. Click on Partition.
4. In the Partition area, click on the drop-down box under **Partition Layout** and select **1 Partition**.

Partitioning a drive is only necessary if planning to use multiple partitions on the drive. It's recommended using a single partition in most cases, if the primary objective is to simply prepare the drive for use with the computer, no partitioning is required. No further action is required.

Note:

5.
6. 

7. 

8. Click on the drop-down next to **Format** and from the drop-down menu select **Mac OS Extended (Journaled)**. This is the format that the drive will be formatted to.
9. In the **Name** area, a drive name can be given to the drive by just typing in the desired name or drive label.
10. Click the *Options* button and choose *Apple Partition Map*. Then, click on *Ok*. Lastly, click on *Apply*.

**Important:** If the Mac computer being used is an Intel-based Mac, Apple recommends to use the *GUID Partition Table* instead.

11.
12. A confirmation box will appear, reminding users that partitioning and formatting the drive will erase all information that is on the drive. Make sure that all critical information on the drive is backed up elsewhere before continuing. If not, copy the data to another location. When ready, click on **Partition**.
15. The disk will be unmounted before being formatted.

![Disk Utility Interface](image)

If an error message is received stating that the drive is unable to be unmounted, this means that there is a program or service currently reading or writing data on the drive. Determine what program is accessing the drive and shut it down before trying to format the drive again. If the error message persists, restarting the computer may resolve the issue. If additional assistance is required, please [Contact Us](#).

16. The drive is now formatting and at the bottom of the Disk Utility panel a **Status Bar** displaying the name of the drive, the format that's being applied to it, as well as the given name. When finished, the bar will go away and the drive will now be listed on the desktop.
How to Format or Partition a Drive on Mac OSX 10.7.x (Lion) and 10.8.x (Mountain Lion)

Partitioning a hard drive means preparing it to be used by the **Operating System (OS)**, creating a Volume for the OS to use. Formatting, however, deletes the content of a volume to clean it, and assigns a file system to it so that data can be moved into and out of the volume. Both processes are normally done together.

**Critical:** The instructions in the article below are designed to help repartition and format a hard drive. This process is Data Destructive and cannot be undone. Once the process begins, **ALL THE DATA ON THE DRIVE WILL BE LOST!**

Mac OSX 10.7.x, and 10.8.x include a built in utility known as **Disk Utility** that can be used to partition and format a hard drive. To partition and format the drive with Disk Utility, follow these steps:

1. Double left-click on the **Mac HD**, the internal Mac drive. Choose **Applications**, then **Utilities**, and double-click on **Disk Utilities**.
If the screen does not look like the one in the picture below, the folder view may be set to a different one. Click on the **Columns** button (it’s highlighted in blue in the screenshot) in the upper left corner of the window to change to the same view used here.

2. In the far left pane, choose the drive that is to be partitioned and formatted. Typically there are two listings for each drive, unless that particular drive has more than one partition in it. Choose the drive listing that is farthest to the left for the drive that is to be formatted. It is usually directly above the name of the drive. Once the drive has been selected, click on the **Partition** tab.
6. Under **Volume Scheme** click the drop-down box and select **1 partition**.

7. Now, click the **Options** button and choose **Apple Partition Map**, then click on **Ok**.
Important: If the Mac computer being used is an Intel-based Mac, Apple recommends to use the **GUID Partition Table** instead.

8. Choose a partition scheme appropriate for the way you will use this disk:
   - GUID Partition Table
     To use the disk to start up an Intel-based Mac, or to use the disk as a non-startup disk with any Mac with Mac OS X version 10.4 or later.
   - Apple Partition Map
     To use the disk to start up a PowerPC-based Mac, or to use the disk as a non-startup disk with any Mac.
   - Master Boot Record
     To use the disk to start up DOS and Windows computers, or to use with devices that require a DOS-compatible or Windows-compatible partition.

   After clicking on 'Options', select 'Apple Partition Map' and then 'OK'.

9. 10.

11. Click on the drop-down next to the **Format** option and change the Format to **Mac OS Extended (Journaled)**. A name can also be given to the drive by typing it into the **Name** box. When done, click on **Apply**.
12. A box will come up warning that formatting and partitioning the drive will erase all of the information that is on the drive. If the information on the drive is no longer needed, then click on **Partition**. If the data on the drive is still needed, it will need to be copied to another location before proceeding.

13. The drive is now formatting, and a **status bar** will be displayed at the bottom of the Disk Utility window. This status bar will say **formatting the disk**, and gives the name of the drive, the format it is applying, and the name that was specified for it. When it is done, this bar will go away and the drive should now be listed on the desktop.

---

**Formatting A WD Drive To Be Compatible With Both Windows and Mac OSX**

Please see Answer ID 291: How to format a WD hard drive in exFAT or FAT32 for assistance formatting a drive to be used on both a Windows PC and a system running Mac OS X.

**How to uninstall the WD Black² Installation Software and remove the HDD portion from a WD Black² Dual Drive**
Once the WD Black² Installation Software is installed on a WD Black² Dual Drive, the Hard Disk Drive (HDD) portion of the device is enabled and becomes available for use. Should there be a need to remove this portion, running the WD Black² Installation Software again will provide the option to remove the software from the device and that way remove the HDD portion once again. For assistance removing the HDD portion of a WD Black² Dual Drive, please follow the instructions below:

**Important:** If it is necessary to download the software again, download the WD Black² Installation Software from the download section of the WD Black².

1. Run the WD Black² Installation Software. From the software's main screen, click on Remove WD Black² Dual Drive.

2. Read the information displayed carefully. If the partition has already been removed, click Proceed.
For more information on attempting to uninstall the software while a partition still exists in the HDD portion of the Dual Drive, please see Answer ID 11019: Error: 'Completion Code: 27, HDD portion contains partitions that must be removed before uninstallation' occurs when removing HDD space on a Dual Drive.

3. Critical: Deleting a partition will delete all files and data contained within the partition. This process is Data Destructive and irreversible. Please make sure that all data on the HDD is backed up elsewhere before deleting the partition(s).

4. The WD Black² Installation Software will begin to be uninstalled. This process may take several minutes.
7. Once the uninstallation is complete, the HDD portion of the WD Black\textsuperscript{2} Dual Drive will no longer be accessible. Restarting the computer is needed to complete the process, so when ready, click on \textit{Restart Now}. 
In case the answer did not answer your question, you can always visit the WD Community for help from WD users.

**How to check if a WD drive is damaged or defective**

Answer ID 14920

Special handling is required to protect hard drives from damage. Hard drives can be damaged by excessive physical force or from Electrostatic Discharge (ESD).

**Critical:** ESD damage is usually invisible to the eye and may not be discovered until much later, either through intermittent performance or failure. For more information on how to avoid ESD damage please see Answer ID 1486: How to properly handle Western Digital internal hard drives.
Please follow the instructions below to check a WD drive for damage:

1. With the drive disconnected, examine the drive for physical signs of damage such as dents or broken pins

2. Ensure that the power cable (if applicable) and data cable is securely connected on both ends

3. Verify the power cable (for Desktop and My Cloud drives) or data cable is connected to a working outlet or port

4. Verify the data cable is in working condition. Try using the cable on a working drive

5. Connect the drive to a different computer or a different port on the motherboard/controller card

6. Test the drive with a diagnostic tool
   - Internal Drives - Windows users: Use Data Lifeguard Diagnostics. For assistance, please see Answer ID 940: Testing a drive for problems using Data Lifeguard Diagnostics for Windows
   - Internal Drives - Mac Users: Use the built-in tools within the Operating System. Please see Answer ID 866: How to test a drive for defects or problems on a Mac for assistance testing your drive.
   - External Drives - Please use WD Drive Utilities, or Data Lifeguard diagnostics to test your drive. Please see knowledge base articles Answer ID 10408: Setting up and using WD

- External SSD Drives - Please see Answer ID 25950: How to Handle and Check if a WD External SSD is Damaged or Defective

- My Cloud Drives - Run a **System Diagnostic Test** (Full Test) using the Dashboard. Please see Answer ID 10427: How to run a System Diagnostics test on a My Cloud for assistance running this test.

7. If the drive is defective or damaged, please do the following:

   a. If data recovery is required, please visit one of our data recovery partners. WD does not provide data recovery services.

   b. **Check the drive's warranty.**
      
      If the drive is in warranty, create an RMA

**Important:** Any agreement you may reach with the service provider is a matter between you and the service provider. Western Digital makes no warranty, express or implied, regarding the services provided by the service provider, including but not limited to, any warranty regarding the quality or reliability of services performed by it. Your selection of the service provider is at your own risk. Western Digital assumes no liability for any loss or damages of any kind that relate to, arise out of or result from the performance of services by the service provider, including, but not limited to any loss of data contained on a Western Digital hard drive. For more information, please visit our warranty policy page.