WD Red Drives in a third party enclosure User Interface may display a failed message

Issue:

Third party Network Attached Storage *NAS* enclosure may display a Bad Sectors, failed, or bad drive message within the NAS User Interface (UI).

Cause:

A failed hard drive could be the cause of the error message, or possible enclousre or system related issue. The first thing to do is test the drive by following the steps below.

Ensure that the data is backed up. Western Digital recommends that best practice is to keep a backup of your important data at all times. Maintaining a valid backup protects against: computer virus, data corruption, hardware issues, or environmental hazards.



Important: Always remember that "backup" means that you have your data stored in at least two (2) locations. Moving data from your system drive to an external hard drive is not a backup, unless there is already a duplicate of the file on a different drive.

Remove the WD Red drive from the enclosure. Connect the WD Red drive to a computer with a SATA cable as a secondary hard drive. Test the drive using the Western Digital Data Lifeguard Diagnostics for Windows. Please see: Answer ID 940: How to test a drive for problems using Data Lifeguard Diagnostics for Windows

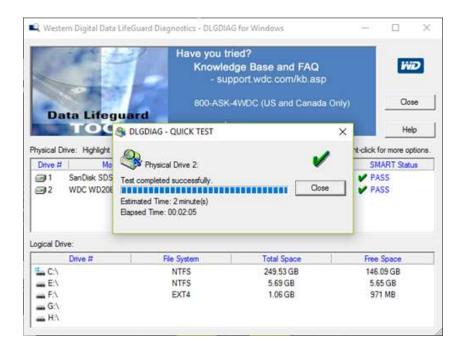


Note:

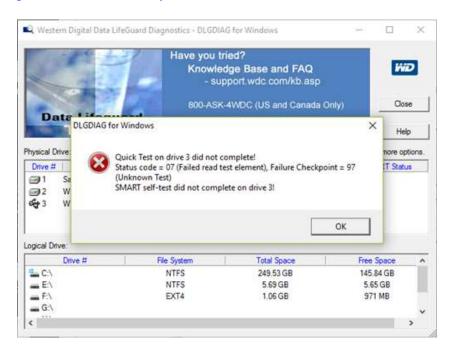
Please contact the motherboard or computer manufacturer to ensure the WD Red hard drive capacity is supported by the motherboard and up to date with the latest BIOS Update.

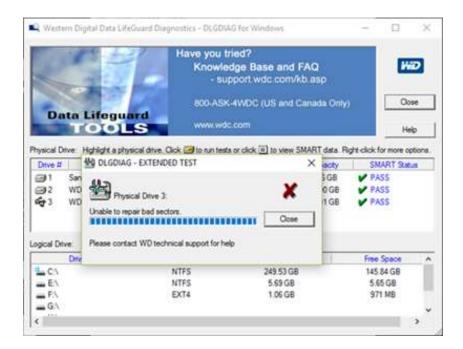
Solution:

If the WD Red hard drive passes the Western Digital Quick and Extended Test then the drive is good. Please contact the third party enclosure manufacture for more support, and information if the WD Red Hard drive is on their supported hard drive list or AVL.



If the WD Red hard drive failed the Western Digital Data Lifeguard Diagnostics Quick and Extended Test then it needs to be replaced. Please see: <u>Answer ID 8: How can I replace a product under warranty?</u>





Testing a drive for problems using Data Lifeguard Diagnostics for Windows

Answer ID 940



Important: Non Windows Users: This utility is NOT compatible with Mac OS. The drive will need to be connected to a *Windows Operating System (OS)*, in order to run this utility. Please see <u>Answer ID 866: How to test a drive for defects or problems on a Mac</u> for information about testing a drive on macOS or download **Data Lifeguard Diagnostics** for **DOS** and follow the instructions under the *More Info* tab.

Data Lifeguard Diagnostic for DOS

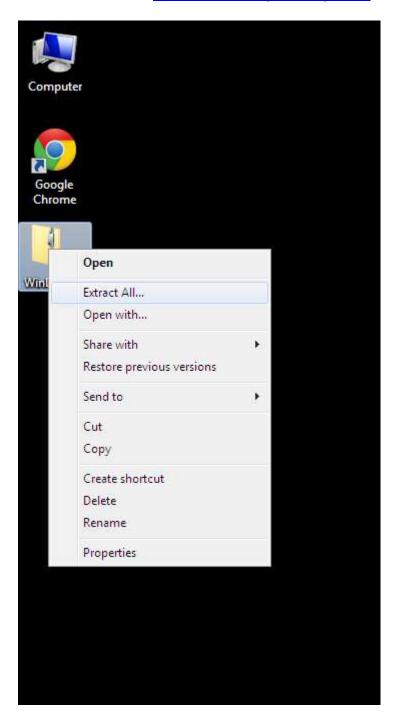


The Windows version of the Data Lifeguard Diagnostics utility can perform drive identification,

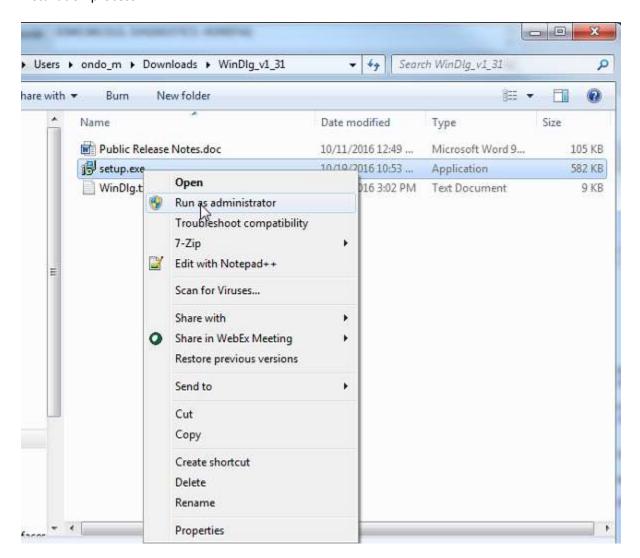
diagnostics, and repairs on a Western Digital FireWire, EIDE, Serial ATA, or USB drive. In addition, it can provide the drive's serial and model numbers.

To use the utility:

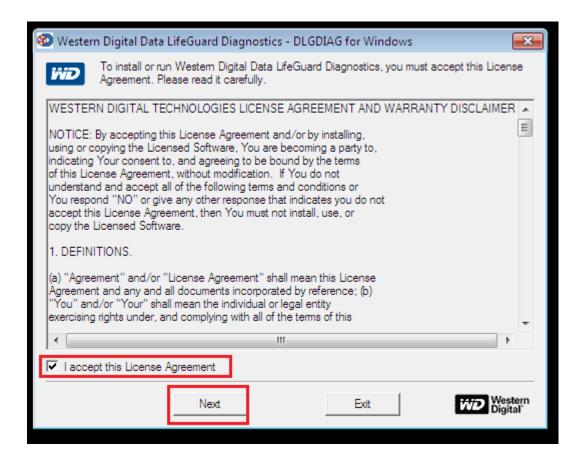
1. Download and extract Windows Data Lifeguard Diagnostics.



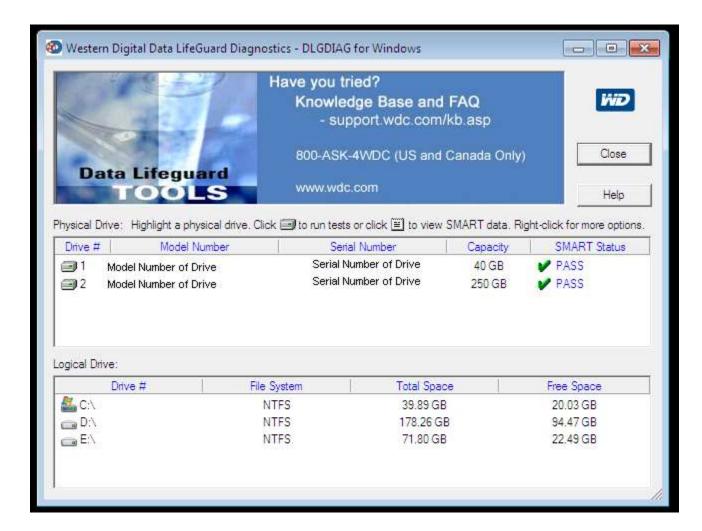
2. Run the **setup.exe** application. If the computer is running Windows 10, 8, 7, or Vista, right-click on **setup.exe** and select **Run As Administrator**. Accept the default location and complete the installation process.



3. Read and accept the license agreement to continue.



4. There are 2 panes on the main program window. The top pane lists the mounted drives that are available for testing. The **Model Number**, **Serial Number**, **Capacity**, and **SMART Status** of each drive will be displayed. The bottom pane provides the partition information for the selected drive such as **Drive Letter**, **File System**, **Total Space**, and **Free Space**.



- 5. Double-click the drive to be tested in the top pane to view the test options. Or click to highlight the drive, then click the *run tests* icon above this pane.
- 6. The **DLGDIAG Select an Option** pop-up window appears.
- 7. The following options are available:

QUICK TEST - Performs SMART drive quick self-test to gather and verify the Data Lifeguard information contained on the drive.

EXTENDED TEST - Performs a Full Media Scan to detect bad sectors; and attempt to repair them, or mark the damaged sector for not to be written to. This test may take several hours to

complete depending on the size of the drive. The average test time takes about 1 hour per Terabyte.

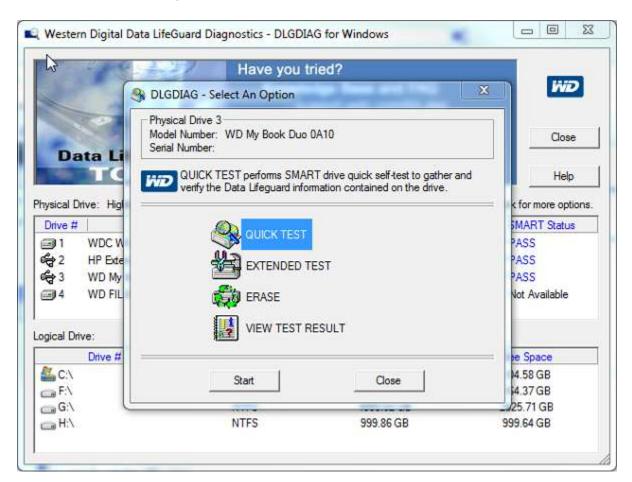
ERASE - Erase will low-level format the drive with options of Full Erase and Quick Erase. File system and partition table will be permanently erased.



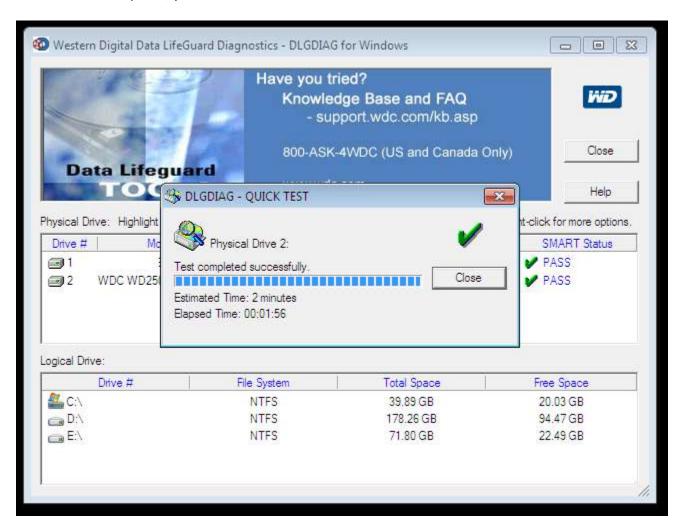
Important: This test is data destructive. Be sure data stored on the drive has been backed up, or is not needed before running this test. The drive will need to be reformatted in order to prepare it for use again. Please see Answer ID 3865: How to Partition and Format a WD Drive on Windows and macOSs for help formatting a drive.

VIEW TEST RESULT - displays the latest test results.

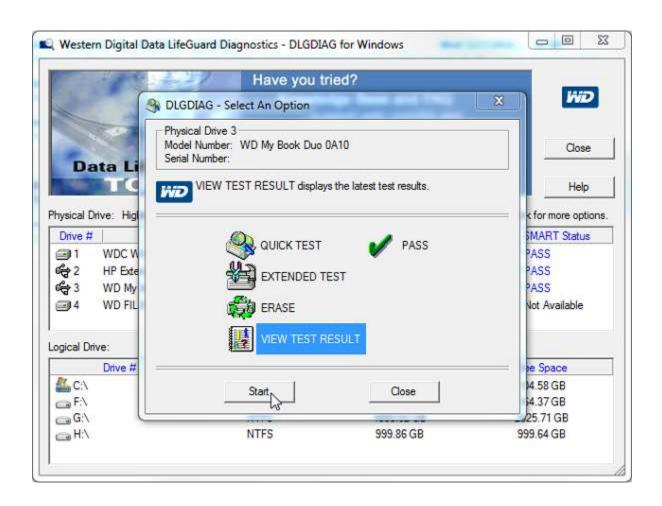
8. Select the test that will be performed and click the **Start** button.

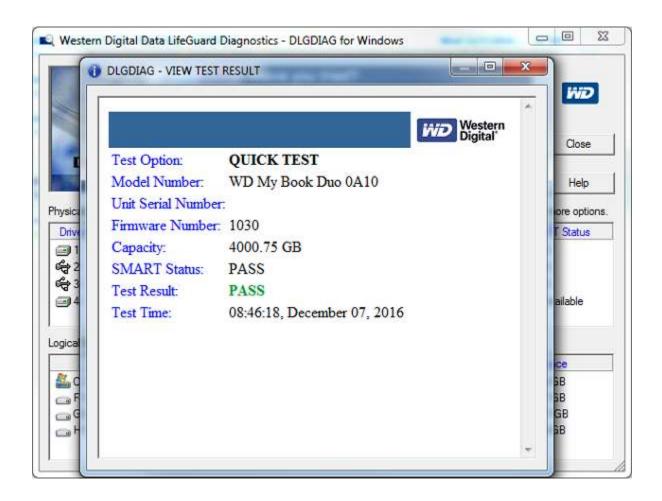


9. When the test completes, you will be notified. Click the **Close** button.



10. The pop-up window will display the test results for the drive.







Important:

- The diagnostics will not read SMART data from the drives. Windows Data
 Lifeguard Diagnostics will test internal hard drives contained within a WD My
 Book Premium II and WD My Book Pro Edition II storage system. The RAID Array
 on these units does not need to be broken in order to test the internal drives.
 The only feature that will not be available with the diagnostics is the SMART
 data. Please see: Answer ID 11711: Data Lifeguard Diagnostics Error Code List for
 a list of error codes this utility provides.
- If any of the tests fail, including the Quick Test, replacement of the drive may be necessary. Please see Answer ID 8: How can I replace a product under warranty? for help creating a Return Merchandise Authorization (RMA).

Drive is not recognized by Data Lifeguard Diagnostics for Windows:

If the drive is not recognized by Data Lifeguard Diagnostics, follow the instructions below to troubleshooting this issue:

- 1. Make sure that the drive is properly connected to the PC. If it is an internal drive make sure the SATA or PATA (EIDE) cable is securely attached to both the drive, and the controller card. If it is an external try replacing the USB, FireWire, or eSata cable and rebooting the system.
- 2. Make sure the drive is getting power. For internal drives, make sure that the power cable is properly connected to the drive, and that both a MOLEX (4-pin) and SATA-type power cables are not connected to your drive simultaneaously. For external Desktop drives, try plugging the power directly into a wall outlet (instead of a Universal Power Supply or power-strip). For portable external drives, try using a **Power Booster Cable** to supply extra power to the drive.
- 3. Right-click on the program and select Run as Administrator.
- 4. Try reinstalling the Data Lifeguard Diagnostics for Windows utility. It is possible that the installation has become corrupted.
- 5. If the drive is internal, make sure that the jumper settings are correct based on the diagram on the drives label.
- 6. Test the drive on another system. If the drive is not recognized on another system, something is likely wrong with either the power supply, data cable, or the drive.
- 7. If the drive is recognized on another system, it's likely a problem with the data port (or BUS), drivers, or a malware software concern on the affected system. It's best to consult a computer technician or vendor for further system testing.

How to Get an RMA to Replace a Defective Product, Obtain a Power Supply, or USB Cable for a WD Product

Answer ID 8

To create an RMA (Return Merchandise Authorization) please log into our <u>Support Portal</u>.

In order to get warranty support, the product **MUST** be in warranty. To check warranty status, please see <u>Warranty Status</u>. Please refer to Western Digital's <u>Warranty Policy</u> for detailed warranty information.

Two replacement options are available:

Standard Replacement

A replacement product will be shipped after the defective product has been received.

- Available to End Users and Resellers worldwide
- Maximum of 20 products per request

Advance Replacement

A replacement product will be shipped before receiving the defective product. In order to use this service, a valid credit card is required. The credit card is used to insure that WD receives the defective product within 30 days from the date the replacement product was shipped.



Critical: Under no circumstances should credit card information be included in an email. If

working with our Customer Support personnel to create an Advanced RMA through our email support, that person will get in touch with you over the phone in order to assist in the creation of the Advanced RMA. Never provide credit card information through email!

- Available to End Users and Resellers (in the U.S.A., Canada, and European Union)
- Maximum of 5 requests per day; 1 product per request
- Valid email address and credit card are required
- Credit card will be charged if the returned product is not received within 30 days from the date the replacement product is shipped

Obtaining a Power Supply or USB Cable for a WD Product

If the WD product is no longer in warranty, please visit the <u>WD Store Accessories</u> to purchase a replacement power adapter or USB cable



To determine the power adapter your WD product uses, please see <u>Answer ID 1378: What is the correct power supply to use with your Western Digital external hard drive?</u>

Note:

Compatibility list for the WD Red NAS Hard Drive

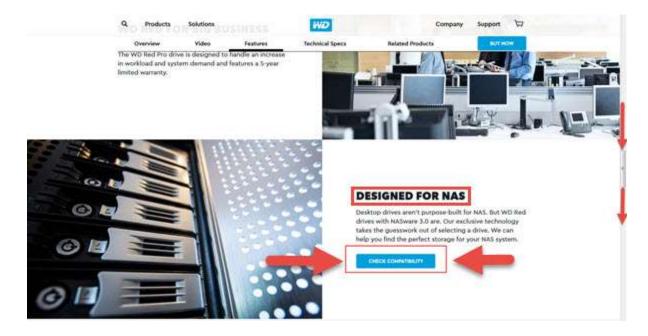
Answer ID 9758

The WD Red NAS hard drives have been extensively tested for compatibility in 1-8 bay NAS systems, and its NASware technology enables seamless integration, robust data protection and optimal performance for systems operating in NAS and RAID environments. They have been tested in our FIT labs and AVL qualified with these key partners:



Important: If the third party enclosure is not listed, please contact the third party enclosure to verify compatibility.

Please refer to the following link <u>Check Compatibility</u> and scroll down to **Designed for NAS** section, and select *Check Compatibility* to ensure the third party **NAS** enclosure is supported



Updating the WD RED WD50EFRX, WD60EFRX or the WD Green WD50EZRX & WD60EZRX drives in Linux

Answer ID 11764

Our Red drives, (Model Numbers: WD50EFRX, WD60EFRX) & our Green drives, (Model Numbers: WD50EZRX & WD60EZRX) have been found to have a configuration setting that if a Benchmark program like PCmark Vantage, IO Meter, or any Benchmark that does Reads \ Writes will show a Random Read Performance Drop. However, In the intended application (such as in multi-drive NAS systems) the drives have performed to our expectations in WD's labs and by our system partners.

Prior to updating the drive using the steps below, make sure you have already created your bootable Linux USB drive, following the steps found in:

Answer ID 11760: Creating a bootable Linux WD Ubuntu USB flash drive to update the WD RED WD50EFRX, WD60EFRX drive or the WD Green WD50EZRX & WD60EZRX drive

To update the WD RED WD50EFRX, WD60EFRX or the WD Green WD50EZRX & WD60EZRX drives in Linux, please follow the instructions below.



Note:

If the system is set for UEFI boot: The bootable Linux USB does not support UEFI boot. In the BIOS boot menu, select Legacy Boot for the USB device. If the system only supports UEFI boot, use a different system that supports Legacy boot.

- 1. Boot your system to USB flash that contains the iso image file you just created.
- 2. After Linux is loaded, the system will stop at a language selection screen for 5s. Wait for the 5s to pass. There is a countdown timer on the left side of the screen.

		Language		
15	Amharic Arabic Asturianu Beларуская Вългарски Bengali Bosanski Català Čeština Dansk Deutsch Dzongkha Eλληνικά English Esperanto Español Eesti	La Gaeilge Galego Gujarati ハウコル Hindi Hrvatski Magyar Bahasa Indonesia Íslenska Italiano 日本語 りんのりゃっ Kasak Khmer およづるは むくづけ Kurdi	Malayalam Marathi Nepali Nederlands Norsk bokmål Norsk nynorsk Punjabi (Gurmukhi) Polski Portuguës do Brasil Portuguës Romānă Pyccкий Sámegillii జాంతం Slovenčina Slovenščina	Thai Tagalog Türkçe Uyghur Українська Tiếng Việt 中文(简体) 中文(繁體)
	Euskara المهراف Suomi Français	Lao Lietuviškai Latviski Македонски	Cpncки Svenska Tamil తెలుగు	



- What happens if the user presses enter while waiting at the language selection screen?
- Note:
- What happens if the user selects a different language in the language selection screen?

3. The license agreement will be shown next.



4. Press "q" to stop reading the license agreement, then Enter.

3. RESTRICTIONS You acknowledge and agree that you will not: (a) reproduce fy, adapt, translate or create any derivative works of the chnology features or measures in the Software by any means neer, or otherwise attempt to derive the source code for the Read the License Agreement Press 'q' to stop reading.

5. Press "y" then Enter to accept the license agreement.

3. RESTRICTIONS You acknowledge and agree that you will not: (a) fy, adapt, translate or create any derivative wo chnology features or measures in the Software by neer, or otherwise attempt to derive the source Do you accept the Agreement? [y/n]: y_

6. The update utility will automatically start to run and update the drive.

WD6251 Version 1
Update Drive
Copyright (C) 2014 Western Digital Corporation

Model: WDC WD60EZRX-00MVLB0
Serial: WD- WD SERIAL NUMBER
Firmware: 80.00A80

Updating this drive.

- 7. After the update has completed, the new model string will be displayed. Verify that the last character in the model string has changed from a "0" to a "1".
 - o WDC WD60EFRX-68MYMN0 -> WDC WD60EFRX-68MYMN1
 - WDC WD60EZRX-00MVLB0 -> WDC WD60EZRX-00MVLB1

```
C:\>wd6251.exe
WD6251 Version 1
Update Drive
Copyright (C) 2014 Western Digital Corporation

Model: WD: WD60EZRX-00MVLB0
Serial: WD-WD SERIAL NOMBER
Firmware: 80.00A80

Previous model number

Updating this drive.

New Model: WD: WD60EZRX-00MVLB1
Drive has been successivity updated.

Model number after update

C:\>____
```

- 8. The tool will check each drive that is connected to the system and update the drive if it is applicable. So multiple drives, with different initial FW, can be connected to one system.
- 9. When the update has been completed on all drives and the updated model strings have been verified, press **Enter** to shutdown the system.

Model: WDC WD60EZRX-00MVLB0
Serial: WD- WD SERIAL NUMBER
Firmware: 80.00A80

Updating this drive.

New Model: WDC WD60EZRX-00MVLB1
Drive has been successfully updated.

Press Enter to shutdown..._

10. Your updates are now complete.

If the Linux Update tool does not update the drive:

Please contact Western Digital Support to get the Windows or DOS update tool & instructions.

FAQ

What happens if the user presses enter while waiting at the language selection screen



Note

: If the user presses **Enter** while waiting at the language selection screen, the following screen will be displayed:



At this screen, make sure **Perform WD Drive Update** is highlighted, then press **Enter** to continue loading Linux. If **Perform WD Drive Update** is not highlighted, press the up or down arrow until it is highlighted, then press **Enter**.

Return to Top

What happens if the user selects a different language in the language selection screen

If a different language is selected by the user at the language selection screen, the screen may display the function key definitions in the selected language, if the language is

supported. At this screen, make sure **Perform WD Drive Update** is highlighted, then press **Enter** to continue loading Linux. If **Perform WD Drive Update** is not highlighted, press the up or down arrow until it is highlighted, then press **Enter**, **refer back to Step 3**, and continue with update.



Creating a bootable Linux WD Ubuntu USB flash drive to update the WD RED WD50EFRX/WD60EFRX or WD Green WD50EZRX/WD60EZRX

Answer ID 11760

Our Red drives, (Model Numbers: WD50EFRX, WD60EFRX) & our Green drives, (Model Numbers: WD50EZRX & WD60EZRX) have been found to have a configuration setting that if a Benchmark program like PCmark Vantage, IO Meter, or any Benchmark that does Reads \ Writes will show a Random Read Performance Drop. However, In the intended application (such as in multi-drive NAS systems) the drives have performed to our expectations in WD's labs and by our system partners.



Required material before starting:

- Blank USB Flash Drive (minimum 1GB)
- WD Linux Support Tool image file: WDUbuntu_Support_UPD6251.iso
- Download the WD Linux Support Tool image file <u>here</u>

For illustration purposes, Western Digital has downloaded the latest version of Rufus, a third party utility that helps format and create bootable USB flash drives. Western Digital have found this to be a viable solution, but there are many methods out there and the user can use any installer they prefer.



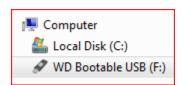
Western Digital provides limited support via these instructions for creating the bootable USB flash drive. Please contact thrid party software administrators for further assistance using

Note: their software.



Critical: The USB flash drive will be formatted and any previous data will be permanently erased from the USB flash drive.

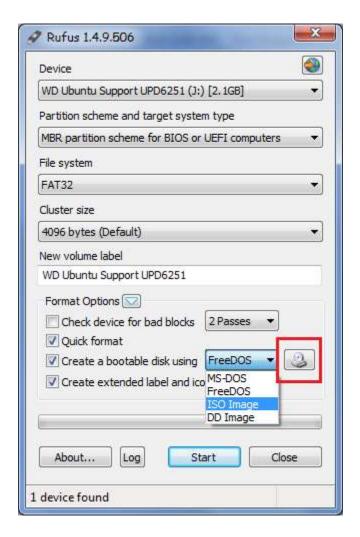
1. Plug the USB flash drive in the computer and wait for flash drive to be recognized by the system. Please note that the USB flash drive may show up as a different name and drive letter



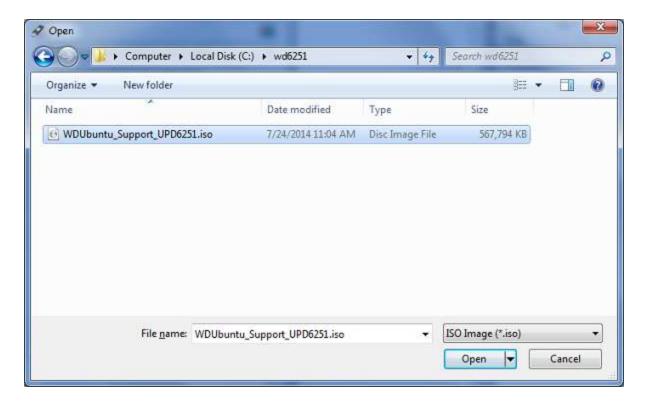
2. After downloading the third party software, double-click to run Rufus. It may ask for permission to run. If so, click RUN.



3. Make sure the correct USB flash drive is selected. The default options and "ISO Image" are used in the following image, which should be fine to create the bootable USB flash drive. Click on the button (circled in red) to select the .iso file.



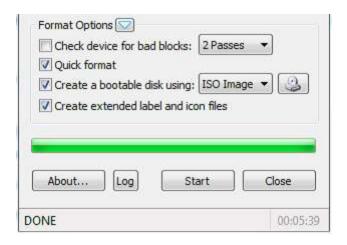
4. Select the file **WDUbuntu_Support_UPD6251.iso**.



5. Click **START**. A warning about data being deleted will be displayed. Click **OK** if the USB flash drive is safe to have all the data erased from it.



6. Rufus should take less than 30 seconds to complete. When Rufus is complete, click **Close**.



7. Safely eject the bootable USB flash drive by right-clicking on the drive and choosing Eject.



How to update the WD RED WD50EFRX, WD60EFRX or the WD Green WD50EZRX & WD60EZRX drives in Windows

Answer ID 11757

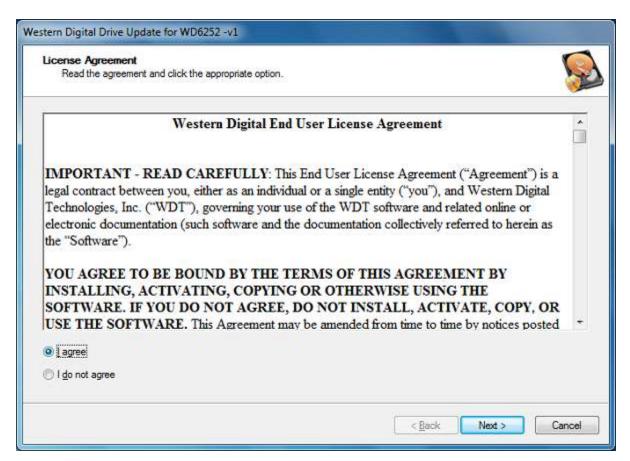
Our Red drives, (Model Numbers: WD50EFRX, WD60EFRX) & our Green drives, (Model Numbers: WD50EZRX & WD60EZRX) have been found to have a configuration setting that if a Benchmark program like PCmark Vantage, IO Meter, or any Benchmark that does Reads \ Writes will show a Random Read Performance Drop. However, In the intended application (such as in multi-drive NAS systems) the drives have performed to our expectations in WD's labs and by our system partners.

Download the wd6252.exe update file for Windows

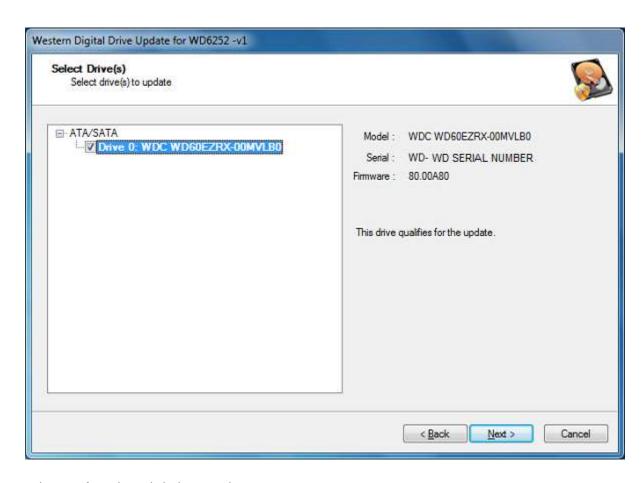
- 1. After the wd6252.exe file has been downloaded, copy the file to the desktop.
- 2. Close any open windows or applications and run the wd6252.exe file.



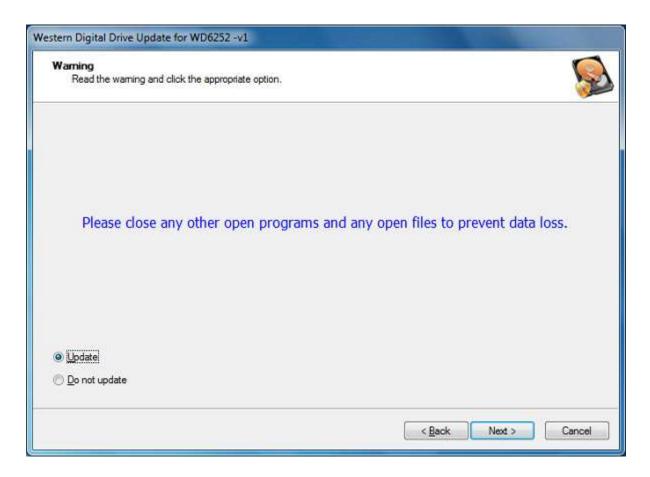
3. Select the I Agree option and click on the Next button.



4. Select the drive to update. If the drive qualifies for the update, click the **Next** button.



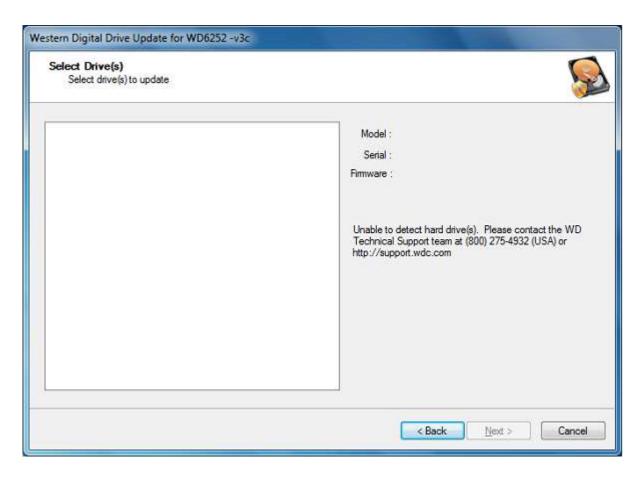
5. Select **Update** then click the **Next** button.





In the event that the **Windows tool** does not detect the drive, like shown in the diagram below:

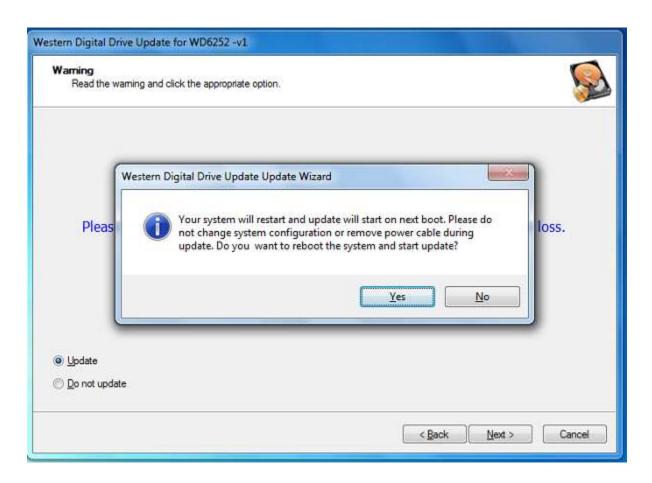
Note:



Please see: <u>Answer ID 11758</u>: <u>What should be done if the Windows Update tool does not detect the drive</u>

If the Windows tool does detect the drive, continue to Step 6.

6. Click Yes to continue.



7. The system will reboot. After the **Starting Windows** screen, the update will begin.

```
*** western Digital Corporation Firmware Update Application (2.1.0.0) ***

** SYSTEM MAY APPEAR UNRESPONSIVE **

** PLEASE DO NOT UNPLUG OR POWER OFF THE SYSTEM **

Preparing system, please wait

Updating drive WDC WD60EZRX-OOMVLBO (WD-WD SERIAL NUMBER), 1 of 1, This may take several minutes

Updating 77% done
```

8. Allow the update to complete. Upon completion of the update, the system will reboot into Windows.

```
*** Western Digital Corporation Firmware Update Application (2.1.0.0) ***

** SYSTEM MAY APPEAR UNRESPONSIVE **

** PLEASE DO NOT UNPLUG OR POWER OFF THE SYSTEM **

Preparing system, please wait

Updating drive wDC wD60EZRX-00MVLB0 (wD-wD serial number), 1 of 1, This may take several minutes

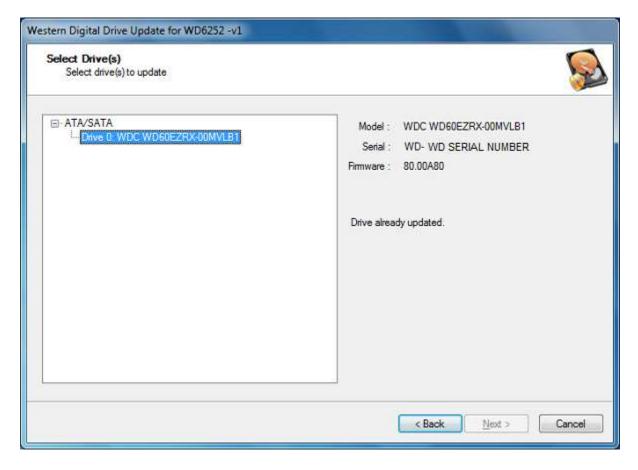
Updating 100% done

Drive updated successfully

UPDATE DONE

System will reboot in (3) second.
```

9. Note that the last character in the model will be changed from "0" to "1" and the system may pause in the BIOS since the drive is recognized as a different model. Press the appropriate key, if necessary, to continue to boot to Windows.





Important:

After the drive updates, the reboot countdown timer may hang and the system does not reboot. In order to resolve this issue, manually press the power button to shut down the system. Then, turn the computer back on. Verify that the drive is updated by verifying the CCC in the reported model.

- Verify that the CCC in the reported model has changed from "0" to "1".
 - WDC WD60EFRX-68MYMN0 changes to WDC WD60EFRX-68MYMN1
 - WDC WD60EZRX-00MVLB0 changes to WDC WD60EZRX-00MVLB1

How to update the WD Red WD50EFRX, WD60EFRX or the WD Green WD50EZRX & WD60EZRX drives via DOS

Answer ID 11756

Our Red drives, (Model Numbers: WD50EFRX, WD60EFRX) & our Green drives (Model Numbers: WD50EZRX & WD60EZRX) have been found to have a configuration setting that if a Benchmark program like PCmark Vantage, IO Meter, or any Benchmark that does Reads \ Writes will show a Random Read Performance Drop. However, in the intended application (such as in multi-drive NAS systems) the drives have performed to our expectations in WD's labs and by our system partners.



Important:

Required material before starting:

- Blank USB Flash Drive (minimum 1GB)
- wd6251.exe image file

Download the wd6251.exe image file for DOS <u>here</u>.

For illustration purposes, Western Digital is using Rufus, a third party utility that helps format and create bootable USB flash drives. We have found this to be a viable solution, but there are many methods out there and the user can use any installer they prefer.



Western Digital provides limited support via these instructions for creating the bootable USB flash drive. Please contact thrid party software administrators for further assistance using Note: their software.



Critical: The USB flash drive will be formatted and any previous data will be permanently erased from the USB flash drive.

Below you will find the steps on how to create a USB bootable drive that you can copy the DOS file to and update the specified drives above.

Creating the USB flash drive

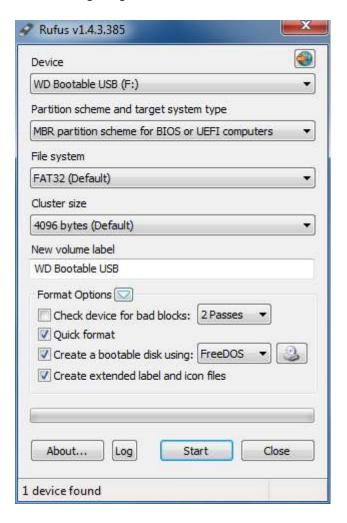
1. Plug the USB flash drive into the Computer and wait for the flash drive to be recognized by the system. Please note that the USB flash drive may show up as a different name and drive letter



2. After downloading the third party software Rufus, double-click to run. It may ask for permission to run. If so, click RUN.



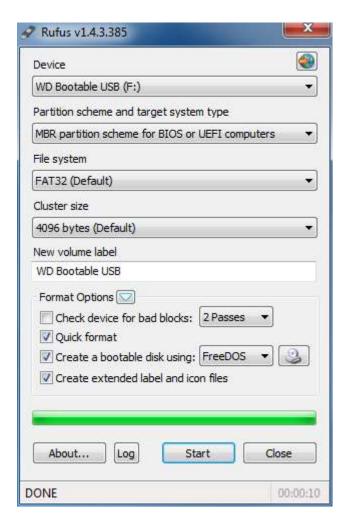
3. Make sure the correct USB flash drive is selected. The default options and FreeDOS are used in the following image, which should be fine to create the bootable USB flash drive.



4. Click **START**. A warning about data being deleted will be displayed. Click **OK** if the USB flash drive is safe to have all the data erased from it.



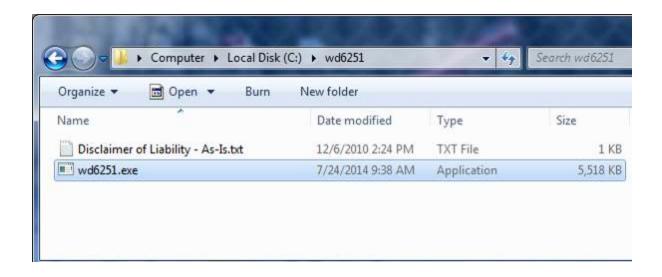
5. Rufus should take less than 30 seconds to complete. When Rufus is complete, click **Close**.



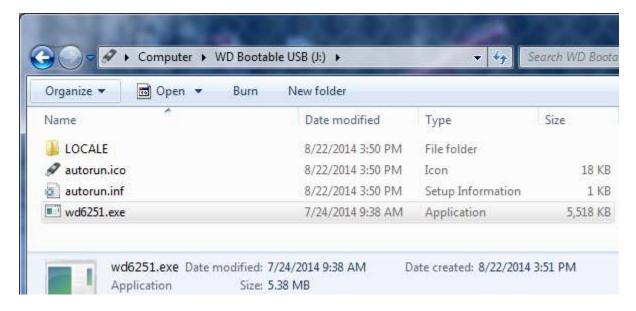
6. At this point the bootable USB flash drive should be ready, you may want to test it by rebooting directly to it to make sure you get a **Ready** prompt.

Updating WD Red & Green drive via DOS

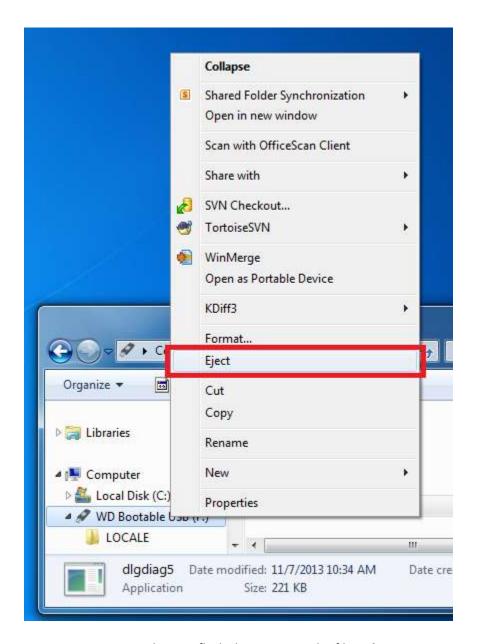
1. After downloading the firmware update from WD Support, extract or double-click to open the folder and copy **wd6251.exe** to the root level of the bootable USB flash drive. **Do not** put the file in a folder. The following image shows what you should see after downloading the file.



The following image shows what you should see after extracting the file onto the bootable USB flash drive.



2. Safely eject the bootable USB flash drive by right-clicking on the drive and choosing **Eject**.



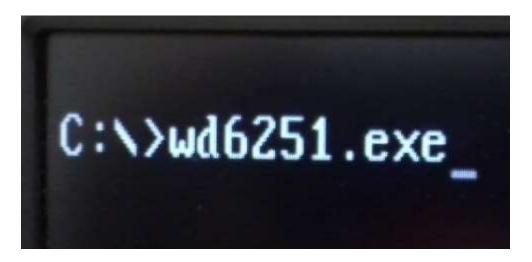
3. Boot your system to the USB flash that contains the file wd6251.exe.

You may need to change the boot order in your BIOS in order to boot from the USB flash drive.

Note:

4.

5. After DOS is loaded, at the command prompt, type in the following command: C:\> wd6251.exe



6. The update will start to execute.

```
C:\>wd6251.exe
WD6251 Version 1
Update Drive
Copyright (C) 2014 Western Digital Corporation

Model: WDC WD60EZRX-00MULB0
Serial: WD-WD SERIAL NUMBER
Firmware: 80.00A80

Updating this drive.
```

7. Upon successful completion of the update, the new model will be displayed.

```
C:\>wd6251.exe
WD6251 Version 1
Update Drive
Copyright (C) 2014 Western Digital Corporation

Model: WDC WD60EZRX-00MVLB0
Serial: WD-WD SERIAL NUMBER
Firmware: 80.00A80

Previous model number

Updating this drive.

New Model: WDC WD60EZRX-00MVLB1
Drive has been successivily updated.

Model number after update

C:\>_____
```

8. Turn off the computer. Your drive has now been successfully updated.



Important: After the drive updates, the reboot countdown timer may hang and the system does not reboot. In order to resolve this issue, manually press the power button to shut down the system. Then, turn the computer back on. Verify that the drive is updated by verifying the CCC in the reported model.

- Verify that the CCC in the reported model has changed from "0" to "1".
 - WDC WD60EFRX-68MYMN0 changes to WDC WD60EFRX-68MYMN1
 - WDC WD60EZRX-00MVLB0 changes to WDC WD60EZRX-00MVLB1

How to change the format type (file system) of a hard drive or Solid State drive in Windows

Answer ID 1021

There are two options to change a hard drive from *FAT32* to *NTFS*. You can use the Convert.exe command from a command prompt in the Windows *Operating System (OS)* or you can delete the existing FAT32 partition or volume and create a new NTFS partition in Disk Management.



Note:

Western Digital recommends deleting the existing FAT32 partition and creating a new NTFS partition. Using the Convert.exe command may cause data corruption or loss.

Select an operating system from the table below for specific instructions:

Operating System	Instructions
Windows 10	Click here for Instructions (instructions will appear below this table)
Windows 8	Click here for Instructions (instructions will appear below this table)
Windows XP, Windows Vista, or Windows 7	Click here for Instructions (instructions will appear below this table)

Please select an *Operating System (OS)* from the table above to display instructions for your specific OS.



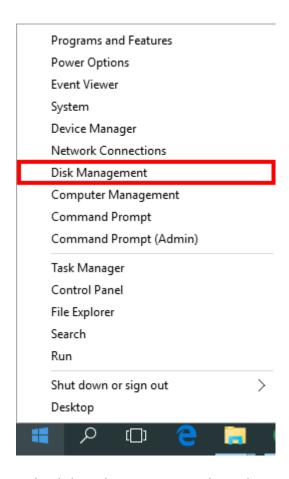
Critical: The instructions in the article below are designed to help you delete and format your external hard drive. This process is Data Destructive and cannot be undone. Once the process begins, <u>ALL THE DATA ON THE DRIVE WILL BE LOST!</u>

Access Disk Management and delete the existing partition or volume:

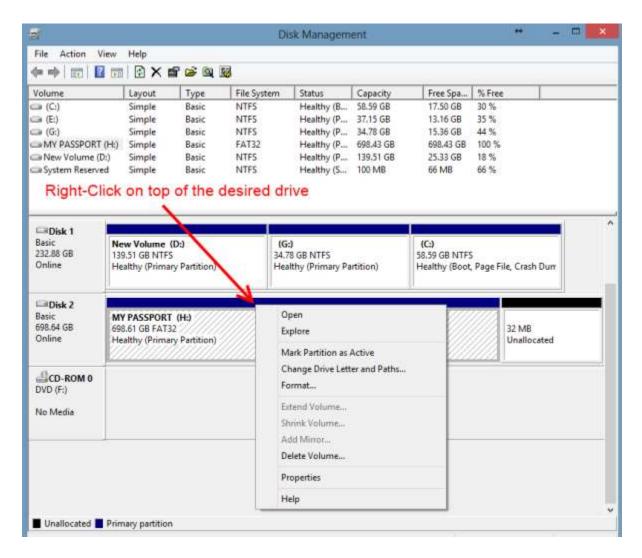
1. Move the mouse to the lower-left corner of the screen, and when the **Start Screen** appears, right-click on it.



2. Click on *Disk Management*.



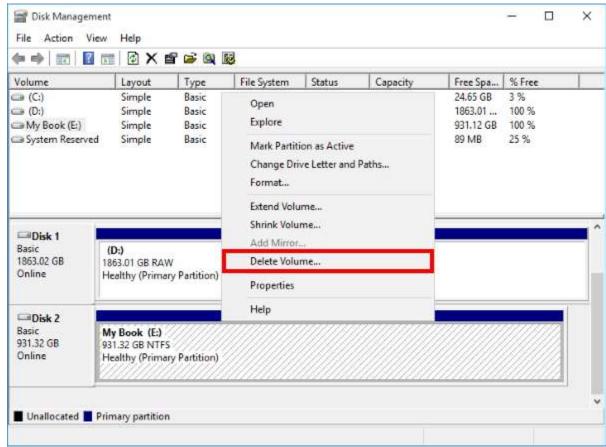
3. Right-click on the partition or volume that is to be reformatted.



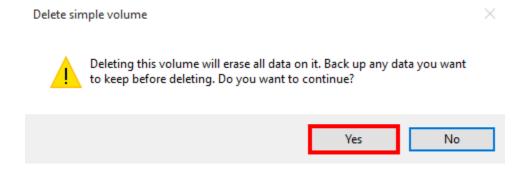
4. Click on **Delete Partition** or **Delete Volume**.



Critical: This process is Data Destructive and cannot be undone. Once the partition or volume is deleted, ALL THE DATA ON THE PARTITION OR VOLUME WILL BE LOST!

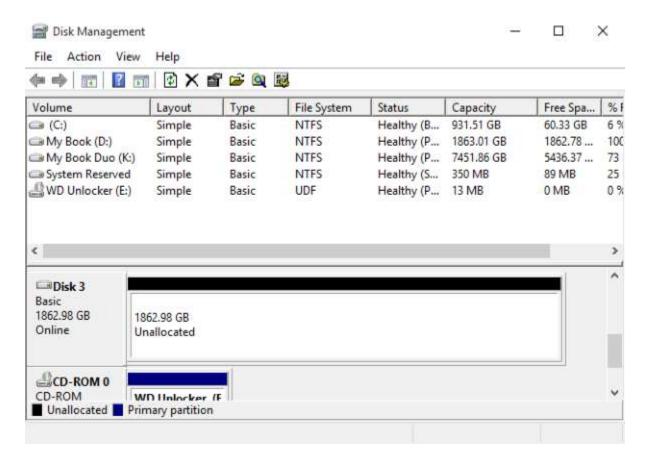


6. Click **Yes** when prompted to finish deleting the partition or volume and data on it.

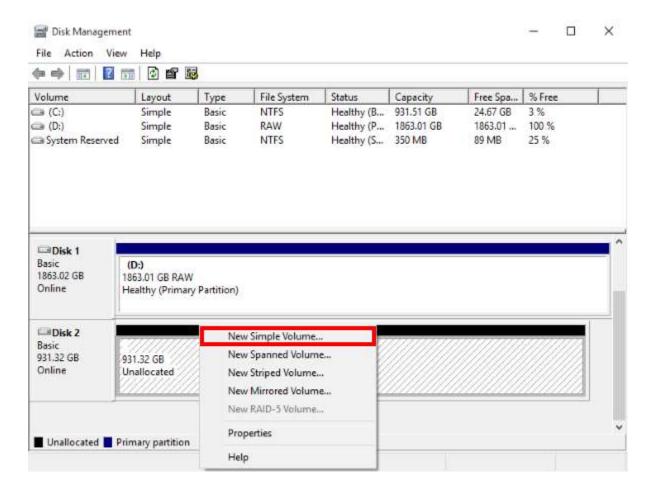


Creating and formatting a new partition or volume:

1. In the lower window pane on the right hand side, the unallocated space for the drive will be displayed. Right-click anywhere on the unallocated space to see a menu of available options.



2. Click on New Partition or New Volume.

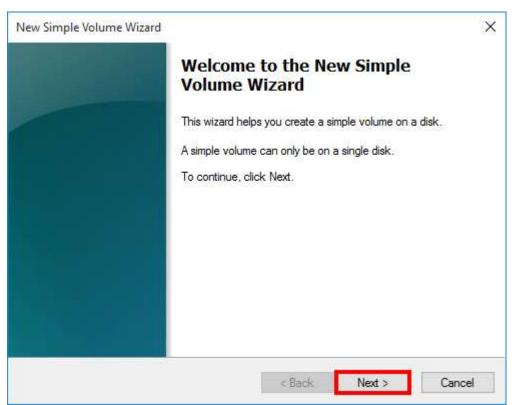


3. The New Partition or New Volume Wizard will appear. Click on Next.

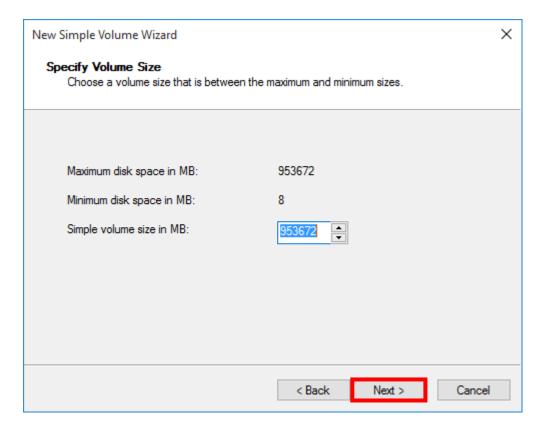
Note:

If asked which type of partition to create, select *Primary Partition* and click on *Next*.

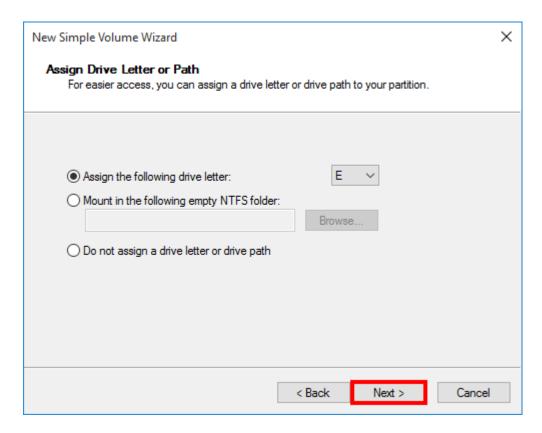
4.



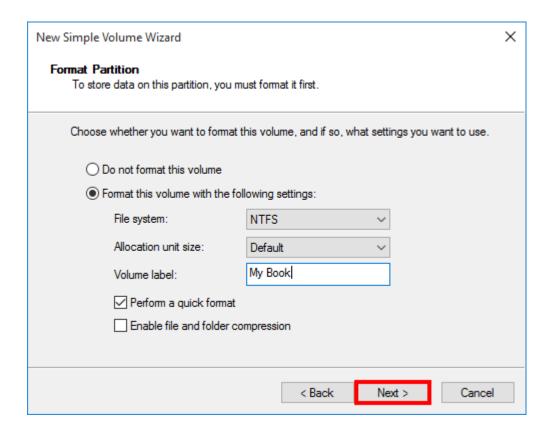
6. Choose the partition size and click on **Next**.



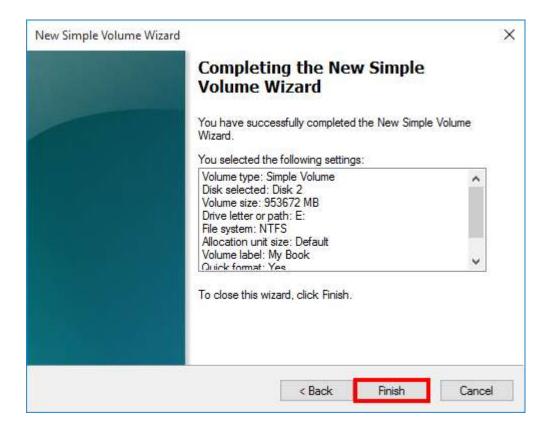
7. Leave Assign the following drive letter. selected and click Next.



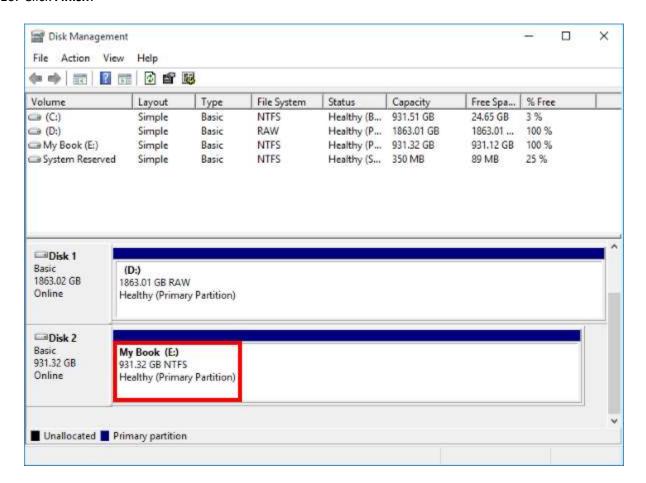
8. Leave *Format this partition with the following settings:* selected and choose the desired file system (FAT32 or NTFS). If the partition size is over 32GB, NTFS must be selected as the file system.



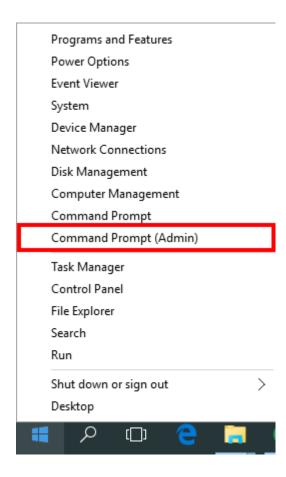
9. The Volume Label may be changed here. When ready, select **Perform a quick format** and click **Next**.



10. Click Finish.



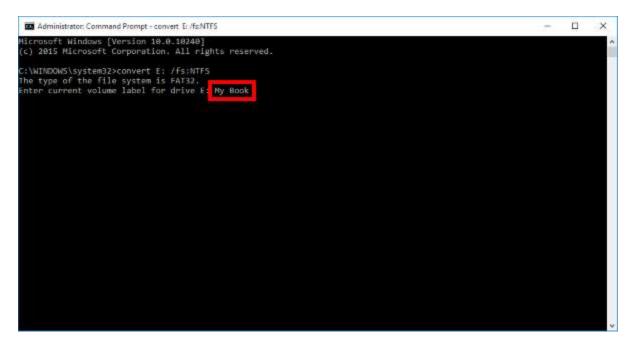
11. Under the drive it will indicate that the drive is formatting and will show a procedure's percentage until completed. Depending on the size of the hard drive and the speed of the computer, it could take more than an hour to format the whole drive. Once completed, the drive will display as a Healthy, Primary Partition and will have a drive letter assigned to it.



Converting to NTFS using Convert.exe:

- 1. Close all programs running on the drive that will be converted.
- 2. On the *Start Menu*, type *Cmd*. Command Prompt will be displayed under the Apps section of the search.

3. Right-click on top of the Command Prompt and on the options displayed on the bottom, select *Run as administrator*. If a User Account Control notification appears, click *Yes*.



4. On the Command Prompt, type *convert X: /fs:ntfs*, where **X** is the drive letter of the drive to be converted, and then press *Enter*.



Before running the Convert command, verify which drive letter is selected on the desired drive. This will ensure that the drive to be converted is the desired drive.

5.

6. When prompted, type the name of the volume to convert and then press *Enter*.

```
### Administrator Command Prompt

### Microsoft Nindows (Version 18.8.18248)

(c) 2815 Microsoft Corporation. All rights reserved.

C:\MINDOWS\system32>convert E: /fs:NTF5
The type of the file system is FAT32.

Finter current volume label for drive E: My Book

Volume MY BOOK created 18/27/2815 7:29 PM

Volume Serial Number is IAFC-2323

Windows is verifying files and folders...

File and folder verification is complete.

Mindows has scanned the file system and found no problems.

No further action is required.

976,321,728 KB total disk space.

32 KB in 1 hidden files.

32 KB in 1 files.

976,321,632 KB are available.

32,768 bytes in each sliccation unit.

38,518,854 total allocation units on disk.

38,518,854 total allocation units available on disk.

Determining disk space required for file system conversion...

Total disk space:

9765256128 KB

Free space on volume:

976321632 KB

Space required for conversion:

1288788 KB

Conversion complete

C:\MINDOWS\system32>
```



Important: During the process of converting the hard drive from FAT32 to NTFS, you will be asked for the **Volume Label** of the hard drive that is going to be converted. The Volume Label of the hard drive is the name of the drive displayed in My Computer or Windows Explorer. This information must be entered exactly as it is displayed in My Computer or Windows Explorer for the conversion to complete successfully.

- 7. If the drive contains system or Windows files, please reboot the system.
- 8. The drive will now be converted from FAT32 to NTFS.