

# Fix Mac hard drive with Disk Utility's First Aid feature

Disk Utility's First Aid feature can verify the status of the hard drive and, if necessary, perform a repair of the hard drive's data structure to prevent minor problems from becoming a big problem.

Disk Utility's First Aid feature can verify the status of the hard drive and, if necessary, perform a repair of the hard drive's data structure to prevent minor problems from becoming a big problem.

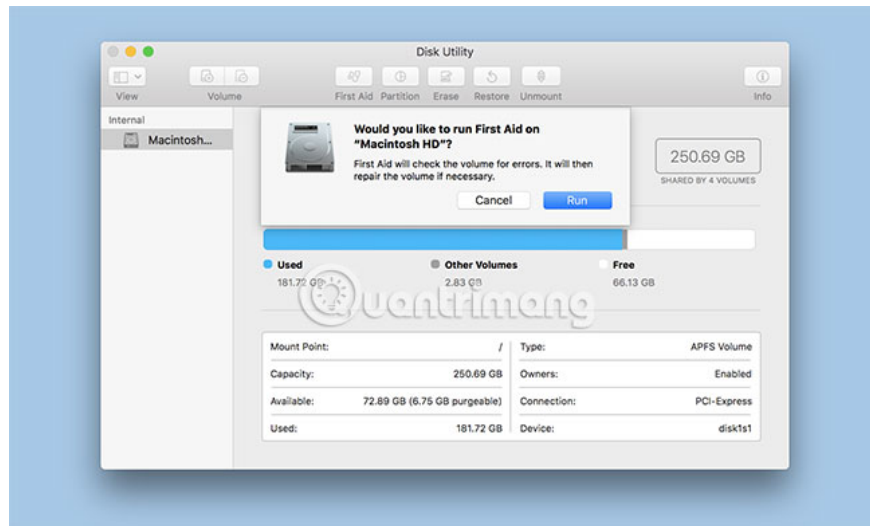
With the advent of OS X El Capitan, Apple made a few changes to how the First Aid feature works in Disk Utility. The main change is that First Aid no longer has the ability to verify the drive independently of repair. Now when you run First Aid, Disk Utility will verify the selected drive and if it finds an error, automatically try to fix the problem. Before El Capitan, you can only run the verification process yourself and then decide if you want to try it.

## First Aid and boot drive

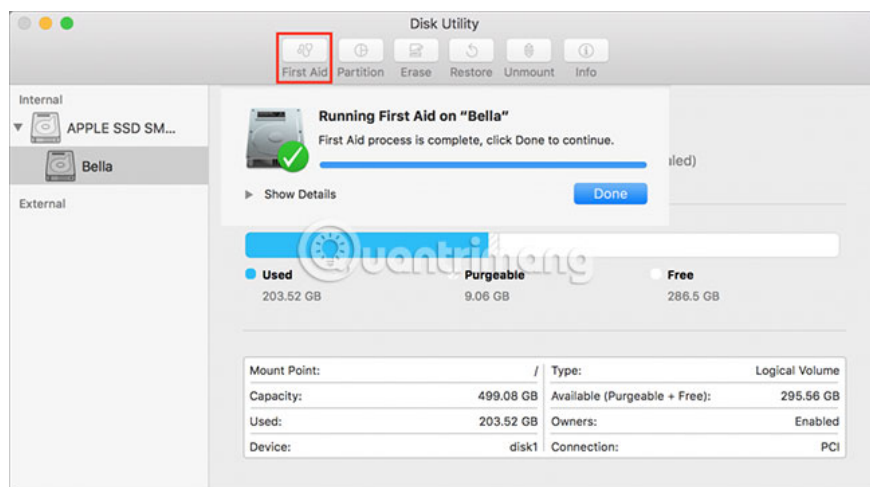
You can use Disk Utility's First Aid on the Mac boot drive. However, for First Aid to make any repairs, the selected volume must first be unmounted. Mac boot drives cannot be unmounted while they are in use, which means you will have to boot your Mac from another bootable device. This may be any drive that has installed a copy of OS X capable of booting. Or else, you can use the HD Recovery volume that OS X has created when it is installed on a Mac.

The article will provide you with instructions for using Disk Utility's First Aid on volumes that do not have a startup function and then use First Aid when you need to repair the Mac boot volume. The two methods are similar. The main difference is the need to boot from another volume instead of the normal boot volume. In this example, we will use the Recovery HD drive that was created when you installed OS X.

## First Aid with volume without start function



1. Launch Disk Utility, located at / **Applications** / **Utilities** /.
2. Because sometimes you may use Disk Utility, it's best to add it to the Dock for easier access in the future.
3. Disk Utility window appears as 3 frames. At the top of the window is a bar containing commonly used functions, including First Aid. On the left is a sidebar that displays all volumes that are mounted on the Mac and on the right is the main control panel, showing information from the currently selected activity or device.
4. Use the sidebar to select the volume you want to run First Aid. Volume is items immediately below the device's main name. For example, you might have a **Western Digital** hard drive listed, with two volumes below it called **Macintosh HD** and **Music**.
5. The right pane will display information about the selected volume, including the size and capacity used.
6. With the volume you want to verify and fix selected, click the **First Aid** button at the top.
7. A drop-down table will appear, asking if you want to run First Aid on the selected volume. Click **Run** to start the verification and repair process.
8. The dropdown table will be replaced with another table showing the status of the verification and repair process. You will see a small triangle at the bottom left of the table. Click this triangle to display details.



9. The details section will reveal the steps taken by the verification and repair process. The actual messages displayed will vary depending on the type of volume tested or repaired. Standard hard drives can display catalog file information, catalog and multi-file hierarchy, while Fusion drives will have additional items checked, such as segment titles and checkpoint ( the process of stopping the system at a certain time to determine the environmental state).

10. If no errors are found, you will see a green check mark appear at the top of the drop-down table.

If an error is found, the repair process will begin.

## Fix the hard drive

Some notes about what you can expect when using First Aid to repair hard drives:

If First Aid reports that the drive seems to be fine, or the drive has been repaired, everything is done. In some previous versions of First Aid, it is necessary to run the repair process several times to ensure the repair is complete; but now that is no longer necessary.

If First Aid displays an '**Overlapped extent allocation**' error, Disk Utility will create the **DamagedFiles** directory at the root level of the boot drive. This error indicates that the two files (or perhaps more) occupy the same location on the drive being repaired. Most likely both files are corrupted, but there is a small chance you can restore one or both of these files.

You can check files in **DamagedFiles** folder . If you don't need this file, or you can easily re-create it, just delete the file and you're done. If this file is very important, check the backup copy to find a usable copy.

If First Aid reports '**The underlying task reported failure**' , this indicates that First Aid has failed to fix. However, don't give up. Try rerunning the repair process a few times.

If the repair fails and you have a backup copy of all the data stored on the affected drive, then you should reformat the drive and perform a clean install of OS X. Then, you can restore your backup data with Migration Assistant.

## First Aid on boot drive

Disk Utility's First Aid has a special **Live Mode** , which can be used when you run on the boot drive. However, you are limited to only able to perform drive verification while the operating system is running from the same drive. If an error is found, First Aid will display, but do not attempt to repair the drive.

There are several ways to troubleshoot, so you can check and repair your Mac's normal boot drive. Methods include booting from volume OS X Recovery HD or other drives containing OS X.

( **Please note** : If you are checking the Fusion drive, you must boot with OS X 10.8.5 or higher. You should use the same OS X version installed on your current boot drive).

## Boot from Recovery HD

You will find full step-by-step instructions on how to boot from HD Recovery volume and boot Disk Utility in the tutorial: Use Volume HD Recovery to reinstall OS X or troubleshoot Macs.

Once you have successfully restarted from HD Recovery and launched Disk Utility, you can use the above method to use First Aid on a drive without a boot function to verify and repair the drive.

Hope you are succesful.

You finished reading the article "**Fix Mac hard drive with Disk Utility's First Aid feature**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.