

HFS formatted external drive not mounting

CADTech Student Employee - 2022-04-14 - Troubleshooting Guides

If you have a hard drive that is showing up in Disk Utility but will not mount try the following steps.

Disk Utility

1. In Disk Utility, select the volume on the left hand side and click on "First Aid"
2. If the result of running First Aid states drive needs to be repaired, click "Repair"
3. If the result of the Repair is successful, drive should now mount. If the result fails, proceed based on the error code mentioned

Terminal

Try these steps if you have a drive who's partition is good (passes) but who has a volume that will not mount. Also, when running the "Repair" option in Disk Utility it returns a error code 8.

FYI: Do these steps at your own risk. Data could be corrupted.

1. While in terminal, run the following command to get the list of devices

Drive listing macOS

BASH

1. diskutil list

1. Now, identify the actual disk identifier for the volume that is not mounting. Normally be something like `/dev/diskXsX`, where the "X" is replaced by a #. Ex: `/dev/disk6s1`
2. Once you have the device path, try the following to force `fsck_hfs` to rebuild the catalog b-tree of the volume

MacOS Rebuild b-tree

BASH

1. sudo fsck_hfs -r -d /dev/diskXsX

- Options Info used in this command:
 - a. -r option rebuilds the catalog B-Tree on the drive

b. -d option shows extra debugging information

1. Once this command finishes, you should now be able to run the First Aid from disk utility and then have the Repair function complete
2. If the volume still does not mount, use Disk Warrior to repair the volume. You also can use the "Preview" function of DW to copy your files off