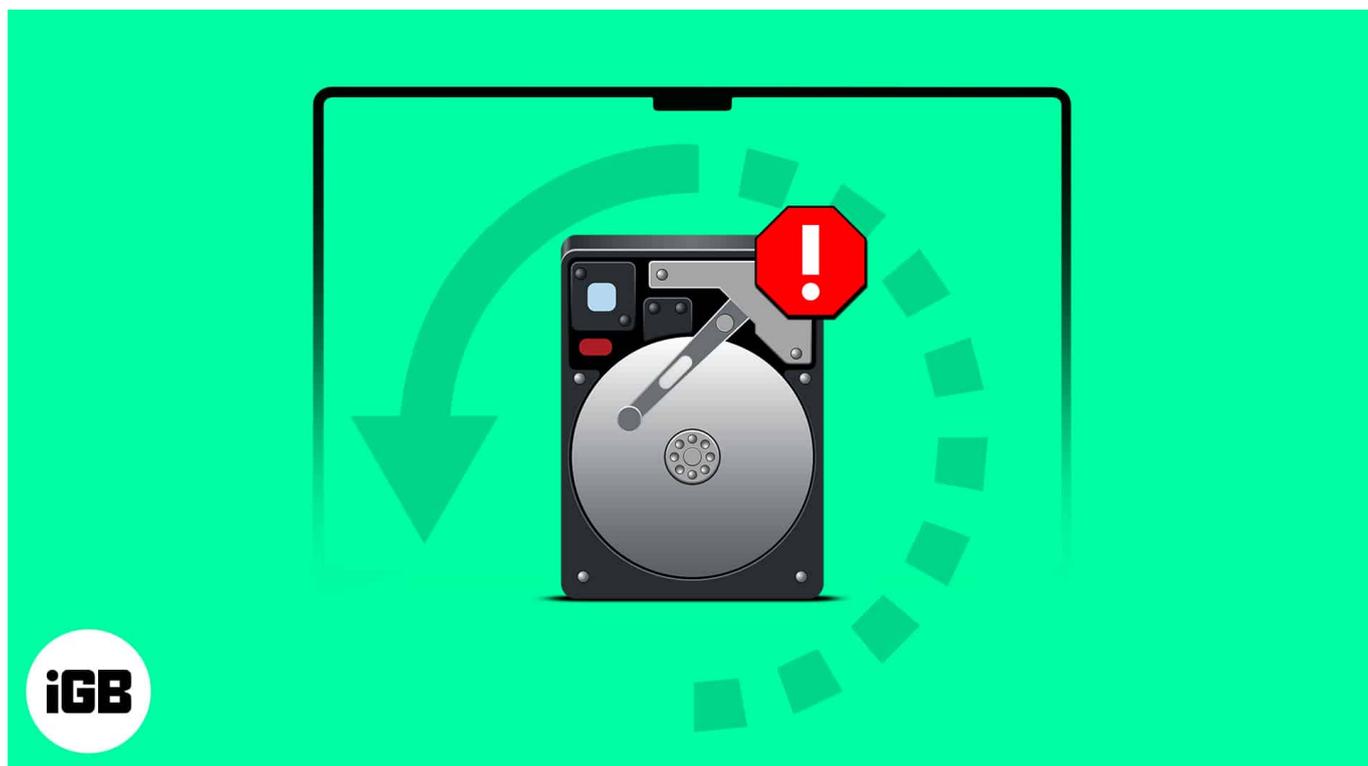


Are you unable to access your files or data on your Mac? Maybe your Mac's hard drive has been crashed or damaged. However, you can recover your vital files with the right tools and techniques.



Let me share how to recover data from a corrupted or damaged hard drive on your Mac, regardless of its type. Without any further ado, let's get straight into it.

How to check if your hard drive is corrupted?

If you suspect your Mac's hard drive is corrupt, there are a few crucial factors you should check to confirm and troubleshoot the issue.

- Corrupted hard drives make it difficult or impossible to access the stored information.
- The data seems to load in a loop during boot-up and when opening files and applications.
- The computer may also freeze or crash often, resulting in frequent restarts.
- Moreover, if files suddenly disappear or are inaccessible, this could indicate a corrupt hard drive.
- When the internal hard drive is corrupt or damaged, your Mac may be unable to boot.

- There may also be slow system performance, lags, or error messages.

How to fix corrupted hard drive and recover data on Mac

A corrupted hard drive on a Mac can be frustrating. However, with the proper techniques, data recovery is often possible. Follow the below-discussed resolves to ensure a smooth Mac hard drive recovery.

Prerequisites to recover data from a corrupted or damaged hard drive on Mac:

- Cease the usage of your hard drive if you're wary of its condition
- Back up your data as a top priority
- Charge up your device before initiating data recovery

1. Check for backups

When your Mac's drive gets corrupted, the first step you should take is to check for any saved backup. If you take regular data backups, you can rest assured that your files are safe.

If you haven't been backing up your data, it's essential to start right away. There is a high probability that trying to recover lost files on your Mac could potentially affect your current files.

This step ensures that your current files are safe and sound, no matter what the outcome of the data recovery process is. Now, let's repair the corrupted hard drive on your Mac before more files get damaged.

2. Scan your Hard Disk

If you're speculating about a drive failure on your Mac, verify this before performing highly advanced recovery methods.

1. Launch **Terminal** on your Mac.
2. Type the prompt **diskutil list** and press **Return**.

```
igb — -zsh — 80x24
Last login: Tue Aug 16 07:20:24 on console
igb@iGBs-MacBook-Air ~ % diskutil list
/dev/disk0 (internal, physical):
#  TYPE NAME              SIZE      IDENTIFIER
0:  GUID_partition_scheme  +121.3 GB disk0
1:  EFI EFI                 209.7 MB  disk0s1
2:  Apple_APFS Container disk1 121.1 GB  disk0s2

/dev/disk1 (synthesized):
#  TYPE NAME              SIZE      IDENTIFIER
0:  APFS Container Scheme -  +121.1 GB  disk1
   Physical Store disk0s2
1:  APFS Volume Macintosh HD 15.4 GB   disk1s1
2:  APFS Snapshot com.apple.os.update-... 15.4 GB   disk1s1s1
3:  APFS Volume Preboot      270.4 MB  disk1s2
4:  APFS Volume Recovery     1.1 GB    disk1s3
5:  APFS Volume VM           2.1 GB    disk1s4
6:  APFS Volume Macintosh HD - Data 3.0 GB    disk1s5

igb@iGBs-MacBook-Air ~ % diskutil verifyVolume /dev/disk1s1
Started file system verification on disk1s1 (Macintosh HD)
Verifying file system
Volume is already unmounted
Live mode required because other APFS Volumes in its Container are mounted
```

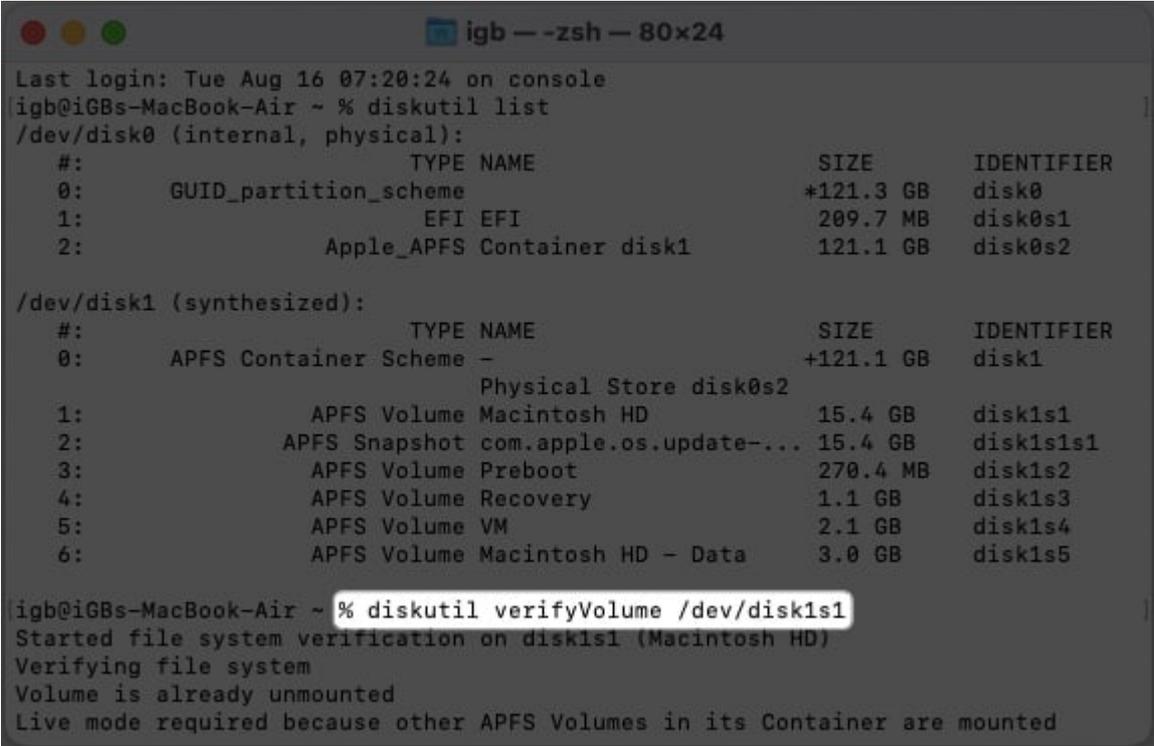
3. You will see a list of all active drives on your Mac.
4. Note the **IDENTIFIER** next to the disk drive you seek to rectify.

```
igb — -zsh — 80x24
Last login: Tue Aug 16 07:20:24 on console
igb@iGBs-MacBook-Air ~ % diskutil list
/dev/disk0 (internal, physical):
#  TYPE NAME              SIZE      IDENTIFIER
0:  GUID_partition_scheme  +121.3 GB disk0
1:  EFI EFI                 209.7 MB  disk0s1
2:  Apple_APFS Container disk1 121.1 GB  disk0s2

/dev/disk1 (synthesized):
#  TYPE NAME              SIZE      IDENTIFIER
0:  APFS Container Scheme -  +121.1 GB  disk1
   Physical Store disk0s2
1:  APFS Volume Macintosh HD 15.4 GB   disk1s1
2:  APFS Snapshot com.apple.os.update-... 15.4 GB   disk1s1s1
3:  APFS Volume Preboot      270.4 MB  disk1s2
4:  APFS Volume Recovery     1.1 GB    disk1s3
5:  APFS Volume VM           2.1 GB    disk1s4
6:  APFS Volume Macintosh HD - Data 3.0 GB    disk1s5

igb@iGBs-MacBook-Air ~ % diskutil verifyVolume /dev/disk1s1
Started file system verification on disk1s1 (Macintosh HD)
Verifying file system
Volume is already unmounted
Live mode required because other APFS Volumes in its Container are mounted
```

5. Now, paste the prompt **diskutil verifyVolume /dev/drive identifier**.

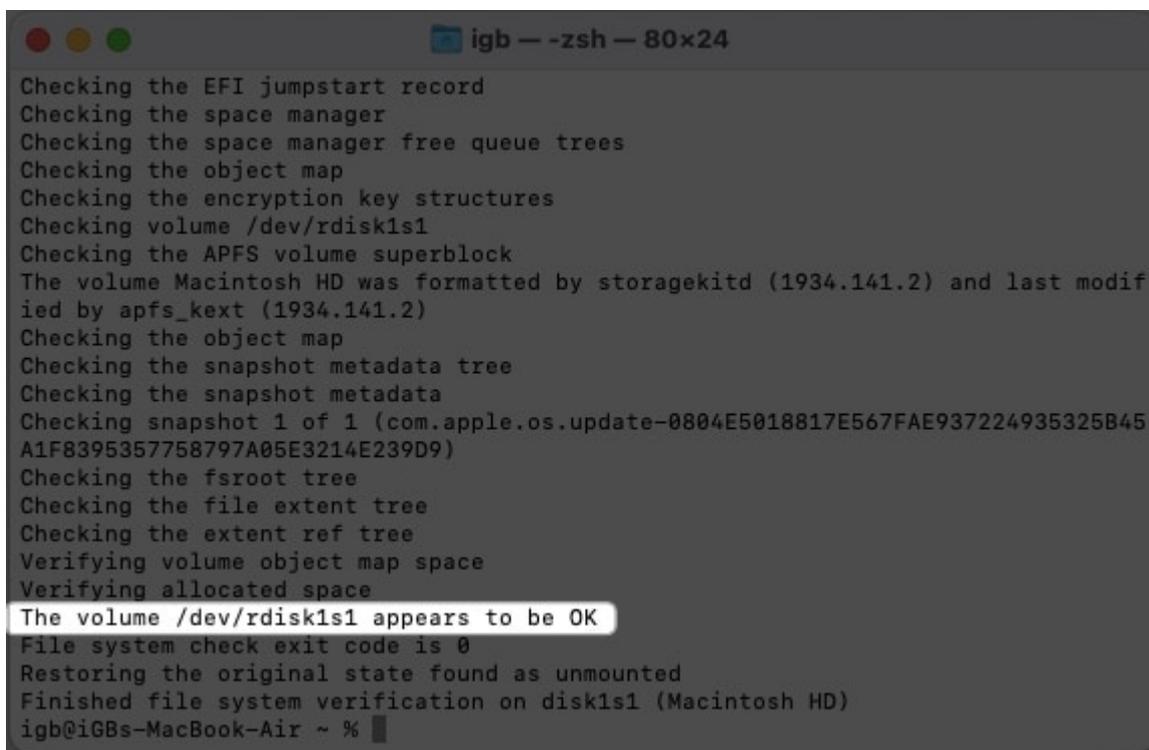


```
igb — -zsh — 80x24
Last login: Tue Aug 16 07:20:24 on console
igb@iGBs-MacBook-Air ~ % diskutil list
/dev/disk0 (internal, physical):
#:          TYPE NAME                SIZE          IDENTIFIER
0:          GUID_partition_scheme      +121.3 GB     disk0
1:          EFI EFI                    209.7 MB     disk0s1
2:          Apple_APFS Container disk1  121.1 GB     disk0s2

/dev/disk1 (synthesized):
#:          TYPE NAME                SIZE          IDENTIFIER
0:          APFS Container Scheme -     +121.1 GB     disk1
   Physical Store disk0s2
1:          APFS Volume Macintosh HD    15.4 GB     disk1s1
2:          APFS Snapshot com.apple.os.update-... 15.4 GB     disk1s1s1
3:          APFS Volume Preboot         270.4 MB     disk1s2
4:          APFS Volume Recovery        1.1 GB     disk1s3
5:          APFS Volume VM              2.1 GB     disk1s4
6:          APFS Volume Macintosh HD - Data 3.0 GB     disk1s5

igb@iGBs-MacBook-Air ~ % diskutil verifyVolume /dev/disk1s1
Started file system verification on disk1s1 (Macintosh HD)
Verifying file system
Volume is already unmounted
Live mode required because other APFS Volumes in its Container are mounted
```

6. Alternatively, to check your main hard drive, use the prompt “**diskutil verifyVolume /**”.
7. Press **Return** to run the command.
8. Once the command is done running, read the **last lines** in the terminal.
9. It will contain a message regarding the **status** of the hard drive.
In this case, it reflects the drive appears to be OK.



```
igb — -zsh — 80x24
Checking the EFI jumpstart record
Checking the space manager
Checking the space manager free queue trees
Checking the object map
Checking the encryption key structures
Checking volume /dev/rdisk1s1
Checking the APFS volume superblock
The volume Macintosh HD was formatted by storagekitd (1934.141.2) and last modified by apfs_kext (1934.141.2)
Checking the object map
Checking the snapshot metadata tree
Checking the snapshot metadata
Checking snapshot 1 of 1 (com.apple.os.update-0804E5018817E567FAE937224935325B45A1F8395357758797A05E3214E239D9)
Checking the fsroot tree
Checking the file extent tree
Checking the extent ref tree
Verifying volume object map space
Verifying allocated space
The volume /dev/rdisk1s1 appears to be OK
File system check exit code is 0
Restoring the original state found as unmounted
Finished file system verification on disk1s1 (Macintosh HD)
igb@iGBs-MacBook-Air ~ %
```

10. However, if you locate a message highlighting, “**The volume is corrupt and needs repairing,**” it’s time to fix the corrupted hard drive on your Mac and recover the essential data.

Alternatively, you can use Disk Utility to scan your hard drive disk and look for errors.

1. Launch **Disk Utility** from Launchpad or Spotlight.
2. Click **First Aid** → Select **Run** on the prompt.
3. Hit **Continue** to run the tool.
4. Now, wait until the scan is completed.
5. You will be alerted of any errors in the hard drive volumes.

3. Run Disk Utility on Mac

Proven to be the most straightforward method, Disk Utility can repair all damaged drives quickly. Take a good look at the process outlined below:

1. Open **Terminal** → Paste the command **diskutil list**.
2. Press **Return** and note the IDENTIFIER for the corrupted drive.
3. Now, use **diskutil repairVolume /dev/drive identifier** prompt to start the disk repair.

4. Wait until it applies the necessary changes and successfully repairs your hard drive.

However, this method may not work effectively if AFPS Volumes and Containers are mounted on your hard drive. In this situation, it is advisable to jump to the following method.

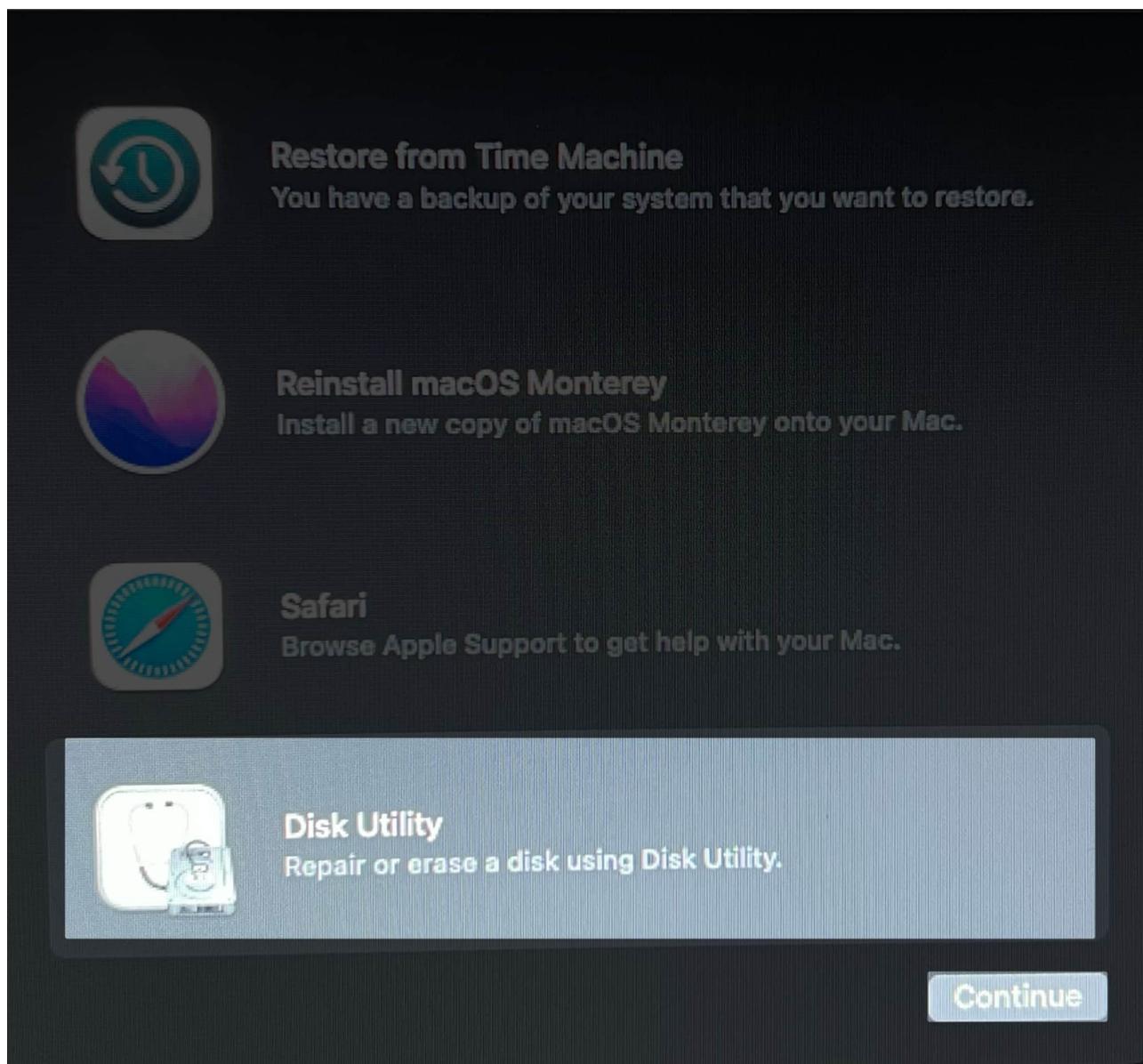
4. Access Recovery Mode on Mac

If you've gotten this far, it's time to ramp up the level of complexity to get the desired result. Accessing Recovery Mode on Mac can differ based on the chipset on your device. Therefore,

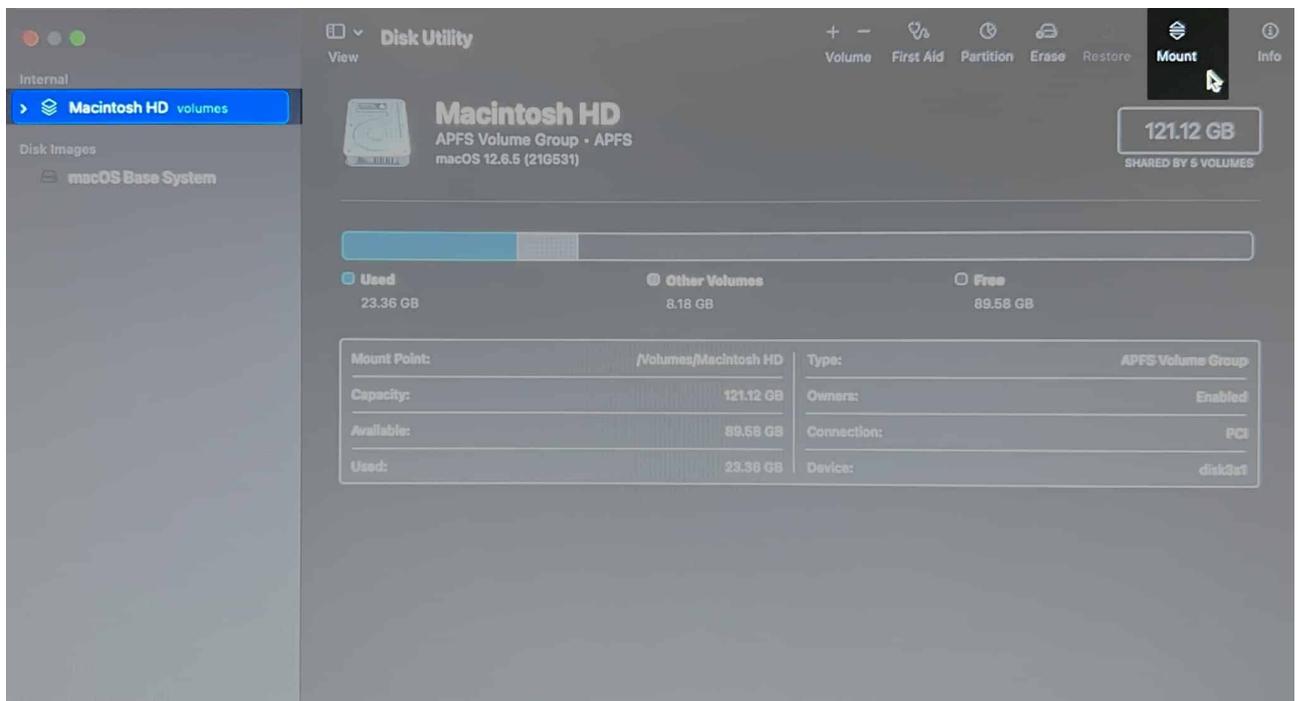
- If you're using an Intel-based Mac, press and hold **CMD + R** during the system restart.
- On the other hand, for an M1 chip Mac, press and hold the **power button**.

Leave the keys once the **Loading startup options** message appears on the screen. Now, follow the steps outlined below:

1. Select **Disk Utility** from the menu and click **Continue**.



2. Choose a **drive** of your preference → Hit **Mount**.



3. Press the **CMD + Q** keys together to quit the Disk Utility menu.
4. Now, go to **Utilities** from the menu bar and access **Terminal**.



5. Use the prompt **diskutil list** and press **Return** to summon active drives on your Mac.
6. Save the **drive name** you wish to repair.

```
Terminal — -bash — 80x24
-bash-3.2# diskutil list
/dev/disk0 (internal, physical):
#:          TYPE NAME                SIZE          IDENTIFIER
0:          GUID_partition_scheme    +121.3 GB     disk0
1:          EFI EFI                  209.7 MB      disk0s1
2:          Apple_APFS Container disk3 121.1 GB      disk0s2

/dev/disk1 (disk image):
#:          TYPE NAME                SIZE          IDENTIFIER
0:          GUID_partition_scheme    +1.1 GB       disk1
1:          Apple_APFS Container disk2 1.1 GB        disk1s1

/dev/disk2 (synthesized):
#:          TYPE NAME                SIZE          IDENTIFIER
0:          APFS Container Scheme -           +1.1 GB       disk2
1:          APFS Volume Physical Store disk1s1 919.7 MB      disk2s1
2:          APFS Volume macOS Base System 80.0 MB       disk2s2
3:          APFS Volume Preboot

/dev/disk3 (synthesized):
#:          TYPE NAME                SIZE          IDENTIFIER
0:          APFS Container Scheme -           +121.1 GB     disk3
1:          APFS Volume Physical Store disk0s2
```

7. Paste the **diskutil repairVolume '/Volumes/ drive name'** command and hit **Return**.
8. Wait until Recovery Mode repairs your corrupted drive.
9. Once get the Finished file system repair alert, your drive should be fixed and ready to use.

```
Terminal — -bash — 80x24
Checking the space manager
Checking the space manager free queue trees
Checking the object map
Checking the encryption key structures
Checking volume /dev/rdisk3s1
Checking the APFS volume superblock
The volume Macintosh HD was formatted by storagekitd (1934.141.2) and last modified by apfs_kext (1934.141.2)
Checking the object map
Checking the snapshot metadata tree
Checking the snapshot metadata
Checking snapshot 1 of 2 (com.apple.os.update-0804E5018817E567FAE937224935325B45A1F8395357758797A05E3214E239D9)
Checking snapshot 2 of 2 (com.apple.os.update-MSUPPrepareUpdate)
Checking the fsroot tree
Checking the file extent tree
Checking the extent ref tree
Verifying volume object map space
Verifying allocated space
The volume /dev/rdisk3s1 appears to be OK
File system check exit code is 0
Restoring the original state found as mounted
Finished file system repair on disk3s1 (Macintosh HD)
-bash-3.2#
```

5. Accessing Time Machine

Time Machine is a utility tool of macOS for creating a backup of the entire system. It consists of all the files and folders stored on the drive.

When [Time Machine is enabled on your Mac](#), it regularly backs up any changes since the last backup by taking snapshots of your hard drive.

This can be especially useful when you haven't been able to access your data through other means, such as running disk repair utilities or attempting to recover data from a damaged disk image.

6. Restart your Mac in Safe Mode

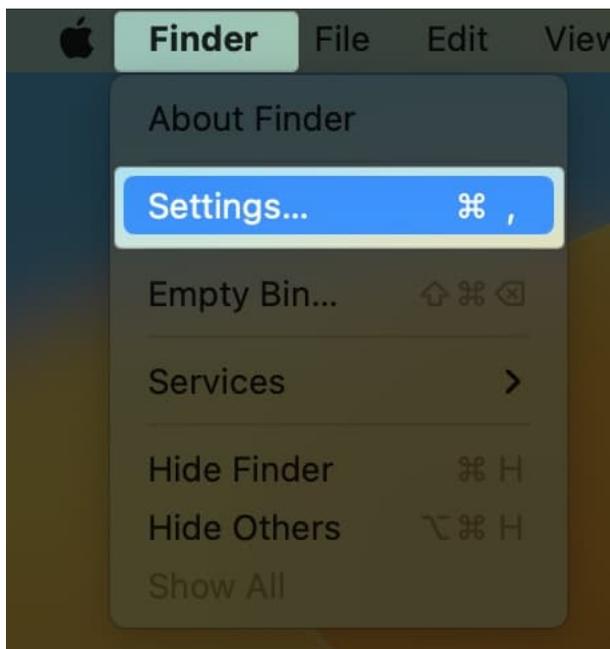
Safe Mode boots your Mac with basic utilities and allows users to troubleshoot problems. Although lost data cannot be retrieved from corrupted hard drives [using Safe Mode on Mac](#), it can still help resolve common device issues.

For example, if your device is running slowly or freezing, booting into Safe Mode can help you identify which software or utility is causing the problem. Hence, it diagnoses device issues and potentially prevents further damage from occurring.

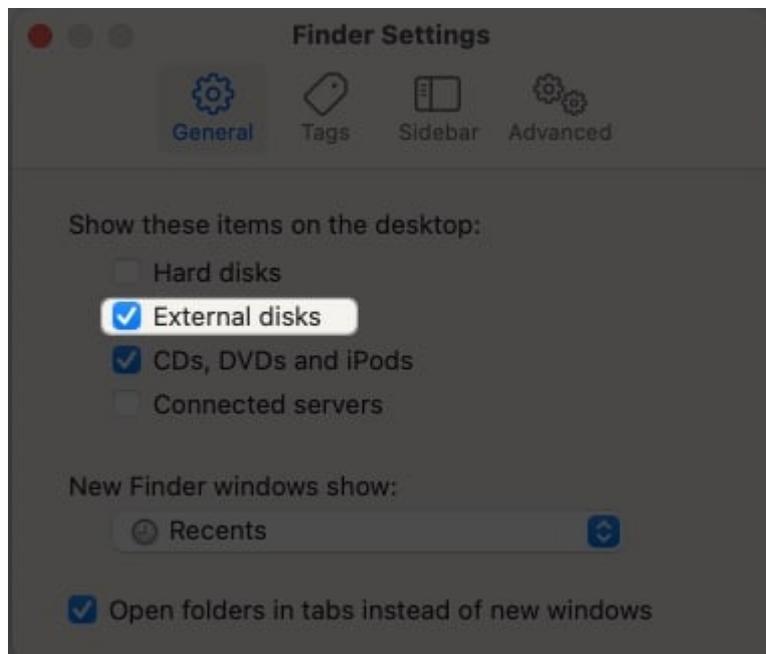
7. Verify Finder settings

If you're a fan of using an external drive on your Mac, you must make it visible. Otherwise, this can make you think your external hard drive is damaged or corrupted. To verify the same, follow the steps outlined below.

1. Launch **Finder** on your Mac.
2. Click **Finder** from the menu bar and hit **Settings**.



3. Now, ensure **External Disks** are enabled for your device.



8. Third-party Data Recovery software

If you're not technically inclined, you can opt for a direct approach using high-end data recovery software. These software are easy to use and well known in the market.

Using software with a simple and intuitive interface lets you recover files from a corrupted hard drive quickly. Furthermore, you can filter out the documents you wish to return to your device.

9. Contact Apple support

After exploring several potential solutions, if the problem of the corrupt drive on your Mac persists, it's time to bring in the experts. [Contact Apple Support](#) for a better understanding of the issue and to find an optimal solution.

Useful tips to prevent future data loss

Let's look at a few factors that can help you protect your Mac's hard drive from damage or corruption.

- Perform data backup regularly and keep copies of your essential files.
- Ensure your software and operating system are updated with the latest security

patches.

- Use [reliable anti-virus protection software](#) to protect your data from malware and viruses.
- Avoid physically damaging your hard drive. Handle your Mac carefully and protect it from extreme temperatures and moisture.
- Prevent using public Wi-Fi networks as they are more vulnerable to security threats.
- Use encryption to protect your data and ensure only authorized users can access it.
- Avoid downloading files from unverified sources, as it can put your Mac at risk of malware and data loss.

Revive and retrieve!

Recovering data from a corrupted or damaged hard drive on a Mac can be difficult but not impossible. Try the methods prescribed above and see what suits you the best. The proper steps and precautions can make the recovery process much more manageable.

Thank you for reading. Please leave your thoughts in the comment section below.

Read more:

- [Best USB-C hard drives for Mac](#)
- [How to partition Mac hard drive](#)
- [How to fix external hard drive not showing up on Mac](#)