

Learn the nuances of file formats to get the most out of your flash drives.

By [Roman Loyola](#) Senior Editor, Macworld JUL 14, 2025 4:15 am PDT



Image: Pexels: Kaboompics.com

USB flash drives (a.k.a. “thumb” drives) may seem passé in a world where [AirDrop](#) and cloud storage solve the file-transfer problem. But they’re still quite useful for handing over files to another user when your Macs are not nearby, for moving very large files, and more. You can even use them to give a PC user a file from your Mac and vice versa.

When you get a new flash drive, you can plug it in and it’ll show up on your Desktop, regardless of how the drive is

formatted. (You may be asked to allow the accessory to attach if you’ve set up macOS’s System Settings for Privacy & Security > Accessories that way.) However, you should consider reformatting that drive before you use it. There are other formats available that could be better suited for your needs.

In this article, we’ll go over the different formats and why you’d pick one over the others. Once you learn about the formats, you can pick one and format your USB flash drive appropriately. If you are in the market for an external SSD device, read our [Best Picks for External SSDs](#).

What is a file system format?

Before we cover the different file system formats, it’s important to know what a file system format is in the first place. It’s basically the way a computer manages files on a storage device. Different operating systems (macOS and Windows, for example) support different file system formats, and each format offers its own features.

There are four different formats you can use on a USB flash drive. The type of file format you pick depends mostly on what computers you plan to use the drive with. Some formats can be used on different operating systems, while others can be used only on one OS. It’s important to pick a format that best suits how you plan to use the USB flash drive.

For Mac-only storage devices: APFS

APFS is the Apple File System, which is currently the default format. It was created with flash drives and SSDs in mind. These types of storage devices use chips that can wear out over time, though that depends on how often data is written to the chips. For most users, an SSD or flash drive will last beyond your ability to use it. To help prevent wear and tear, APFS is designed with writing efficiency in mind to prolong a device's health.

APFS offers other features, such as strong encryption, space sharing, snapshots, and more. It also offers on-demand disk space allocation for a partition. Macs with internal SSDs must be formatted with APFS.

While APFS was made for SSDs and flash drives, it can be used with hard drives, but a [couple of reports](#) state that you may experience slightly slower performance. You should consider using Mac OS Extended instead (see below).



These USB-A flash drives need a USB-C adapter to be used on most modern Macs. Jacqueline Macou / Pixabay

APFS was introduced in macOS 10.13 High Sierra, so Macs running an OS older than that will not be able to recognize an APFS-formatted drive. For those older Macs, you need to use Mac OS Extended (see below).

Drives formatted with APFS can be used only on Macs running macOS 10.13 High Sierra or later. APFS drives cannot be used with Windows PCs. [Learn more about APFS.](#)

For older Macs and Mac-only hard drives: Mac OS Extended

Before there was APFS, there was Mac OS Extended, also known as HFS+ (Hierarchical File System +). It was created at a time when hard drives were the dominant form of storage, internally or externally. It was introduced in Mac OS 8.1 in 1998, when it replaced HFS (Hierarchical File System), the original Mac file format.

HFS+ lacks some of the features of APFS that were created to improve efficiency on SSDs, so HFS+ may impact an SSD's or flash drive's speed. Also, this lack of efficiency impacts the wear and tear on flash memory.

Since Mac OS Extended was created for hard drives, it's best used for such, even on today's Macs. Any hard drive, SSD, or flash drive that will be used on Macs with

macOS 10.13 High Sierra or older must use Mac OS Extended. Storage devices for [Time Machine must be formatted with Mac OS Extended](#).

Storage devices formatted with Mac OS Extended can be used only on a Mac. If you want to be able to connect a storage device to a Windows PC, you need to use exFAT or MS-DOS (FAT).

For Mac and Windows: exFAT or MS-DOS (FAT)

If you want to use your USB flash drive with both Macs and Windows computers, you have two file formats to choose from: exFAT or MS-DOS (FAT). “FAT” stands for File Allocation Table, and exFAT is a more recent version, while MS-DOS (FAT) is older.

MS-DOS (FAT)’s major limitations are that it cannot store files larger than 4GB, and its maximum partition size is 8TB. However, MS-DOS (FAT) drives can be used on all versions of Windows. ExFAT has a maximum file size and partition size of 128 petabytes, but it can’t be used on Windows versions older than Vista.

Which one to use? Use MS-DOS (FAT) unless you work in video, large databases, images, or anything else that creates large files, or you have a flash drive that’s larger than 8TB and you do not want to divide it into multiple partitions. In fact, your USB flash drive is probably already formatted with MS-DOS (FAT)—most are. Otherwise, use ExFAT.

If you are using a Windows PC to format a flash drive, you’ll find a third choice, NTFS. Macs can read NTFS drives, but they can’t write to them without special third-party software. Apple’s Disk Utility cannot format drives as NTFS. Also read: [How to format a USB thumb drive for both Mac and Windows](#).

For other devices: MS-DOS (FAT)

If you need to use the flash drive with another device, such as a TV, use MS-DOS (FAT). For example, you might want to transfer a video from your Mac to your TV. Or you downloaded files needed to upgrade a device with a USB port. Since MS-DOS (FAT) is so universal, chances are these devices are compatible with it.

Pick a partition scheme

Okay, so you’ve figured out which file format system to use. But wait! There’s one more thing to figure out: the partition scheme, or “Scheme” as it’s referred to in the Disk Utility app.

A *partition* in storage parlance is a section of a storage device. For example, if you have an 8TB drive, you can decide to format it into one partition of 8TB, and it would appear on your Mac as one 8TB drive. Or you can decide to partition that drive into, say, two 4TB partitions, and then you would see two 4TB drives on your Mac. The *scheme* tells the computer how the files are organized.

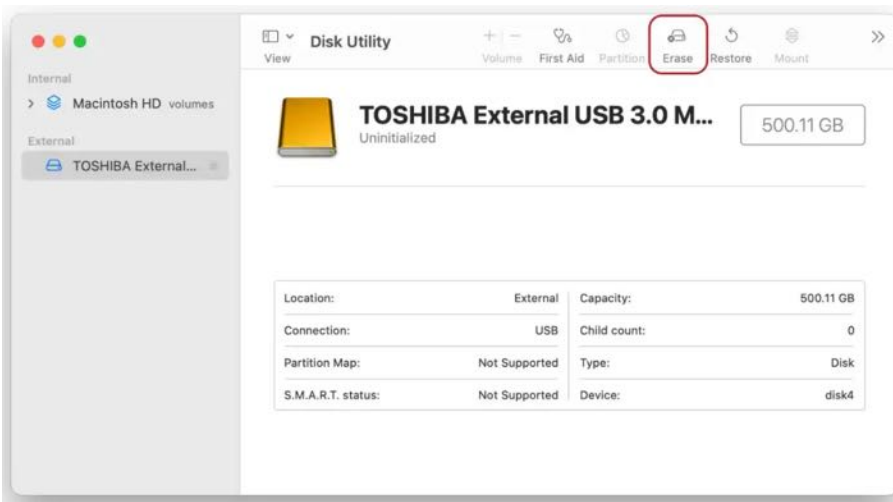
In the Disk Utility app, there are three schemes from which to choose:

- **GUID Partition Map:** for all Intel and M-series Macs. Choose this one if you do not plan on using the drive with a Windows PC. Later versions of Windows can use this scheme, but you're better off using...
- **Master Boot Record:** this scheme works on Windows PC and Macs.
- **Apple Partition Map:** use this only if you're going to use the drive on an old Power PC Mac.

How to format a USB flash drive for Mac

Formatting a USB flash drive (or any storage device) can be done with the **Disk Utility** app, which is found in Applications/Utilities. These are the steps to format the drive.

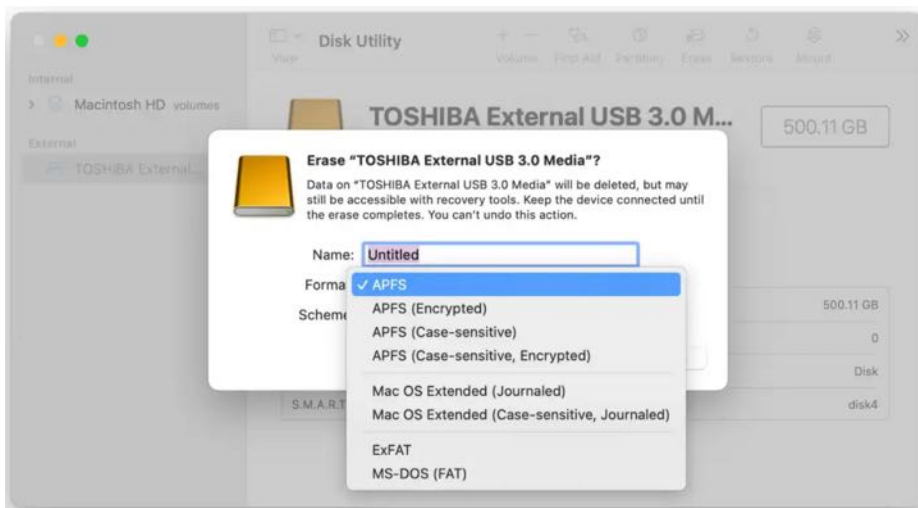
1. Disk Utility



In Disk Utility, select your USB flash drive in the External section of the left column. Click the **Erase** button.

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2. Name, Format, and Scheme



1. Give your drive a name in the **Name** field.
2. Click to expand the menu under **Format** to select your format type.
3. Click to expand the menu under **Scheme** to select your partition scheme.

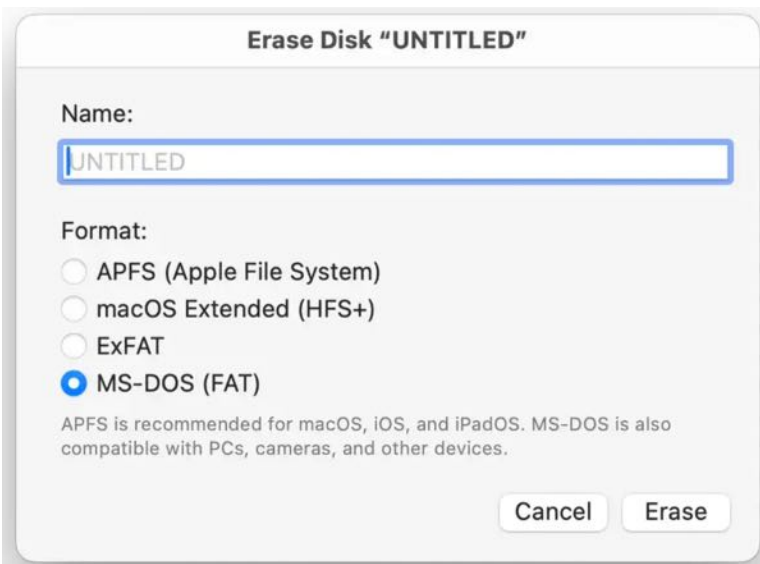
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3. Erase the drive



Click **Erase** when you are ready to format. You will not see a confirmation window, so only click Erase when you are sure you're ready to go. A status window will appear when your drive is ready to be used.

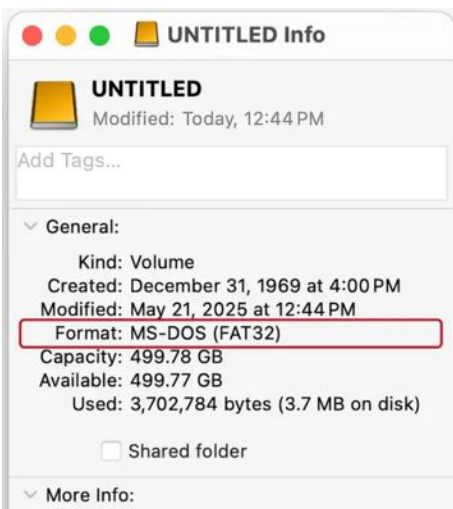
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You can also format a drive if you set the Finder to show storage devices on the Desktop. Control-click the device's icon and select Erase Disk, and then a window will appear asking for the name, format, and any options you want to select (see image above). You don't have to pick a partition scheme when using this method.

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How to check a drive's format



To see what format a drive is using, you can find out in the **Disk Utility** app. You can also **Get Info** on a device (select it in the Finder and press Command+I) and check the listing under "**Format.**"

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Roman is a Macworld Senior Editor with over 30 years of experience covering the tech industry, focusing on the Mac and other products in the Apple ecosystem. He is also the host of the Macworld Podcast. His career started at MacUser, where he received Apple certification as a repair technician (when Apple did that kind of thing). He's also worked for MacAddict, MacLife, and TechTV.