

FAQ for USB Flash Drive

1. What is a USB Flash Drive?

A USB Flash Drive consists of a flash memory data storage device integrated with a USB interface. USB Flash Drives are typically removable and rewritable. When you plug a USB Flash Drive into your computer USB port, the computer recognizes it as a mass storage device and assigns it a drive letter. Then, you may use it like a floppy drive or hard disk drive to store documents, music, private data and almost any other kind of files.

2. What are the advantages of using USB Flash Drive?

- USB Flash Drive is extremely small and can fit in a pocket, it is very convenient for transporting.
- USB Flash Drive does not contain any moving parts which make them very durable and long-lasting.
- USB Flash Drive has steadily increased its storage capacity while decreasing its price on the market.
- USB Flash Drive is widely supported by most computer systems.
- USB Flash Drive uses less power compared with USB hard drive.

3. What are the Disadvantages of using a USB Flash Drive?

- USB Flash Drive is so small that it is often lost or forgotten.
- USB Flash Drive often does not have any write-protection mechanism/software to keep viruses from infecting it.

4. Can I use USB Flash Drive with Mac or Linux computer?

Yes, you can use USB Flash Drive with Mac or Linux computer if there is USB port. The Mac OS should be version 9 or later, and Linux kernel should be version 2.4.0 or later.

5. What kind of file system format does USB Flash Drive support?

Usually it is formatted as FAT32. You may format it to other file system format if your computer OS supports, such as FAT, exFAT, NTFS, EXT2, EXT3, etc. . FAT32 is commonly supported by most computer systems, including Windows, Mac and Linux. However, FAT32 cannot store file with size greater than 4GB. If you need to store file size greater than 4GB, you may consider using NTFS, but the USB Flash Drive will be used on Windows computer system only, it may not be used in other computer systems.

6. Do I need install driver for using USB Flash Drive?

If your USB Flash Drive is formatted as FAT32, you need not to install any driver for Windows XP/Vista/7 and other newer operating systems. You need to install driver only for Microsoft Windows 98/98SE/ME/2000, because old operating systems do not support mass storage device completely.

7. Do I need to turn off the computer before inserting or removing a USB Flash Drive?

The USB interface standard was created with the hot-swappable feature. You may insert or remove a USB Flash Drive while the computer is on. However, it does not mean you can remove a USB Flash Drive while data is being read or written to/from it. You should first release the USB Flash Drive by clicking the "Safely Remove Hardware" icon in Windows tray.

8. How to store files on a Windows computer?

Please follow these steps to store files on a Windows computer:

- Power on a computer with Windows operating system, log on it and wait until it has started up successfully.
- Plug the USB Flash Drive into the USB port of the computer, wait until the system has detected the Flash Drive and installed driver for it automatically.
- Use Windows Explorer to locate the Flash Drive icon and double-click on it to open the contents of the drive, check that the Flash Drive can function normally.
- Copy or drag the files/folders you wish to store on this Flash Drive.
- Verify that the files/folders are stored properly.
- Ensure that you do not disconnect the drive directly from the computer after you have finished storing the files, as it may destroy the files.
- Click on the icon of "Safely Remove Hardware" in the Windows tray, and then click on the item name of your Flash Drive. Wait until it prompts that your drive can now be safely removed from the computer.
- Unplug the Flash Drive from the USB port.

9. Can a USB Flash Drive be pulled out just after storing/updating files on it?

No, you should not remove a USB Flash Drive just after storing/updating files on it. Removal at such times may cause the loss of data and damage to the device. You should first release the USB Flash Drive by clicking the "Safely Remove Hardware" icon in Windows tray.

10. What is the function of the LED on a USB Flash Drive?

When a USB Flash Drive is first plugged into the USB port of a computer, the USB Flash Drive LED turns on and off. This means that the computer is recognizing the USB Flash Drive. During a file transfer, the USB Flash Drive LED will flash. Do not unplug the USB Flash Drive during a file transfer. Doing so may cause corruption of the data being transferred, or cause corruption of the FAT table of the USB Flash Drive. If the FAT table is corrupted, the USB Flash Drive can go back to its original working condition by formatting it; however, all the data will be lost.

11. After transferring data to a USB Flash Drive, the LED is still flashing for a while. Why?

A computer finishes data transfer from the CPU to the built-in buffer memory. In this case, the computer thinks that the data transfer has finished; however, it takes more time to transfer data from the buffer to the USB Flash Drive. This causes the LED to continue flashing. Please do not unplug the USB Flash Drive while the LED is flashing. This may damage your data or the USB Flash Drive FAT table.

12. When I click the "Safely Remove Hardware" in the Windows tray to eject my USB Flash Drive, the computer prompts that the device is currently in use. What can I do?

When the computer prompts that the device is currently in use, you should not pull out the USB Flash Drive at this moment. This may damage your data or the USB Flash Drive FAT table. You may close any programs or windows that might be using the device and then try again. If the computer still prompts the message, you may need to shut down the computer before pulling out the USB Flash Drive.

13. I have deleted files from a USB Flash Drive by chance. What can I do?

By default, a USB Flash Drive operates in the way as a removable storage. The deleted files will not be stored in Recycle Bin first. So that you may not recover the files once they have been deleted.

14. Can USB Flash Drive be infected by computer virus?

Since USB Flash Drive is a mass storage device, it can be infected by a computer virus. Once a USB Drive has been infected by a computer virus, you may try to clean it by using anti-virus program.

15. When I insert a USB Flash Drive & try to access the drive, it asks me to “Please Insert disk into drive” or asks me to format the drive, or the drive is in RAW file system format. Why?

There are many reasons that may cause these scenarios, including

- the USB Flash Drive is being encrypted and password protected,
- the file system format is not recognized by the computer system,
- the USB Flash Drive has some software corruption or hardware failure.

If the USB Flash Drive is being encrypted, you must use proper program and password to unlock it. If the file system format is not recognized, you might need to install suitable driver or merely use it in those computers that can recognize such file system format. If you are sure that it is software corruption, usually the USB Flash Drive can be reused by formatting it again, but all the data stored in it will lose. If the USB Flash Drive is hardware failure, you may need to replace a new one.

16. How to format/erase a USB Flash Drive?

Please follow these steps to format/erase a USB Flash Drive:

- Insert the USB Flash Drive into a USB port on your computer. Click on the “Start” button and then click on the “My Computer” option.
- Right-click on the flash drive in the “Devices with Removable Storage” section and then click on the “Format” option. A formatting dialog box will appear.
- Select a format type in the “File System” box, for example: FAT32. Rename your flash drive in the “Volume Label” box. Leave all of the other settings on their default values.
- Click on the “Start” button. Click on the “OK” button when it asks if you are sure to erase all of your data.
- Close the formatting dialog box after the formatting process completes.

17. What are the differences between USB 1.1, USB 2.0 and USB 3.0?

USB 1.1 is earliest version, which supports devices at a lower speed, for example: Keyboard and mouse. Depend on the devices, USB 1.1 can operate at two modes: Low Speed and Full Speed. The data transfer speeds of USB 1.1 at Low Speed mode and Full Speed mode are 1.5 Mbps and 12 Mbps respectively.

USB 2.0 is newer version, which supports devices at a faster speed if the device is designed for USB 2.0, for example: USB Flash Drive and USB Hard Disk. USB 2.0 can operate at a Hi-Speed mode, the data transfer rate is increased to 480 Mbps. Nowadays, most computer systems and USB Flash drives support USB 2.0.

USB 3.0 is currently the newest version, which can operate at a Super Speed mode with the data transfer rate up to 5 Gbps.

USB TYPE	DATA TRANSFER SPEED
USB 1.1 at Low Speed mode	1.5 Mbps
USB 1.1 at Full Speed mode	12 Mbps
USB 2.0 at Hi-Speed mode	480 Mbps
USB 3.0 at Super Speed mode	5 Gbps

Please refer to the URL [“Universal Serial Bus \(USB\)”](#) for more information.

18. Is USB 1.1 and USB 2.0 forward and backward compatible?

USB 2.0 is fully backward compatible with USB 1.1. You are able to use a USB 2.0 Flash Drive in a USB 1.1 compliant system, but at USB 1.1 data transfer rates.

19. Once I plug in a USB Flash Drive, I see this message “A HI-SPEED USB device is plugged into a non-HI-SPEED USB hub”. What does it mean?

If a message “A HI-SPEED USB device is plugged into a non HI-SPEED USB hub” is prompted when you plug in a USB Flash Drive, this means that a USB 2.0 Flash Drive are plugged into a USB 1.1 port. The USB Flash Drive will still work, but it will operate in USB 1.1 performance. However, if you are sure that both the USB Flash Drive and the USB port should support USB 2.0, it means that there is something out of order, don't use/update any files on the USB Flash Drive, otherwise it may cause data loss. You may try using another USB Flash Drive on this computer and inserting the USB Flash into another computer, to verify which device is out of order. If it is the USB Flash Drive, please backup the data in the USB Flash Drive at once and replace it with a new one.

20. Can I install a program on a USB Flash drive and use it on another computer?

Most programs copy some files to the Windows or Windows\System directory or modifies the registry during installation. When you move the USB Flash Drive to another computer, these files might not be registered there and therefore the programs installed might not work. Secondly, the USB Flash Drive might appear as another drive letter, this will be a problem for most software. Typically, software is standalone that does not require installation will usually work.

21. How can I protect my files in USB Flash Drive against data leak?

One of the methods of protecting your files in USB Flash Drive against data leak is to encrypt them. By encrypting your USB Flash Drive, the files contained within it become password protected and can only be accessed by you or someone who knows the password. There are hardware protection method and software protection method, usually the hardware protection method would be more secure and speedy. USB Flash Drive with FIPS 140-2 level 2 certified and hardware based 256-bit AES encryption is recommended. Please refer to the URL “[Encrypting using FIPS compliant USB devices](#)” for more information.

22. May I encrypt my existing USB Flash Drive by software method?

Yes, if your existing USB Flash Drive has no hardware encryption feature, you may encrypt it by some kind of encryption programs. For example, if you are using Windows 7, it has a core BitLocker Drive Encryption functionality. Please refer to the URL “[Encrypting with BitLocker To Go for Removable Devices under Windows 7](#)” for more information. And, there is an open-source disk encryption software for Windows, Mac and Linux called “TrueCrypt”, please refer to the URL “www.truecrypt.org” for more information.