Saving Data on a Flash Drive (Memory Key)

Technology has changed once again. Floppy diskettes are out, CDs and DVDs are ON the way out, and “flash drives” are in!

What does this mean? Well, let’s find out.

What exactly is a memory key or flash drive, and how is it used and why? A memory key or flash drive is a device of storage...just like you see pictured above...a device that can be used to save anything from photographs to documents, letters, spreadsheets, any kind of data, even many programs you download, on almost any computer that is equipped with a USB port.

Most all computers made in the past 15-20 years have USB ports either in the front of the machine or the back, if you have a “desktop model.” If you have a laptop, the ports are usually located along the left or right-hand sides of the laptop, and/or in the back. A port with a blue plastic piece visible inside is “faster” – usually a 3 speed USB port – whereas ports without the blue plastic inside are a little “slower” and are usually 2.0 speed. (It depends on the age of the flash drive if it will respond faster.)

Memory keys or flash drives are inserted into these USB ports where they are “detected” as a piece of hardware attached to your machine. Once detected, the device can be used to store data or retrieve it, and data can also be erased from it. Flash drives have replaced floppy diskettes, and are also replacing CDs and DVDs, which were typically used for temporary storage of data in the past.

Flash drives are inexpensive and can usually hold a lot of data. They come in various storage capacities. Usually, they range in size from 8gb or greater in storage capacity, but, of course, the more storage capacity, the higher the price. At the library, as of 2015, flash drives of 8gb in storage capacity sell for $7. Similar prices can be found at local retail stores or online.

Flash drives, in my opinion, should be considered temporary storage devices. Although there are no moving parts in the device, some of the possible dangers of which they run the risk include being lost (they are small), dropped in liquid, left in warm or cold places, and, just in general, can lose data as is the case with any storage device. The best idea is always to backup your data from the flash drive to another location. The other location could be a hard drive, but it could also be in the cloud, for example. It depends on how important you consider your data to be.

Some flash drives come with encryption software, or other software particular to the device. Usually, you can erase this software unless you intend to use it. If you choose to erase this software, always do so when your flash drive is free of all other data. Erasing the software while your other data is still on the flash drive may be risky and you may lose your data along with the software you are trying to erase. You could empty the contents of your flash drive (or copy contents) to a folder on your desktop – then re-format the flash drive to eliminate the software – then copy the folder back to the flash drive from the desktop without the software files.

Look carefully at your flash drive. It may have a button that you can slide to protect your device from careless overwriting. Usually, flash drives will flash a light when they are in use. This is particularly important to take...
note of – never remove a flash drive from the USB port if the light is FLASHING. This indicates activity is taking place between your computer and the flash drive.

Here are some steps to follow.

1. Insert your flash drive into an empty USB port on the computer. Some computers (such as the library computer lab computers) have a HUB attached to one USB port, and the HUB allows for up to 2-4 extra devices to be plugged in at once. This includes not only flash drives, but other devices such as digital camera tethering cables, printer cables, scanner cables, and more, which also have USB connectors.

2. Usually Windows will announce that it detects new hardware. An Autoplay screen may come up prompting you to do “something” with the flash drive (like the one you see below). Often, I close this screen and access my flash drive another way (see step 3 below) but before I do, I will make note that the computer has assigned a letter to this particular flash drive – in this case, “F” -- notice “Removable Disk (F:)” in the dark title bar area of the dialog box. It is up to you if you wish to close this dialog box, or use it to open your flash drive. See page 5 for information on Autoplay.

3. Instead of using the above screen, I open FILE EXPLORER to THIS PC (find it in the taskbar of a Windows 8.1 machine – click it) and locate the device there. The flash drive may appear as a brand name (whatever brand you purchased) or it may not. However, it is always assigned a letter, just like the floppy diskette was typically assigned the letter A when machines had floppy drives, and is located in the grouping “Devices and Drives.” You may have to double click on various letters to find the one that is assigned on this particular computer to your flash drive. Remember, the letter most likely will be different on each machine on which you use the flash drive. In the case above, we remember F as the drive letter, and simply locate F in the listing of “Devices with Removable Storage" from THIS PC. (see next page for a diagram)
4. Some flash drives come with software that will try to make your life easier by using it in conjunction with saving and managing the files on your flash drive. You can certainly spend time learning how to use the software, or you can opt not to use it. Regardless, this software takes up some space on your flash drive’s memory.

5. If you have double-clicked on the flash drive, and are through examining its contents, click the BACK button at the top of the window you are in to return to the original COMPUTER screen. Next, right-click on the flash drive. Look for properties in the menu that appears, then point and left-click on it to choose it. Notice how much space is “free” and how much is used on the flash drive. Close the properties window.

6. Just like any other area of memory, such as a hard drive or a floppy diskette, you can create folders on your flash drive, and place things in the folders. **Double-click** the flash drive and notice above in the HOME tab of the ribbon, an option to create folders. You can create some folders, or you can do this at another time. At least for now, just notice that you have the option to do so.

7. You can drag and drop files to various folders on your flash drive.

8. Some suggestions:
   a. Use your flash drive to store a downloaded upgrade here at the library in case you don’t have access to high speed Internet service.
   b. Use your flash drive to store items from floppy diskettes or CDs or DVDS, or SD Camera Cards.
   c. Use your flash drive to hold your digital pictures. You can then bring the flash drive to friends’ or relatives’ homes and display your pictures on their Windows-based computers, or bring the flash drive to a photo developing station such as those found at Walmart, CVS, Walgreens, or other places. You can often plug the flash drive into a smart TV to watch your photos on your television.
   d. Flash drives can also “transport” important documents you need to print – you can bring the documents to places like Kinkos for copying.
   e. You’ll think of many more uses, I’m sure!
9. **REMOVING** the flash drive:
   a. Make sure you have closed any documents that are opened from the flash drive.
   b. Look in the right-hand application area or tray of the computer (where the time is displayed) and look for a small green circle with a white checkmark on top of a gray device. This is the “Safely Remove Hardware and Eject Media” icon.
   c. Left-click once on the icon.
   d. Look in the choices for the drive letter of your flash drive, and left-click on it. It is possible two letters will show on one line, especially if your flash drive has extra software installed (such as U3 software).
   e. The computer should now say, in a white message box near the icon, words to the effect that it is now safe to remove the hardware.
   f. At this point, your flash drive will no longer be detected by the computer, and it will not show up in “THIS PC,” or File Explorer.
   g. If you want the flash drive to again be detected by the computer, you need to pull it out of the USB port, and push it back into the port.

Note: See page 8 of this handout for a second method to remove a flash drive.

An aside: Usually, this is the correct way to remove a flash drive from the computer. However, many people have found that by simply removing the key **without** going through the steps listed above, as long as the flash drive was not in use (such as in the middle of a save, where the small light on the device might be flashing), there didn’t seem to be any harm to the files on the device, even though the next time it was inserted into a USB port, a message may come up warning you that the device was not “properly ejected” last time.

Sometimes, ignoring that message and using the flash drive as usual works out for the most part. Try at your own risk, however.

You CAN re-name the flash drive. Simply right-click on it (in MY COMPUTER), and look for RENAME in the drop-down menu that appears. I renamed one of mine Kathy Handy (see diagram above) so if it does get lost, I have a chance of getting it back, plus in MY COMPUTER, it will show up with my name for easy retrieval.
Here are some steps to follow for Windows 8.1 Users:

1. Go to Desktop View in Windows 8.1
2. Insert your flash drive into an empty USB port on the computer. Some computers have a HUB attached to one USB port, and the HUB allows for up to 2-4 extra devices to be plugged in at once. This includes not only flash drives, but other devices such as digital camera tethering cables, printer cables, scanner cables, and more.
3. Read the screen. Usually Windows announces that it detects new hardware. An autoplay screen may come up prompting you to “do something” with the flash drive (like the one you see below). Often, I close this screen and access my flash drive another way (see step 4 below) but before I do, I will make note that the computer has assigned a letter to this particular flash drive – in this case, “I” – notice “Handy 2013(G:)” in the top area of the dialog box. It is up to you if you wish to close or just ignore this dialog box, or use it to open your flash drive by clicking on it.

4. Click once to open FILE EXPLORER in the taskbar of the Windows 8.1 Desktop Screen, and locate the device there instead of using the autoplay offerings. Notice the window that opens is labeled, “This PC.”

5. The flash drive may appear as a brand name (whatever brand you purchased) or it may not. In this example, you can see I have named the flash drive, HANDY 2013. However, the flash drive is always assigned a letter by the computer (just like the floppy diskette was typically assigned the letter A when machines had floppy drives) and
is located in the grouping “Devices and Drives.” You may have to **double-click** on various letters to find the one that is assigned on this particular computer to your flash drive, and you can have more than one flash drive inserted into various ports on the machine. The letter most likely will be different on each machine on which you use the flash drive. In the case above, we remember **G** as the drive letter from the autoplay window, and simply locate **G** in the listing.

6. Some flash drives come with software that will try to make your life easier by using it in conjunction with saving and managing the files on your flash drive. You can certainly spend time learning how to use the software, or you can opt not to use it. Regardless, this software takes up some space on your flash drive’s memory. It is often helpful to delete the software right when you get the flash drive, before anything is saved, as deleting the software later on, especially once you have saved material on the device, may actually delete some or all of your files along with the software.

7. If you have double clicked on the flash drive, and are through examining its contents, click the **BACK** button at the top of the window you are in to return to the original **THIS PC** screen.

8. **Right-click** on the flash drive. Look for properties in the menu that appears, then point and left-click on it to choose it. Notice how much space is “free” and how much is used on the flash drive. **Close** the properties window.

9. Just like any other area of memory, such as a hard drive or floppy diskette, you can create folders on your flash drive, and place things in folders. Double-click the flash drive, and notice in the ribbon an option to create a new folder (see below). You can create some folders if you wish, or you can do this at another time. At least for now, just notice that you have the option to do so.

10. You can drag and drop files to various folders on your flash drive.

11. Some suggestions:
   a. Use your flash drive to store a downloaded upgrade here at the library in case you don’t have access to high speed Internet service (may not work for everything, but will for some things).
   b. Use your flash drives to store items from floppy diskettes. You can try to use the library’s machines (public ones) to help in the transfer process – we have a portable floppy drive that you can use at either the public stations or in the lab during practice sessions.
   c. Use your flash drive to hold digital pictures. You can then bring the flash drive to a friend’s or relative’s home and display your pictures on their computers or on TV sets with USB openings, or bring the flash drive to a photo developing place such as those found at *Staples, Best Buy, CVS, Walgreen’s, Staples,* or other places.
Flash drives can also transport important documents you need to print – you can bring the documents to places like the ones listed in c. above.

Put music on a flash drive and, if your car has a USB port, insert it and play music of your choice on your car’s stereo system.

You’ll think of many more uses, I’m sure!

12. Method 1: REMOVING the flash drive (Method 2 is also shown on page 4)
   a. Make sure you have closed any documents from the flash drive that are open.
   b. Look in the right-hand application area or notification area of the computer (where the time is displayed) and look for a small green arrow pointing above a gray device. If it does not appear, click the white upward pointing triangle that you see there. When you hover your mouse over the icon (green arrow pointing above a gray device) it should say “Safely Remove Hardware and Eject Media,” as shown below.
   c. Left click once on the icon (safely remove...)
   d. Look in the choices that appear for the drive letter of your flash drive, and left-click on it. It is possible two letters will show on one line, especially if your flash drive has extra software installed (such as U3 System software as seen above).
   e. The computer should now say, in a small balloon, that it is now safe to remove the hardware.
   f. At this point, your flash drive will no longer be detected by the computer, and it will not show up in “This PC.”
   g. If you want the flash drive to be detected by the computer, you need to pull it out of the USB port, and push it back into the port.
13. **Method 2:** (Quicker) Click once on the device (flash drive) when in “This PC” and click “Drive Tools,” then “Manage” at the top of the screen. Look for **eject**, and click once on it. Look for the message as described in letter e above.
Saving to a Flash Drive within a program such as MS Word or MS Excel
(using 2013 versions)

1. Type your material in MS Word 2013 or MS Excel 2013, for example.
2. Click File in the upper left-hand corner of the screen.
3. Click Save As.
4. Click Computer then Browse.
5. Notice your options. (Office 2013 products such as Excel or Word give a windows Explorer view with your saving locations in a panel on the left side of the SAVE AS dialog box window, and actual folders or files are then displayed on the right.
6. Select the flash drive from the panel on the left (notice the flash drive named KATHY HANDY is selected in this example). Typically, the computer will default to saving into the DOCUMENTS area on the hard drive. Here, however, we are “re-directing” the save to a flash drive.

7. You can opt to rename your file by typing the name you wish into the File name box.
8. Just underneath the file name box is the Save as type box. Make sure the Save as type box is displaying the correct file type for you (in this case, a word document, .docx, which is fine.)
9. Click the Save button when you are done (lower right-hand area of the screen).

Deleting files from a Flash Drive

If any file from the memory key or flash drive is open and running on the screen, then the file CANNOT be deleted until the file is closed from the screen.

1. Close any open file you are using that you wish to delete.
2. Open FILE EXPLORER from the task bar in Desktop view of a Windows 8.1 machine.
3. Select (or click on) the flash drive on the left side of the display.
4. Locate the file you wish to delete in the right-hand side of the screen. Select it by clicking ONCE on the file.
5. Hit DELETE on the keyboard. A message appears that looks like this – it is a dialog box awaiting your response.
6. Answer YES by clicking the button if you indeed do wish to delete the file. Know that when you delete the file, it WILL NOT go into the recycling bin. It will be “gone forever.” This is true of any file you delete from the flash drive.
10 Things You Never Knew You Could Do With A USB Flash Drive


By Bertel King, Jr. 21st May 2013  Gadgets, Software  12 Comments

USB flash drives are a cheap and portable way to back up files and move them around between machines. But as cloud storage becomes cheaper and WiFi more accessible, flash drives aren’t as necessary as they once were. You probably now have a couple sitting around in a drawer that rarely ever get used. If you want to breathe new life into your old USB flash drives, here are ten things you may have never known they could do.

1. **Install a Linux distribution**

**Linux USB**

Most Linux distributions can be booted from live CDs as a means of trying them out before giving them a full install. In recent years, the trend has shifted towards creating live USBs instead. You can download the appropriate software for your distro of choice and burn an image to your flash drive, creating a means of testing out and installing Linux that is more durable than a CD-ROM. USB drives can hold more data than CDs, allowing you to boot up distros that are too large to fit on a disk.

2. **Boot a Persistent OS**

**Persistent OS**

If you want something more permanent than a live USB, which do not save any changes you make, you can install several distributions directly to your flash drive. This way you can boot up your own personal operating system on other peoples’ computers and still have access to the files you’ve created and the programs you’ve installed. Pendrivelinux is one option, but at this point in time, even the major distributions such as Ubuntu supported persistent booting.

3. **Run Portable Apps**

**Drive Portable**

PortableApps.com allows Windows users to bring their favorite programs and files with them on a flash drive without having to boot into a new operating system. When you plug in your flash drive, you can open what amounts to a separate, portable “Start” menu. Not every application is supported, and you may still have to transition to using open source applications to fully take advantage of Portable Apps. If you would prefer an alternative, there’s also LiberKey and winPenPack.

4. **Use as RAM**

**RAM** In a case where you have a computer that’s slowing down and a flash drive with extra space, you can use the latter to give the former a speed boost. Using a flash drive to provide your computer with extra memory helps it to manage applications better, giving you a faster experience. Microsoft provides ReadyBoost as a means of speeding up your computer using your flash drive as RAM under Windows.  [SEE PAGES 9 & 10 FOR DETAILS – kh]

5. **Partition hard drives**

**Hard Drive**

Installing *Parted Magic* to a flash drive helps you more easily re-partition your computer’s hard drive. Partitioning is difficult and dangerous to do when an operating system is running from the hard drive in question, but booting from a flash drive removes some of [the] risk and makes the entire process much more straight forward.
6. Gaming

USB Gaming

While it’s not exactly portable gaming, you can install certain games to flash drives, allowing you to get your gaming fix regardless of whose machine you’re using (granted they’re using the same operating system). Not every game supports this functionality, but Minecraft does. Considering how expansive that game is, it might be all you need.

7. Keep Files Private

Drive Private

You can turn your entire flash drive into an encrypted partition as a means of keeping private files safe from prying eyes. You also have the option to have your flash drive boot normally but containing a separate partition that encrypts any file placed in it. For an extra layer of security, you can also password protect your encrypted partition. Bitlocker To-Go makes this easy to do.

8. Unlock Your Computer

Drive Unlock

If you don’t feel that using a password alone is secure enough, and your computer doesn’t have a biometric scanner, you still have alternative options for securing your computer. Just turn your flash drive into a key and set your computer to only unlock when the drive is plugged in. If you use Windows, Predator is a popular tool for making this happen, but it’s not the only one out there.

9. Rescue an Infected PC

Infected PC

You have the ability to install virus scanners onto your flash drive driver to search for malware on infected computers. You can find offerings to restore your computer after a malware-related crash from well-known companies such as AVG and Kaspersky.

10. Automatically Sync Files

Files

You probably manually drag and drop files onto your flash drive, but there is a simpler means of transporting files. By automatically syncing files between your computer and your flash drive, you can make it nearly as convenient to use as Dropbox or Google Drive. SyncToy and SyncBack SE are two Windows tools that can make this happen. GoodSync2Go is a solution that works with Mac OS X.

Conclusion

USB flash drives are immensely useful tools capable of fixing computers and booting operating systems. They drop in price each year at the same time that their storage capacity continues to double, making them great for any tech enthusiast on the go. And if all else fails, they’re still good for storing files, too.

What other uses do you use USB drives for?

- Store music, audio books, or old radio shows on a USB and play it in the car if the car has a USB port
- Store photos and plug into a newer Smart TV to watch the pictures as a slideshow on the TV
Enabling Ready Boost on a Windows 8.1 PC

Visit [http://tinyurl.com/ReadyBoost-by-Windows](http://tinyurl.com/ReadyBoost-by-Windows) for a video from Microsoft that will describe how to take advantage of Ready-Boost. Here are the directions from their site, as well. If you don’t see AUTOPLAY [step 2 below], instead open FILE EXPLORER and RIGHT-CLICK the device, and then click PROPERTIES. Next, continue with step 3 below.

To turn ReadyBoost on or off

1. Plug a flash drive or flash memory card into your computer.

2. In the Autoplay dialog box, under General options, click Speed up my system.

3. In the Properties dialog box, click the ReadyBoost tab, and then do one of the following:
   - To turn ReadyBoost off, click Do not use this device.
   - To use the maximum available space on the flash drive or memory card for ReadyBoost, click Dedicate this device to ReadyBoost. Windows will leave any files already stored on the device, but it’ll use the rest to boost your system speed.
   - To use less than the maximum available space on the device for ReadyBoost, click Use this device, and then move the slider to choose the amount of available space on the device you want to use.

4. Click OK.

Move the slider to choose how much space you want to designate for boosting your system speed.
Pros and Cons of Memory Sticks or Flash Drives:

**Pros**
Small and lightweight
Compact
Great storage capacity
Can be used on nearly all OSs including Windows, Mac, Linux, and AMD
No need to interrupt other programs for the USB flash drive to be installed and used
More resilient than a CD or DVD
Relatively inexpensive

**Cons**
Easily lost
Won’t last forever – can wear out in time

Notes

If AutoPlay doesn’t open, it might be disabled. For more information, see Troubleshoot AutoPlay problems.

For ReadyBoost to effectively speed up your computer, the flash drive or memory card should have at least 1 gigabyte (GB) of available space. If your drive or card doesn’t have enough available space for ReadyBoost, you’ll see a message telling you to free some space on it. For best results, use a flash drive or flash memory card with at least double the amount of available space as the amount of memory (RAM) in your computer.

For more information about how ReadyBoost works and what types of flash memory devices work with it, see Using memory in your storage device to speed up your computer.

Need more help?

See all support pages for devices & drivers.
Ask a question in the community forums.
See what devices are compatible with Windows 7 at the Compatibility Center.