



## These Two Thumb Drives Are Computer Savers

WHEN SOMETHING GOES WRONG WITH YOUR COMPUTER, YOU MIGHT NOT BE ABLE TO FIND NEEDED UTILITY APPLICATIONS BECAUSE SOMETHING HAS GONE WRONG WITH YOUR COMPUTER.

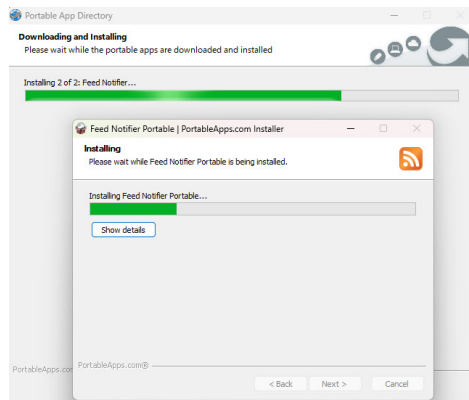
That circular reasoning is why it's wise to prepare one thumb drive with a selection of portable utilities and a second with files to rescue a computer that won't boot. You'll need two thumb drives: One can be small—just 4 or 8 GB—and the other should be at least 16GB. The drive I'll describe first is one that will help when the computer can boot but has some problems.



Start by downloading PortableApps from [PortableApps.com](http://PortableApps.com). Make sure the thumb drive you want to use is plugged in and, when you run the downloaded application, you can choose to create a new installation, update an existing installation, or select a custom location. Select *New Installation* and click *Next*, then choose *Portable* from the next screen and click *Next*, and you will see a list of one or more thumb drives. Make sure the correct thumb drive is selected and click *Next*. Then click *Install* to start the process.

When the installation is complete, start the application by navigating to the thumb drive and double-clicking *Start.exe*. PortableApps will check for any updates to itself. Then you can

scroll through the list of more than 400 applications and choose ones to place on the thumb drive.



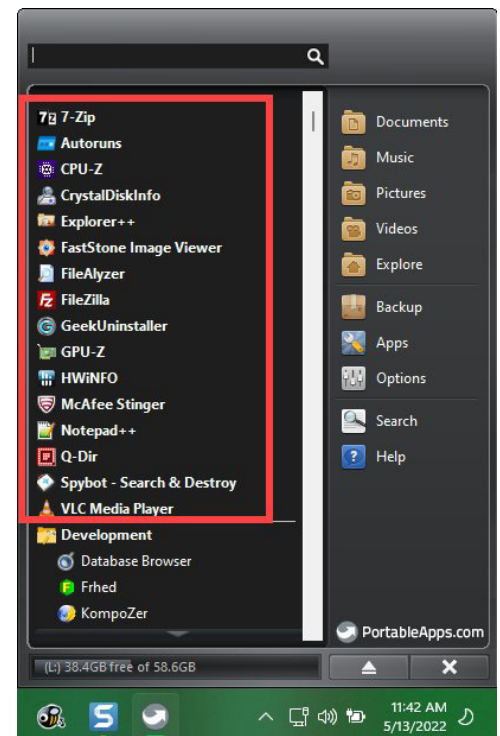
After selecting one or more applications, click *Next* to install them on the thumb drive. PortableApps can automatically add many of the applications you select, but some require input from the user—either permission to set up the application or the location where it should be saved. If your list of preferred apps includes some of these, the installer will display a notification so that you can watch for alerts and approve them.

### Using the Applications

TO USE AN APPLICATION, PLUG THE THUMB DRIVE IN, VIEW IT IN A FILE EXPLORER, AND DOUBLE-CLICK *START.EXE*.

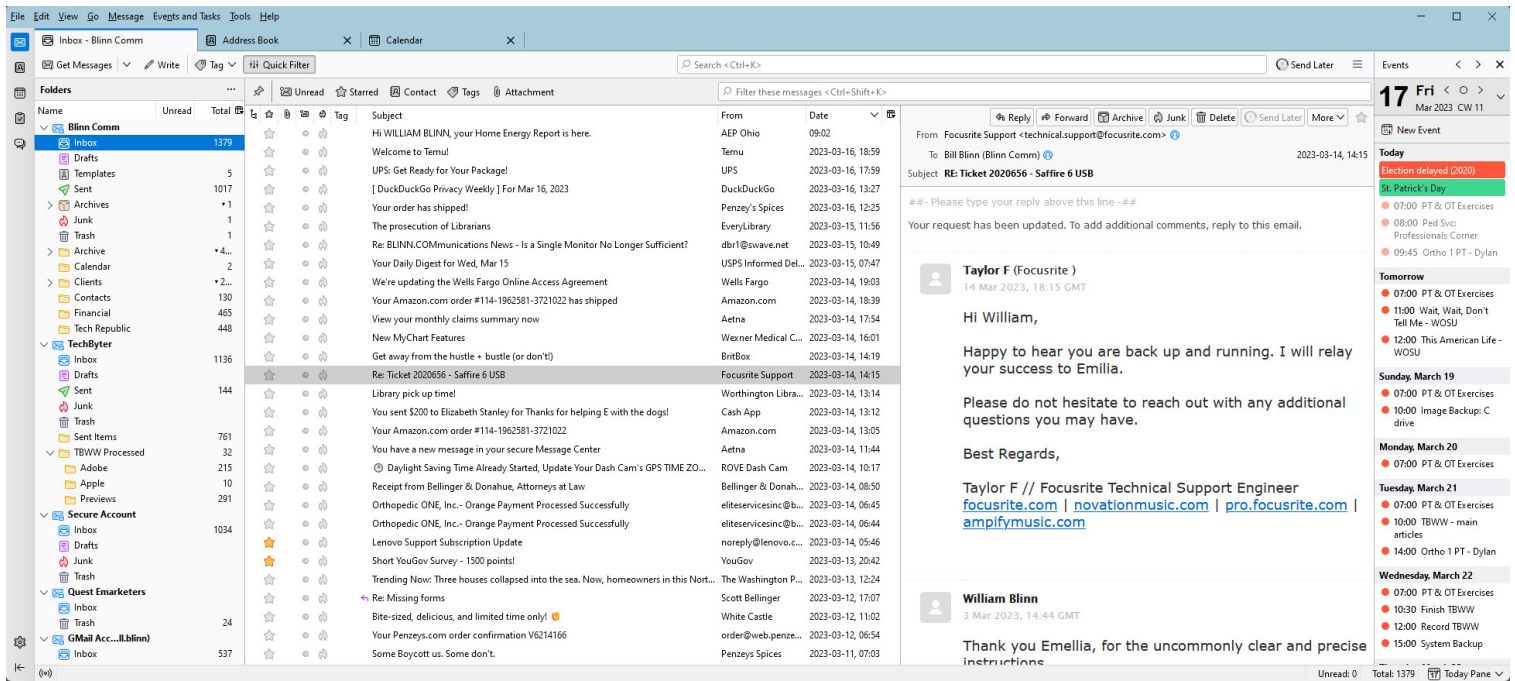
The PortableApps icon will appear on the Taskbar and a menu with the applications you've loaded will be shown in the lower right corner of the screen.

To place the applications you'll use most often at the top of the menu, scroll through the list, right-click an application name, and select *Favorite* from the context menu. To use an application, click its name.



PORTABLEAPPS CREATES A PANEL IN THE LOWER RIGHT CORNER OF THE SCREEN.

Consider this use case: You're at a friend's house when you receive an urgent email on your phone. The message needs an immediate reply, but the reply will be more complex than what can be done with a phone. Your computer is at home, so you ask permission to use your friend's



computer, insert your PortableApps thumb drive, launch Thunderbird, collect your messages, compose a two-page response and send it. Everything is done on the thumb drive and nothing is copied to or left on your friend's computer.

This scenario does require preparation. After creating the PortableApps thumb drive, you would open Thunderbird and set up your email account using the Internet Message Access Protocol (IMAP).

IMAP leaves messages on the server until they are downloaded or deleted. If you use the older Post Office Protocol (POP3) on your primary computer, messages that have been downloaded will not be visible.

The thumb drive can also contain a variety of security applications and diagnostic utilities. These are the ones you might need to use at home when your primary computer develops a problem.

Users can create a PortableApps account or donate to the project, but neither is required. Developers regularly add new applications. Every time you start PortableApps, the installed applications are checked and updated as needed.

**WHEN RUN FROM THE USB DRIVE, AN EMAIL APPLICATION SUCH AS THUNDERBIRD DISPLAYS MESSAGES ON THE SERVER AND ALLOWS YOU TO REPLY WITHOUT LEAVING ANY TRACES ON THE COMPUTER.**

### Creating a Recovery Drive

IF YOU DON'T HAVE A BOOTABLE RECOVERY DRIVE, NOW WOULD BE A GOOD TIME TO CREATE ONE.

Many backup applications include an option to create the emergency disk and there are usually two options, a Linux recovery system or a Windows PE system. The PE is usually the better choice. If you don't have a backup program that can create a boot drive, see [HowToGeek's explanation of how to obtain the files](#).

The recovery USB drive need not be large because the files consume less than 700MB of space. Resist the temptation to use this thumb drive as the target for installing the portable utility apps because the bootable USB drive must be formatted as a FAT32 (File Allocation Table) device. Because of the limitations of FAT32, you'll want a disk formatted as exFAT (Extended File Allocation Table) or NTFS (NT (New Technology) File System) for portable apps.

It is possible to install PortableApps on a thumb drive you've set up to boot the computer, but only if the

thumb drive is partitioned to create two logical drives. This is a task for advanced users.

To use a recovery thumb drive, you'll need to change the computer's boot order so that the thumb drive is queried before the hard drive. That requires modifying the CMOS settings and you have two options: Modify the settings now so that the computer always looks for the USB drive first or wait until there's a problem and change the settings then.

Changing the settings now will make the boot process take slightly more time because the boot loader will need to look at any attached USB devices to see if one is a bootable device. That will slow the startup process and also can be a security issue if an infected thumb drive is attached at boot time.

Even if you don't make the changes permanent now, it's a good idea to investigate how to get to the CMOS settings before you need to make those changes. Think of the recovery drive as insurance. Hopefully you'll never need it, unlike the portable applications drive, which you might use frequently. Ω