

What You Will Want to Know About Windows 10's Backup and Recovery Tools

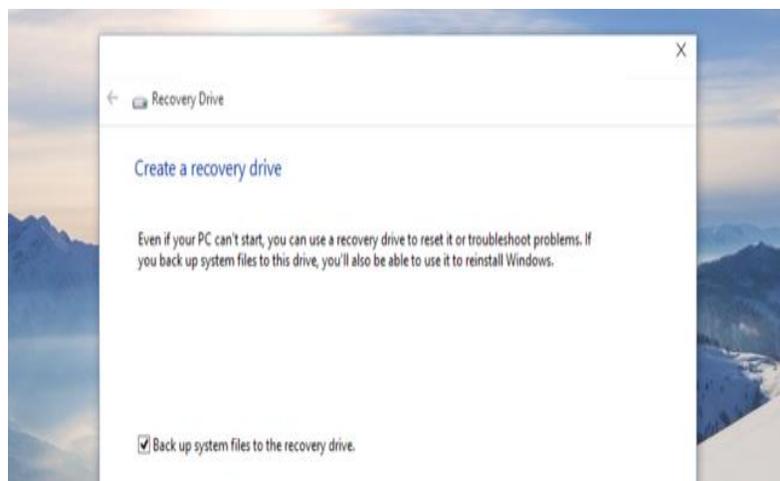
Windows 10 includes many different backup tools. Microsoft has restored the old **Windows Backup** tool that was present in Windows 7, and **File History** is still around. But those are just the tips of the iceberg.

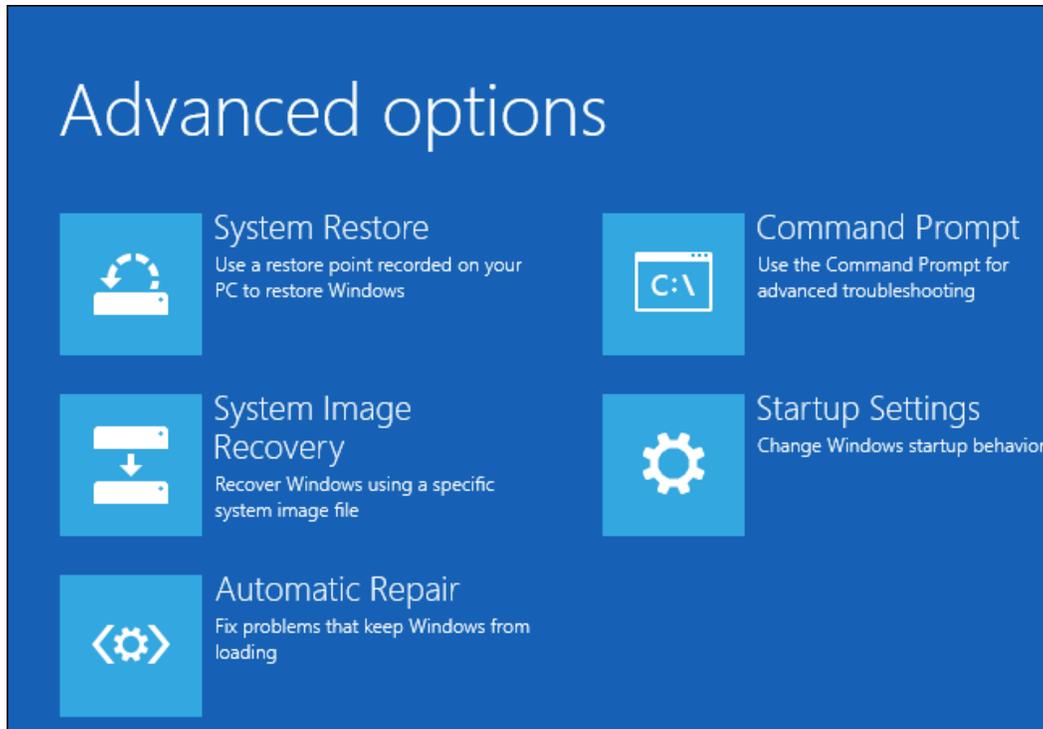
The latest version of Windows also includes a way to back up and restore system images, wipe your computer to its default state, store files online, and make recovery drives you can use in case of emergency.

RECOVERY DRIVE CREATOR

The “recovery drive” that comes with most computers (but is hidden) is a clone of the computer's hard drive as it was at the time it was shipped by the manufacturer. Restoring the contents of the recovery drive returns the hard drive to its factory-new state. Of course, all your personal settings; user-installed software; and personal data files are not restored. But at least you have a working system that's not fouled up with malware or registry errors.

You can **create a USB recovery drive** (must be at least 8GB) that will allow you to access advanced startup options, even if your Windows 10 installation becomes completely damaged in the future. To create a recovery drive, open the Search box, type **RecoveryDrive.exe** into the box, and press Enter. (see the first clip that appears below). This procedure will allow you to create the recovery drive. Once it has been created, you will be able to boot from this drive to access the five *Advanced Options* (see blue background clip on next page) if Windows won't allow you to access them normally.





SYSTEM RESTORE FEATURE

Windows 10 includes other troubleshooting features found in previous versions of Windows, too. If your computer becomes unstable, you can use the system restore feature (notice that it is one of the five Advanced Options) to revert your system files and settings back to a known-good state.

SYSTEM IMAGE RECOVERY

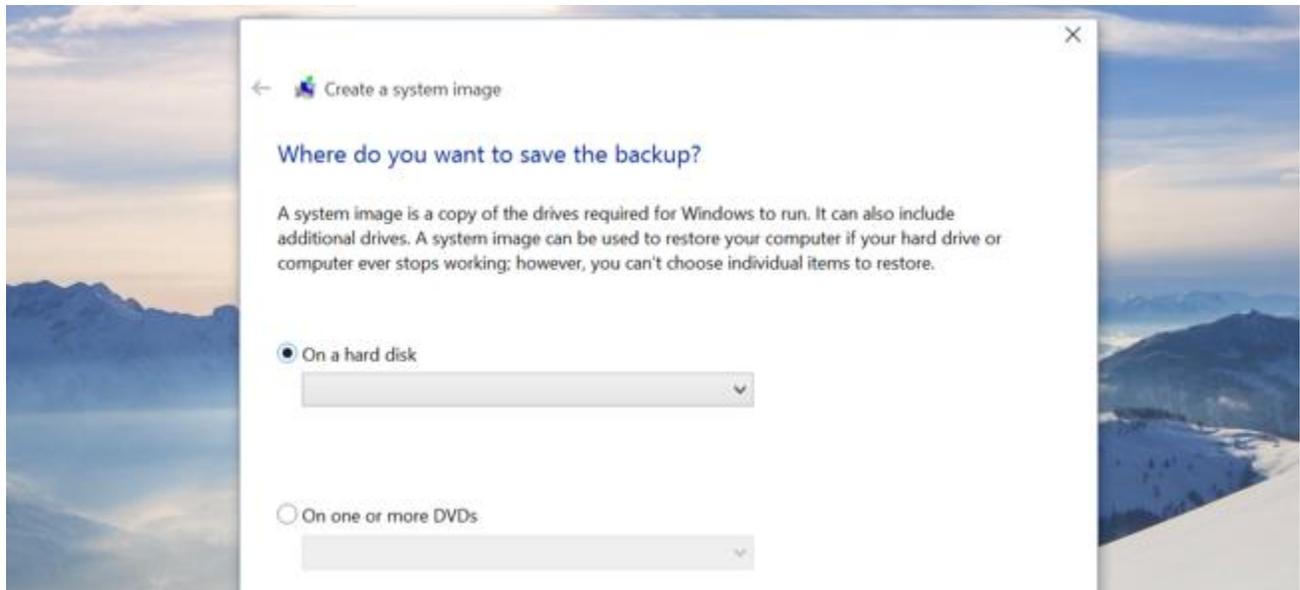
To utilize this feature, you must have created a clone or image of your entire system. This must be done when your computer is running in a good state. *Go to Control Panel (Windows + X, then P), then Category View, then System and Security. Finally, Backup and Restore (Windows 7).*

Microsoft has included the old Backup and Restore feature from Windows 7. This was removed from Windows 8.1, but it's back now in Windows 10. It's also known as "Windows Backup." As mentioned above, you will find it in the Control Panel's Category View, under **System and Security: Backup and Restore (Windows 7)**.

This feature allows you to **create an entire image of your current Windows system**, including your operating system, installed programs, settings, and user

files. This backup can be stored on an external hard drive provided that the external drive has a capacity that is at least as large as the size of the primary drive. (The backup is too large for a USB drive.) Note that this feature is far more important to reclaiming your entire system than the recovery drive feature.

The steps to create a system image are captured by the program that is represented by the clip on the following page.



THIRD-PARTY IMAGING/CLONING PROGRAMS THAT ARE HIGHLY RECOMMENDED

[EASEUS TODO BACKUP FREE](#) is widely touted as a top choice for free backup software. Aimed at Windows home users, and designed for ease of use, Todo Backup Free offers "one-click backup and restore" to protect your files and help you recover in the event of a data disaster. The software backs up your entire hard drive including the operating system and installed software. You can schedule your complete backups to run automatically, or backup only selected files and folders on a daily, weekly or monthly basis.

[MACRIUM REFLECT FREE](#) is best known as a tool to make system images, but it's also an excellent backup software option. It can clone a hard drive (make an exact file-for-file copy) or create a backup image with optional incremental updates. Computer guru Bob Rankin uses Macrium Reflect to create a weekly backup image and daily incrementals, so that his backup is never more than one day old. You can also use it to backup just selected files or folders. The scheduling

feature lets you automate your backups. For even the novice or intermediate user, the program is quite intuitive and offers outstanding flexibility in making both clones and images.

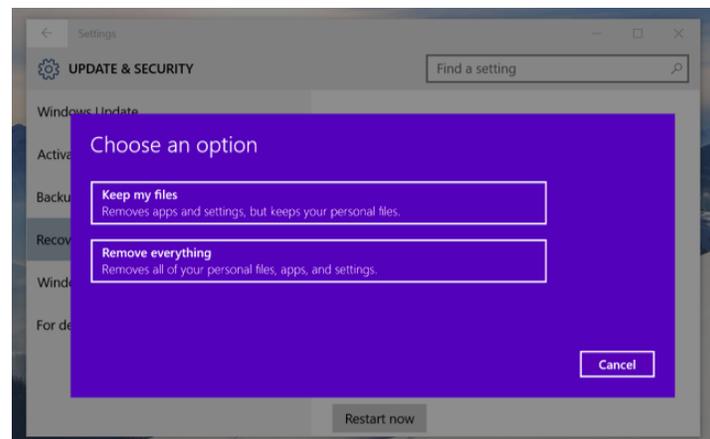
ACRONIS TRUE IMAGE is probably the “Cadillac” of the cloning/imaging/backup industry. The cloning operation copies the entire contents of one disk drive to another to get two identical drives with the same file structure. The "Disk Clone" tool effectively copies all of the contents (including the operating system and installed programs) of one hard disk drive onto another hard disk drive. Therefore, you don't have to reinstall and reconfigure all of your software.

RESET THIS PC (just one step above using the Recovery Drive).

Rather than relying on system image backups, some people use the “Reset this PC” feature to restore your computer to its default operating system state. This also replaces the need to ever reinstall Windows from scratch using an installer DVD or USB drive — just tell Windows to reset your PC and it'll go back to its factory default settings. One caution: *This procedure will allow you to keep your personal data files, but all your applications and settings that you have added since setting up your machine will be deleted.*

To accomplish a reset, open **Settings** (Windows + I), select Update & Security, select Recovery, and click the “Get started” button under “Reset this PC.”

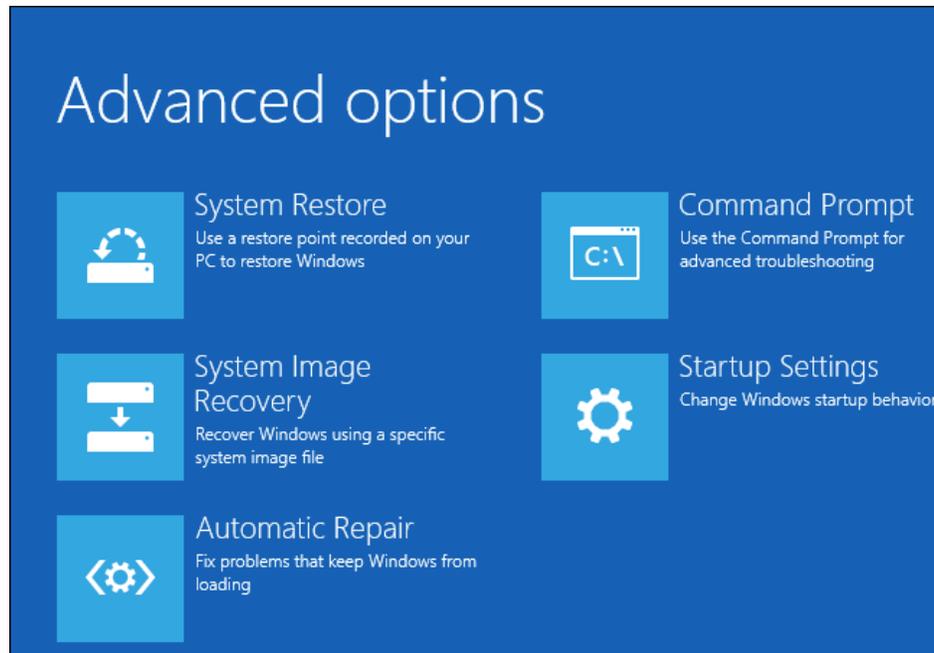
You can tell Windows to keep your user files and reset the operating system and installed programs to their default state, or remove everything. If you remove everything, you can tell Windows to securely erase the drive — something you should do before getting rid of a Windows 10 computer or any other device.



ADVANCED STARTUP OPTIONS

To access the advanced Startup options, open **Settings**, select Update & security, select Recovery, and click “Restart now” under Advanced startup.

From here, you can restore Windows from a system image you created earlier, use system restore to correct problems, and perform other maintenance tasks. This menu should also appear if your computer attempts to boot properly and can't.



A CLEAN REINSTALL OF WINDOWS

Reinstalling Windows is an important strategy for anyone who wants to start over with a clean copy of the operating system. By doing so, you can remove bloatware, wipe out malware, and fix other system problems.

A full, clean reinstall is different from the *Reset This PC* option, or a manufacturer's *recovery partition*. Those built-in options will set your PC back to its factory-default state—which could include some vendor-installed junk you never wanted anyway. A **clean install** uses the generic Windows installation media that you can download from Microsoft (<https://www.microsoft.com/en-us/software-download/windows10/>), and it'll have just the OS, no other frills.

You shouldn't need to regularly reinstall Windows to keep it performing well. But, if a computer is bogged down by startup programs, context menu items, and years of junk, reinstalling Windows may be the quickest way to speed it up again.

Reinstalling Windows can also save a computer infected with malware and other system problems caused by software issues.

Before you begin, back up all of your personal data. While you should back up your data regularly, it is especially important to do so before reinstalling an operating system.

In Windows 10's Anniversary Update (August 2, 2016), Microsoft is experimenting with a new "Give your PC a fresh start" tool that will allow you to reinstall Windows directly from a tool, erasing even all that manufacturer-provided junk. It should be just as good as installing Windows 10 from scratch. Look for a "Learn how to start fresh with a clean installation of Windows" option at the bottom of the Recovery pane after upgrading to the Anniversary Update.

Below is what the screen will look like!

