Know How to Use Your Recovery Drive in the Event of a Serious Problem

Sooner or later, nearly every Windows user powers up the machine — and Windows simply refuses to start. For that reason, Windows lets you create and run a self-booting rescue disc, but Win10 takes that tool to a new level.

The Windows 10 Recovery Drive comes with multiple tools for repairing and reinstalling Windows. You can use a **system restore point** to restore an image backup, run an automated **Startup Repair tool**, **refresh Windows** (either keeping or removing your data), or completely reinstall **(reset)** the operating system.

If you're lucky, you'll never need your Win10 recovery drive. But when things go seriously wrong with Windows 10, you'll be extremely relieved to have it. Here's how to create and use a recovery drive.

**Preparing the Recovery Drive — on a flash drive**

The changes to the self-booting, Windows-recovery system start with the name. It's no longer a rescue *disc*, it's now a rescue *drive.* In fact, creating a bootable CD or DVD is no longer an option; you must use a spare USB flash drive with a capacity of one gigabyte if you are creating a Recovery Drive for a computer that has been upgraded from Windows 7 or Windows 8.1. If you are preparing a Recovery Drive for a **new** Windows 10 computer, you will need a flash drive with a capacity of 16 GB.

Note that everything currently on the flash drive will be lost when you turn it into a Win10 recovery drive.

Most important, you'll want to create your new recovery drive *now,* while your Win10 setup is healthy. (*Generally speaking, a recovery drive created on one PC will work on another machine*.)

Once you have a suitable flash drive plugged into your system, it's time to run Win10's **Create a recovery drive** option.

1. In the Win10 search box, enter *recoverydrive.exe* and select the **recoverydrive.exe** option that appears near the top of the column.
2. Click **recoverydrive.exe** and follow the prompts.
3. On the next screen, you will want to leave the box unchecked if you are using a Windows 10 computer that was upgraded from Windows 7 or Windows 8.1. If you are using a new computer, recently purchased, you will want to leave the box checked.
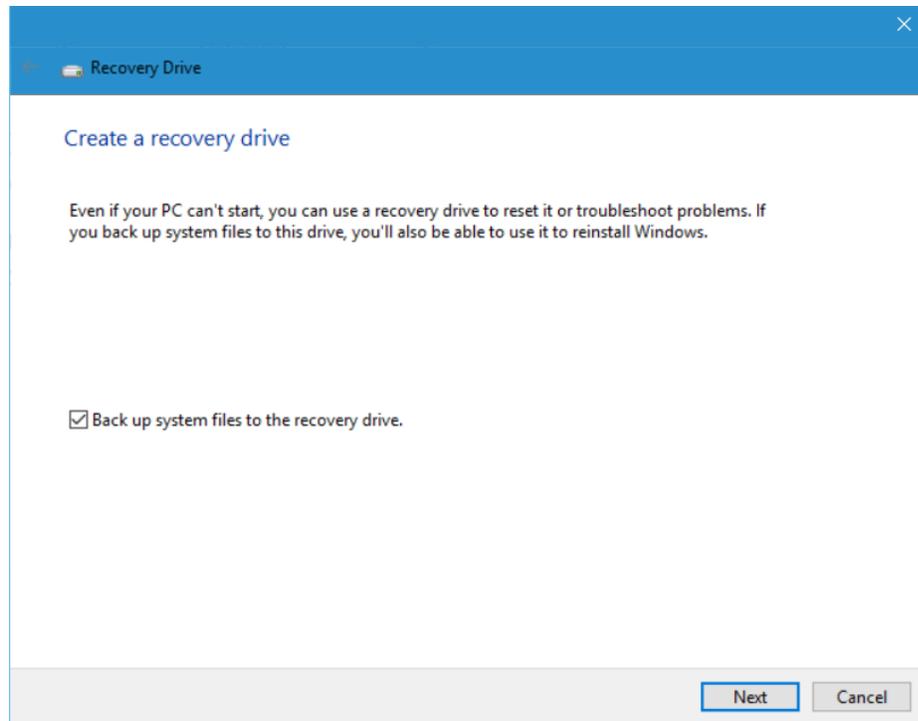
4. When the process is done, label the flash drive with something like "Recovery". Store it securely, so it doesn't get used for some other purpose and you'll be able to find it in an emergency.

But before you do that, you should test that the rescue drive boots.

Booting Windows from the recovery drive

Starting your system from the recovery flash drive should be easy — simply plug in the USB drive and power up your system. But if that doesn't work, you'll need to check the preferred boot order in the BIOS. To get to the boot order on your computer, try tapping the ESC key about once per second immediately after starting your computer. If ESC doesn't work, try F2. In Hewlett-Packard computers, the secret key is F9. In Toshiba and Dell computers, the key to press repeatedly is F12.

When the recovery drive boots, you'll first be asked to choose a keyboard layout — which is really a choice of languages and nationalities.

The next screen, **Choose an option**, offers three choices. *At this point, if you are only testing if your recovery drive will work, you can select **Exit and continue to Windows 10** or **Turn off your PC**. If you are continuing with the recovery process, you will want to Click **Troubleshoot.**

Next, you will get three more choices: **Reset this PC, Recover from a drive,** and **Advanced options**. Click **Advanced Options**.
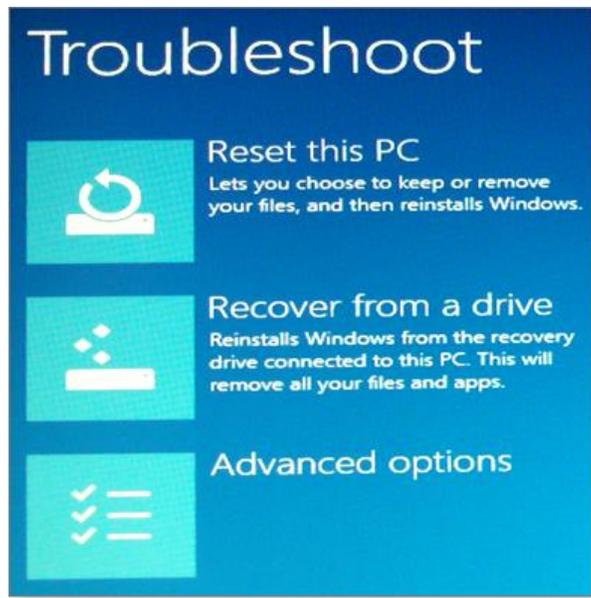
After selecting one of these tools, you might be asked to select an operating system — even though the only option is Windows 10. Simply select Windows 10.

Advanced options: When you don't need to reinstall

Despite the heading, most of the offerings under **Advanced options** aren't more advanced than anything else on the Troubleshoot menu. They are simply tools that might fix Windows without reinstalling the operating system. In other words, these are the tools you should look at first.
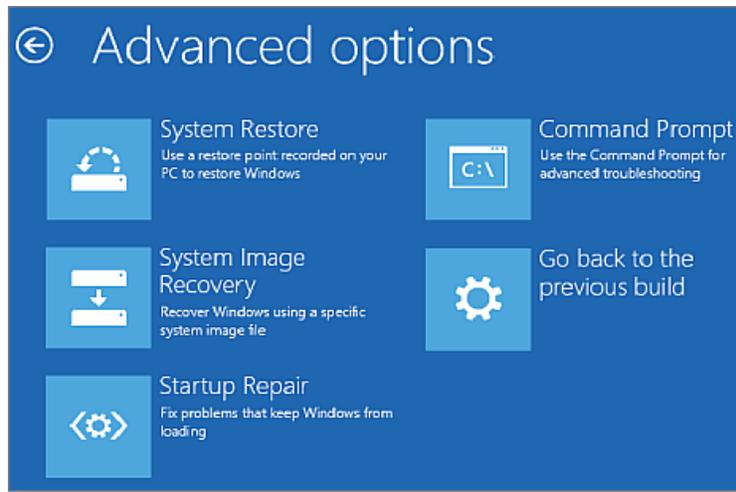
- *Startup Repair***:** This simple tool examines all system files and settings that play a role in the Windows boot process. It then tries to determine what's at fault and attempts to fix it.

  Because it's relatively quick, this tool is a good place to start your troubleshooting. If it doesn't work, you can then move on to more extensive solutions.

- *Go back to the previous build***:** It is advisable that you **not** use this option.

- *System Restore***:** Most likely, you're already familiar with Windows *restore points* — records of previous operating-system settings and configurations that you can access and restore via Control Panel/Recovery. The option in the recovery drive works that same way.
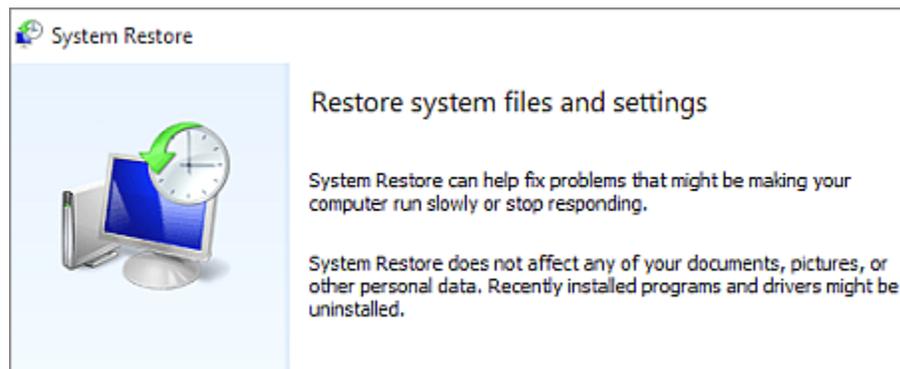
- *System Image Recovery***:** You also access backup images of your system hard drive or SSD, stored on another drive. Details for how to create a System Image Recovery are listed on the next page.

To restore an image from an external drive, you'll need to plug in both the recovery drive and the backup drive into separate USB ports.

- *Command Prompt*: Most of us don't want to bother going here, unless you have a knowledge of the DOS commands.

SYSTEM IMAGE RECOVERY, AKA BACKUP AND RESTORE

To utilize the **system image recovery** feature, you must have created a clone or image of your entire system on another internal or external hard drive. This must be done when your computer is running well. *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."

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 by itself.

The steps to create a system image are captured by the program that is represented by the image below.
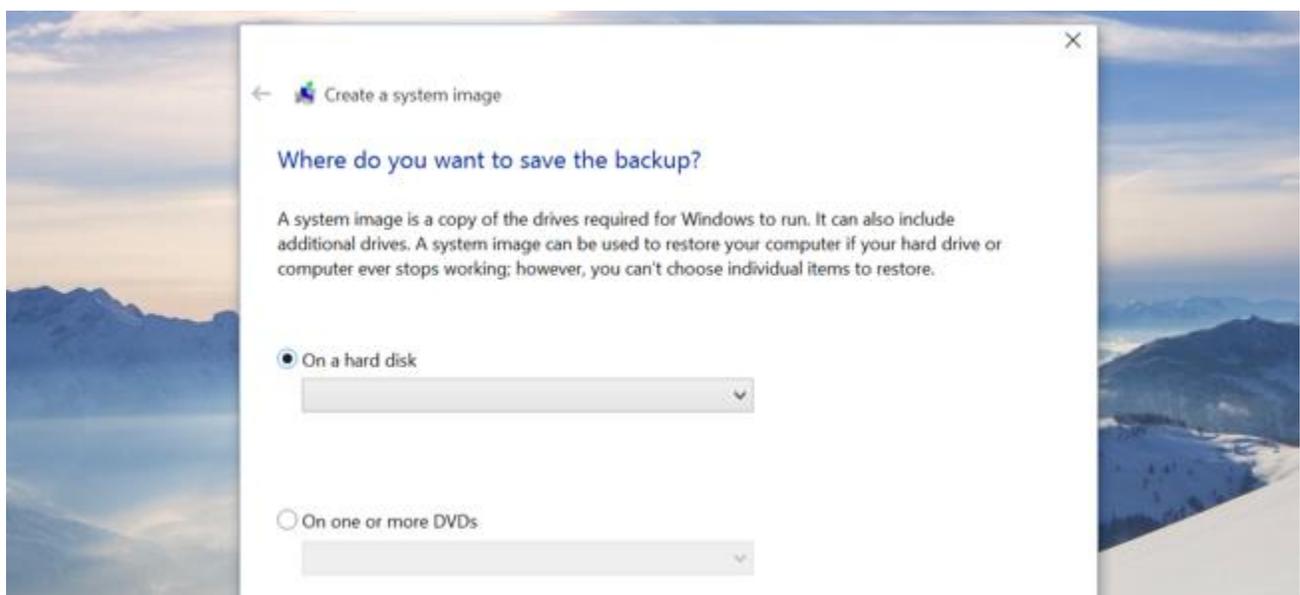
THIRD-PARTY (NON-MICROSOFT) IMAGING/CLONING PROGRAMS THAT ARE HIGHLY RECOMMENDED

If you don't want to use the System Image Recovery program that comes with Windows 10, you may want to consider one of these:

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.

ADVANCED STARTUP OPTIONS (if you can boot your computer)

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.
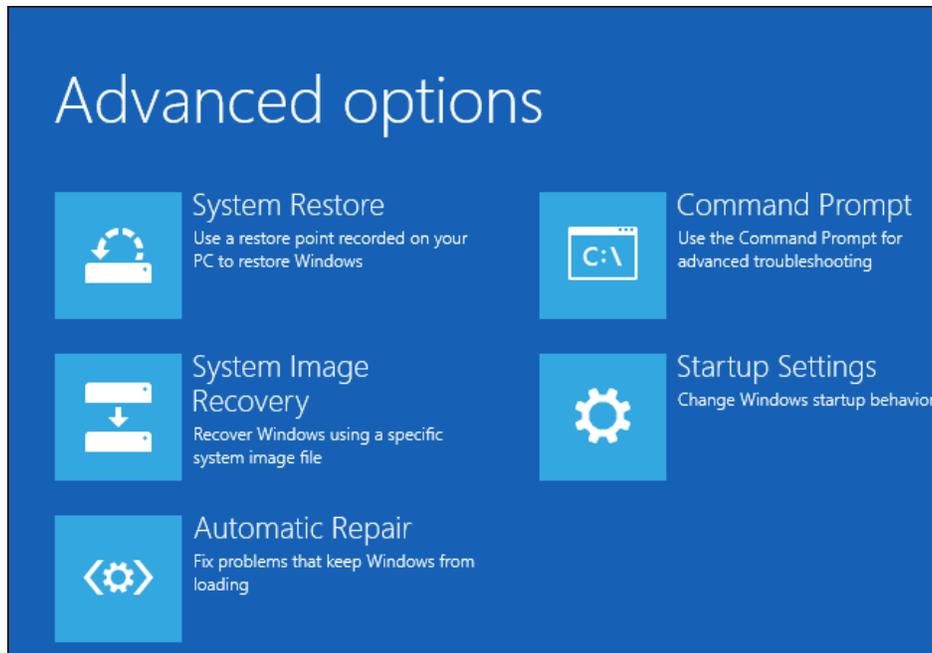
A CLEAN REINSTALL OF WINDOWS

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. (Your File History backup system should accomplish this task.) While you should back up your data

regularly, it is especially important to do so just before reinstalling an operating system.