

In this lesson you'll get into the nitty-gritty with the Windows Registry—the heart of the operating system, and a place full of ways to squeeze some more speed from your computer.

The Registry stores all sorts of information about your system in what are called “keys.” A key might describe how Windows handles a particular type of file, or how it manages memory, and many other things. You get into the Registry by clicking Start, choosing Run, and entering **regedit** in the box that appears. Then welcome to the Registry, perhaps the most intimidating part of Windows. Here you can make all sorts of internal changes to the way Windows operates.



Note:

Changes made to the Registry will generally not take effect until you restart Windows.



ALERT:

Be very cautious editing the Windows Registry. Changes made here can completely disable your computer if they're done incorrectly. We recommend that you follow the instructions below very carefully, and encourage you to back up your data files before proceeding.

Saving your configuration

Before you do anything else, set up a System Restore Point. That tells Windows to save everything about your current configuration, so if something goes awry you can tell it to revert back to that point — kind of like a big “undo” button.

To set a Restore Point:

- Click Start and choose either Programs or All Programs.
- Go to Accessories, then System Tools, and choose System Restore.
- On the welcome screen, you'll be asked whether you want to restore or create a restore point. Choose Create a Restore Point.
- Name it something you'll remember, such as “Before regedit Changes.”
- Click Create.
- Now if something doesn't work, you can repeat these steps and choose “Restore” instead, to return to the status you just saved.

Back up Registry:

- Select File > Export and check export range **All**
- Give it a name – say regbackup-before playing

That done, let's tweak.

The first things you'll see are the five main sections of the Registry's entries. They have cryptic names: HKEY_CLASSES_ROOT, HKEY_CURRENT_USER, and so on. Next to each of those five sections is a small plus sign. Click that to view that section's subsections. Note that you can end up going several levels deep before getting to the key you want to change. The standard way to point to a key is to list the various levels separated by slashes. For example, if you see:

HKEY_CURRENT_USER / Control Panel / Desktop

it means you should click the plus sign next to HKEY_CURRENT_USER, then the plus sign next to Control Panel, then look for Desktop.

Make your menus load faster

For your first trip to the Registry, we'll do something simple: Make your menus work faster.

- Start regedit (see above).
- Navigate to the following key by clicking the plus signs next to the name of each level:
HKEY_CURRENT_USER / Control Panel
- Click "Desktop." A list of entries will appear on the right side.
- Double-click "MenuShowDelay" and change the Value data to 0.
- Click OK.

Free up memory from closed programs

When you shut down a program, Windows will often keep part of it in memory even if it's not being used. Called dynamic link libraries (DLLs), they take up memory and sometimes cause other problems. You can change a Registry key to prevent Windows from doing this.

- Start regedit, following the instructions in this lesson.
- Navigate to the following key:
HKEY_LOCAL_MACHINE / SOFTWARE / Microsoft / Windows / CurrentVersion
- Under CurrentVersion, right-click on Explorer, then choose New->Key.
- In the box that appears ("New Key #1"), change the name to **AlwaysUnloadDLL**.
- Hit Enter. On the right side, double-click the word (Default).
- For the value data, enter 1.
- Click OK.

- Close regedit (unless you want to tweak some more).

Speed program startup

Windows can be set to load information about some applications to make them start up faster by changing how much work a program called the Prefetcher does.

- Using regedit (instructions above), navigate to the following key:

HKEY_LOCAL_MACHINE / SYSTEM / CurrentControlSet / Control / Session Manager / Memory Management / PrefetchParameters

- When you click PrefetchParameters, the right side of the editor will display a list of entries.
- Double-click “Enable Prefetcher” and change the value data to 5 (in decimal, not hexadecimal).
- Click OK.
- Close regedit.

Reduce Windows’ workload

If you have many folders and subfolders, every time you access one, Windows will spend a lot of time updating the “last accessed” time for that folder and all its sub-folders. Stopping that process will buy you some time.

- Using regedit (see instructions above), navigate to the following key:
HKEY_LOCAL_MACHINE / System / CurrentControlSet / Control
- Under Control, right-click on FileSystem, then choose New, then DWORD Value.
- Replace “New Value #1” with **NtfsDisableLastAccessUpdate** and hit Enter.
- Double-click NtfsDisableLastAccessUpdate and change the Value data to 1.
- Click OK.

Improve Swapfile performance

Many programs use a lot of memory, and if you run more than one or two at once, Windows might run out of RAM. In that case, it will start using a section of your hard disk called the “swapfile” to store information. It’s a lot slower than RAM, but it beats not being able to run a program. But sometimes Windows uses the swapfile before it has to. This tweak will tell it to wait till the last moment before doing that.

- Click Start, then Run.
- Enter **msconfig** in the box.
- Click on the System.ini tab.
- Click the plus sign next to 386enh.
- Click New, then type “ConservativeSwapfileUsage=1” in the box that appears.
- Click OK.

