# PC Efficiency: Disable Startup Programs

## Check and Disable the Unnecessary Programs Slowing Down Your PC

**This article shows you how to:**
- See which programs run at startup on your computer
- Permanently disable all of the unnecessary startup programs
- Get Windows starting more quickly

It's one of the common frustrations of computing: the time it takes Windows to start. It only took a few seconds to shut down, so why should it take five minutes to start up again? The usual reason is so-called 'startup programs'. Some of these were probably included on your PC when you bought it, and others have been added over time. They have to be loaded each time Windows starts, which slows down the entire process. In this article, I'll explain how to get Windows starting faster by identifying and then disabling these unnecessary programs.

Starting Windows

**Contents:**

## How Startup Programs Slow Down Your PC

*Your PC takes longer to start*
If you've had your PC for a year or more, perhaps you've noticed that it doesn't start up as quickly as it did when it was new. Unlike a car or a washing machine, it's not that the hardware itself is getting old and wearing out: generally, the components of a computer either work or they don't. The cause of this slowdown is the software.

*What happens?*
To explain what's going on, let's take a quick look at what happens every time you switch on your PC:

• After running through a few basic checks and tests (denoted by white text on a black screen), your PC starts Windows.

*Windows services are loaded*
• Once the essential parts of Windows have loaded, which is a comparatively quick job, Windows then has to start its 'services'. There could be several dozen of these, handling vital jobs such as printing, playing sounds, checking for Windows updates and enabling Internet connections. At this point, you're prompted to log in to Windows.

*The PC is set up as you like it*
• Now Windows loads your 'user profile' and sets everything up the way you expect to see it. This involves populating your Start menu (or Start screen), putting your familiar icons on the desktop and taskbar, applying your chosen colour scheme and desktop background, and ensuring that everything else looks and behaves the way you've set it.

*Startup programs have to be loaded*
• Finally, Windows works its way through the list of 'startup programs'. These are programs that are set to run automatically every time you start your PC: Windows has to find and start each one individually, and then wait for it to load before moving on to the next.

*Small changes to the startup time*
The first three of these four procedures barely change over time. You may gain a few more 'services' relating to

hardware or software you've added to your PC, and there may be a little extra delay if you keep a large number of icons on your desktop. However, none of these will make a huge difference to how long you have to wait to begin using Windows.

What really does make the difference is the fourth procedure – those startup programs. Over the time you've owned your PC, you've quite likely gained more of these than you had when it was new, and that's why Windows now takes longer to start.

*Extra startup programs make a big difference*

Where did they come from? Surprisingly, given that many of them are quite unnecessary, some were already installed on your PC when you bought it. New PCs commonly come with all sorts of programs pre-installed, and some of these programs may well have been set to start automatically every time you switch on your PC.

*Some startup programs came with your PC*

Others are programs you've installed yourself, albeit without necessarily knowing they'd run every time you started your PC. To give you some examples:

*Others have been added since*

- If you've installed Skype, it sets itself to start automatically so that it's always available to receive chat requests and calls.

- If you install Adobe Reader, it adds two startup programs: Adobe Updater checks regularly for new versions of Reader and installs them when it finds them; Adobe Speed Launcher aims to make Reader start faster when you need it by preloading parts of the program.

- When you installed the software for your printer, a 'status monitor' program might have been set to run automatically so that you could check the printer's ink levels or run its head-cleaning procedure by clicking an icon in the tray.

Many of these startup programs run invisibly, so you won't always be aware they've been started. However, some of them place an icon in the tray section of your taskbar, near the clock. If you have a lot of icons here (and/or in the little panel that appears when you click the arrow to the left of the tray), it follows that you have a lot of startup programs – and these are just the ones you can see!

*Most startup programs are unnecessary*

The vast majority of these programs don't need to be running constantly on your computer. Fortunately, by following the steps I'll give in a moment, you can disable them. This isn't the same as uninstalling them: taking the examples I gave above, perhaps you use Skype or Adobe Reader, and you certainly use your printer, so you want to keep these programs on your PC. You just don't necessarily need them to be starting automatically and running constantly, slowing things down.

*How to disable startup programs*

I'll start by explaining the nuts and bolts of how you disable unwanted startup programs, and later in this article we'll look at how you decide which should be disabled and which shouldn't.

## Windows 10 and 8.1: Disable Startup Programs in Task Manager

If you're using Windows 10 or Windows 8.1, follow the steps below to display the list of startup programs in the built-in Task Manager program:

**1.** Right-click the Start button ①. On the menu that appears, click the **Task Manager** item ②. Alternatively, if you prefer using the keyboard, you can
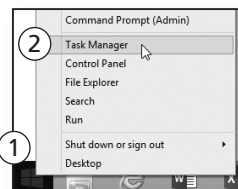
hold down the **Ctrl+Shift** keys and tap the **Esc** key to open Task Manager.

2.  When the Task Manager window opens, do you see the words **More details** at the bottom beside a circled arrow? If so, click those words (or the arrow). The Task Manager window will grow in size and gain a row of tabs across the top, and those words at the bottom will change to 'Fewer details'. In future, every time you start Task Manager you'll automatically see this 'More details' view.

*Click on **More details** if necessary*

3.  At the top of the window, switch to the **Startup** tab. This is where you can find a list of all your PC's start-up programs.

*Go to the **Startup** tab*

4.  Now have a look at the contents of the **Name** column at the left: can you see the whole of every name in this column? If you can't, there's a quick way to widen the column. Move your mouse on to the dividing line between the **Name** and **Publisher** column headers, as pictured below, so that the mouse pointer turns into a double-headed arrow. When it does, double-click, and the column will widen just enough to ensure you can read the whole of each entry in the Name column.

*Widen the first column*
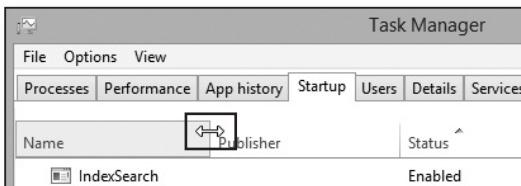


You can widen other columns in the same way if you need to: just move the mouse pointer to the join between that column and the column to its right, then double-click. If you can't see all the

columns, you can use the horizontal scrollbar at the bottom of the window, or make the window wider, or maximise it by clicking the middle button of the group of three in the top-right corner of the window.

*Disable a program*

**5.** Now let's assume there's a particular program in the list you want to disable. Click it once to select it ①, then click the **Disable** button ②.

*You can easily re-enable it*

**6.** By looking at the **Status** column ③, you can see which programs are still enabled and which are not: in the screenshot below, I've disabled the 'Canon My Printer' program ④. If you want to re-enable a program, click it once to select it and then click the **Enable** button that appears at the bottom.
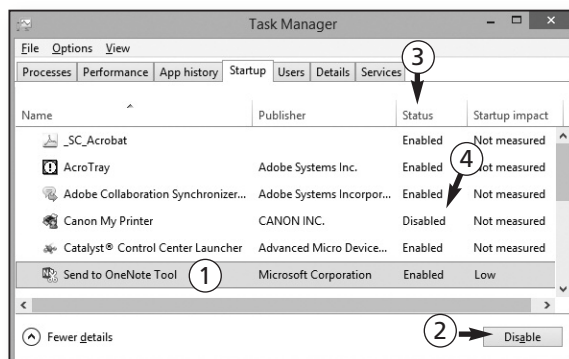


**7.** Work your way through the list, disabling any programs you don't want starting automatically. When you've finished, click the **x** button in the top-right corner of the window to close it.

*Changes occur next time you start your PC*

At the moment, any programs you've just disabled are still running. (Similarly, if you've just re-enabled a program, it won't yet be running.) Windows only takes notice of these changes the next time you start the PC, running any programs marked as 'Enabled' and ignoring any marked

as 'Disabled'. However, there's no need to restart your PC immediately unless you need to check the result of the changes you've made.

## Windows 7 and Vista: Disable Startup Programs with Msconfig

If you're using Windows 7 or Windows Vista, follow the steps below to display the list of startup programs using a program named 'Msconfig':

1.  First, click the Start button to open the Start menu, and then click in the search box which can be found at the bottom of the menu.

2.  Type the command **msconfig** into the search box and press **Enter**. If you see a warning message from User Account Control, just click **Yes** (in Windows 7) or **Continue** (in Windows Vista).



3.  Now you'll see a window which is titled 'System Configuration'. At the top of this window, switch to the **Startup** tab. This is where you see the list of all your PC's startup programs.

    *Go to the Startup tab*

4.  Now have a look at the contents of the **Startup Item** column at the left: can you see the whole of every name in this column? If you can't, there's a quick way to widen the column. Move your mouse on to the dividing line between the **Startup Item** and **Manufacturer** column headers, as pictured below, so that the mouse pointer turns into a double-headed arrow. When it does, double-click, and the column

    *Widen the first column*

will widen just enough to ensure you can read the whole of each entry in the Startup Item column.
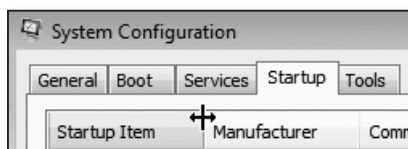


You can widen other columns in the same way if you need to: just move the mouse pointer to the join between that column and the column to its right, then double-click. If you can't see all the columns, you can use the horizontal scrollbar at the bottom of the window to bring them into view.

*Remove ticks beside items to disable them*

5. Each program in the list has a checkbox to its left, and at the moment there are probably ticks in all the boxes. The tick indicates that this program is being loaded automatically every time Windows starts. If there's a program you want to prevent from starting, just click its checkbox to remove the tick. In the example below, I've disabled the program named 'AmazonMP3DownloadHelper'.
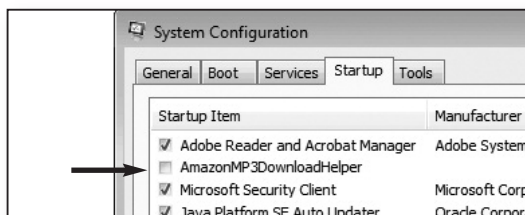


*Tick to re-enable a program*

If you want to re-enable a program, click the checkbox to place a tick inside it.

6. Work your way through the list, disabling all of the programs you don't want starting automatically by removing the ticks beside them. When you've finished, click the **OK** button at the bottom of the window.

**7.** Now you'll see the small dialog pictured below which asks if you want to restart your PC. Tick the box beside **Don't show this message again** ① so that you won't see this message every time you adjust your startup programs, then click **Exit without restart** ②.

*Avoid seeing this message every time!*
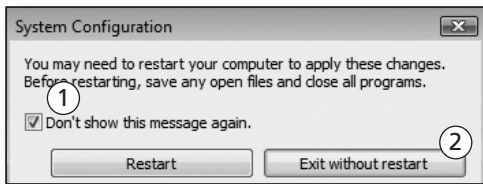


At the moment, any programs you've just disabled are still running. (Similarly, if you've just re-enabled a program, it won't yet be running.) Windows only takes notice of these changes the next time you start the PC, running any programs with ticks beside them and ignoring those without. However, there's no need to restart your PC immediately unless you need to check the result of the changes you've made.

*Changes occur next time you start your PC*

When you do next start the PC, you may see another message titled 'System Configuration Utility' which says (in a rather long-winded way) that you've made changes to the way Windows starts. If you do see this message, tick the box beside the line beginning **Don't show this message** and then click **OK**. This ensures you won't see the same message every time you start your computer.

## Which Startup Programs Do You Need?

As you can tell from the steps on the last few pages, disabling startup items is a quick and easy job. The big question is, which ones can you safely disable and which

should you leave to continue running each time Windows starts?

*Don't disable your anti-virus program!*

The answer is that, with one vital exception, everything in the list could potentially be disabled. That exception is your anti-virus program, which must be set to start automatically and begin protecting your PC as soon as you start using it.

This might be Microsoft Security Essentials (which is termed 'Microsoft Security Client' in your list of startup items), AVG Anti-Virus, a similar program from Avast, Avira or Kaspersky (among others), or perhaps a security suite from McAfee or Norton. I'm sure you know which anti-virus program you're using to protect your PC, and you need to identify that in the list and make sure you don't disable it.

In Windows 10 and Windows 8.1, the built-in anti-virus program is Windows Defender. Although this starts automatically (as it must), it doesn't appear in your list of startup programs, so there's no risk of disabling it accidentally. However, if you've installed a different anti-virus program in place of Windows Defender, that probably will appear in your startup list, so be sure to identify it and keep it enabled!

*Some other programs are optional*

Beyond this single exception, there are many other startup programs which fall into the 'optional' category. In other words, they're not essential to you or your PC, but in a few cases you might appreciate the features they provide. For instance, a number of startup programs exist solely to keep another program updated: every so often, they check online for a new version of a particular program, and if they find one, they download it and install it. That saves you the job of checking for those updates yourself, but at the expense of having this program starting and running constantly whenever you use your PC.

In the table below, you'll find a collection of the most common startup programs with a brief note of what they do. For each program, I've suggested that you either 'Enable' or 'Disable' it, or noted that it's 'Optional'.

*Common startup programs*

| Program | Action | Note |
|---|---|---|
| Adobe Acrobat | Disable | Faster startup for Adobe Reader. |
| Adobe Reader and Acrobat Manager | Optional | Keeps Adobe Reader updated. |
| Adobe Speed Launcher | Disable | Faster startup for Adobe Reader. |
| Adobe ARM | Optional | Keeps Adobe Reader updated. |
| AmazonMP3 DownloaderHelper | Optional | Downloads MP3 audio files you buy at Amazon. |
| AVG AntiVirus | Enable | Anti-virus program. |
| Avira.systray | Enable | Anti-virus program. |
| Bonjour | Disable | Shares music over a network with Apple iTunes. |
| Catalyst Control Center | Disable | Adjusts settings for ATI graphics cards. |
| Dropbox | Optional | Keeps your online Dropbox files synchronised. |
| FlashPlayerUpdate | Enable | Keeps Adobe Flash Player updated. |
| Google Chrome | Disable | The Chrome browser updates itself without this. |
| Google Update | Optional | Updates Google software. |
| Google Toolbar Notifier | Disable | Tells you if something changes your browser search settings. |
| GrooveMonitor | Disable | Share Office files between computers. |
| hpwuSched | Disable | Updater for HP programs. |
| IndexSearch | Enable | Windows feature to keep your files indexed for faster searching. |
| Intel Common User Interface | Disable | May be several similar items. Adjusts settings for Intel graphics cards. |
| iTunes Helper | Disable | Starts iTunes if you connect an Apple device to your PC. |

| Java Platform Updater | Enable | Keeps the Java plug-in updated. |
|---|---|---|
| Java Quick Starter | Disable | Makes Java items on web pages start a little faster. |
| jusched | Enable | Keeps the Java plug-in updated. |
| Microsoft Office | Disable | Helps parts of Office to start a little faster. |
| Microsoft OneDrive | Optional | Keeps your online OneDrive file synchronised. |
| Microsoft Security Client | Enable | Anti-virus program. |
| Nero | Disable | Helps Nero CD-burning program to start a little faster. |
| NVIDIA | Disable | May be several similar items. Adjusts settings for NVIDIA graphics cards. |
| QuickTime Task | Disable | Places an icon for QuickTime near the clock on the taskbar. |
| QTTask | Disable | Places an icon for QuickTime near the clock on the taskbar. |
| RealPlay | Disable | Updater for RealPlayer. |
| RealSched | Disable | Updater for RealPlayer. |
| RealTek HD Audio | Disable | Adjusts settings for RealTek audio hardware. |
| RealTray | Disable | Places an icon for RealPlayer near the clock on the taskbar. |
| Send to OneNote Tool | Optional | Worth keeping if you actively use Microsoft OneNote. |
| Skype | Optional | Allows you to receive calls and chat requests in Skype. |
| SpotifyWebHelper | Disable | Starts the Spotify program if you click a Spotify link in a web page. |
| Synaptics Pointing Device | Enable | Controls the touchpad on a notebook PC. |
| Windows Defender | Enable | Anti-virus program. |

*Not in the list above*    Of course, it's likely that you have at least a few items in your startup list that don't appear in the table above. One approach is simply to disable them (after ensuring

that none is your anti-virus program!) on the reasonable assumption that they're all unnecessary. If you find that a familiar and useful icon near the clock has disappeared next time you start your computer, you can nip back into the list of startup programs, identify the item you've lost and re-enable it.

But perhaps you'd prefer to take a more measured approach, finding out what each item is and does before deciding whether or not to disable it? In that case, here's what to do:

*Find out more about a startup program*

### Windows 10 and Windows 8.1

If there's an item you're uncertain about in the list, just right-click it and choose **Search online**. Windows will open your web browser and whisk you to a page of search results about the program you've right-clicked. By looking at one or two of these web pages, you should find out fairly quickly whether this program is one that really needs to be run at startup.

*Quick search online*
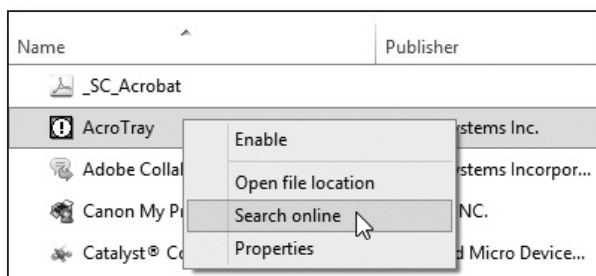


### Any version of Windows

Although users of Windows 7 and Vista don't have the useful 'Search online' option mentioned above, an equivalent method would be to visit a search engine such as Google (www.google.co.uk) and search for a startup item by typing its name (and, perhaps, the company name shown in the 'Manufacturer' column).

*Look up the program at Google*

*Search this huge database*   An alternative, useful for any version of Windows, is to visit the website below, which has a database of over 45,000 startup programs:

**www.pacs-portal.co.uk/startup_search.php**

*Type the program's name*   Scroll down a little way to find the Search box, type the full or partial name of a startup item and click **Search**. This takes you to a page that looks just like the one you just came from, but scroll down again and you'll see a table containing the results of the search.

1 results found for **canon my printer**

| Startup Item or Name | Status | Command or Data | Description | Tested |
|---|---|---|---|---|
| Canon My Printer | U | BJMyPrt.exe | Printer software for Canon Bubblejet printers | No |

*Disable the program or not?*   This table tells you the name of the program being started and gives you a brief description of it. But it's the 'Status' column that's most useful; this gives a one-letter code which advises you how to treat the program:

- **Y:** or Yes, leave it enabled and starting automatically.

- **N:** or No, disable it because it's unnecessary.

- **U:** or User's choice. In other words, it's up you, but generally you can assume that it's not worth leaving the program enabled.

- **X:** definitely not required (and possibly even troublesome or malicious), so disable it.