

Tools for testing your Internet speed

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Top Story

By Patrick Marshall on March 4, 2015 in [Top Story](#)

There are many reasons an Internet connection will become noticeably slower — including not getting the bandwidth you're paying for.

Internet speed-testing services might help reveal whether your ISP is at fault, but only if you understand how they work.



When streaming *House of Cards*, do you find that Frank Underwood can't make a threat without stuttering? Does uploading a new video to YouTube seem to take forever? Are you really starting to wonder whether you're getting the faster Internet service that's costing an extra \$50 a month?

There's probably good reason to wonder. Recent reports show that some Internet service providers (ISPs) deliver slower connection speeds than they claim — up to 41 percent, according to an April 21, 2014, WSJ Digits blog [post](#).

The good news is that there's a bunch of free broadband speed tests available online. The bad news is that the speed numbers from those tests tend to jump around like a kangaroo on amphetamines. So to start, here are the two most important tips to keep in mind when running any Internet-performance test:

1. Never rely on a single set of readings from a single speed test (more on why below).
2. Local wireless connections have lots of potential potholes that can affect download/upload performance. So run the tests on a computer that's connected to your network — and the Internet — with an Ethernet cable.

What Internet-performance tests measure

Nearly all Internet-speed tests measure three things: download and upload transfer rates plus latency. The tests are surprisingly simple; download/upload speeds are based on the time required to transfer a single file — or multiple files of various sizes — between your PC and an online server.

The latency (aka **ping**) test measures the time it takes for a single packet of data to reach an online server and then return to your computer. Latency is typically important to anyone running extremely time-sensitive applications across the Internet — financial trading and interactive games are common examples.

In most cases, you'll notice that upload speeds are far lower than download speeds. That's because ISPs, facing limited bandwidth, long ago chose protocols that prioritize downloads over uploads.

That made a lot of sense in the early days of the Internet, when users typically downloaded more data than they uploaded. And that's still true, though possibly to a lesser degree. We now download gigabytes of streamed music and movies; but we're also video chatting, calling via voice-over-IP, and backing up our files to cloud-storage services.

In the future, ISPs might have to revisit download/upload bandwidth allocation. But for now, downloading will remain significantly faster than uploading.

Measuring Comcast with eight testing services

Using Internet-connection speed-testing services is generally easy. For example, on the Bandwidth Place site, simply click the big Start button (see Figure 1). Many services also let you pick the Web-based server used for the tests.

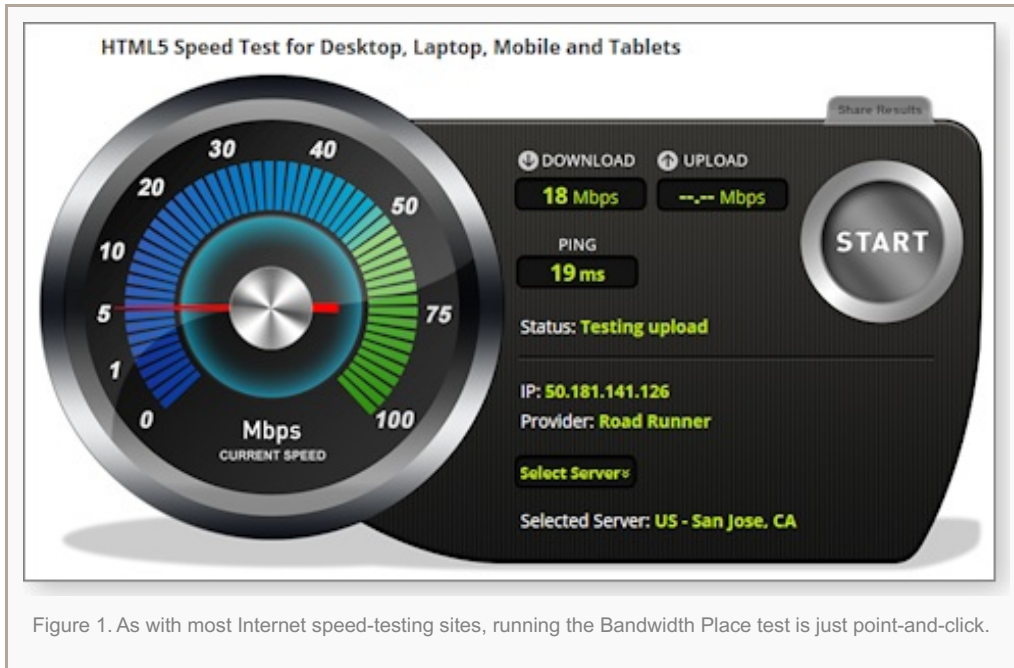


Figure 1. As with most Internet speed-testing sites, running the Bandwidth Place test is just point-and-click.

Keep in mind that, for a variety of reasons, the connection-speed results produced by testing services can differ significantly. I'll discuss why in a moment. First, here are some results from eight popular connection-speed testing services.

I use Comcast for my Internet service — surprisingly, my Seattle neighborhood has few choices. The expected service levels for my subscription are 50 megabits per second (Mbps) for downloads and 5mbps for uploads. The speed figures below represent testing done at midday. Some tests returned significant speed variations, depending on the time of day.

In all but two tests, Comcast met its promised service levels, though the differences between tests were significant. The overall results are:

Service	Download (Mbps)	Upload (Mbps)	Ping (milliseconds)
Bandwidth Place	53.0	6.11	18
CNET Internet Speed Test	48.85	(na)	(na)
XFINITY Speed Test	59.3	6.1	8
DSL Reports Speedtest	49.6	5.9	66
Geek Squad	16.8	5.96	106
Ookla Speedtest	59.4	6.15	8
SpeedOf.Me Lite	65.0	6.7	11

Service	Download (Mbps)	Upload (Mbps)	Ping (milliseconds)
Visualware MySpeed	56.1	5.95	26

To summarize, reported download speeds ranged from 16.8Mbps to 65Mbps, a variance of over 48Mbps or about 75 percent. Ping speeds ranged from eight milliseconds to 106ms, a far greater variance. Even if we throw out the Geek Squad tester's results as an outlier, download speed measurements from the other testers varied by as much 25 percent.

Is one test more accurate than another?

For many reasons, it's impossible to accurately measure **overall** Internet-connection speeds — or even to say whether one Internet testing service is more or less accurate than its competitors.

To start, the Internet is a far-from-homogenous infrastructure; it's a mashup of different routers, servers, cable types, and so on. Typically, each browser-to-webserver connection uses different routes over the Net and passes through various devices that manage Web traffic — all of which impacts connection speeds.

Moreover, Internet users might use different browsers or FTP apps at different times. Some browsers might have accelerators that employ multiple HTTP threads for transfers; others might not. In short, there's no consistency with Internet connections.

There's also no consistency with testing services. As noted above, services use the same three types of tests — download, upload, ping — but the tests themselves can be quite different. Some services use a single file for uploads and downloads, while others use multiple files of different sizes. Even the format of test files can impact transfer speeds, depending on the protocols used, the size of packets, and the amount of overhead they contain.

Some services transfer files in a single thread; others use multiple threads. For the most part, it's unknown whether a speed test that employs a single-threaded transfer — as most of them do — is more, or less, accurate than a speed test that employs a multi-threaded transfer.

And while some tests always use a single online server, others search for the fastest available server or allow the user to select a server.

Internet performance will vary greatly based on the location of servers used for testing. Typically, the farther they are from your location, the lower your speed numbers — especially latency. As noted above, many speed tests scan servers in several locations and select the one that's closest. Some speed tests — SpeedOf.me (Figure 2), for example — run data through several servers in different locations during a test.

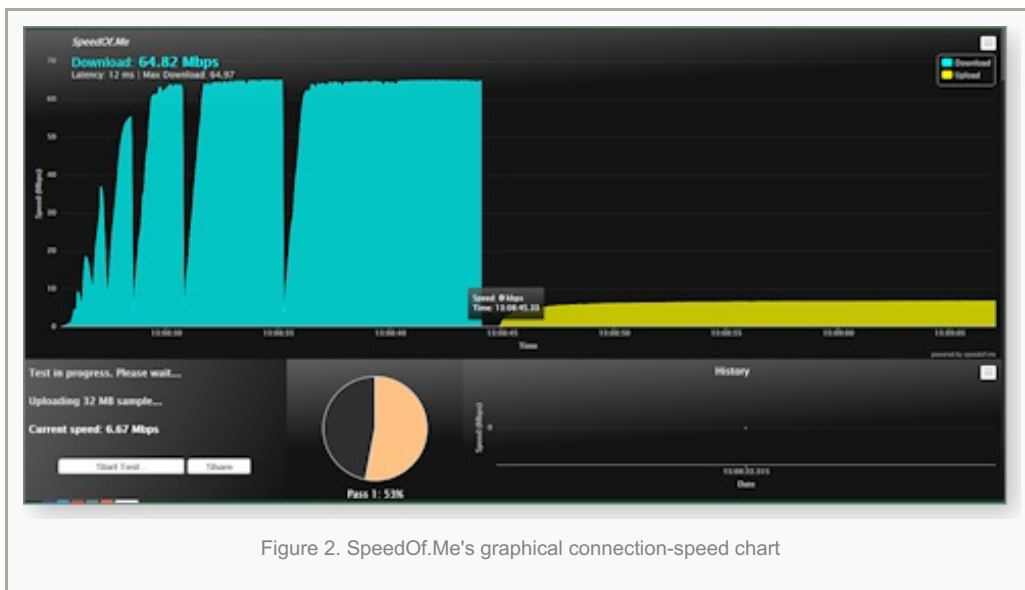


Figure 2. SpeedOf.Me's graphical connection-speed chart

Latency can also have an impact on throughput, because most Internet traffic is bound by a TCP “congestion window.” Essentially, the system waits for confirmation that packets were received before sending more. The longer the latency, the slower the transfer.

The time of day can also result in wildly different speed results. A business might see lower speeds during the day, when numerous users share a single Internet connection. Home users will typically see slower speeds in the evening, when you and your neighbors are downloading YouTube videos and streaming movies.

Bear in mind, too, that test results can vary significantly depending on numbers of other users simultaneously using a local ISP node. For consumers, that might be everyone in an apartment building — or it might be the number of employees sharing a single, leased business connection. If you notice performance dropping after 3 p.m., it might be because all the students in your neighborhood are returning home and jumping on the Internet.

Most speed-measuring services download a small app for running the tests. Some use Java, others use Flash. A few of the newer services use HTML5, which requires that no software be installed on your computer. In theory, HTML5 tests are more accurate because there’s no overhead imposed by the downloaded, local software. But Ookla (Figure 3) claims that its Flash-based tester adjusts for protocol overhead and application buffering before reporting results.



Figure 3. Ookla has a relatively simple interface for displaying upload/download speeds and ping time.

Bottom line: No matter what assumptions an Internet-testing service makes, it can't build a test that fits nicely into the real world. There's no practical way to account for each user's PC configuration and Internet use — especially when our Internet connections will vary from place to place, session to session, website to website.

What to do if your speed is slower than you expect?

Given the limitations of Internet-speed tests, how do you determine whether you're getting the performance you're paying for?

The tests can give a rough approximation of Internet-connection speeds — but only if we run multiple tests at various times of the day and week. If possible, run the test from different computers to see whether you get consistent results. That can help eliminate local machine and networking issues.

And again, make sure to use an Ethernet cable between the PC and your router/modem. Various types of wireless-network interference can significantly reduce Internet-connection speeds.

Run the tests from several different services and throw out the highest and lowest results. If the majority of tests consistently show lower-than-expected performance, it's probably time to contact your ISP.

Tools for testing your Internet speed

Feedback welcome: Have a question or comment about this story? Post your thoughts, praise, or constructive criticisms in the [WS Columns forum](#).

[Letters](#)

Linux inspires readers to share their thoughts

By Kathleen Atkins on March 4, 2015 in [Letters](#)

Following publication of the Feb. 19 Top Story about Linux, we received numerous unequivocal opinions from Windows Secrets readers about both the operating system and our coverage of a non-Windows OS.

More letters welcomed our Linux coverage than not, although one or two of the latter are too profane to print. Still, you can see an assortment of reader responses below. For more conversation about Linux and the Top Story, visit the related Windows Secrets Lounge [thread](#).



Glad/not glad to see an article on Linux

- Just a quick note to let you know how extremely well written was David Robinson's Feb. 19 [Top Story](#), "An introduction to Linux for Windows users." It was concise, accurate, and covered almost all the salient points about Linux's history and development. The screenshots were also a nice touch.

Bravo! Best regards. — *Jonathon English*

- This is a Windows newsletter in case someone forgot to tell you. We do not need more dribble here about Linux. Do a primer on the latest Windows Server. We know Linux and a gazillion other UNIX-like derivatives exist. And probably most of us have used one or more of those badly written excuses for an OS in the past.

Why do you think we pay for this newsletter? Certainly not to read about Linux. — *Robert Sosenko*

- I saw a place I could test Linux with Windows without installing it. I have a CD for Linux 14.04, but I'm reluctant to install it; I'd much rather test it first. But I'm getting fed up with Windows' constant problems and easy hacking. All hackers know Windows, so it's easy for them to get into it. — *Robert Aldridge*
- I **love** that you are now covering Linux!

Please let your readers know that there are **free** online courses offered by the Linux Foundation. I am currently taking them. Here's the [link](#) to Linux Foundation training. — *Susan Brennan*

Because of what could be new at Microsoft

- Personally, if Microsoft can't give me the exact version of Windows 10 that I already have with Windows 8.1 Pro with Windows Media Center, I won't be upgrading to it. Microsoft will be losing a customer, as I won't be renewing my Office 365 Personal or Xbox Live subscriptions, either.

Instead, I'll be ditching everything Microsoft and moving to a Linux distro. — *Keith Brooks*

Kathleen Atkins is the Windows Secrets associate editor. She's also a freelance writer, editor, and photographer. Prior to joining Windows Secrets, she worked at Microsoft Press.

[Lounge Life](#)

Swarms of locusts: Junkware on the Internet

By Kathleen Atkins on March 4, 2015 in [Lounge Life](#)

When Lounge member beiland had some work done on his computer, the shop installed IObit Uninstaller.


Inevitably, beiland brought some unwelcome tracking software onto his system, giving him occasion to test his new uninstaller.




He thought IObit worked well, but to stay on the safe side, he checked in with fellow Lounge members in the Maintenance forum. They had a range of [experiences](#) to relate. Ironists will appreciate that even uninstallers sometimes bring baggage with them.

The following links are this week's most interesting Lounge threads, including several new questions for which **you** might have answers:


Office Applications

General Productivity	What is Microsoft Office Single Image?	
Word Processing	How to convert multiple Word 2010 docs to PDF?	
Spreadsheets	Read data into Excel from text file?	
Databases	Understanding Form_BeforeUpdate	
Visual Basic for Apps	Export from Excel to Notepad	
Microsoft Outlook	How to share Outlook calendar with Android smartphone?	
Non-Outlook E-mail	Need help changing email application	
Other MS Apps	Loss of cut, copy, and paste functions in OneNote 2007	

Windows

General Windows	Adobe Flash Player won't install	
Windows 10	Will Windows 10 have an email client?	
Windows 8	Win 8.1 on two machines; how to separate them?	
Windows 7	Acer laptop crashed after reinstall	
Windows Vista	Vista recovery errors	
Windows XP	Shutdown question	
Windows Servers	Moving a live DHCP server	


Internet/Connectivity

Internet Explorer	Financial sites not opening in IE 9	
Third-Party Browsers	Trying to set homepage on Firefox 35.0.1	
Networking	Connectivity issues, perhaps?	

Software Development

Web Design & Development	Recommendations for website building?	
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Other Technologies

Security & Scams	RegServo: Is it malware?	
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Office Applications

Maintenance

[Opinions of IObit Uninstaller?](#)



Hardware

[HD-detection problem](#)



Other Applications

[Adobe Flash Player failure](#)

starred posts: particularly useful



If you're not already a Lounge member, use the [quick registration form](#) to sign up for free. The ability to post comments and take advantage of other Lounge features is available only to registered members.

If you're already registered, you can jump right into today's discussions in the [Lounge](#).

The Lounge Life column is a digest of the best of the WS Lounge discussion board. Kathleen Atkins is Associate Editor of Windows Secrets.

[Wacky Web Week](#)

R.I.P. L. Nimoy, the human heart of Mr. Spock



What better way to wonder at the strangeness of humanity than along with Spock, the puzzled logician of Star Trek?

The actor who embodied the literal-minded science officer of Star Trek's *Enterprise* captured millions of simultaneously amused and respectful fans; this week's video will perhaps remind you why. But it also might be worth remembering that the long-lived (and prosperous) actor also said, "Logic is the beginning of wisdom, not the end." Click below or go to the original YouTube [video](#).

Post your thoughts about this story in the [WS Columns forum](#).

[LangaList Plus](#)

DISM: Windows' advanced image-creation tool

By Fred Langa on March 4, 2015 in [LangaList Plus](#)

The Windows *dism.exe* tool offers over 100 advanced functions for maintaining system files. Here's what you should know about it.

Plus: Win8's 'Universal' **.pdf** reader causes trouble; a free, reader-recommended application updater; and a warning to Lenovo owners about Superfish.



Help for using the complex and powerful *dism.exe*

Reader Kees van der Pot is enthusiastic about a little-known Windows tool.

- “As a lifetime subscriber and long-time reader of your weekly column, I’d like to make a contribution.

“My laptop suffered with problems which I could not solve with **sfc /scannow**. Searching through your articles about nondestructive repairs, I found an item about Microsoft’s **dism.exe** tool.

“The command **dism.exe /Online /Cleanup-image /RestoreHealth** was the perfect solution for all my problems!

“I wonder why this tool is mentioned in only two articles: Susan Bradley’s ‘Patching Windows — the Windows 8.1 Update edition’ and Fred Langa’s ‘Shrink that gigantic WinSxS folder down to size.’

“Can you explain this wonderful power tool in more detail?”

Sure! The Windows’ Deployment Image Servicing and Management (DISM) tool is found in Windows 7 and 8. Its primary function is to help IT departments and original equipment manufacturers create, manage, and install (or **deploy**) uniform, standardized system images on many identical Windows PCs.

But DISM can also be useful if you’re managing just a few PCs — or even one.

That’s because DISM can also be used as a more general tool for maintaining Windows’ system files and drivers.

You can see a few of DISM’s wide-ranging abilities in the two Windows Secrets articles cited above. The April 24, 2014, Patch Watch [column](#) shows how to use DISM to roll back and recover from a bad Windows upgrade. The April 4, 2012, LangaList Plus [article](#) shows how to use DISM to clean out tons of no-longer-needed Windows Update files.

Here’s a third example: DISM is at the heart of Win8’s custom-recovery image process (see the Oct. 10, 2013, [Top Story](#)).

Indirectly, DISM also powers Win8’s two recovery options, **Refresh** (Aug. 15, 2013, [Top Story](#)) and **Reset** (Sept. 12, 2013, [Top Story](#)). You don’t actually see DISM — it’s working behind the scenes.

The **dism.exe** application is a beast. It’s an expert-level, command-line tool that offers over 100 functions and subfunctions (or **arguments**) for installing, managing, and maintaining system images, files, and drivers. DISM comes in separate Windows 7 and Windows 8 versions, and though they perform similar functions, they use slightly different — and incompatible — command sets, each 100+ deep.

DISM is definitely **not** for beginners. But for advanced users, it’s worth taking some time to scan through its capabilities and possibly try out a few of its especially useful or interesting features and functions.

Here are the best Microsoft resources I can find on DISM. Because the two versions are somewhat different, I’ve put the references into separate Win8 and Win7 lists.

Windows 8:

Windows 7:

Combined Windows 7 and 8:

- [“Fix Windows corruption errors by using the DISM or System Update Readiness tool”](#)

Note: Although **dism.exe** is a command-line tool, a CodePlex [page](#) offers the unofficial, free, open-source, graphics-based **DISM GUI**.

Win8’s ‘Universal’ PDF reader causes trouble

Charles Dial is having trouble controlling one of Windows 8's **Universal** apps. ("Universal" is Microsoft's new name for what we used to call native "Metro" or "Modern" apps.)

His problem is with **Reader**, Win8's lightweight, PDF/XPS viewer. But the answer applies generally to **any** Universal apps.

- "This morning I was hit with a PDF-reader 'update' from Microsoft that eliminated my preferred app — Foxit Reader — and installed **glcnd.exe** as the default reader. The new app doesn't appear in the Programs and Features list, making damn sure it can't be removed via Windows' standard uninstaller tool.

"When running, **glcnd.exe** calls itself 'Reader'; it fills the screen, wiping out all access to any window controls that will close it. Moreover, it completely blocks access to all other open windows: it's immune to **^ + C**, **^ + Z**, **ESC**, or any other normal keyboard or mouse commands. **WinKey + D** gets me back to the desktop, but I still can't kill Reader.

"I can use Task Manager to cancel **glcnd.exe**, but Reader immediately resurrects itself when I open a PDF. Even worse, the app displays a fuzzy image of the rendered document.

"This is the most obnoxious and intrusive piece of crapware I've seen in the last 30 years! I had to reinstall Foxit Reader and then once again set it as the default reader. That killed Reader, but I know it's still lurking in there."

It's not that bad, Charles — honest! Universal apps **can** be controlled and uninstalled. It's just that the methods are different from what you're used to in Win7 and previous Windows versions.

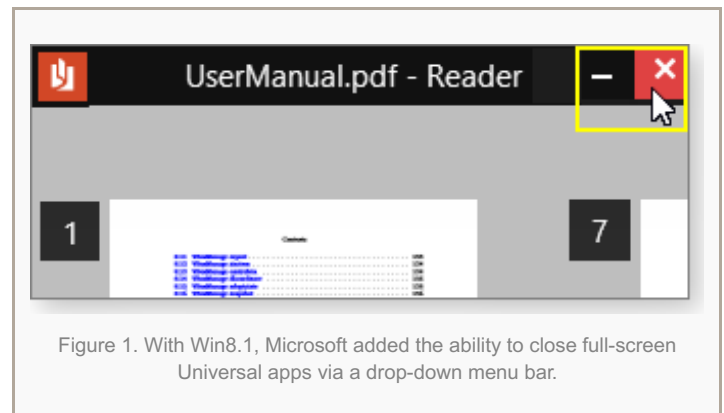
For example, to close or minimize a full-screen, Universal app such as Reader in Win8.1, you just mouse or swipe to the top edge of the window. A conventional menu bar should drop down. You can then click the "minimize" or "close" controls in the normal manner (see Figure 1).

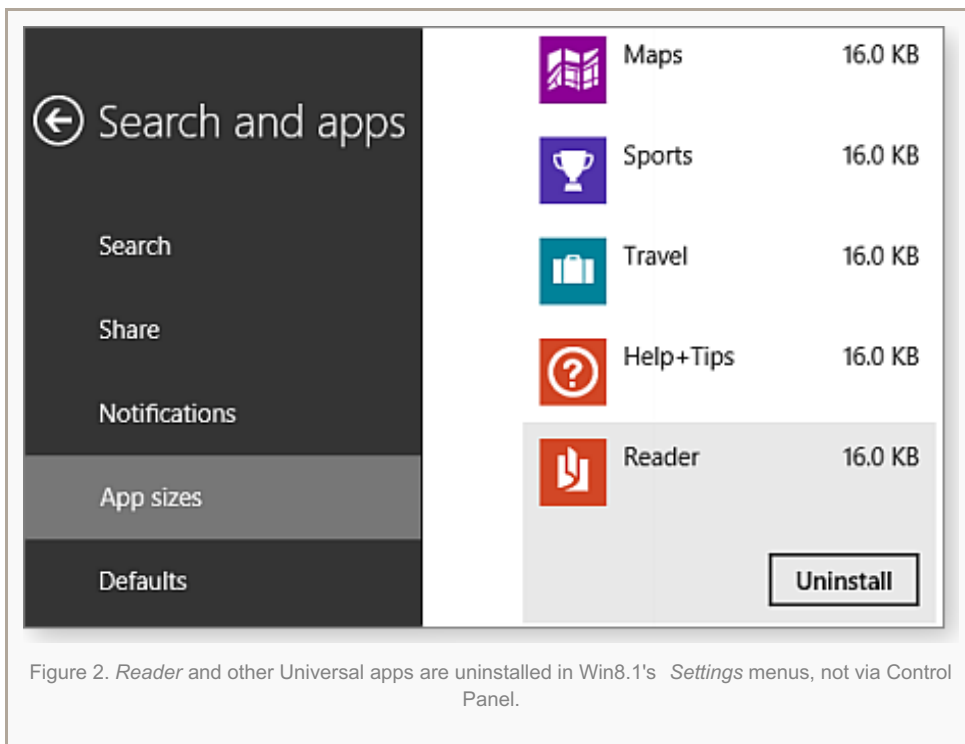
Note: These Universal menu bars were added in Win8.1 — you won't find them in the original Windows 8. If you're still running Win8.0, I **strongly** recommend upgrading. Version 8.1 has numerous important improvements. The upgrade is free via the Windows Store or by installing [KB 2919355](#).

From a full-screen Universal app, you can switch to other active windows or to the Desktop with the standard **Alt + Tab** key combo — just as you did in Vista and Win7.

Universal apps (including Reader) can be easily uninstalled — not through the Control Panel's Programs and Features tool, but via the **Settings** menu. (As you'll see, the process is not exactly intuitive.)

Open the charms bar and click **Settings/Change PC Settings/Search and apps/App sizes**. Select the app you want to uninstall — e.g., **Reader** — and click **Uninstall** (see Figure 2).





I always reboot after any software uninstall to ensure that any leftover in-use/in-memory components are fully cleared out. I follow up with a Registry cleaner to ensure there are no stray Registry settings. But this is a personal preference; it's not a requirement.

If a normal uninstall doesn't work for some reason, you can manually delete the app's executable file. In Reader's case, it's usually at:

C:\Program Files\windowsapps\microsoft.reader{some string of numbers}\glcnd.exe

If you can't delete the file because it's in use, open Task Manager's Processes or Details tab, find the app, right-click it, and click **End task** (see Figures 3 and 4) — then go back and uninstall the app.

Note: The Processes tab lists most apps by their "friendly," descriptive name (e.g., **Reader**); the Details tab mostly uses the apps' actual file name (e.g., **glcnd.exe**).

After ending the task, uninstall the app and reboot.

With Reader gone, you should then be able to permanently install the alternate PDF tool of your choice — and **keep** it set as your default app.

If you ever want to reinstall Reader or some other Universal app, you can simply download a new copy from the Win8 Store.

A free, reader-recommended application updater

After reading "App updater Secunia PSI not working properly" in the Feb. 12 LangaList Plus [column](#), Steve Marston sent in this suggestion:

- "Hi Fred! What about 'Patch My PC?'"

Patch My PC is a small, freeware/donationware updater tool ([site](#)) that tracks version numbers for apps. The site claims that it has a catalog of over 100 programs. When you launch Patch My PC, it scans your system to identify and update any apps it finds that are not current.

Based on my limited testing, it appears to work fine. But like most general-purpose updaters — including CNET's Download App (free; [site](#)) and FileHippo App Manager (free; [site](#)) — Patch My PC also appears to follow the higher-version-numbers-are-always-better philosophy. In my experience, that's not always the case.

Sometimes, a new version might correct problems that have nothing to do with your setup; or it might add features you don't care about and will never use. Occasionally, new versions are just a way to show you ads by pulling you back to the publisher's website or including them in the installation process.

In short, you don't necessarily need or want every new software "enhancement."

Security updates, on the other hand, are almost always worth installing. That's why I prefer an update tool such as Secunia PSI, which flags and updates only software versions with known security issues.

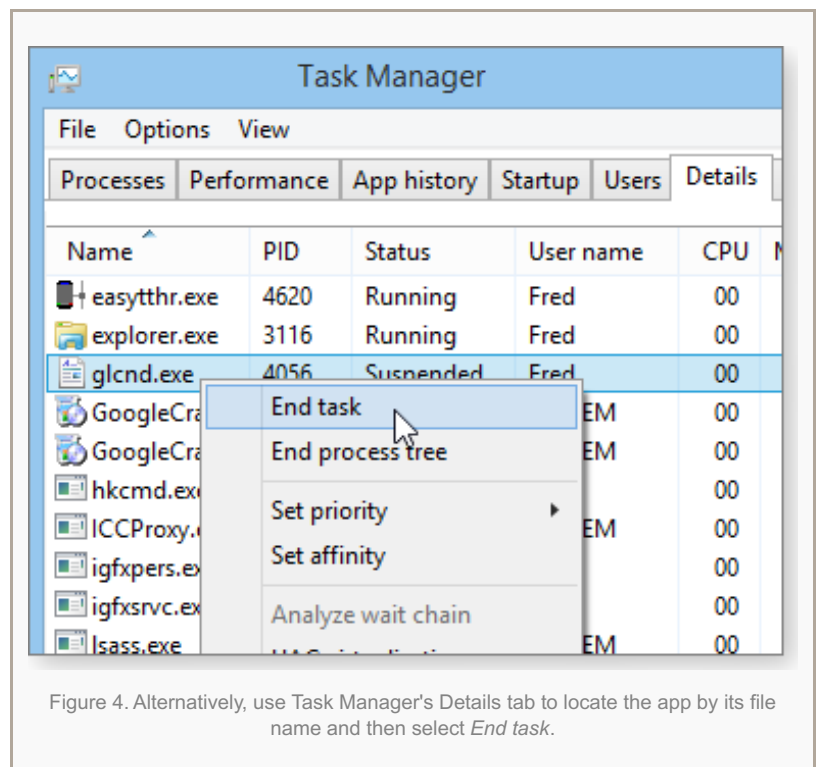
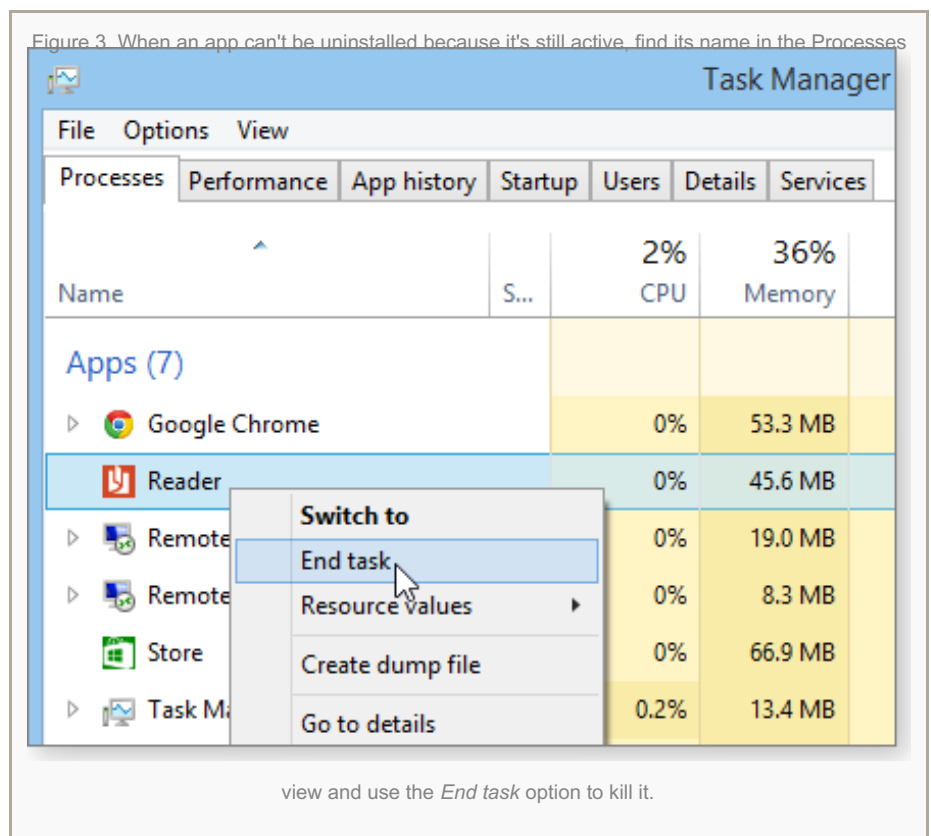
It is, of course, ultimately your choice. If you prefer to always run on the latest versions of software, then apps such as Patch My PC, CNET Download App, and FileHippo App Manager make it easy to do so. For nonsecurity updates, I prefer a more measured, "if it ain't broke, don't fix it" approach. I install newer software only when it offers a clear benefit — and for that, general updaters aren't all that useful.

For more information about updating software and services, see the July 26, 2012, [Top Story](#), "Software that updates your other software," and a related item in the Feb. 21, 2013, LangaList Plus [column](#), "How and when to update your system's drivers."

Superfish: A warning to Lenovo PC owners

Most of you have no doubt seen in the recent news that Lenovo shipped new Win8 PCs — possibly as many as **16 million** — with a potentially dangerous adware tool called **VisualDiscovery/Superfish**.

OEM-installed adware is nothing new, but Superfish uses a security certificate that decrypts all HTTPS Internet traffic



sent by your browser. The problem is so serious that the U.S. Department of Homeland Security issued an alert ([TA15-051A](#)) that Lenovo users immediately remove Superfish and its security certificate. The alert states:

“Since [Superfish’s] private key can easily be recovered from the Superfish software, an attacker can generate a certificate for any website that will be trusted by a system with the Superfish software installed. This means websites, such as banking and email, can be spoofed without a warning from the browser.”

According to a Lenovo security-advisory [page](#), the initial reason for discontinuing the use of Superfish was that “user feedback was not positive” (possibly the PC-security understatement of the year). Nevertheless, the company has released automated and manual methods to remove Superfish, as noted on a Lenovo support [page](#).

Microsoft has updated Win8’s built-in Windows Defender and the standalone Safety Scanner ([site](#)) to remove both the Superfish infection and the bogus certificate.

Microsoft Security Essentials (for Vista and Win7) also can detect and remove Superfish, although Lenovo didn’t ship any Win7/Vista PCs with that adware installed. Other major anti-malware vendors are also releasing Superfish-removal tools.

Moreover, Mozilla has issued a Firefox hotfix because — according to a Mozilla [post](#) — disinfection tools might not completely remove Superfish from the browser.

If you have a Win8 Lenovo PC, I urge you to follow the Lenovo removal instructions ([site](#)) and then scan your system with Win8’s Windows Defender, Safety Scanner, or another reputable tool that specifically targets and removes Superfish.

[Fred Langa](#) is senior editor. His LangaList Newsletter merged with Windows Secrets on Nov. 16, 2006. Prior to that, Fred was editor of Byte Magazine (1987 to 1991) and editorial director of CMP Media (1991 to 1996), overseeing Windows Magazine and others.

Best Utilities

A small utility for big file-management issues

By Nathan Segal on March 4, 2015 in [Best Utilities](#)

One of those extremely annoying Windows experiences is trying to delete a file or folder and getting only an error message: “Cannot delete file: Access is denied.”

You can spend a lot of time checking permissions or associated processes — or you can simply download Unlocker, a free utility that lets you take back control of your files.



A word of caution when installing Unlocker

Unlocker was written by French programmer Cedrick Collomb to solve a specific problem — the inability to delete a file or folder. Like many small utilities, Unlocker was created because its author could not find a convenient equivalent tool built into Windows.

As is the case for many small utilities, downloading and installing Unlocker might trigger security warnings. In fact, if you search for it via Google, the search results will return a link to Collomb’s Empty Loop site with the warning: “This site may harm your computer.” But the app is safe to use and can be downloaded from software sites such as [CNET Download.com](#), [FileHippo](#), [MajorGeeks](#), and [Softonic](#). Several sites also offer a **portable** version of Unlocker.

Note: Unlocker can also be downloaded from its Empty Loop [homepage](#). But when I tried that source, both Firefox

and Chrome blocked the download. Chrome displayed the message: “Unlocker1.9.2.exe may harm your browsing experience, so Chrome has blocked it.” Below that, you’ll also see the words: “Recover Malicious File” or “Remove from List.”

Whichever download site you use, watch out for potentially unwanted software offers and confusing links. With Firefox, the CNET site offered the “Direct Download Link” option (see Figure 1). I recommend using it to simplify the setup process.

The Direct Download option didn’t appear when I used Chrome. You have to be careful not to click one of the many other download offers.

As you step through the setup process, **don’t** select the **Quick** installation option, which is checked by default (see Figure 2). In my case, it offered to install the Delta Toolbar add-on. Click the Advanced option and uncheck the add-on selections.



Unlocker

Download Now
Installer Enabled ⓘ

Download Editors' Rating:
★★★★☆
Very good

Quick Specs

Version: 1.9.2	Total Downloads: 2,813,767	Date Added: May 17, 2013
File Size: 1.03MB	Downloads Last Week: 4,080	Platform: Windows

[Direct Download Link](#)

Editors' Note: Unlocker includes optional bundled software that may be unwanted. Unlocker has been tested for malware by the CNET Download.com security team.

Figure 1. Whenever offered, use CNET's *Direct Download Link* option for downloading utilities.

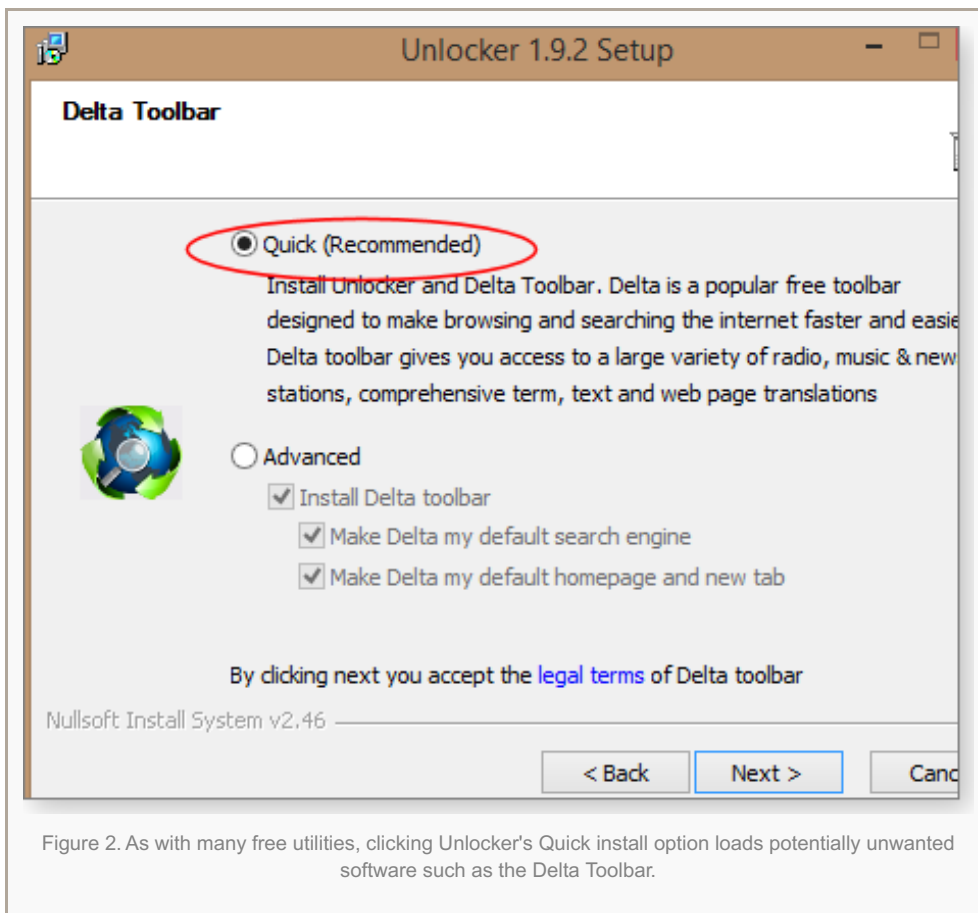


Figure 2. As with many free utilities, clicking Unlocker's Quick install option loads potentially unwanted software such as the Delta Toolbar.

The rest of the setup process is relatively obvious. You have the option to check for Unlocker updates and to add an Unlocker extension to Windows/File Explorer.

The nuts and bolts of using Unlocker

Unlocker isn't the easiest utility to use, mostly because instructions are virtually nonexistent. The utility developers seemed to assume that users will figure it out on their own. Unfortunately, that's not necessarily the case.

For example, if you launch the utility from the start menu, you get the terse navigation window shown in Figure 3. Initially, I found it confusing; but after some experimentation, I understood that you use the window to navigate to the problematic locked file or folder.

An easier method is to simply right-click a file or folder and select Unlocker from the options menu (Figure 4).

No matter how you launch Unlocker, if it doesn't find that the selected files are locked, it'll display a "No Locking handle found" dialog box (see Figure 5), which contains a dropdown list of options — you can take no action, delete the file, rename it, or move it.

If it does find locked files, they'll be displayed in a list, as shown in Figure 6. (Note: Unlocker seems to fail if you manually select multiple files or folders.) More precisely, you'll see a list of locked **processes**.

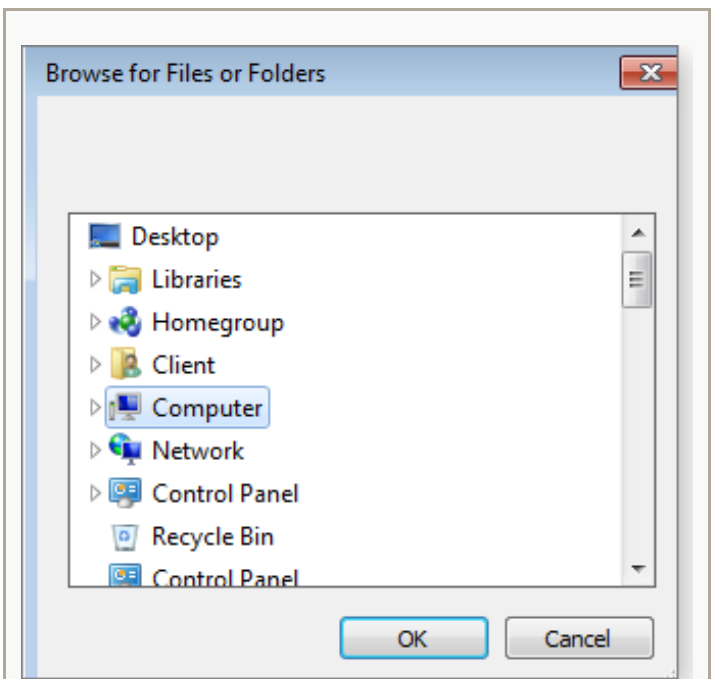
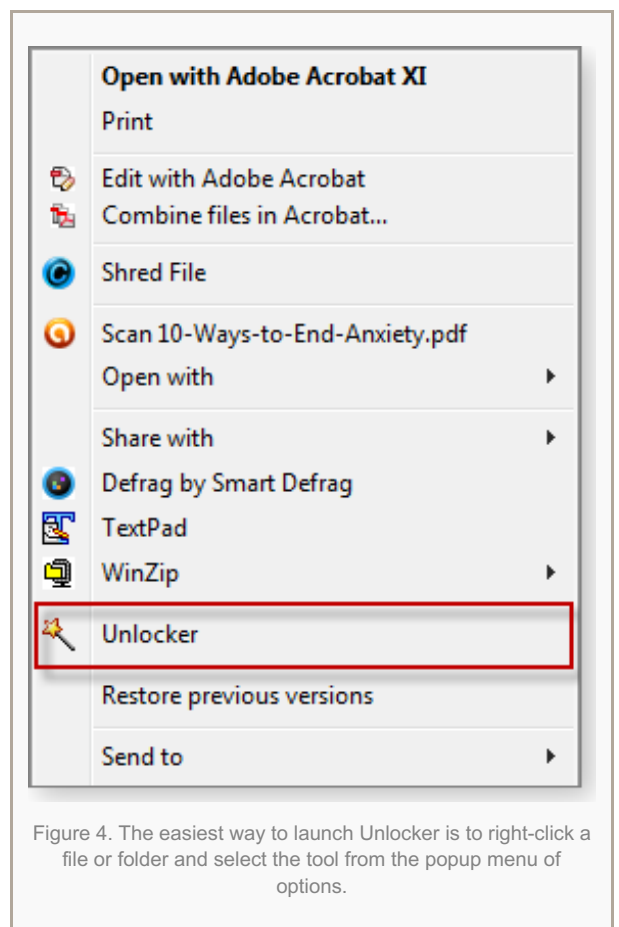
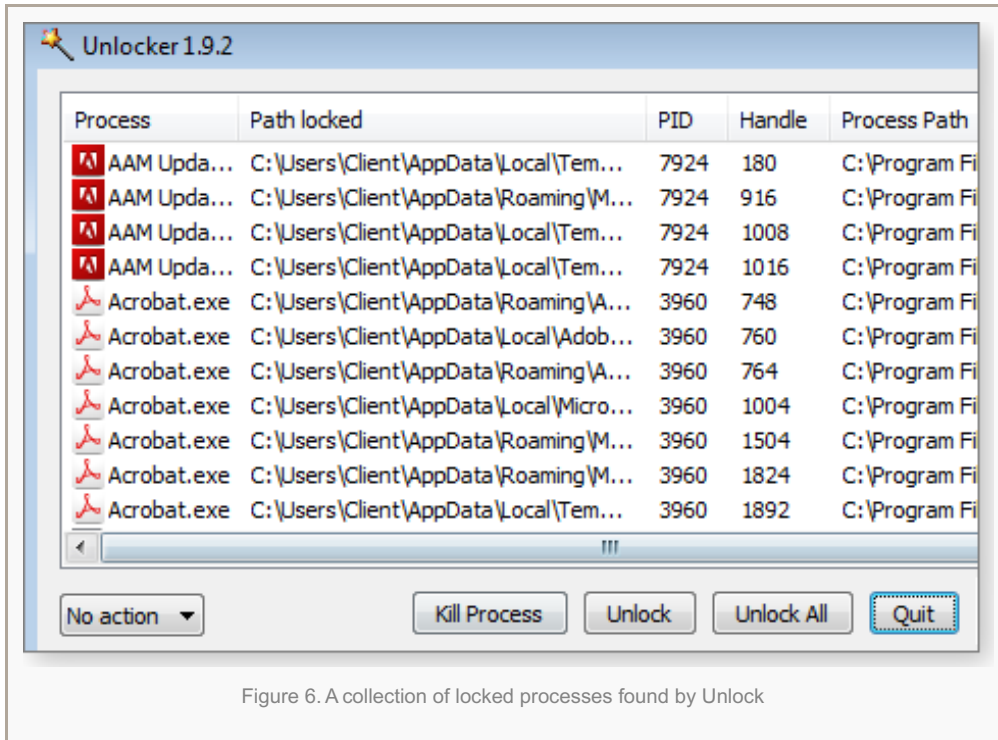
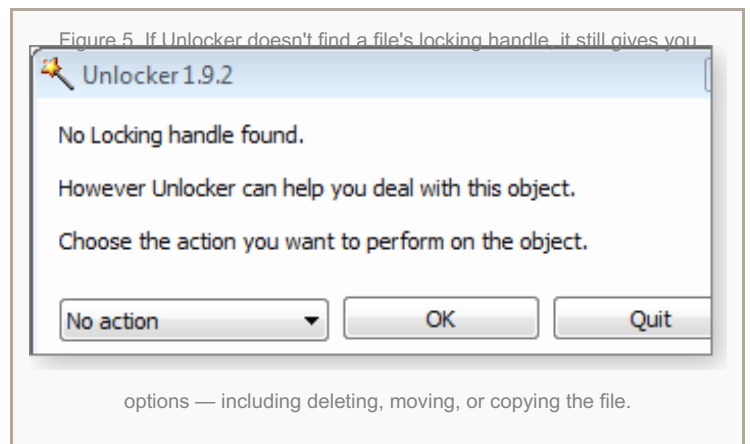


Figure 3. Unlocker starts with a less-than-intuitive navigation window.





For a given file, you have the four choices mentioned above plus the ability to kill processes or unlock one — or unlock all that are listed.

A few observations and recommendations

According to Unlocker's [information](#), there are several reasons a file might be locked. It could be because of sharing violations, or the file might be in use by an application or other user, or the containing drive might be file-protected. Whatever the reason, Unlocker claims it can give back control of the file. The aforementioned info page has a large chart of what Unlocker can do and how it compares to similar tools. (It's actually an excellent list of unlocking/process-killing apps.)

Note that although Unlocker is considered safe, it might run afoul of anti-malware applications. Check your security software's manual for putting Unlocker on your white list. If Unlocker stops working, uninstall it and delete all related Registry keys; then reboot the system and reinstall the program.

Power users can run Unlocker from a command line by using the **-H** switch. That pops up a dialog box (Figure 7) listing Unlocker's command options (switches). Using command-line switches makes it easier to run tasks in a batch file.

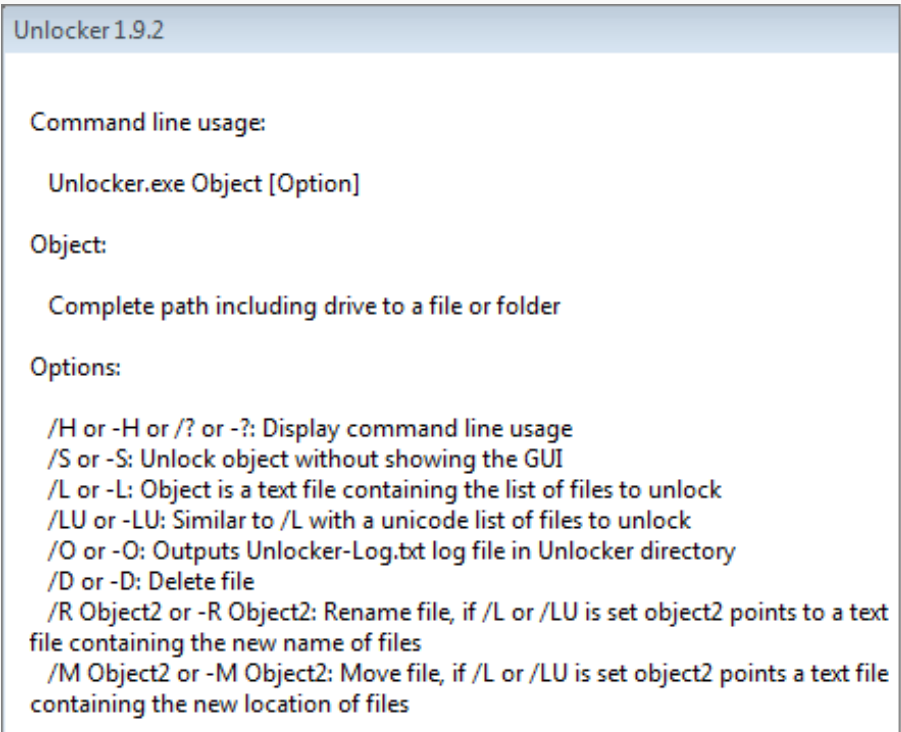
If you've unlocked the handles but still can't delete the file, select Delete in the right-hand drop-down menu and then

select Unlock All — you're done! This is, for example, a good way to delete a troublesome **index.dat** file.

Another tool for your PC

management tool chest. As stated earlier, Unlocker isn't the easiest program to use. If you're having problems navigating it, you can find various tutorials online — simply search for them with your preferred search engine. You'll discover, however, that most are extremely brief.

I suggest using Unlocker in combination with another program such as Process Monitor (Sysinternals [page](#)). You can, for example, set up a filter in Process Monitor to show all activity for a locked file — including the specific process that's causing the lock. Then use Unlocker to unlock or kill the problem process. It just might save you a system reboot.



```
Unlocker 1.9.2

Command line usage:

  Unlocker.exe Object [Option]

Object:

  Complete path including drive to a file or folder

Options:

  /H or -H or /? or -?: Display command line usage
  /S or -S: Unlock object without showing the GUI
  /L or -L: Object is a text file containing the list of files to unlock
  /LU or -LU: Similar to /L with a unicode list of files to unlock
  /O or -O: Outputs Unlocker-Log.txt log file in Unlocker directory
  /D or -D: Delete file
  /R Object2 or -R Object2: Rename file, if /L or /LU is set object2 points to a text
file containing the new name of files
  /M Object2 or -M Object2: Move file, if /L or /LU is set object2 points a text file
containing the new location of files
```

Figure 7. A popup box displays Unlocker's command-line switches.

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