# **Degunking Windows**

Clean up and speed up your sluggish PC

## **Chapter 1**

## Why Is My Computer All Gunked Up?

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# Why Is My Computer All Cunked Up?

#### **Degunking Checklist:**

- √ Make sure you understand the four basic processes involved in degunking Windows.
- √ Learn how files saved on your hard drive can gunk up your machine.
- √ Understand why you need a strategy for dealing with pesky temporary files.
- $\lor$  Learn that you can develop a plan to combat spam.
- √ Understand why installing too many programs can really gunk up your machine.
- √ See how your Desktop and menu system are two places where gunk can build up if you are not careful.
- √ Learn how hard drive segmentation and limited drive space can impact the performance of your drive.
- √ Understand how unorganized data files and Web favorites can gunk up your machine.

Because you've picked up this book, chances are you fall into one of three categories: You're a person with a Windows machine that is struggling to stay afloat; you're a person whose dad or mom just asked why his or her machine has run out of hard-drive space and can't seem to function properly; or you're a help-desk clerk trying to show people how to save their machines from oblivion. Whatever the case, you're the victim of a fairly common problem—you have a gunked-up computer that you need to keep from falling apart. The hard drive works overtime just to send out a two-line e-mail. The start-up process takes three times longer than it did the day you first bought your computer. When you shut down your PC, you can run down the street to get your latte and get back home before the machine finishes winding down. When you feel that your computer is ready to be put out to pasture, you're likely to ask yourself: What the heck happened? Where did I go wrong?

Don't let hardware vendors convince you that your hard drive has suddenly gone bad or that your computer processing chip has gotten too old and cranky. They want you to buy a new machine every year. You can probably see the magazine ads now: "You need the latest whiz-bang RX43210-75 chip" or "Our new micro-woofer, repeater, wireless, sub-atomic, low-heat hard drive will run circles around the competition."

The truth is, you probably don't need what these guys are selling. You just need a little experience, some degunking insight, and a copy of this book.

Our PCs are like our houses: benign neglect usually leads to problems like leaky roofs and clogged drains. Through a combination of internal factors (forgetting to back up your hard drive, not closely watching what gets installed, subscribing to too many e-mail newsletters, and so on) and external factors (spam, viruses, and poorly programmed software), our PCs get really gunked up. Files get plastered all over like clothes in a teenager's bedroom, the Registry (the place where information about your files is stored) starts to go south, and your hard drive can barely support what's currently installed on it (let alone that new road atlas CD-ROM you got for your birthday that you want to install).

It's hard to pinpoint exactly why your computer has gotten so gunked up. After all, every user's experience is a little different. "Getting gunked" involves a combination of many factors. After a while, with normal wear and tear, every computer will start to slow down. The hard drive spins longer, programs take longer to load, programs crash more frequently, and in general a PC becomes harder to use.

The good news is, there are common factors that create gunk on every PC. In this book, we'll identify common PC gunk creators and how to manage them so your computer keeps running quickly and efficiently.

## What the Experts Know

Hardcore Windows users and those geeky guys you hear on Sunday afternoon radio shows know how to keep their machines working well. And the good news is that most people can learn to do this, too. The problem is, until now, no one has put all this degunking information into an easy-to-follow book. What we're about to show you is really not that hard. By following these sequential steps, you can improve the operation of your machine considerably.

Our process is divided into four key areas:

- Basic computer housekeeping 101: Here we'll focus on how to get everything back in its place and rid yourself of all the gunk. (Just think about how good it feels to clean out your closet and throw away all of the stuff you don't need.) We'll also concentrate on how you can optimize your files for the best performance.
- 2. Repairing common problems: Once you've culled down the programs and files on your machine, it's time to repair some basic and common problems. You can think of this as a basic tune-up of your system, and it can be the capstone to a core cleaning and improvement process.
- Total reinstall: In the most extreme cases, some Windows users will need a clean wipe of their system and a reinstallation. Fortunately, you don't always have to do this. But as many savvy users will tell you, this is the tried-andtrue way to get back to the good old days of when your computer was cranked up for the first time.
- 4. *Improving preferences and settings to maintain things better:* Once you've officially degunked your machine, you'll want to tweak the operating system and key programs to improve the chances that you don't end up back where you started. You can make improvements by setting preferences to improve the chances files go where they should, scheduling automated tasks such as hard drive optimizations, and creating simple shortcuts that make it easy to remove unwanted files. Another final set of improvements involves incorporating some programs that improve security, virus protection, and overall optimization of system performance. Consider this step as putting the wax on a newly cleaned car.

## Understanding How You Got So Gunked Up

You understand now that it is common for your system to not be running as fast as it once did, and that you haven't done anything wrong. Things in your computer might be, well, a bit disorganized. Let's review how most users end up in this predicament.

#### Files Are Saved All over the Hard Drive

Novice users, and even some savvy ones, will have document files, downloaded files, and other programs saved in many different places on their hard drive. This happens all the time. For example, the program used to open an attachment from Outlook or Outlook Express stores a copy of the file in a temporary directory in your Windows directory system. If you don't resave the file in your My Documents or other designated document folder, the document will remain in the temporary directory. This is an example of gunk.

Other users will also casually save stuff to their desktop or the C: root directory of their drive without giving it any further thought. Files received from IM (Instant Message) services usually end up in completely different directories. The point to all of this is that, if you don't pay attention to where your files are going, you could end up with a situation in which you easily jam up your hard drive with a lot of data you don't need or even know how to find again.

## Temporary Files Aren't Always So Temporary

Windows has a fascination with temporary files. The problem is that when computers crash or files are improperly saved, temp files like to stay around and gunk up your system. It's like temporary tax hikes—they somehow become permanent fixtures. The result is that you can find hundreds, if not thousands, of files stuck in obscure places, with obscure filenames, throughout your hard drive. To make matters worse, some of these files can't even be located unless you really understand how to find them. Getting these files off your hard drive is not always easy.

Of course, there are automated utilities that locate and delete your temporary files, but they don't typically clean out all of the files. In some cases, you have to resort to some hand-cleaning to get rid of all of the temporary files you don't need on your hard drive. Thus, it helps to know where they hide and how they get there in the first place.

## Spam, Spam, Eggs, Bacon, and Spam!

Spam is the bane of anyone with an e-mail account. We all hate spam. Spam is like weeds in our gardens. The more we try to get rid of it, the faster it comes back. Eventually, it overwhelms us one way or the other. We end up with e-mail repositories teaming with irrelevant files, adding to a bloated hard drive, one that is slow to respond to searches, deletions, sorts, and more.

You might have convinced yourself that there is nothing you can do about spam. But as you'll learn in this book, there are strategies you can put to work right away to greatly reduce your exposure to spam. Many users we talk to simply throw in the towel when it comes to spam, and some spend up to 30 minutes or more per day sorting through their e-mail and deleting their spam. If you take a more proactive approach by using different e-mail addresses, setting up spam filters, using different e-mail clients, and avoiding activities that trigger spam in the first place, you could save a lot of time.

## **Installing Too Many Programs**

We are all guilty of this sin. You hear about some cool utility or you need a neat game to keep the kids occupied. Worse yet, your kids find 18 games to keep themselves occupied. You download a couple of media programs, 5 instant messaging systems, and more. You install the gardening CD-ROM in the spring, use it once, and then forget about it. And what about the genealogy CD you put in last Christmas and totally forgot about until we just brought it up? Caught you! Remember the 50 screensavers you're downloaded over the last four years? Maybe, if you're lucky, you uninstalled some of them. The problem is, your idea of uninstalling them was to drag them into the trash and ignore the warnings that these were installed programs. Windows technically still thinks vou have them.

When you install a program, you're doing more than just copying files to the hard drive. Programs can make physical changes to the Windows operating system, including something called the Registry, which is sort of like a street map or rulebook on how programs work in Windows. Gum up your Registry and it can be like driving in New York City without the traffic lights working.

We've done this before and believe us, it's not fun.

#### Your Menu System Is Overrun

As you add and remove programs, they each tend to add program icons to your Start menu. Eventually, given enough time and lack of upkeep, you'll end up with tons of separate folder entries on the Start menu (like the one Figure 1-1), making it unmanageable. Worse yet, some of the icons might not even work anymore. Your system is probably still functional, but you can make Windows quicker to load and easier to use by cleaning up the Start menu. If your Start menu looks like the one in Figure 1-1, you picked up the right book.

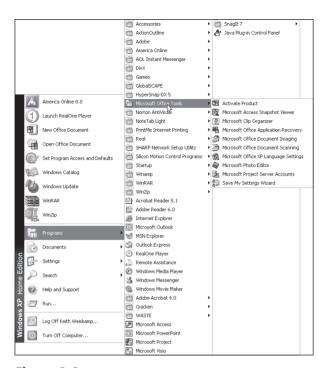


Figure 1-1

Does your Start menu look like this, with a bloated set of program folders you probably don't even use anymore?

#### Your Desktop Is Overrun with Icons

Does your Desktop look like the one shown in Figure 1-2? Okay, we admit it. This is a screen capture from one of our computers once upon a time. We saved it to show you that even the most experienced geek needs some degunking help from time to time. A bloated Desktop is similar to the Start menu problem just discussed, and it can be even worse because not only are some program icons put on the Desktop when programs are installed, but users often put other junk on their Desktop as well. The result is a Desktop that looks like it contains the contents of your entire drive. Every piece of junk that you found while using your computer is out there for the world to see. It's like a closet without doors. The background image on Windows is so obscured you probably don't even recognize it anymore. Your friends walk by and think you are a power user because you have all these icons on your Desktop, when in fact, you just never thought about cleaning it up.

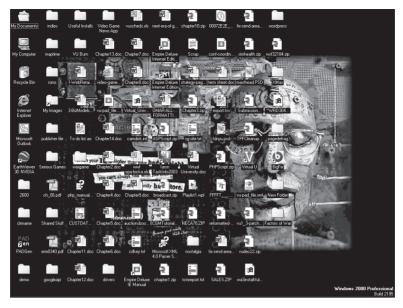


Figure 1-2 Does your Desktop look like this, a sea of program icons? If it does, you need to degunk.

## **Segmented Hard Drive**

As a computer utilizes its hard drive, it stores programs and files in bits and pieces all over the place. Big data files and large programs aren't stored in one contiguous stretch; they are stored hopscotch style, with a piece here and a piece there. As a result, the reader on your hard drive has to physically move back and forth multiple times to read the data in one file. This slows down the hard drive and causes more wear and tear on it. And the more wear and tear on your hard drive, the higher the likelihood that it will crash, misbehave, or wear out more quickly.

Users who install and uninstall lots of programs, create and delete lots of files, and construct large e-mail files (and don't delete them when they should) can suffer from this disk access problem. By optimizing the hard drive correctly, you can speed things up and keep your machine running better and longer.

#### **Low Hard Drive Space**

Windows often utilizes the hard drive to keep it running and perform basic tasks—not just for temporary files that speed Web surfing. Windows also uses the hard drive to serve as an extension of working memory and to perform other core operating system functions. Thus, if your hard drive runs very low on disk space, you can create a problem that causes Windows to crash more frequently or slow waaaaay down. This is less of a problem nowadays because more people have machines with gigantic hard drives and loads of memory. However, by increasing the number of video files, music files, big Internet downloads, and digital photographs they store, people are filling up their hard drives much faster and they aren't keeping up with their cleaning and organization tasks. Laptops and subnotebooks fall victim to this a lot because they tend to have smaller hard drives. By learning to keep only what you need on your drive, organize what you do keep, and clear out files expertly, you can ensure that you don't fall victim to the dreaded "low hard drive space" syndrome.

#### **Unorganized Data Files**

Some people put their files all over the place. There are a few people who at least put files in a few core folders. But wouldn't it be nice if you not only had your data files in the right folders, but you also named them correctly? While you are at it, you could even get rid of duplicate files, making folders easier to search, and get rid of files you don't need anymore.

Here's a pop quiz: How many digital photos do you have on your computer that have a thumb in front of the lens and you've failed to delete them? How easy is it for you to find that great sunset photo from two years ago when most of your photos have filenames like SNR 062500b.jpg? Look at the file directory in Figure 1–3 and tell me it doesn't look like one of yours. Consider how hard it is to locate files when they are stored in a directory with tons of ambiguous filenames.

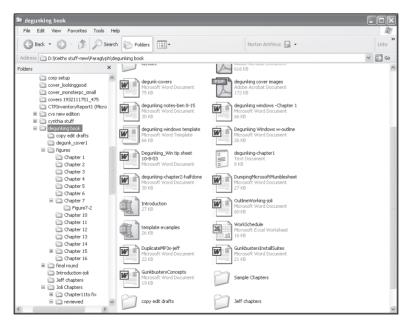


Figure 1-3
Now where did I stick that nice sunset photo?

Our computers get gunked up because we're flooded with new files all the time. We're not just dealing with word processing documents and a few spreadsheets anymore. We're downloading MP3 files for music; we're ripping our CD collection to the hard drive; we're taking hundreds of digital photos and videos; we're adding PDFs and PowerPoint slides, JPEGs and GIFs, and Photoshop collages. Somehow, we need to do more than just dump this stuff in folders without having some type of organization.

#### **Unorganized Web Favorites**

If you surf the Web a lot, you probably have a long list of bookmarks or Web Favorites. Chances are that you've discovered a quick-key for saving Web Favorites (Ctrl+D in Internet Explorer), so you may have a long list of Web Favorites (see Figure 1-4) that is almost useless unless the Favorite you want is in the top 25. Don't worry, we'll show you how to clean all of that up!

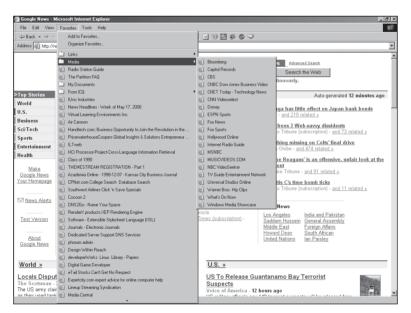


Figure 1-4

Does it take you five minutes to get to the last item on your Web Favorites list? If so, you need to degunk!

## Spyware Boogieman

Spyware is a catchall name for products that, once installed, essentially report back information on your Web surfing habits or help bombard you with pop-up ads and other advertising. Spyware has also become synonymous with installed programs

that don't show up in your installed programs directory. This makes them hard to find, hard to deal with, and, worst of all, hard to uninstall. In truth, some spyware is pretty harmless—it won't raid your hard drive or report the balance of your bank account to hackers. However, these programs can sometimes eat up available memory or resources and slow down your machine. They can also interfere with other programs. Therefore, you might want to get rid of them.

#### The Dreaded Cookie Monster

Cookies are not programs. They're basically tiny pieces of text data that Web sites place in a special directory on your machine. For example, a site like Yahoo! might place a small cookie on your machine with the contents "xu44\$@dncsdlk3," which is a unique string of characters that it uses to recognize your computer. Unless you log in to Yahoo!, that string doesn't serve any purpose; it is used only by Yahoo! to recognize you when you visit their site. Cookies can also store more specific data, such as the date of your last visit.

Overall, Cookies are fairly harmless. They usually eat up only 1K to 2K of hard drive space, and they usually don't give a site much information other than that you have visited before. However, many people like to get rid of them because, after a while, you can have a few thousand of them, and about 99 percent of them are useless. In addition, if you ever accidentally stumble onto a gambling or porn site, you might find cookies from them on your machine, which can be disconcerting for some people. Imagine searching for all text files on your machine and seeing a small 1K file named cookie:www.tripleXfunland.net.txt.

Some people set their browsers to avoid accepting cookies altogether, but some very legitimate sites use cookies to make your experience better and more customized. (Ever wonder how Amazon recognizes you when you visit? Cookies.) Disabling cookies can sometimes lead you to throw the baby out with the bathwater, so to speak. It's your call, and in the end, you'll probably accept cookies, so it is worthwhile to know how to clean them out by hand.

#### You're Gunked Up!

Chances are that if one of these things is happening on your computer, nearly all of them are. But if you commit yourself to degunking, you can get most or all of your computer back running the way it used to. The problems we just discussed above will only get worse with time, and that's why your entire computer can get so bogged down.

# Ready for Degunking?

The most difficult part of getting your machine back to where it should be involves dedicating a little time. As we move on and look at the different degunking techniques, we'll arrange the tasks in the order that will likely get you the most results in the shortest amount of time. Our approach will be to show you not only how to fix things, but how to get yourself on a maintenance program so that your computer always runs well. If you're new to the world of degunking, don't worry. It's much easier than putting together a barbecue in the backyard with those ridiculous instructions they provide.

#### **Additional resources**

- Sign up for our **Downloads Weekly Update**, delivered on Mondays.
- Sign up for our <u>TechRepublic NetNote</u>, delivered on Mondays, Wednesdays, and Thursdays.
- Check out all of TechRepublic's newsletter offerings.
- "Configuring Windows XP's Indexing Service the right way" (TechRepublic)
- "Tune Windows XP to speed up boot and shutdown times" (TechRepublic download)

#### **Version history**

Version: 1.0

Published: July 8, 2005

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—The TechRepublic Downloads Team