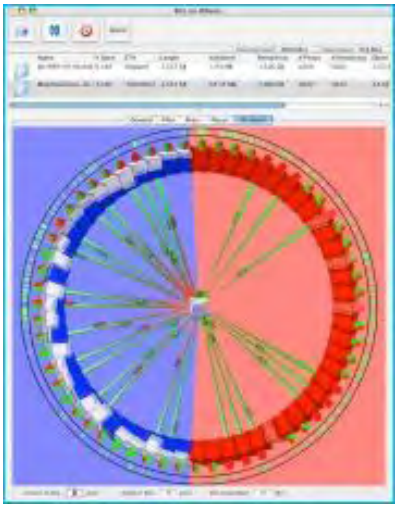
# *ComputorEdge™ Online* — 01/23/09



## This issue:
## BitTorrents: The Power of Peer-to-Peer File Sharing

BitTorrent files use the power of groups of users for streamlined peer-to-peer file sharing. How can you use them? Are they legal?

## COMPUTER FOCUS:

A reader wants an answer to an Ubuntu/Skype/PulseAudio incompatibility issue; and a quick tip on using the ls (list) command.

## Rob, The ComputorTutor Does Visual Basic for Applications by Rob Spahitz

### More Access VBA Programming

Last week, we explored the concept of computer programming, focusing on the computer language called Visual Basic. This week, we continue exploring the use of VBA for Access.

# DEPARTMENTS:

## EdgeWord: A Note from the Publisher by Jack Dunning

### Downloading with BitTorrent

While downloading with BitTorrent is not your traditional approach to get files, it certainly does have its advantages—and some disadvantages.

## Editor's Letters by ComputorEdge Staff

### Readers write in with letters to the editor.

"Free-E-Filing Software," "ISO Info Helpful," "I Want Some Paper," "Skeptical About Firefox," "Netbooks for Business," "A Way with Words," "Windows Key Uses"

Send mail to *ceeditor@computoredge.com* with questions about editorial content.
Send mail to *cewebmaster@computoredge.com* with questions or comments about this Web site.


ComputorEdge Magazine, P.O. Box 83086, San Diego, CA 92138. (858) 573-0315

Return to Table of Contents

## Digital Dave

**“**Digital Dave answers your tech questions.**”** by *Digital Dave*

A reader notices faint scratches on DVDs and CDs. What could be causing it—and is it a problem?; a reader is experiencing a strange PC startup problem; a reader can't send e-mail with his laptop while on the road; a reader wants to remove Windows XP "hot fixes" from his computer.

*Dear Digital Dave,*

*I used DVD and CD-RW discs to back up data files. Lines that look like faint scratches appear on the data side of the discs at a 45-degree angle to the disc tracks after use. I don't think dust in my drive is causing them. My discs continue to operate correctly. Has anyone else noticed this?*

*Mike*
*Cardiff by the Sea*

Dear Mike,

If all of your discs are developing those lines after use, then most likely something in your drive is scratching the surface, if only slightly. It is not normal for anything to be touching the read surface during operation.

The actual writing of data is done below the surface of the disc, so tiny scratches usually do not affect the stored information. However, if the damage is great enough, then you can experience loss since the laser will not be able to access the data through areas that have scratches. If in fact your drive leaves marks every time you use it, then eventually some of the data will become unreadable.

You may not notice data loss in music and video files since they both use error-correcting software for playback. The loss is likely to be negligible. If you are saving programs, then even the loss of a single bit could mean loss of the program. I would replace a drive that's causing damage. They're cheap.

Digital Dave

*Dear Digital Dave,*

*We have a Compact Presario PC with an AMD 64 Athlon processor and Windows XP. The PC came originally with 512MB of RAM.*

*This week we removed the old memory and added 2GB of new RAM (the correct type). Now when we turn on the machine, the monitor remains blank. Then I have to hold the start button down for a time before I can start the PC again, then it runs OK after the second start!*

*Before adding the new memory, we cleaned out all the dust that had accumulated for the past three years. We checked all connections and everything seems OK, with no evidence of any damaged parts.*

*What might be the problem?*

*Chalmers Kerr*
*San Diego, California*

Dear Chalmers,

It's difficult to know what is wrong, but the fact that you can restart the computer to get it to work is a victory. I might try reinstalling the memory chips to make sure that they are tight (or swap them out if you have other memory that you know is good). I don't think that the dust had anything to do with the problem—especially since you removed it.

I once had a similar laptop that I also upgraded to 2GB of memory. Occasionally it would hang up, requiring a similar hard boot. (On many laptops, holding down the start button will perform a hard reset.) Many computers may have quirks that are next to impossible to track down. We tend to learn to live with them, even if they are annoying. If you know how to get the computer working, and it runs for a long enough period of time to be useful, then back up your data and continue on.

It is possible that components that drive the monitor are being affected by temperature. When you first start the cold computer, the chips are not working properly. When the chip is warmed a little, an opening in a circuit could close as it expands with the heat, making it operable again. If this is the case, it is likely to deteriorate in the long run.

In my experience, problems such as yours do not improve. We either live with them until we can no longer bear it, or we start replacing parts—if we know which ones to replace.

Digital Dave

*Dear Digital Dave,*

*After buying a new laptop (MacBook Air), I'm having a problem sending e-mail while away from home because of the requirement to utilize different SMTP settings required for Apple Mail.*

*How do I get e-mail/SMTP settings to work with different connected servers while using my laptop on the road?*

*Bruce Plummer*
*El Cajon, California*

Dear Bruce,

Your problem sending e-mail when on the road has more to do with the nature of the Simple Mail Transfer Protocol (SMTP), then your laptop or Apple Mail. The SMTP is vulnerable to spammers because it doesn't require authentication. If an e-mail server will accept outgoing mail from anywhere, then any spammer can use it. Therefore, ISPs tend to restrict direct SMTP access to only those clients who are connected via their home (or work) network. When away, access to sending e-mail from foreign IPs is usually blocked. This is why most ISPs offer Web mail.

Web mail is a system whereby a client can send mail by logging in via their Web browser. Since it is going over the Web (a different port from SMTP) and requires login, it is not susceptible to spammers. Your best bet is to find out how to use Web mail with your provider, then you can e-mail from anywhere that you have Web access.

If you have a Virtual Private Network (VPN), either through your work or at home, then it is possible to send e-mail after logging in—if that is part of your VPN's capabilities.

Digital Dave

*Dear Digital Dave,*

*Is it safe to remove Windows XP hot fixes from my computer?There are some dating back to 2004.*

*Carl Thunelius*
*San Diego, California*

Dear Carl,

No!

The hot fixes are there to correct problems in the Windows operating system. If you uninstall them, it will likely reintroduce the error into your computer. Unless you know that a hot fix is causing a problem, there is no incentive to uninstall it.

Every so often, Microsoft releases a Service Pack (SP) that will incorporate most of the previous updates. Upon installation, the SP will remove the applicable hot fixes from the software list. Regardless of how old the patch is, I wouldn't remove it.

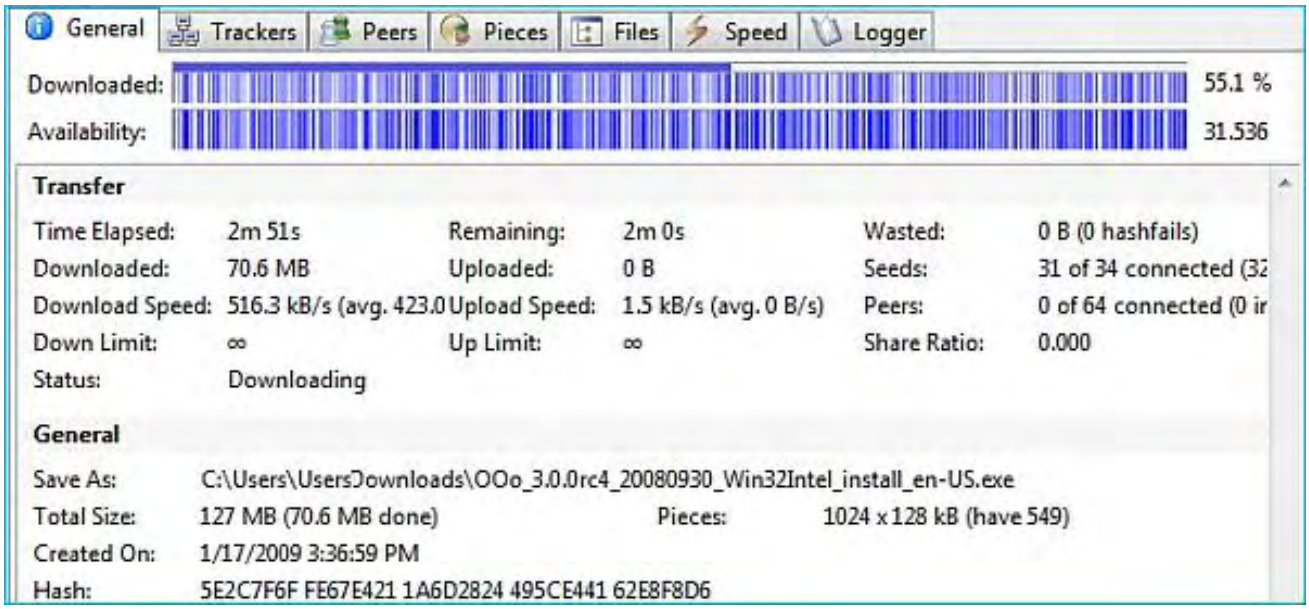
You may have a desire to keep things neat and clean on your computer, but since there is nothing neat and clean about Windows, resist the temptation to titivate.

Digital Dave

---

---

Return to Table of Contents




## BitTorrent Basics

**"The hottest and most promising way to download files using P2P networks."** by Michael J. Ross

> BitTorrent leverages the power of a group of users sharing pieces of a file among them, greatly increasing the chances that you will be able to obtain a complete downloaded file.

Data distribution is the very essence of the Internet. Yet there are numerous ways of distributing data over the Net. These include Hypertext Transfer Protocol (HTTP), which is how the text and images on the typical Web page are transmitted from a Web server to your computer, and are viewable within your Web browser. File transfer protocol (FTP), as the name implies, is designed not for the transfer of small Web page elements, but instead for the transfer of complete files, from one server to another.

Other distribution methods have been developed, such as peer-to-peer (P2P) networking. Most of the P2P networks work as follows: Each person logged into the network is running a client application specific to that particular network. The program allows the user to make available, to anyone else on the network, any files on his computer (or all of the computers on his home network). If another user does a search within her P2P application for a file that he has made available, then the file can be copied from his computer to hers, through the network (over the Internet, of course).

Some of the better-known P2P networks are Direct Connect, FastTrack, Gnutella and Napster, as well as some that have been shut down, but were quite popular in their time, e.g., eDonkey (a.k.a. eDonkey2000). Multiple client applications exist for each one of the P2P networks. For instance, the Gnutella network can be accessed by people running BearShare, Grokster, iMesh, LimeWire, Shareaza and several others.

### Bit by Bit

Perhaps the hottest and most promising P2P network is BitTorrent, which takes a different approach to the sharing of files: It utilizes breakthrough "file-swarming" techniques for dividing up an original digital file into pieces—known as a "torrent"—and then sharing those pieces among all the users who have requested that particular file. This is similar to the phenomenal growth of "social news" and "social bookmarking" on the Web, which rely upon the power of the opinions of many people, all over the world. Users who are making available copies of a given file are known as "seeders," while people who are downloading the file are known as "leechers." Hence the common admonition, "Please seed this file!", i.e., share it with others, rather than making it unavailable (in order to eliminate the bandwidth burden on your computer when other people request that file).

BitTorrent leverages the power of a group of users sharing pieces of a file among them, and by doing so, it greatly increases the chances that you will be able to obtain all of the pieces that compose a particular file that you want. In

other words, you are downloading different sections of the same file from multiple users (in most cases), thus making the system more redundant. This is a huge improvement over traditional peer-to-peer networks that are based upon obtaining a file from just a single user. What if that person disconnects from the Internet before the entire file has been downloaded to your computer? In that case, you end up with only the first part of a file, and not a complete one. This is quite annoying if it is a music file, and the latter portion of it has been chopped off. The situation is even worse if you are downloading an executable file, because a partial computer program won't even run.

Another advantage to BitTorrent is that the client programs are not only free to use, but they usually contain no spyware and no pop-up advertising. This is in stark contrast to the many other peer-to-peer network clients that repeatedly pop up obnoxious advertisements—some so frequently as to make those programs unbearable. For anyone interested in trying out a BitTorrent program, there are many quality ones from which to choose. Some of the better-known names include BitComet, BitTornado, LimeWire, Shareaza, µTorrent and Vuze (formerly known as Azureus).

Downloading using BitTorrent is generally faster than using any other P2P network, for two reasons: Instead of relying upon a single connection to the one individual who is sharing their copy of a file with you, your BitTorrent client is assembling the file from multiple users, via multiple connections—not unlike the power of parallel processing, in which two or more microprocessors split up a computational task, or the way in which a multi-threaded computer program can divvy up processing steps among several threads within a single instance of the program. A second speed advantage, typically overlooked by industry pundits, is that BitTorrent users tend to be more tech savvy than those using other networks, and consequently have faster connections to the Internet, for uploading pieces of your requested file to your BitTorrent client.

**A Torrent of Controversy**

The use of BitTorrent for distributing files has come under the same scrutiny and attacks that have been leveled at their P2P predecessors, such as Napster and eDonkey, to name just two. That is because much of the traffic on these networks consists of music, movies and TV shows—all protected by copyright laws, which technically are being violated through online sharing. This has naturally angered industry groups such as the Recording Industry Association of America (*www.riaa.com/*) (RIAA) and the Motion Picture Association of America (*www.mpaa.org/*) (MPAA), which are trade groups that represent the recording and movie industries in the United States, respectively. Many other developed nations have similar trade organizations.


"They are hauling him away for using BitTorrent software to download episodes of 'Desperate Housewives'!"

Criticism of these two organizations' activities against file sharers has been intense and unrelenting, largely because of the Draconian legal actions that the organizations have taken against the people they accuse of violating copyright laws through sharing music and movies online. The RIAA has been especially active in its legal assaults against consumers, dating back to 2003. According to InfoWorld, during a 12-month period, from October 2003 to September 2004, the total number of lawsuits filed was 5,541. Less than two years later, by February 2006, the number had reached 17,587. The total amount of money won through court actions—many of which are resolved as settlements—is most likely staggering, and increasing every week.

Boycott-RIAA (*www.boycott-riaa.com/*) is one of several organizations that have been battling the RIAA, and making the public aware of the more egregious lawsuits, such as those levied against children who barely know how to use a computer, poor people who would be bankrupted by even the most modest of the settlements sought by the RIAA, and even people who don't own computers! Industry analysts have argued that the pursuit of file sharers has, on balance, been counterproductive for the music industry, because the people who share the most files also spend the most

amount of money purchasing CDs and MP3s. The RIAA has apparently learned the folly of branding its customers as enemies, because in December 2008, it halted all lawsuits against individuals. Sadly, its new approach is to try to convince Internet service providers (ISPs) to disconnect anyone sharing music files.

The spirited ongoing battle between file sharers and copyright enforcers can be followed in the online media. Those siding with file sharers can read the latest battle reports on various Web sites, such as TorrentFreak (*www.torrentfreak.com/*), which makes available up-to-date news, recommended torrent sites and other relevant information. Those siding with copyright enforcers can read press releases from the music and movie industry groups—assuming that the individual's ISP does not accidentally disconnect them for alleged file sharing.

Unfortunately, all of this legal controversy has given BitTorrent a bad name, and besmirched the countless uses of the technology that are completely legal. For instance, a growing number of companies are distributing their products as torrents—choosing to ride the wave of BitTorrent sharing, instead of trying to hold back the wave. For instance, new versions of open-source software, such as Linux, are perfect candidates for dissemination as torrents.

So if you would like to experience the remarkable resource known as BitTorrent, be sure to try it now, while you still can, before it gets snuffed out by government or industry.

---

Michael J. Ross is a Web developer (*www.ross.ws*), writer, and freelance editor. He creates Web sites that help entrepreneurs turn their ideas into profitable online businesses.

---

---

Return to Table of Contents

# µTorrent for Sharing Files

**"The world's most popular BitTorrent client."** by Michael J. Ross

There are more than two-dozen commonly used BitTorrent clients, but µTorrent has emerged as the favorite. Here's why.

Even before the advent of the Internet, there was a trend toward the digitizing of our cultural information—such as recorded music, Hollywood movies and books in all subject areas. The Internet now makes it possible for people to share that information far more easily, by e-mailing files as attachments to messages, downloading files posted on Web sites, and using peer-to-peer (P2P) networks. Gone are the days of "sneaker net," which involved moving a computer file from one machine to another, by physically transporting it on a diskette. Now, there are more than two-dozen different P2P networking protocols, including FastTrack, Freenet, Gnutella and the notorious Napster. One P2P protocol, P2PTV, even specializes in television content.

Peer-to-peer file sharing now makes up a significant portion of all Internet traffic. An article published on Ars Technica (*arstechnica.com/news.ars/post/20070903-p2p-responsible-for-as-much-as-90-percent-of-all-net-traffic.html*) on September 3, 2007, reported the results from studies done by two different deep-packet inspection companies. P2P activity accounts for a minimum of 37 percent of all Internet traffic (according to Ellacoya Networks, a company since purchased by Arbor Networks (*www.arbornetworks.com/*)), and possibly up to 90 percent (according to ipoque (*www.ipoque.com/*)). More than a year later, the true figure is probably higher than it was at that time, as countless more people have begun using P2P networks and enjoying the plethora of content now available.

One of these P2P protocols, BitTorrent, is rapidly emerging as the leader, partly due to its superior architecture, which allows each user to download the pieces of a desired file—known as a "torrent"—from multiple sources simultaneously, rather than being dependent upon obtaining the file from a single source. This not only results in reduced risk of ending up with only part of a file, but it is faster and provides more anonymity. There are more than two-dozen commonly used BitTorrent clients, which are computer programs that you can install on your PC to participate in sharing torrents. In this article, we will focus on one of those clients applications, µTorrent.

## Lean and Mean

Billing itself as "The World's most popular BitTorrent client," µTorrent (*www.utorrent.com/*) runs on several versions of Microsoft Windows (Vista, XP, Server 2003, NT, 2000, 98, Me, and even 95, using Winsock2), Wine (for anyone running Linux who would like to use emulation), and Mac (recently released and currently in beta). Through the use of a separately downloaded language pack, the application supports 43 languages, ranging from Albanian to Vietnamese, with more being added all the time.

µTorrent is designed to be extremely lightweight—using little system memory or space on the hard drive. The most recent version (as of this writing), 1.8.1, requires less than 15MB of RAM, and takes up only 264KB of disk space, which is a fraction of the space consumed by most if not all rival BitTorrent client installations. µTorrent is also lightweight in terms of system administration: In order to run the program, you do not even have to install it, going through the usual Windows program-installation process. Instead, simply run the downloaded executable.

Even though µTorrent is laudably lightweight, it is also rich in features. In addition to the terrific operating system and language support mentioned earlier, it sports such features as multiple simultaneous downloads, fully configurable bandwidth scheduling, global and per-torrent speed limiting, RSS downloading, fast resumption of interrupted downloads, random port assignment, protocol encryption, automatic shutdown of the application or system reboot once all downloads have finished, and more. It displays a wealth of details about each torrent, as we will see shortly in screenshots of the application.

## Mu (µ) for You

To get started using µTorrent, go to the program's home page (*www.utorrent.com/*).


Figure 1. µTorrent site home page.

On the Web site, you will see a page listing dozens of alternate user-interface themes, known as "skins," which can be used to easily change the appearance of µTorrent's user interface. Note that the page, by default, shows only those skins that are compatible with the most recent version of the program. If, for whatever reason, you are running an earlier version and wish to see skins that are compatible with your older version, then click the checkbox near the top of that page.

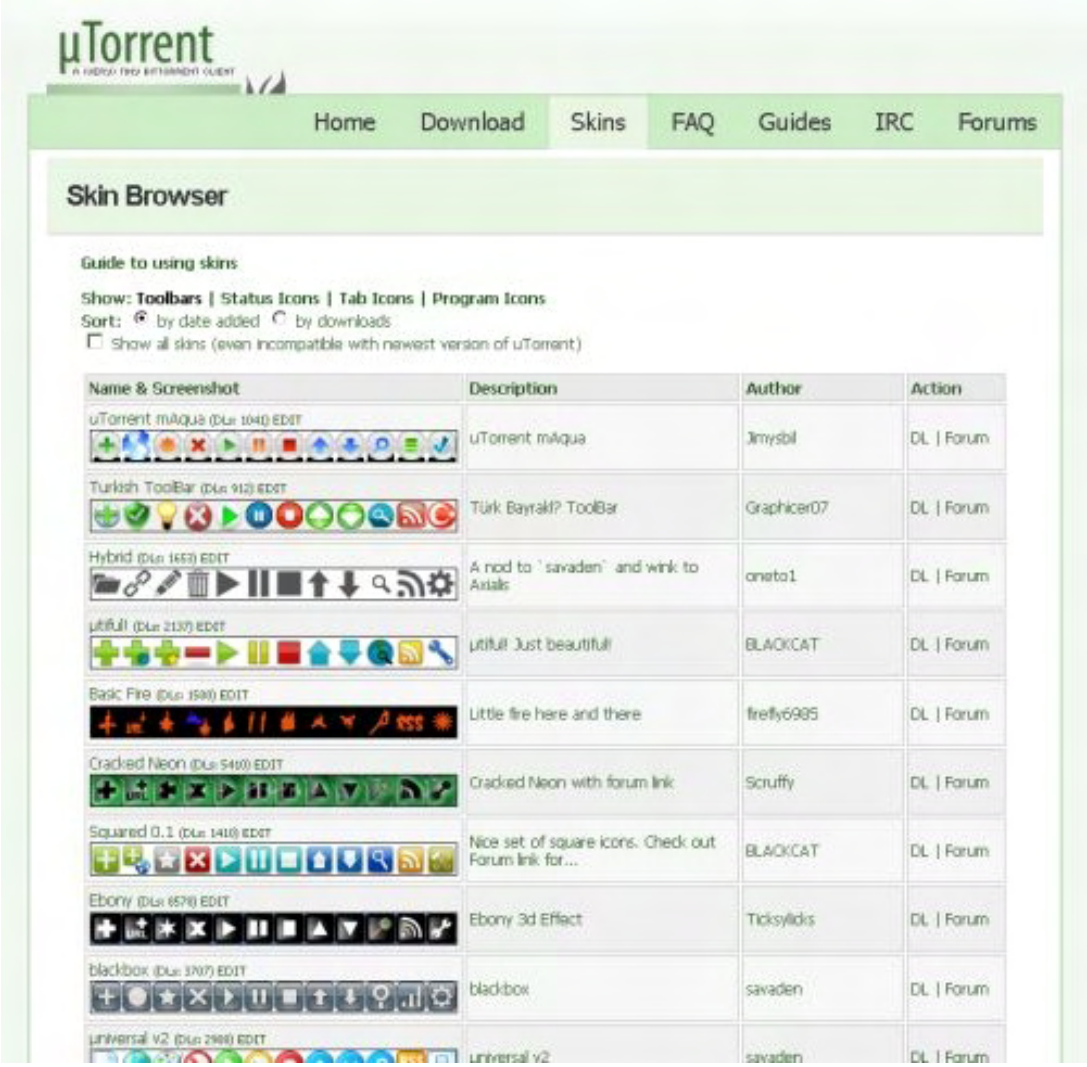


Figure 2. µTorrent site skins.

The site also has a page offering 19 user forums, grouped by Windows, Mac and non-English topics.

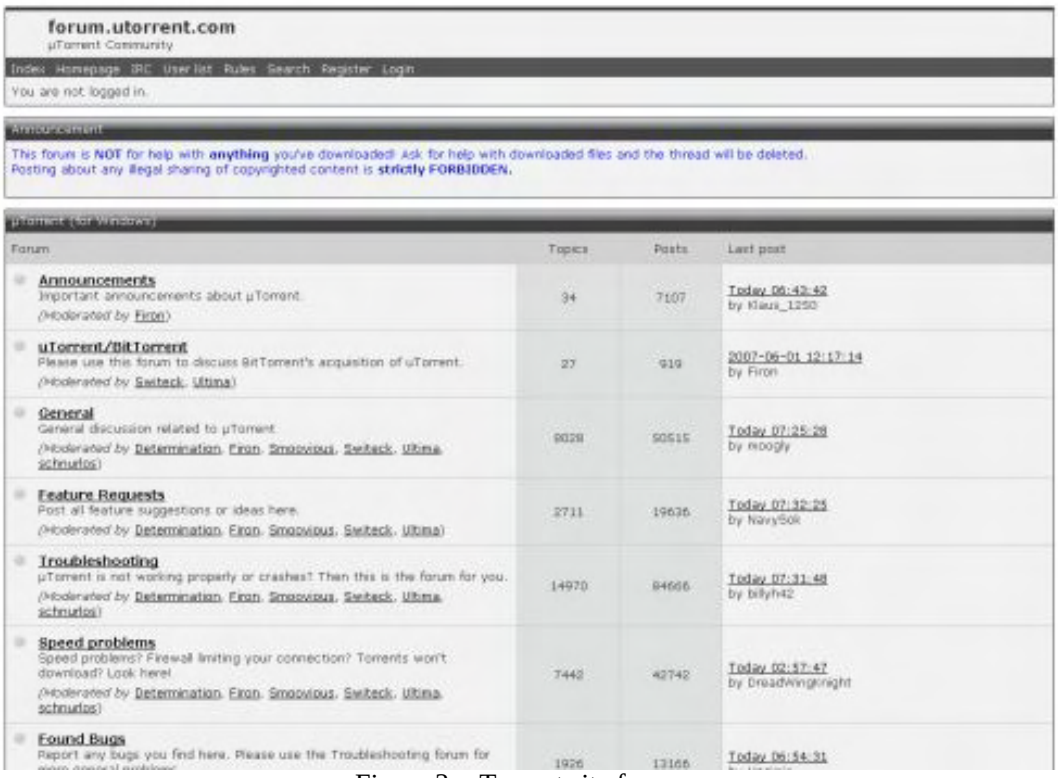


Figure 3. µTorrent site forums.

Download the latest version µTorrent by returning to the site's home page and clicking the large green button. Since the file that you download is the complete program itself, and not an installation file, do not save it into any temporary directory where you normally save installation files off the Internet. When you run the program, you will see the interface pictured below, without any torrents listed in the main panel to the right.

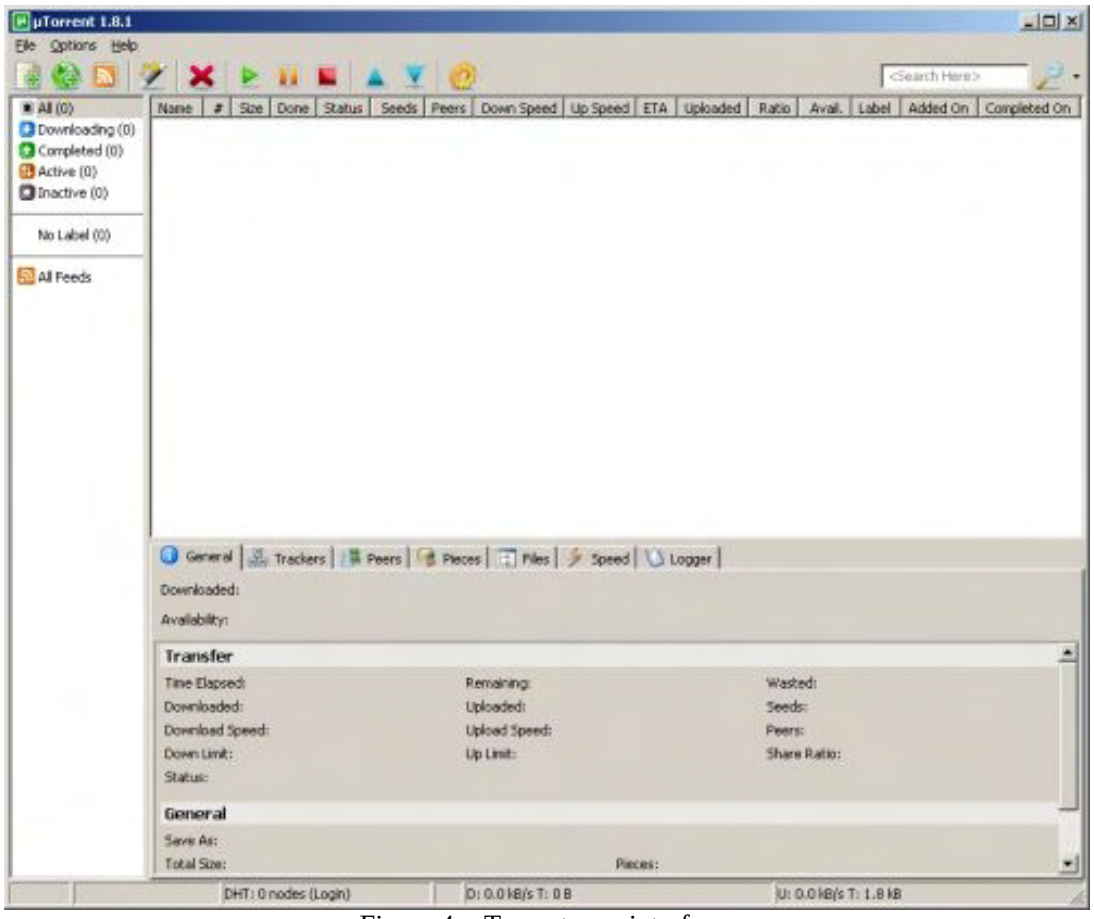


Figure 4. µTorrent user interface.

In order to make any changes to the program's configuration, choose Preferences from the Options menu.

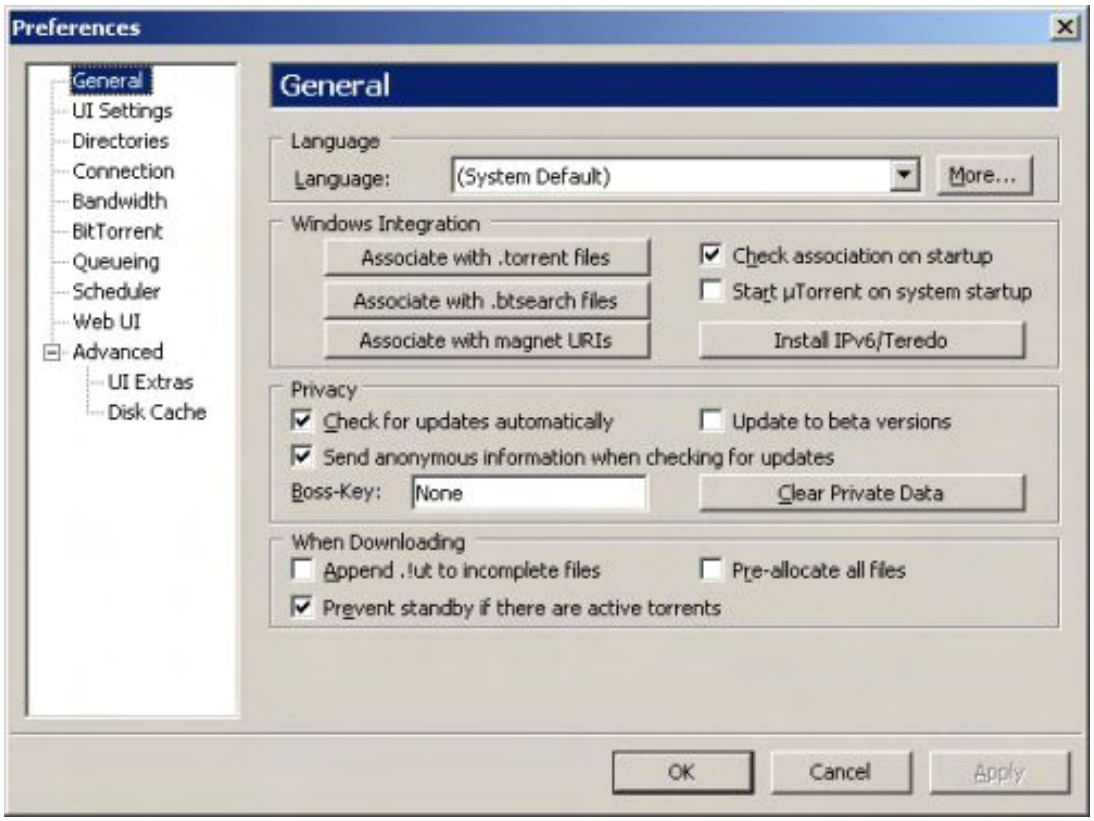


Figure 5. µTorrent preferences.

More than likely, you will not need to modify any of the default settings. But be sure to check the Directories section (the third one) to see exactly where on your computer your downloaded torrents will be placed, once completed.

**An Illustrative Example**

To see µTorrent in action, let's start downloading a copy of Linux Mint (*www.linuxmint.com/*), which is a Linux distribution based upon Ubuntu (*www.ubuntu.com/*). We can use any one of a number of torrent sites. In this case, we will use ScrapeTorrent (*www.scrapetorrent.com/*).

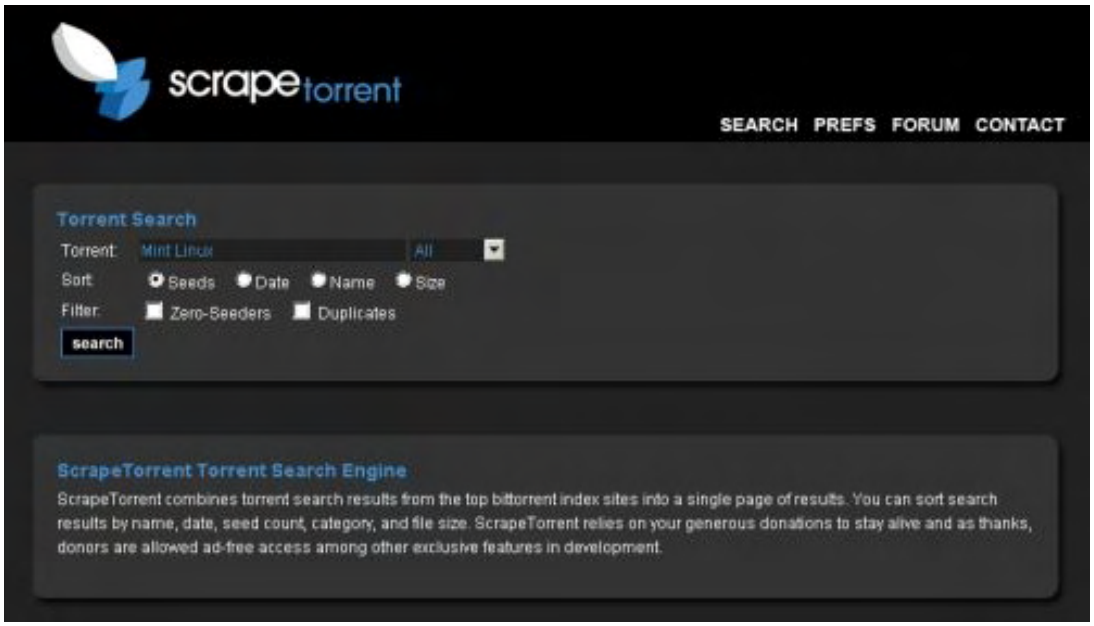


Figure 6. ScrapeTorrent site.

We enter the name "Linux Mint" in the entry field, and start the search. The results are displayed below.

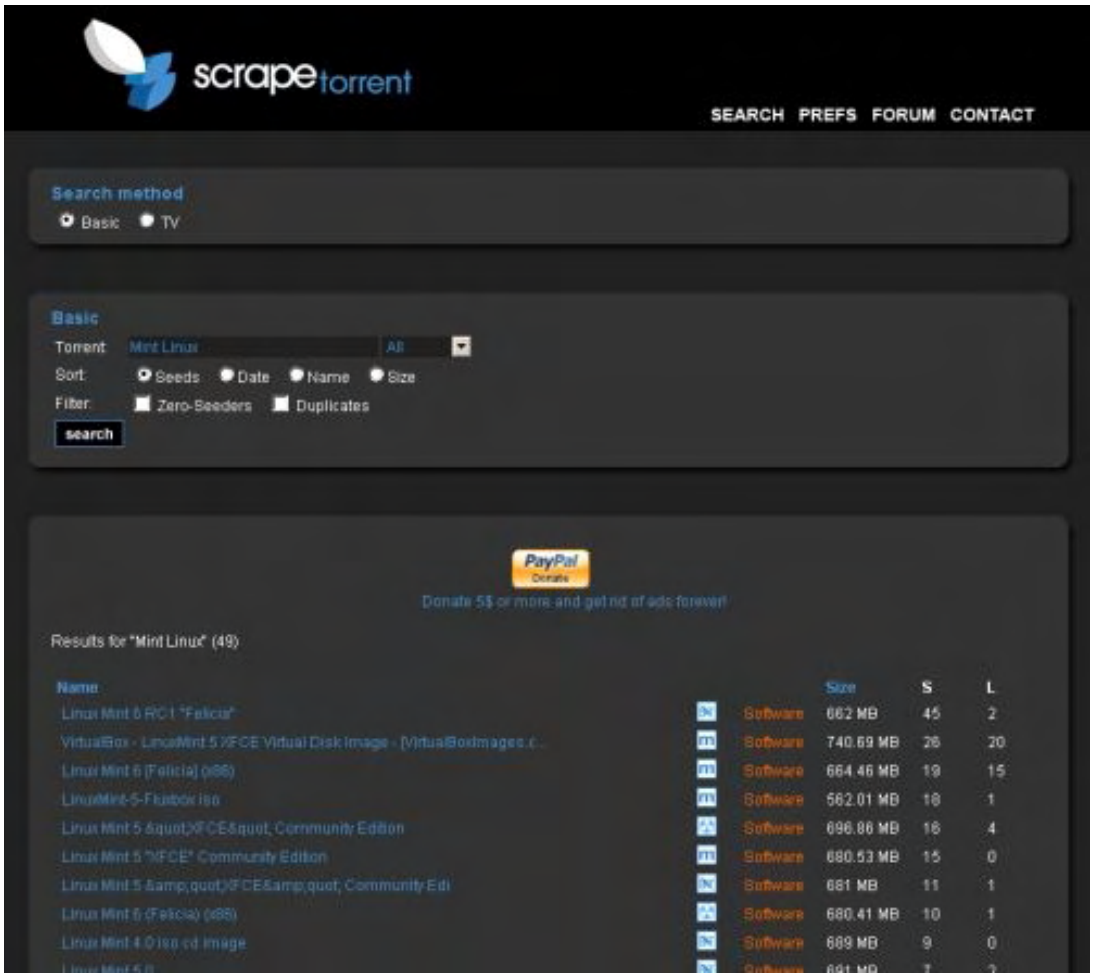



Figure 7. ScrapeTorrent Mint Linux search results.

The third torrent in the list, Linux Mint 6 [Felicia] (x86), has a healthy number of sources (known as "seeds"), so we will click on that one, which takes us to the linked page on Mininova (*www.mininova.org/*).

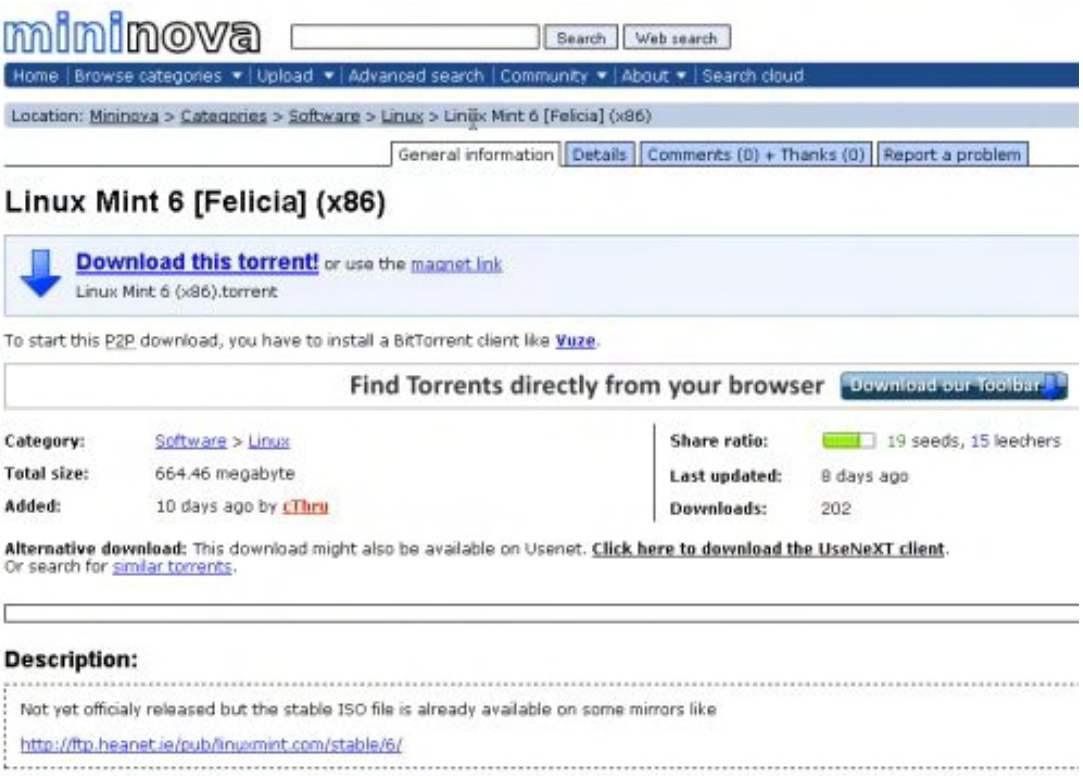


Figure 8. Mininova Mint Linux page.

Clicking on the "Download this torrent!" link on that page pops up a dialog box in our current Web browser (in this case, the highly recommended Firefox (*www.mozilla.com/firefox/*)).

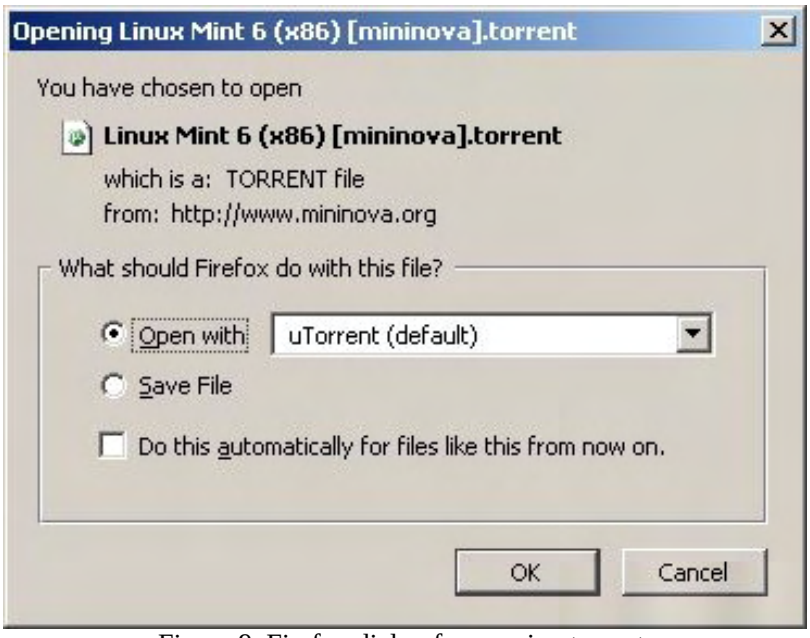



Figure 9. Firefox dialog for opening torrent.

Clicking the OK button opens the torrent file in µTorrent (assuming that you have not set some other BitTorrent application as the default Windows application for torrent files).

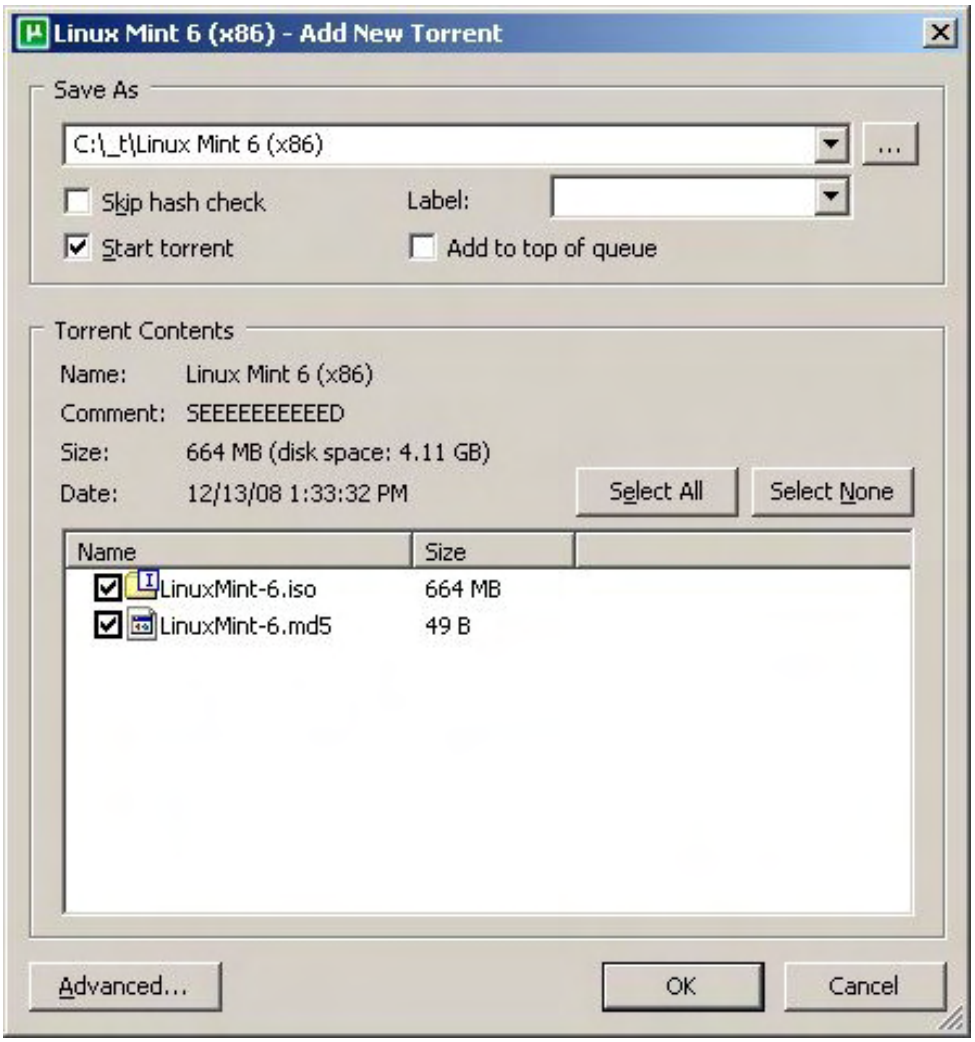



Figure 10. µTorrent add new torrent.

µTorrent will use the default torrent destination directory (mentioned earlier in the discussion of program options), but you can change that. In this example, we will save the file into a temporary directory, C:*bckslsh*_t. Clicking the OK button adds the torrent to the main panel in µTorrent, which immediately begins looking for sources for the file.

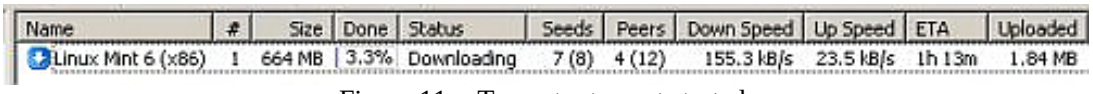



Figure 11. µTorrent—torrent started.

We see, in Figure 11, the name of the torrent, its file size, how much of it has been downloaded (3.3 percent), the current status, how many seeds and peers have been found on the BitTorrent network, the download and upload speeds, the estimated time of completion, how much of it has been uploaded to other users, and other information.

For any torrent listed in the panel, you can view a variety of information about it, by clicking on any of the seven tabs near the bottom portion of the application window. The General tab provides a visual representation of what parts of the file have been downloaded so far and what parts are available, as well as their level of availability, with darker blues indicating portions that are more available than others. Additional details are listed below that.

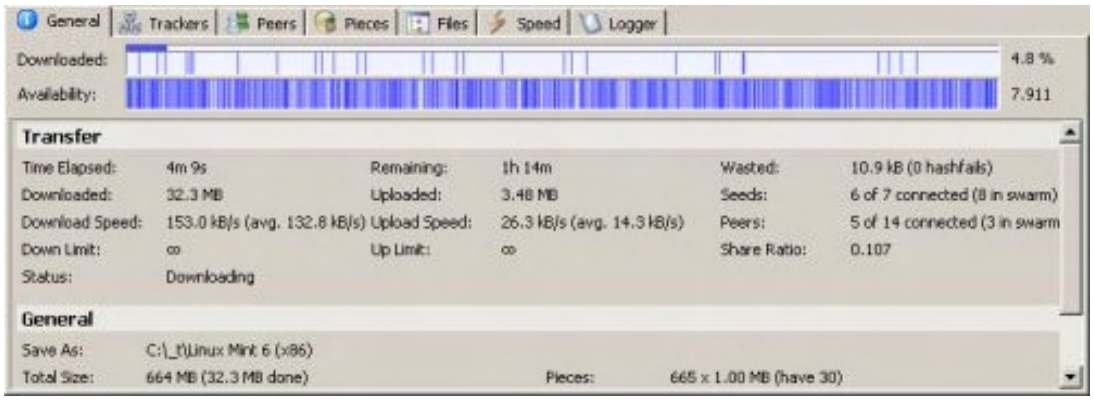


Figure 12. µTorrent tab—general.

The Trackers tab lists all of the BitTorrent services that are tracking this particular torrent.

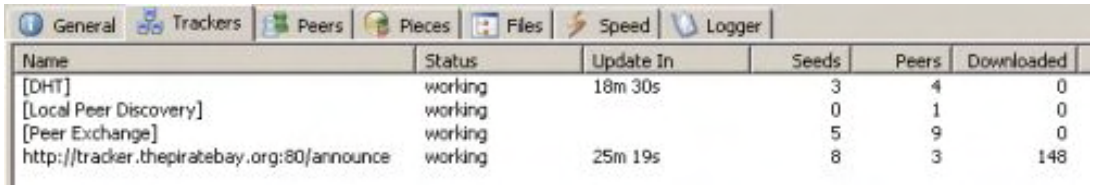


Figure 13. µTorrent tab—trackers.

Interested in what kind souls are providing you with the torrent that you are currently downloading? Just check the Peers tab for a list of them. µTorrent even tries to identify and label their countries of origin.

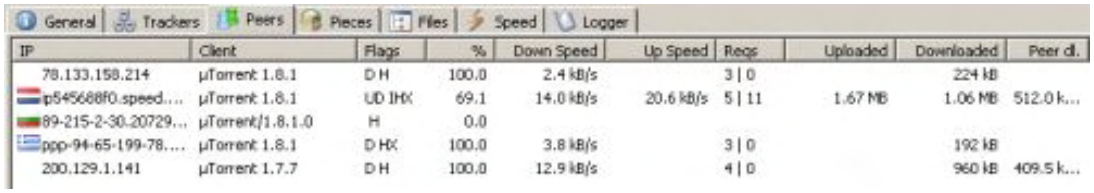


Figure 14. µTorrent tab—peers.

The next tab, Pieces, shows you how your chosen torrent has been divided into separate pieces, as well as the download status of the blocks that comprise each piece.

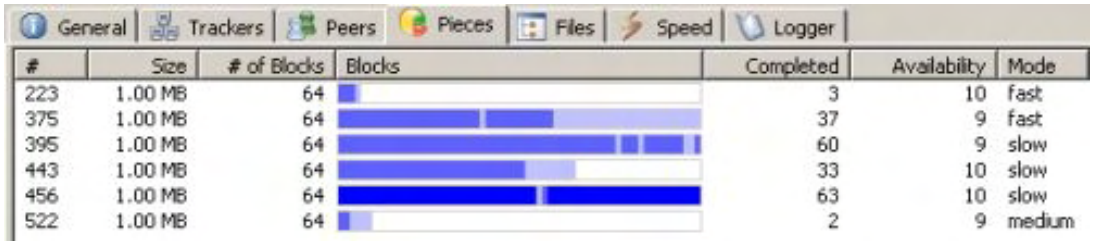


Figure 15. µTorrent tab—pieces.

Most torrents consist of multiple files, and you can see a list of them in the Files tab. In our sample torrent, there are only two such constituent files.

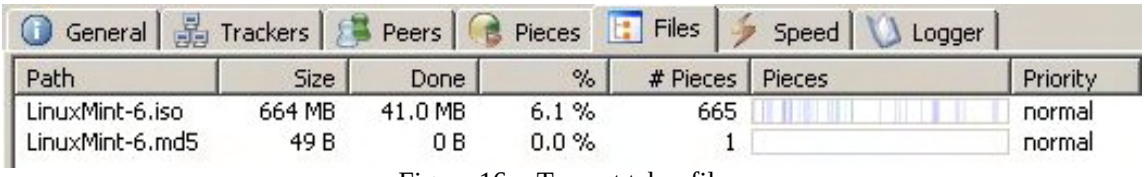


Figure 16. µTorrent tab—files.

Just how fast is the chosen torrent being shared? Click the Speed tab to monitor it in real time, from a graph showing download speed (shown in green) and upload speed (red).


Figure 17. µTorrent tab—speed.

Once you start using µTorrent, you will undoubtedly see why it is such a favorite among so many BitTorrent enthusiasts.

---

Michael J. Ross is a Web developer (*www.ross.ws*), writer, and freelance editor. He creates Web sites that help entrepreneurs turn their ideas into profitable online businesses.

---

---

Return to Table of Contents


# Windows Vista Tips and Tricks

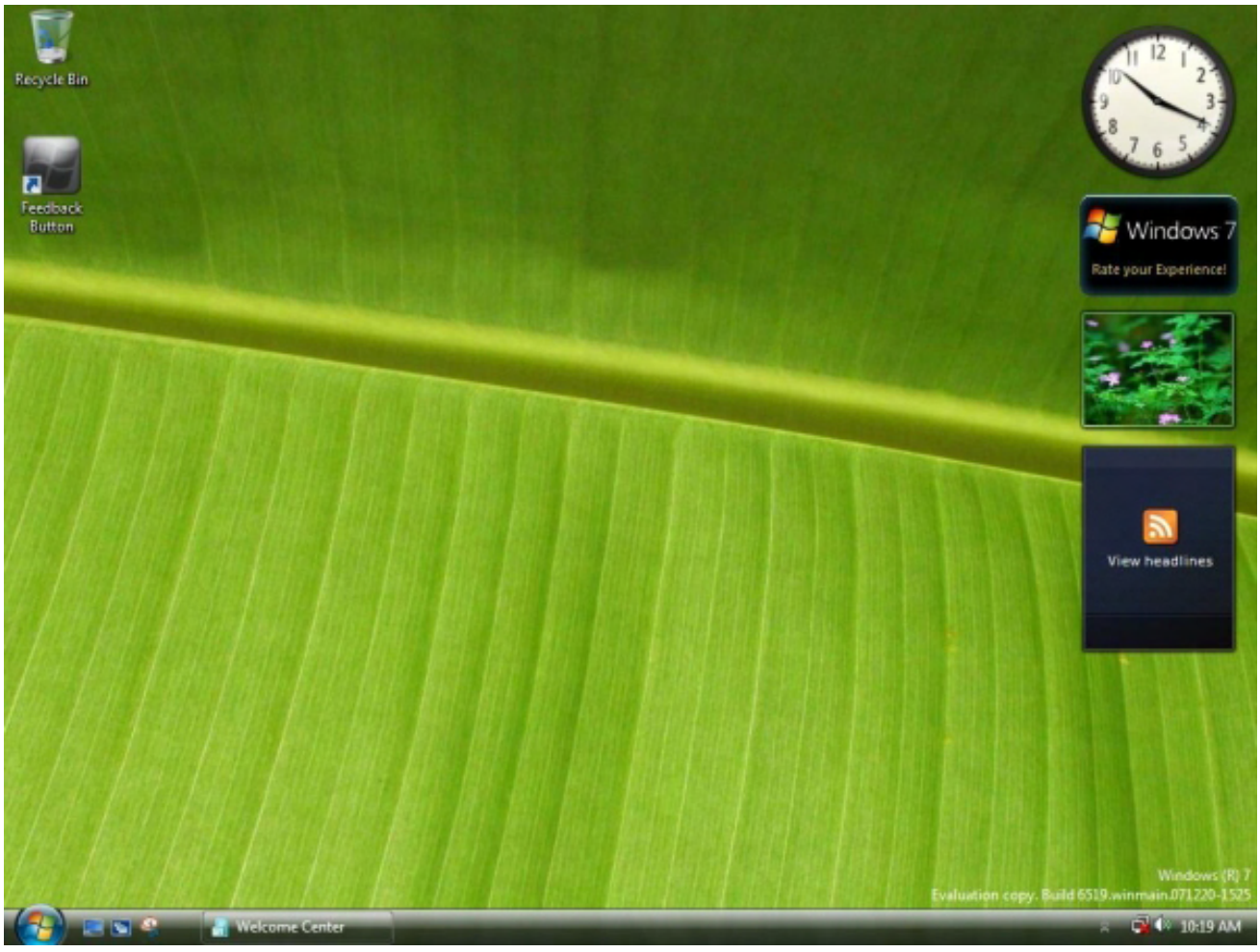
## Windows Vista Tips and Tricks

**"Windows 7 on the Horizon"** by Jack Dunning

> The general consensus is that Windows 7 is an improvement and not just a variation on the Vista theme.

Microsoft has released a beta version of Windows 7. That means that possibly about this time next year, the initial release could occur—although, if Microsoft is smarter this time, it will probably be later than that. While I haven't had the time to get a beta version for myself, there are many people who have. They have not been shy about posting their opinions on the Web. I've surfed the Web to see what they're saying.

For many, Windows 7 is what Windows Vista should have been before it was released. Some say that 7 is merely Vista with many of the problems fixed. If that were truly the case, then it would be released as a Service Pack (SP) upgrade for Vista. In reality, Windows 7 is just enough different from Vista that an SP would not be sufficient.



Windows 7 is compatible in most ways with Vista. It uses all the same drivers and should work with all the same Vista expansion cards and peripherals. Unlike the move from XP to Vista, there should not be any problems moving from Vista to 7. In many ways, the two are the same. The look and feel has not changed radically.

Windows 7 has a smaller footprint than Vista and boots up in about half the time. This improvement makes it a candidate for netbook computers. Currently, many netbook manufacturers are loading Windows XP on their machines due to the lower memory requirements. Window 7 also has improved support for multicore processors.

A few programs found in Vista will no longer be bundled with Windows 7. In particular, Windows Mail, Windows Movie Maker and Windows Photo Gallery will be a free download in Windows Live Essentials. This not only pares down the initial installation, but it provides an entry point for users into the Windows Live concept, which will compete with Google's moves in the marketplace.

Meeting Space is out the window. I am not sure how much anyone was using Meeting Space for collaboration, especially since it didn't support audio.

The Sidebar is gone, but Gadgets are still there. They now sit on the desktop.

I read one review by someone who obviously didn't know Vista very well. He was excited about the screen-capture Snipping Tool in Windows 7, not realizing that it is also a feature of Vista.

Much of the discussion surrounds multitouch screen capabilities and the new taskbar. Most people were unimpressed with the iPhone-like multitouch demos, which require a touch-sensitive screen for your computer. It's hard to tell how important this feature will be to users in general.

The new taskbar has dropped the Quick Launch shortcuts and has added something called Jump Lists. (Don't worry: You can reactivate the Quick Launch bar if you want it.) The Jump List is a way to quickly open an application or pick a folder/file/Web page.

The general consensus is that Windows 7 is an improvement and not just a variation on the Vista theme. Rather than trying to add new gimmicks that will bloat the software, Microsoft has actually stripped it down, making it act a little more like a real operating system.

If you are currently using Vista, then some of the changes may seem slight. You could become annoyed at the things that have been dropped from Vista, but in most cases the changes are improvements. If you're an XP user, then the fact that Windows 7 continues with many of the Vista changes may not impress you. If you try to put 7 on an old XP, your experience may not be any better than it was with Vista.

The full release of Windows 7 is probably at least a year away. No decisions need to be made today. That gives everyone time to continue doing what they do now. (Plus, Microsoft can continue to fix known problems.) If you do buy a new Windows machine with Vista, most of what you learn on Vista will not be wasted.

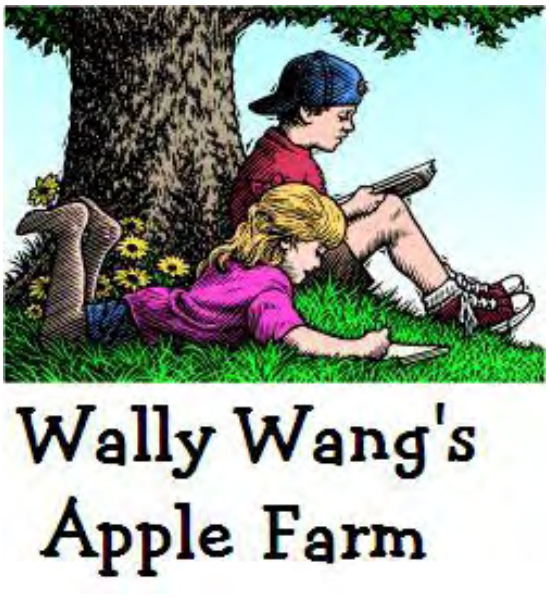
---

Jack is the publisher of *ComputorEdge* Magazine. He's been with the magazine since first issue on May 16, 1983. Back then, it was called *The Byte Buyer*. His Web site is *www.computoredge.com*. He can be reached at *ceeditor@computoredge.com*

---

---

Return to Table of Contents




## Wally Wang's Apple Farm

**"BitTorrent Clients for the Mac"** by Wally Wang

With so many different BitTorrent clients available, just grab one or more, try them out, and start downloading massive files off the Internet. Also, a look at PhoneValet, which turns your Mac into a computerized telephone service; and a tip on using Command F to search a Web page for a particular word or phrase

Napster started the file sharing revolution by letting complete strangers connect their computers to a network and swap files with one another. The problem with such direct file sharing is that it takes time. With music files and high-speed Internet connections, sending and receiving files takes a few minutes at the most. With much larger files such as complete movies or major software applications such as Windows, sharing files can be frustrating since connections can get broken or computers simply go to sleep or shut down. When that happens, any partially transferred file is useless and you'll have to download that same massive file all over again.

The solution to sharing and transferring large files conveniently is BitTorrent. Instead of forcing you to download a single massive file from one computer, BitTorrent allows you to download a single file from multiple computers. Not only does this speed up the file transfer, but it also increases the chance that you'll actually get your file. If one computer loses its connection to your own, you'll still be able to retrieve data from a handful of other computers instead.

At the same time that your computer receives a BitTorrent file, it can start sending and sharing that file with other people. As a result, BitTorrent has become the preferred method for sharing large files.

To download a BitTorrent file, you need a special program called a BitTorrent client. If this sounds way too complicated already, take the easy way out and download the Opera (*www.opera.com*) browser, which includes a built-in BitTorrent client. All you have to do is search the Internet, find a BitTorrent file that you want to download, double-click on it, and Opera takes care of the rest.

An outdated but colorful BitTorrent client is Bits on Wheels (*www.bitsonwheels.com*), which offers a unique graphic image showing you all the computers that are sending you pieces of your file. Unfortunately, Bits on Wheels hasn't been updated since 2005, so you may not want to rely on a program that might never see an update for a while.

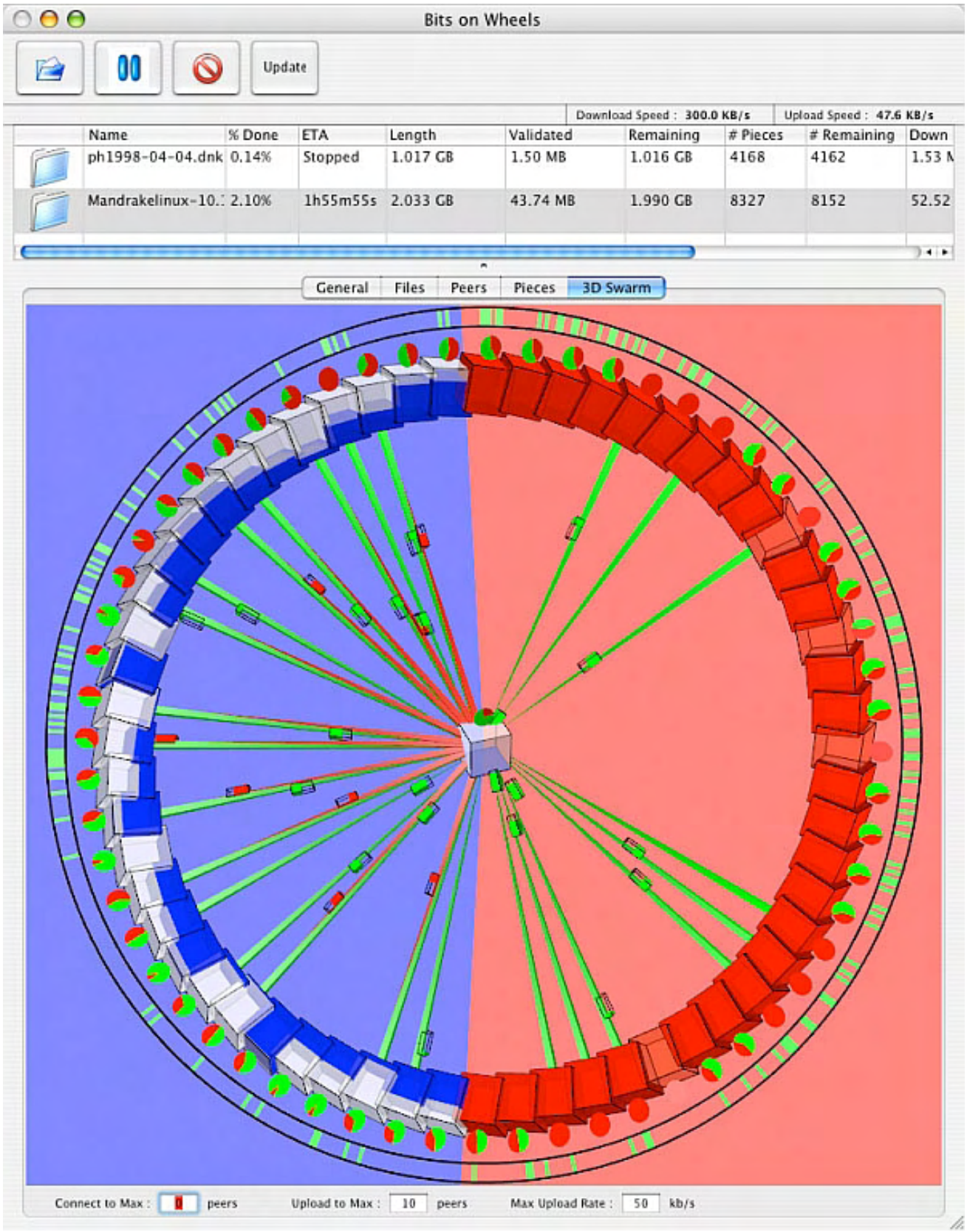



Figure 1. Bits on Wheels displays a graphic image of your file-sharing activities.

Another BitTorrent client is Transmission (*www.transmissionbt.com*), an open-source project optimized to use as little memory as possible. One of the more popular clients is strangely named BitTorrent (*www.bittorrent.com*). Like Transmission, Bits on Wheels and Opera, the BitTorrent program is also free, so with so many different BitTorrent clients available, just grab one or more, try them out, and start downloading massive files off the Internet.

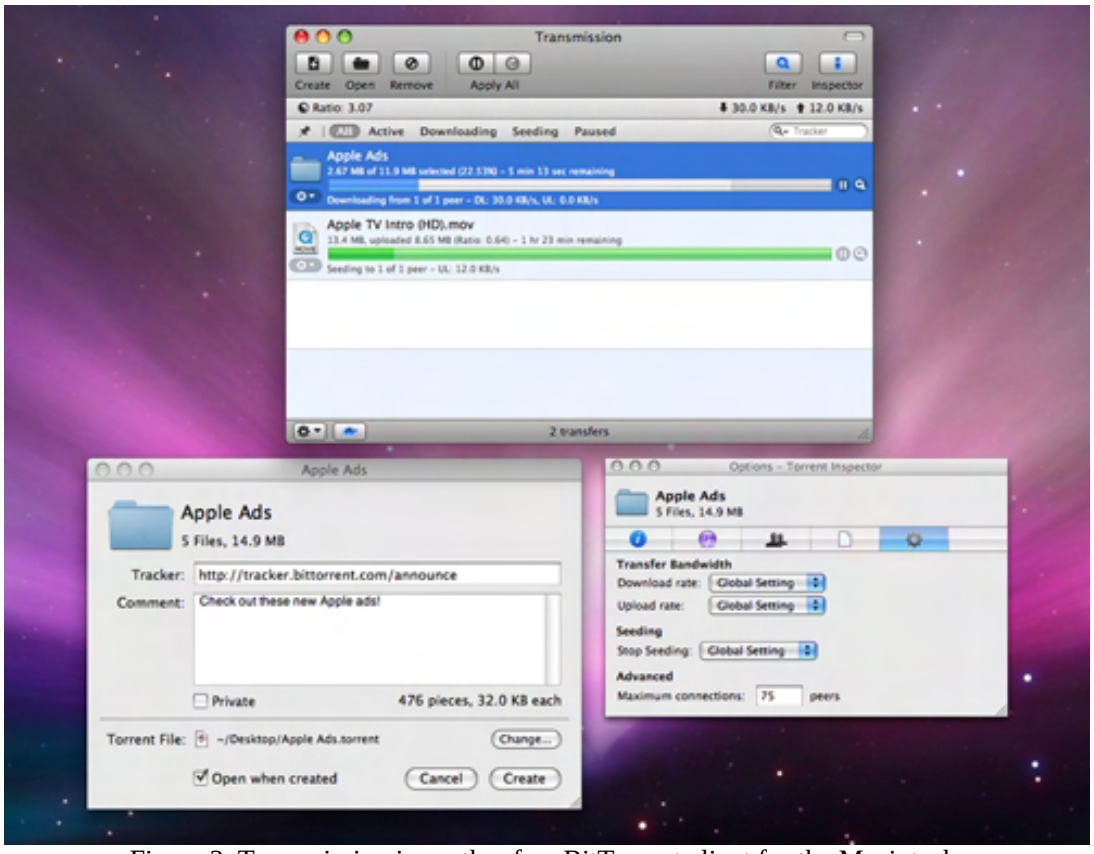


Figure 2. Transmission is another free BitTorrent client for the Macintosh.

* * *

If you still rely on an answering machine, consider selling it on eBay or giving it away, and replace it with your Macintosh and a copy of PhoneValet (*www.phonevalet.com*), which essentially turns your Macintosh into a computerized telephone service. All you have to do is install the software, plug your telephone cord into the PhoneValet box, which plugs into your computer's USB port, and you'll be ready to go within minutes.

At the simplest level, PhoneValet can mimic an ordinary answering machine. Just set up a voice mailbox, record a message through a microphone (such as the built-in microphone found on the iMac and MacBook models), and now callers won't have any idea your Macintosh is really answering your calls. Of course, you can still use your Macintosh for ordinary work while PhoneValet silently waits in the background, ready to take your calls.

Just mimicking an answering machine is a waste of silicon, so PhoneValet goes a whole lot further. One neat feature is the ability to type in all or part of a phone number for PhoneValet to recognize. If you type in the number of your friend, any time your friend calls from that phone number, PhoneValet can display any information you've saved related to that phone number, such as your friend's face and contact information. Now you can see at an instant whether you want to answer your phone or just let PhoneValet take your call instead.

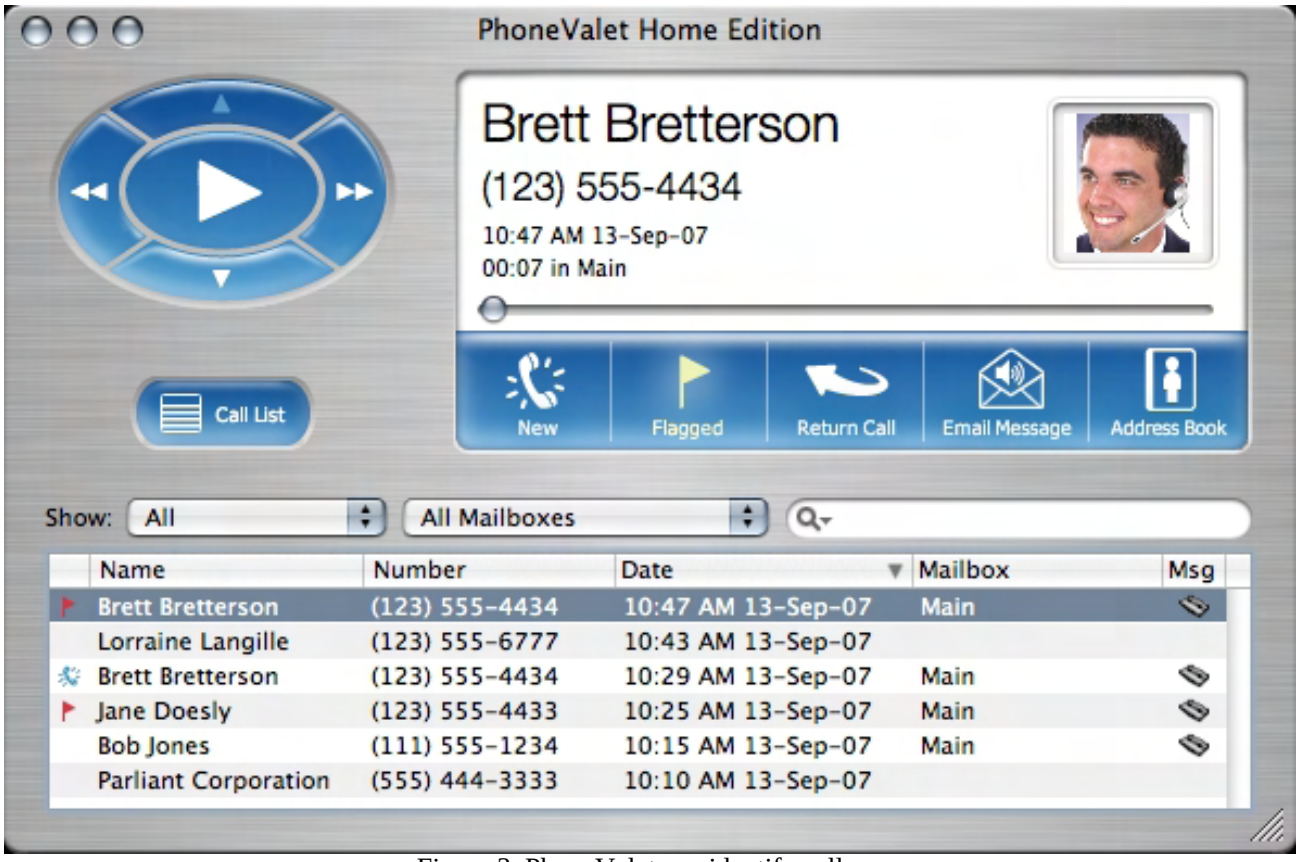


Figure 3. PhoneValet can identify callers.

Rather than identify complete phone numbers, PhoneValet can also identify area codes. Since telemarketers typically call from 800 numbers, you can program PhoneValet to block all 800 callers.

Besides blocking area codes, PhoneValet can also block specific phone numbers. If you want to break up with someone, type in that person's phone number, and each time that person calls, PhoneValet can play a special recording for that specific phone number such as, "Get lost, you loser!" Of course, anyone else calling from a different phone number will just get routed to your ordinary answering message.

More flexible is PhoneValet's ability to create multiple mailboxes. For home use, this lets you create separate voices mailboxes for your spouse and your kids. For a small business, this lets you create an inexpensive phone service just using PhoneValet and your Macintosh. Set up multiple voice mailboxes for each of your employees, and anyone calling can get routed to the appropriate person right away.


Figure 4. PhoneValet can create multiple voice mailboxes.

Since PhoneValet records all messages as audio files on your hard disk, you'll always have a record of all your messages for as long as you want to keep those files. Tag your audio files, and now you'll be able to use Spotlight to search for particular messages, such as all messages left by a single person or all messages related to a specific topic.

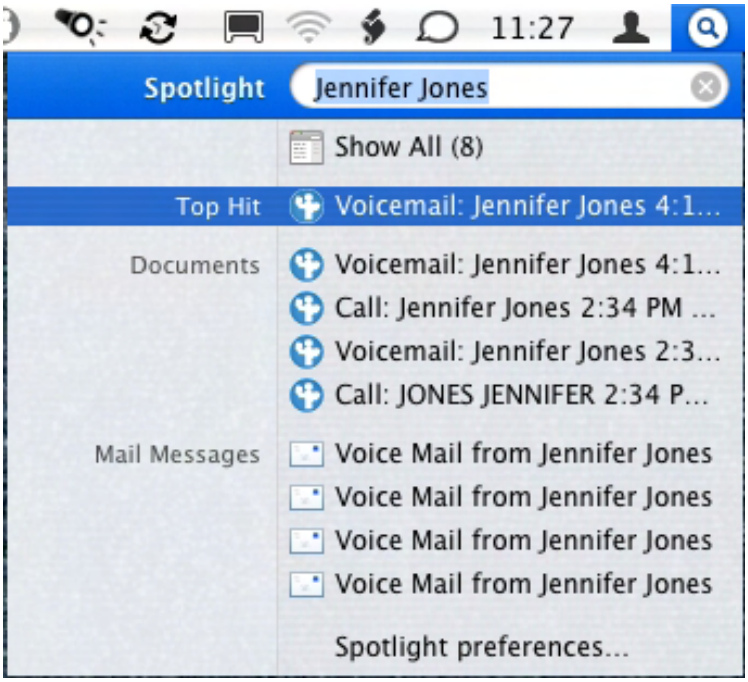



Figure 5. You can search for specific recorded messages though Spotlight.

PhoneValet comes in Home ($49.95) and Message Center editions ($169.95). The Home edition lets you create up to five voice mailboxes, while the Message Center edition gives you as many voice mailboxes as you can cram on to your hard disk. Either solution can turn your Macintosh into a sophisticated answering service for a one-time cost of PhoneValet.

* * *

Look for something in your favorite search engine, and you'll likely find yourself bombarded with an avalanche of Web pages that match your criteria. Now if you visit a particular Web site, you may suddenly wonder why this Web page popped up in your search results if you can't find your search term anywhere on the page.

At this point you could manually scan the page, but a faster solution in Safari is to press Command+F, which opens a Find text field in the upper-right corner of the Web page. Type a word or phrase that you want to find just on the currently displayed Web page, and Safari highlights all your search terms directly on the Web page. By clicking the Left and Right arrows near the Find text field, you can highlight all the found words on the Web page.

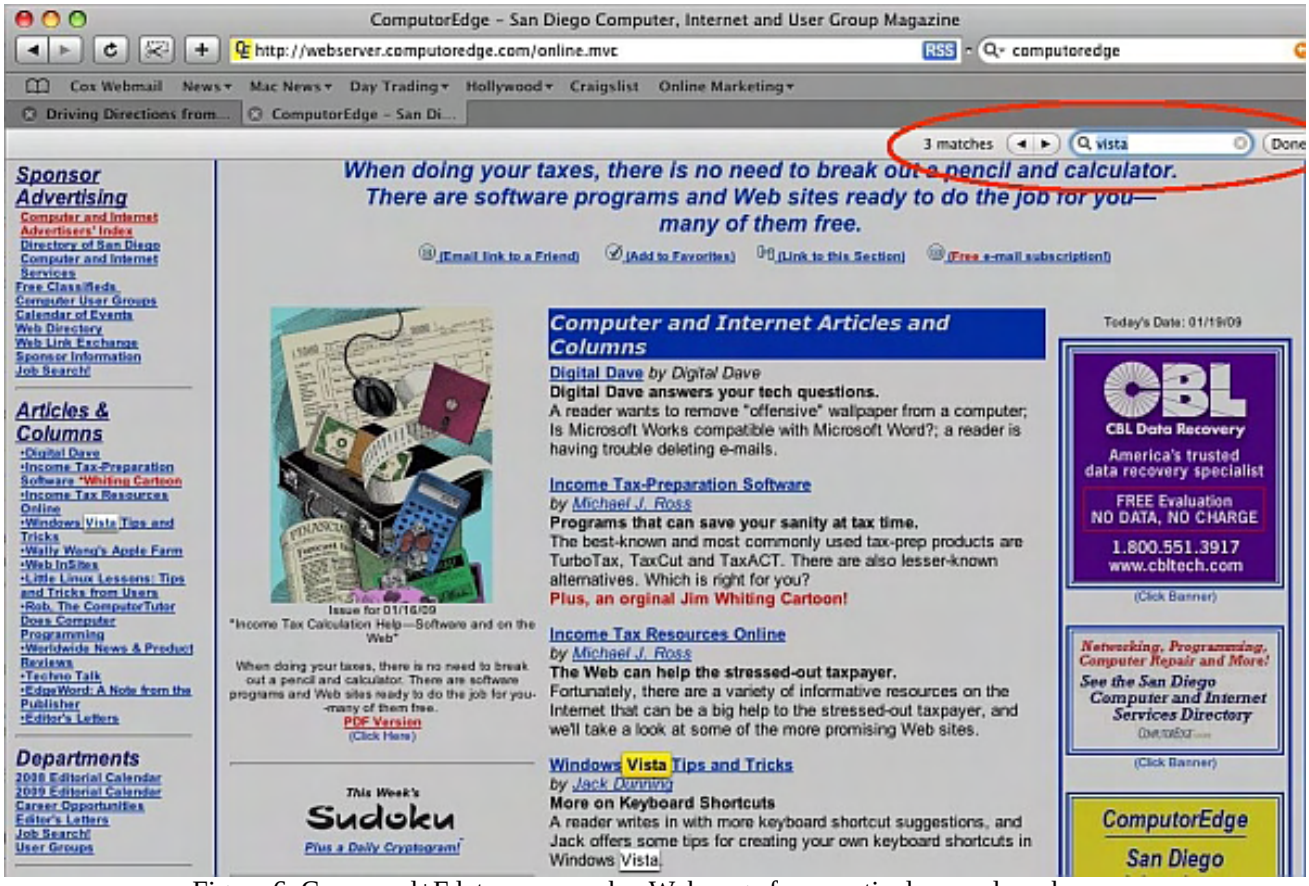


Figure 6. Command+F lets you search a Web page for a particular word or phrase.

In the early days, before Wally became an Internationally renowned comedian, computer book writer, and generally cool guy, Wally Wang used to hang around *The Byte Buyer* dangling participles with Jack Dunning and go to the gym to pump iron with Dan Gookin.

Wally is responsible for *Microsoft Office 2007 for Dummies*, *Breaking Into Acting for Dummies*, *Beginning Programming All-in-One Reference for Dummies*, and *Mac All-in-One Reference for Dummies* from *www.dummies.com*, as well as, *Steal This Computer Book 4.0*, *Visual Basic Express 2005: Now Playing*, and *My New Mac* from *www.nostarch.com*. He is also the co-author of *Strategic Entrepreneurism* from *www.selectbooks.com*.

Every Saturday morning from 9:00 am - 10:00 am in San Diego, you can hear Wally with fellow co-hosts Dane Henderson and Candace Lee, on the radio show CyberSports Today (*www.cybersportstoday.com*), which covers the video gaming industry on ESPN Radio 800 AM. Wally covers the military history side of the video game industry.

When not performing stand-up comedy or writing computer books, he likes to paper trade stocks with the video game Stock Reflex (*www.plimus.com/jsp/download_trial.jsp?contractId=1722712&referrer=wwang*).
Wally can be reached at *wally@computoredge.com*.

Return to Table of Contents


## Web InSites

**"BitTorrents vs. the RIAA--and Your ISP"** by Dawn Clement

Is your ISP blocking or throttling your BitTorrent downloads? It may pay to find out.

Music is found in every known human culture, including 21st century America. Music helps us to make sense of the world, and as such, plays a vital role in the development and well being of all people. It's no wonder, then, that music would be so prevalent on the Internet.

Music files first began appearing on the Internet before the advent of the World Wide Web. They were available to download from Bulletin Board Systems in either WAV or MIDI format. The MIDI format was released in 1983 and was originally thought to be a format for distributing music. However, MIDI files don't sound much like the music people are used to, and WAV files proved to be a more popular format for trading music. WAV files are still used today because of their high sound quality. They aren't particularly useful for swapping, however, because of their extremely large size. In 1989, a German company patented the MP3 format, which has become the standard for digital music files.

The public quickly embraced the new music format, and began to send each other music files over the Internet. This practice was so widespread that a young man named Shawn Fanning decided to create a program devoted entirely to sharing MP3s. In June 1999, he released his program, which he called Napster. Napster was an unimaginable success—perhaps too successful. In July 2001, Napster was shut down by a court order precipitated by a lawsuit filed by the RIAA (Recording Industry Association of America). However, the fall of Napster did little to stem the rising tide of music file sharing that had been unleashed on the Internet.

The Recording Industry Association of America (RIAA) is a trade group that represents the major labels of the recording industry in the United States, and was formed in 1952. The bulk of the profits from music sales goes to the recording companies, who make up the membership of the RIAA. Music is an extremely lucrative business for recording companies, and the total annual net income from members of the RIAA has been reported to be approximately $11.5 billion. The actual recording artists are paid royalties that are a minuscule percentage of what their recorded work earns. The RIAA is a very wealthy, very powerful organization that wants to stay that way. It began filing lawsuits against individual users of file-sharing programs in 2003, and since then has filed more than 35,000 lawsuits centered around peer-to-peer file (P2P) sharing. Fines levied under the Copyright Act have reached as high as $150,000 per music track. Most of these cases settled out of court—primarily because the defendants could not afford to pay legal fees, and it was cheaper to settle. Individuals sued by the RIAA over the years have included minor children, senior citizens, the disabled, people in hospitals and the dead. The RIAA even sued a family who did not own a computer.

Fear of lawsuits probably slowed down P2P file sharing, but it certainly did not stop it. The RIAA was able to sue individuals for sharing music files because it was able to pinpoint the origin and the destination of specific files. The reason for this is that Napster (and other P2P services like it) users traded complete files with each other, usually music files.

BitTorrent works a little differently—when you download a torrent file, you get part of the file from one source and part of the file from another source, until eventually you have the whole file. The problem for the RIAA is that no one person is uploading or downloading an entire song. Because of this, the legality of BitTorrent sites is highly debated. So far, no

court has made a ruling on the legality of a Web site offering BitTorrent links.

BitTorrent is a file-sharing protocol designed to transfer large files extremely efficiently. Users of BitTorrent connect through a Tracker (a central server that coordinates the traffic) to send and receive portions of files. As the number of people with the file grows, the speed at which that file can be distributed to individuals grows. It's uncertain what percentage of Internet traffic can be attributed to BitTorrent files, but the general consensus is around 30 to 35 percent (by comparison, e-mail makes up approximately 1 to 1.5 percent of Internet traffic).

That's a lot of people sharing a lot of music. It is no longer relatively easy for the RIAA to target individual users of P2P services, and it appears to have given up the fight. On December 19, 2008, the RIAA announced that it would no longer file mass lawsuits against illegal file sharers. Instead, the RIAA plans to use Internet service providers (ISP) to find and shut down P2P users. Not one ISP has publicly admitted cooperation with the RIAA's new plan. In fact, Verizon spokeswoman Ellen Yun has been quoted as specifically stating, "We are not working with them on this." It is highly unlikely that this new tactic will work to the RIAA's satisfaction. After all, ISPs are in business to make money just like the recording industry. If they co-operate with the RIAA, and shut down users who swap music files, they will lose paying customers. It is highly unlikely that your ISP will disconnect your service for sharing files with others.

Bandwidth is the size and speed of the connection your computer has to the Internet, and there are limitations to how much data can be exchanged depending on how much bandwidth is available. Most ISPs are open about these limits, and most also prioritize data traffic during peak usage time in order to fulfill their promised speeds to customers. For example, they may give e-mail a higher priority than torrents. The reason for this is that not all data is equal; some files, like e-mail, are small (approximately 2KB per page), and some, like MP3s, are much larger (approximately 5MB per song). The larger a file is, the more bandwidth it takes up. ISPs are extremely protective of bandwidth and have been known to disconnect bandwidth "hogs."

Whether you download torrents or not, you might be interested to find out whether your ISP throttles P2P traffic. The Max Planck Institute's Glasnost project is intended "to make access networks, such as residential cable, DSL, and cellular broadband networks, more transparent to their customers." To this end, they have developed a simple Java-based program that "measures the rate at which network communications are being interrupted by reset (RST) messages." Basically, what this means is that you can determine whether or not your music downloads are being delayed by your ISP. You can test your ISP by going to the Glasnost Project Web site (*broadband.mpi-sws.org/transparency/*).

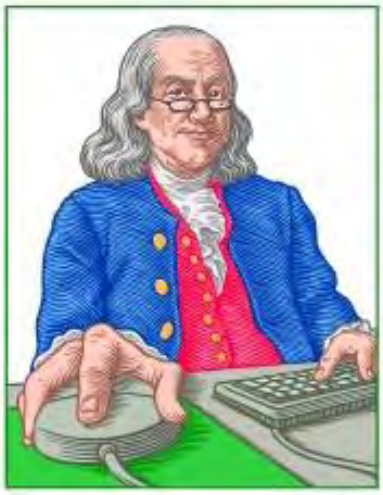
---

Dawn Clement is a freelance writer, domestic engineer, and mother of three with a Masters of Arts in Philosophy and over nine years experience in technical support.

---

---

Return to Table of Contents



LITTLE LINUX LESSONS

"AN INVESTMENT IN LINUX KNOWLEDGE PAYS THE BEST INTEREST."

## Little Linux Lessons: Tips and Tricks from Users

**"Linux users share ideas and ask for help."** by ComputorEdge Staff

A reader wants an answer to an Ubuntu/ Skype/PulseAudio incompatibility issue; and a quick tip on using the ls (list) command.

**Ubuntu/Skype/PulseAudio Problem**

*Has anyone come up with the real answer? There seem to be many workarounds available, some of which work occasionally/randomly or not at all.*

*Help!*

*Richard P. Scheid*

*If you have an answer to this question, please please address it to Linux Lessons (*ceeditor@computoredge.com*).*

**Quick Tips**

The ls (list) command is one of the most useful. Check 'man ls' for all the possible parameters. If you just want a quick look at file names, just use ls.

```
# ls
bluetooth.device.conf   devfs.rules             pccard.conf             periodic.
conf            rc.conf
```

If you need more detail then -l will give the long format.

```
# ls -l
total 114
-r—r—r—  1 root  wheel   4021 Feb  8  2007 bluetooth.device.conf
-r—r—r—  1 root  wheel   1961 Feb  8  2007 devfs.rules
-r—r—r—  1 root  wheel  64568 Feb  8  2007 pccard.conf
-r—r—r—  1 root  wheel   8431 Feb  8  2007 periodic.conf
-r—r—r—  1 root  wheel  32771 Feb  8  2007 rc.conf
```

Forget which directory you're in?

```
# pwd
/etc/defaults
```

**Looking for Some More Questions**

*If you have an opinion on these or other Linux topics, then please let us know. Also, if you have another Linux tip that works for you and would like to pass it along (or have a question), please drop us a line at Linux Lessons (*ceeditor@computoredge.com*).*

---

This is a column for Linux and Unix-like operating system users. The goal is to give Linux users an opportunity to share tips, tricks and ideas with both fellow users and the *ComputorEdge* Linux newbies. Each week in this column, we will highlight the thoughts you submit to us. This is your column. As long as a submission is dealing with the Linux/Unix-like world, we want to share it.

The tips and tricks may be short or long, and can include graphics. If there is a little technique or program that you use on a regular basis, then we want to hear about it. You may also pose questions for other Linux users to answer. E-mail your ideas or questions to Linux Lessons (*ceeditor@computoredge.com*). Be sure to put the word "Linux Lessons" in the subject line so it won't get lost in junk mail. We depend upon you to make this column a success.

Jack Dunning
*ComputorEdge*

---

*ComputorEdge* always wants to hear from you, our readers. If you have specific comments about one of our articles, please click the "Tell us what you think about this article!" link at the top or bottom of the article/column. Your comments will be attached to the column and may appear at a later time in the "Editor's Letters" section.

If you want to submit a short "ComputorQuick Review", or yell at us, please e-mail us at *ceeditor@computoredge.com*.

---

---

Return to Table of Contents

Rob, The Computor Tutor

## Rob, The ComputorTutor Does Visual Basic for Applications

**"More Access VBA Programming"** by Rob Spahitz

Last week, we explored the concept of computer programming, focusing on the computer language called Visual Basic. This week, we continue exploring the use of VBA for Access.

Last week, we explored the concept of computer programming, focusing on the computer language called Visual Basic (aka VB). We also learned that Microsoft has made this available on its Office product and gave it the name Visual Basic for Applications (aka VBA.) For the next few weeks, we will explore how to use VBA for Access.

**Visual Basic Basics**

If you open any existing Access file (or create a new database using Access) and proceed to the Forms Object section, you can quickly start playing with VBA. (FYI: Some existing databases are available through a Web page I've set up for some of our projects: *www.dogopoly.com/ce*)

Start by creating a blank form in Design View and save it as frmVBA_Test. Now let's start playing with some of the basic concepts of VBA (which are really the concepts of VB and similar to most programming languages).

First, please note that VBA in the Office products is identified as version 6, such as 6.5. Microsoft has actually moved on in its software-development offerings and has recently released VB.Net 2008, which is really VB version 9. When Microsoft updated VB from version 6 to version 7, they called it "VB Dot Net" and they made some significant changes. As I've heard it, they are trying to update the Office suite to match the new version, but have had some problems getting it to work, so they continue to support VB6 for its Office products. When I start talking about VB.Net in a future column, I will discuss some of the differences you may need to learn to get your VB6 projects to work effectively when upgraded to VB.Net.

OK, with that out of the way, let's learn a few concepts of modern-day programming. As mentioned last week, most serious modern programming languages are called Object-Oriented (OO). VB6 is partially OO and is close enough that we can consider it that. FYI, VB.Net is fully OO.

With OO languages, you normally work with three concepts: Properties, Methods and Events.

**Properties:** You've worked with properties many times in Access. The properties window lets you set various things, such as which database field a control is linked to (Control Source) and which table or query your form is linked to (Record Source). The reason you see these is because of the objects you are working with—they comply with OO concepts.

**Methods:** This is a fancy way to say computer procedures (i.e., blocks of computer instructions, also known as computer code.) These typically come in two varieties: Subroutines and Functions. They both run a sequence of computer code; only the function returns a value when it is done. Note: Many programs misuse procedures and functions and try to return values when they shouldn't, through parameters. Although this works, and is very common, it also introduces high degrees of risk for unstable computer code. With modern-day OO language features, there's really no reason to program in a sloppy way like that.

**Events:** Although technically not part of OO, events allow multitasking environments (like Windows, Mac and Unix-based systems) to better manage processing. The idea behind events is that sometimes something happens to an object and you, as the programmer, would like to run some special code when that happens. For example, when someone clicks a button, you'd like to do some special processing, such as update the database. Since you may want to intercept

many types of things that happen in Windows and the objects you are working with, you are usually presented with many events for each object.

**Forming a Message**

Back on the form, make sure the Properties window is open. Pressing the F4 key will do that quickly, or you can use menu View/Properties or a variety of other things. Since the form has no objects in it (well, it technically includes a Detail area), we will work with the form for now. On the properties window, there is a separate tab called Events that will show you the events available for the current object (the Form). In this case, the first one you see is On Current, followed by Before Insert, then After Insert and so forth for a total of about 50 events! Wow! So many events you can capture on a form.

Since our form is pretty bare, many of the events are not relevant at this point, so let's pick one you can understand and make it do something. Find the event called On Click, and select the text box next to it, as seen in Figure 1.

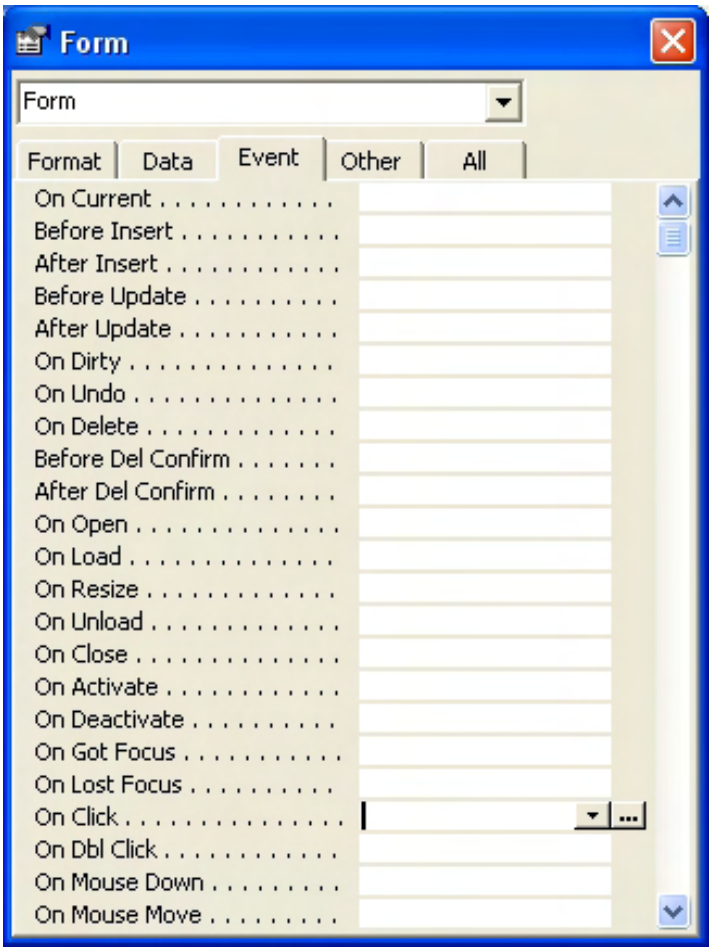


Figure 1. The Form's On Click Event.

Notice how you get a drop-down list and a lookup button ("..."). In the drop-down list, you'll see Event Procedure. This means that you can define a procedure (method) for this event. With the lookup button, you get three options, as seen in Figure 2.

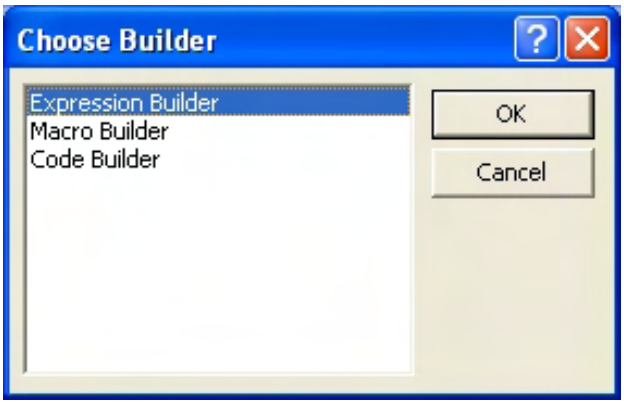



Figure 2. Event Options.

These options allow you to build an expression (which I've never used in this context, so I'm not sure what it would mean; usually it's for defining a value for a text box or something like that); you can build a macro (which was the old way to define computer code for an event); or you can build code, which would be for VBA.

So either select build code or select Event Procedure (or start by typing the bracket to get it in there). Now when you click on the lookup button, it automatically selects Code Builder and goes straight to the VB area and should show something similar to Figure 3.

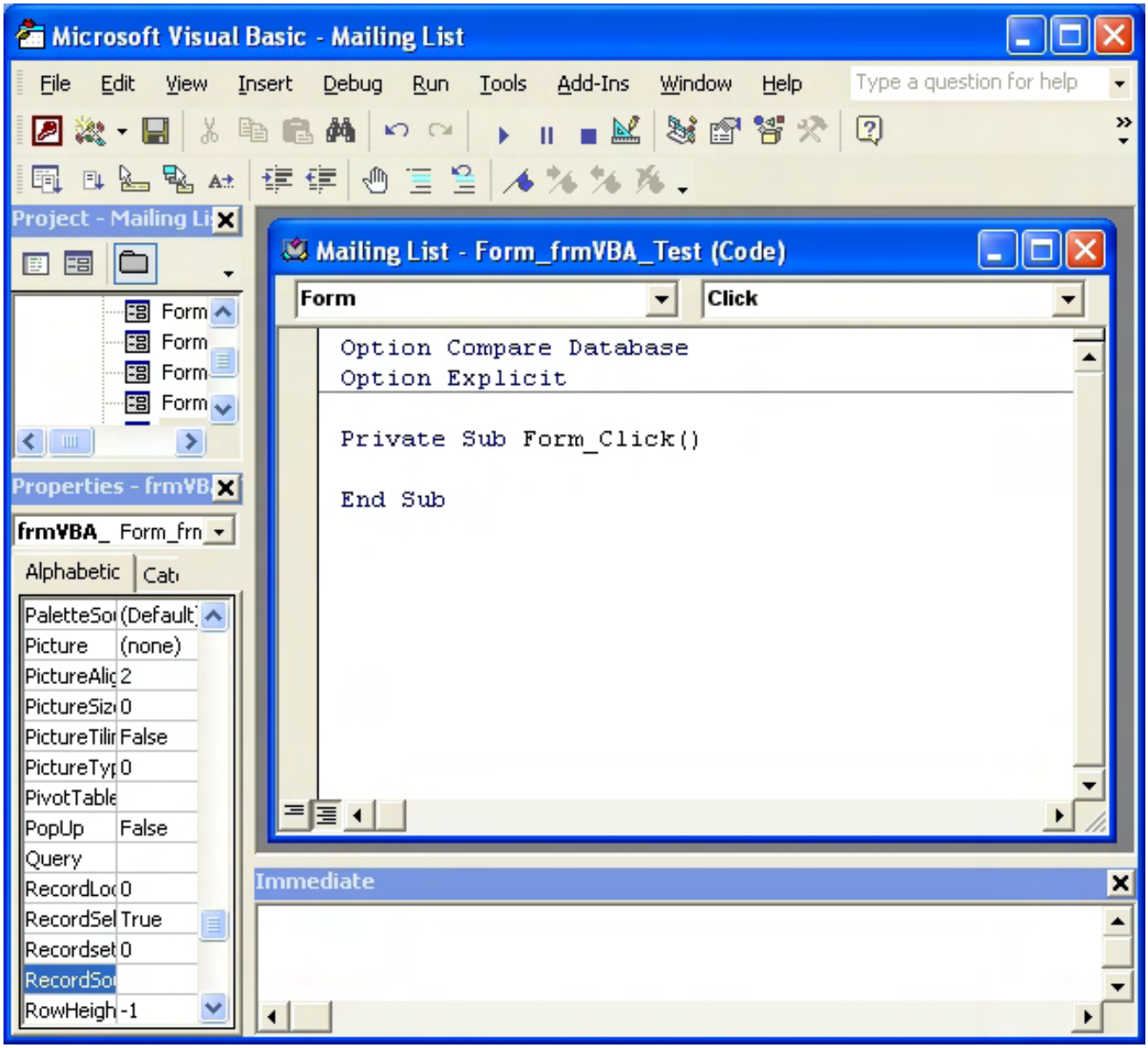



Figure 3. The Visual Basic window for Access.

Note the title of this window. Rather than Microsoft Access, it shows Microsoft Visual Basic (along with the name of your Access database project, such as Mailing List. We are now out of the realm of Access and into the realm of Visual Basic. If you were reading my Excel columns six months ago, you may recognize this window. VB in Excel is identical to VB in Access (and Word and the entire Office suite). The only difference you'll see is the project you are using, which will be a workbook for Excel, a database file for Access, etc.

We'll explore this environment later. For now, in the blank row between the Private Sub and the End Sub, enter:
MsgBox "Hi"

Near the top-left of the screen is a little maroon Access key. Click on that to return to the Access form. Now when you switch the form to Form View, you can get a Windows-style message box (aka dialog box) to appear showing your message, as seen in Figure 4.

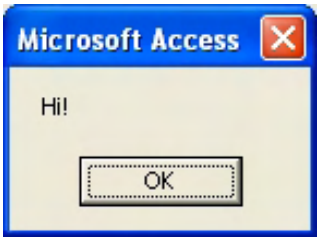



Figure 4. Your message!

Um, did you say the message box didn't show up for you? Well, here's the confusing part. The form is the background area and is obscured by the Detail area. So if you clicked in the Detail area, you get nothing. In Figure 5, I've marked the two areas that can be clicked to get the message. The main area of the form is really part of the Detail area, so the form's click event never occurs because it is blocked.

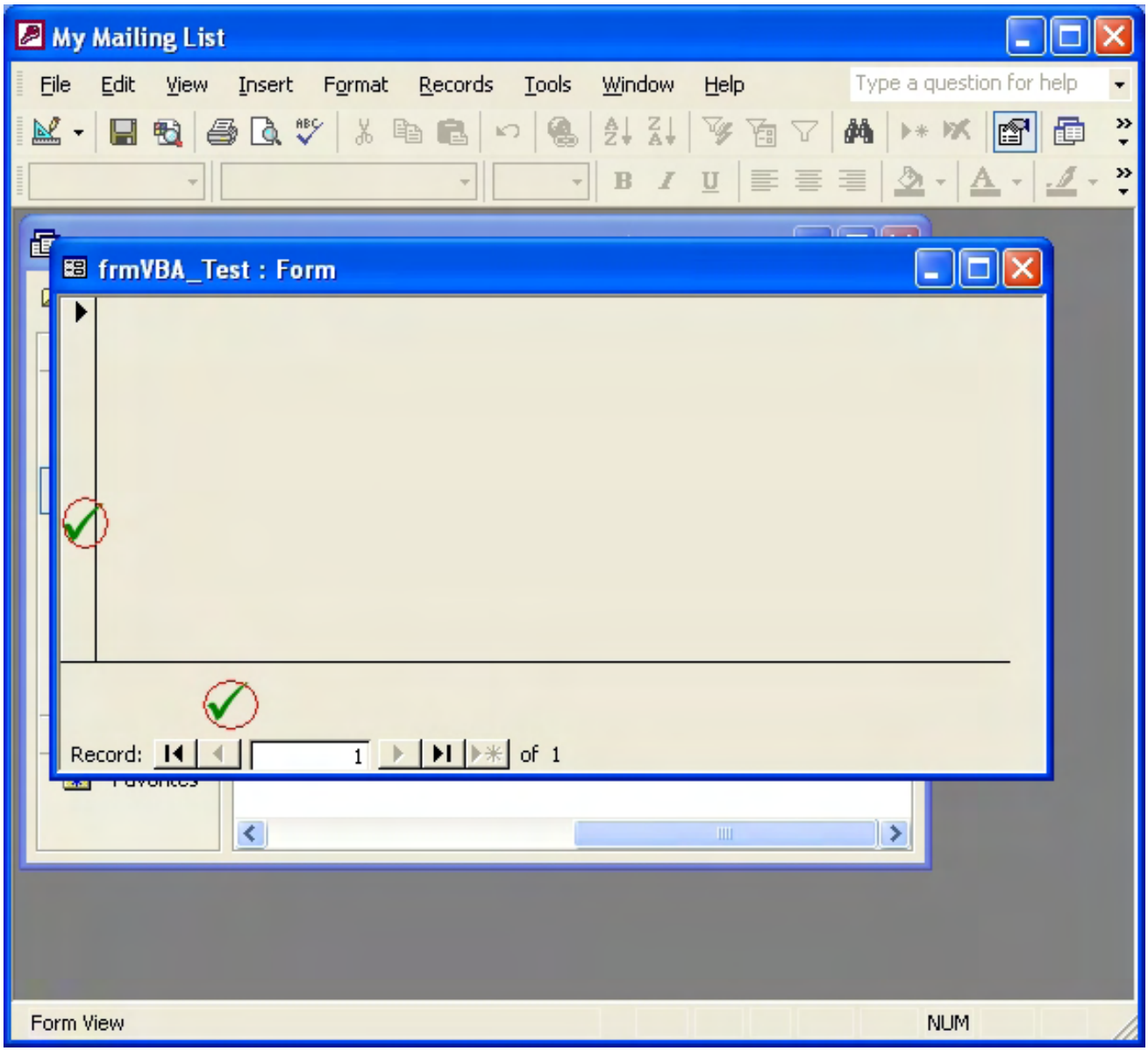



Figure 5. Clickable form areas.

Enough of that exercise. Feel free to explore some of the other events and put a similar message in the code created by other events. As you do this, be careful with the way the VB blocks appear, since the order of the lines can make the code stop working. If that happens, you may have to stop the process until you learn how to manage these problems. At the very least, you can try clearing the entire VB window and starting over. The main thing to remember is that every Event Procedure starts with a line showing Sub and ends with the line End Sub. In between, each one a separate line, should be your VB computer code.

So one last example. Go back to your form in Design mode, and select the Detail area of the form. Notice how you have a lot fewer events to choose from. Select On Click again, then pick Event Procedure, and in the VB window, enter something like: MsgBox "Detail area clicked".

When you go back to Access and view the form, then click the central part of the form, you should see your message. Make sure to save your form when you close, or you'll lose your VB code.

At this point, your VB code window should look something like this:

```
Private Sub Detail_Click()
    MsgBox "Detail area clicked"
```

```
End Sub
Private Sub Form_Click()
    MsgBox "Hi!"
End Sub
```

Next week, we'll explore more of the VB environment, and then see how things like Access's button wizard will write some VB code for us. Eventually, we'll start making that code more efficient as we explore computer-programming concepts.

See ya next week!

---

Rob has been in the computer industry for over 25 years and is currently a part-time teacher, offering classes in Excel, Access, Visual Basic, and a variety of other technical tools. He has loved *ComputorEdge* since 1990 and can be contacted at *RSpahitz@Dogopoly.com*.



---

---

Return to Table of Contents

## EdgeWord: A Note from the Publisher

**"Downloading with BitTorrent"** by Jack Dunning

While downloading with BitTorrent is not your traditional approach to get files, it certainly does have its advantages—and some disadvantages.

Wanting to immerse myself in the experience, I decided to download a few files using BitTorrent. I used the BitTorrent client software from BitTorrent (*www.bittorrent.com*). It seemed like the obvious thing to do and was particularly easy to find. Until I finally used the software, I was having trouble understanding exactly what all the excitement was about. While downloading with BitTorrent is not your traditional approach to get files, it certainly does have its advantages—and some disadvantages.

Once I had downloaded and installed the BitTorrent client, it was time to download a torrent file. It is easy to find torrent files on the Internet. (Torrent files end with the extension .torrent and are much smaller than the actual files that will ultimately be downloaded.) Search for any key term plus the word "bittorrent." For test purposes I used OpenOffice. I was immediately taken to a page where I could download the torrent file for OpenOffice.

The torrent is a small file that acts as a map to the download. In order to use BitTorrent, someone needs to create a torrent file that breaks up and maps the entire download into blocks. Each of these blocks can be separately tracked and copied without downloading the entire file. The torrent file is a listing of all those pieces of the target file and is used by the client software to track the process of grabbing pieces of the file while putting them together. Each block—needing to be copied only once—can be downloaded at any time and in any order.

When a torrent file is loaded into the BitTorrent client, it is read and used for tracking the progress of the download. First the client looks for peers (called seeds) that are offering pieces of the target file. As seeds are found, the downloading process begins. If there are relatively few seeds, then the process may take days, depending upon the bandwidth offered by the seeds and the size of the target file. This not a problem for BitTorrent—although it may be for you.

One of the beauties of BitTorrent is that it has infinite patience. As each block of the file is copied it is saved. The block may be for any section of the file (beginning, middle or end). If you need to shut down the computer until a later time, the BitTorrent will take up where it left off when you start up again. The client software tracks the progress in graphic form (see Figure 1).

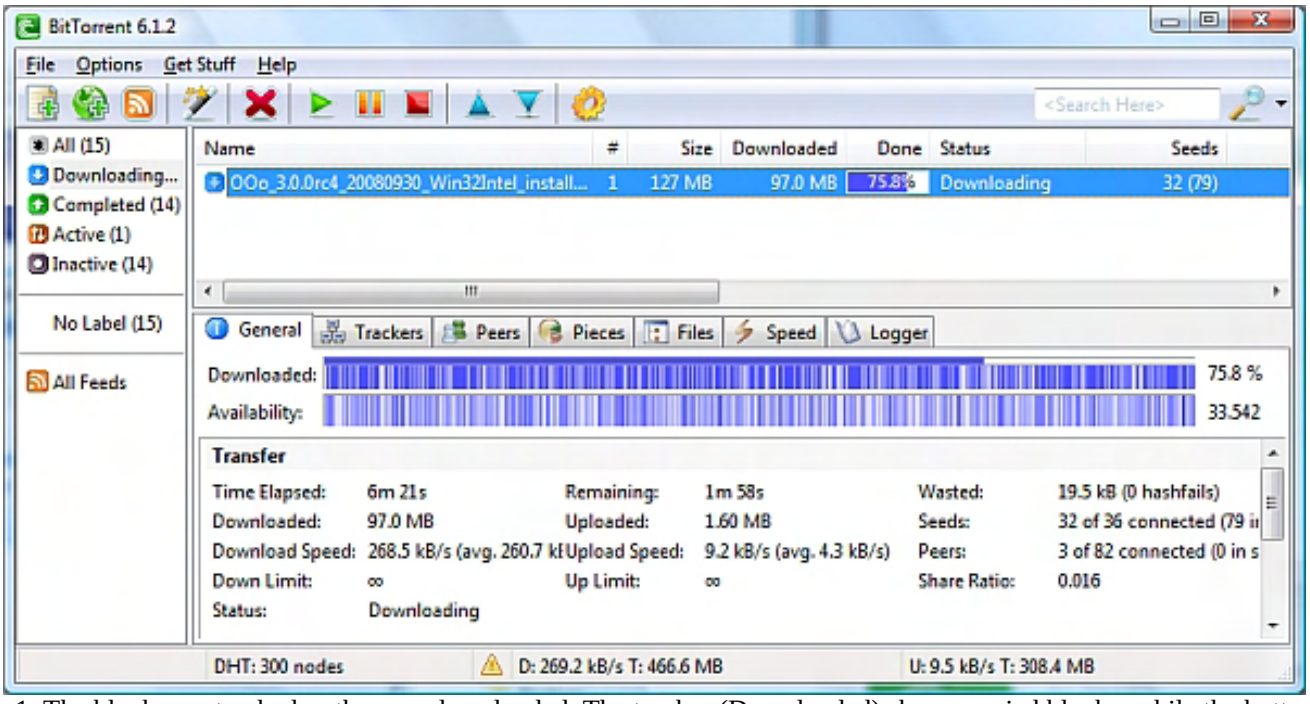



Figure 1. The blocks are tracked as they are downloaded. The top bar (Downloaded) shows copied blocks, while the bottom bar (Availability) shows blocks offered by the seeds. Once completed, the top bar becomes one solid color.

If there are many seeds, then how fast you can download is only limited by your Internet connection bandwidth. In many cases, a BitTorrent download may be faster than a straight download from a primary server. The OpenOffice download immediately jumped to almost 300KB per second (see Figure 2).

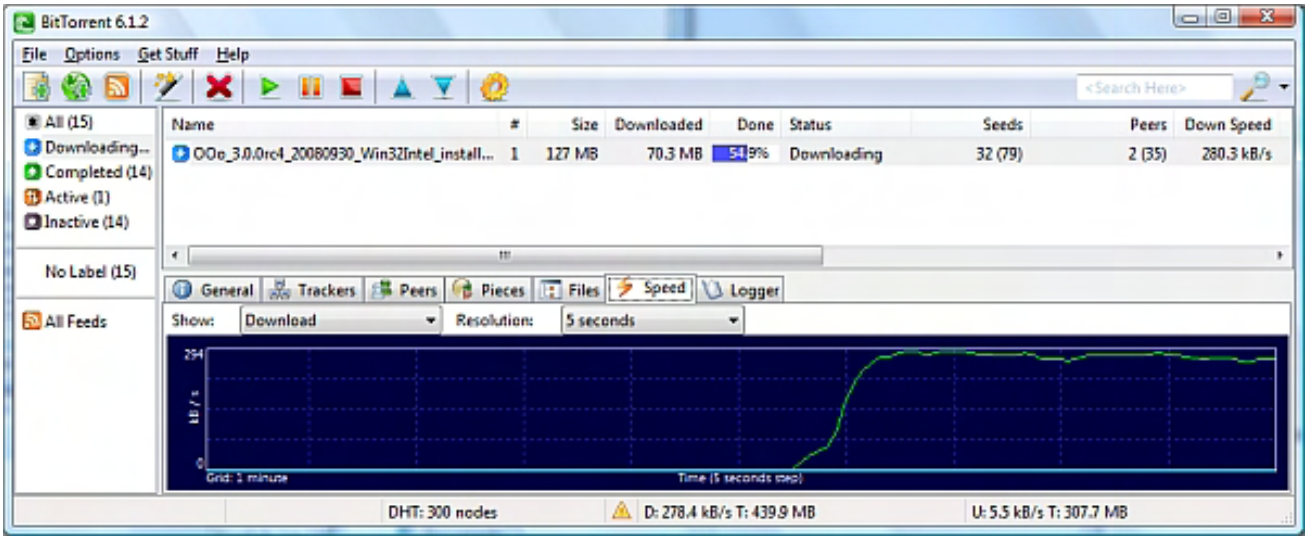



Figure 2. BitTorrent downloading speed for OpenOffice.

The most disconcerting part of using BitTorrent is that, unless you turn off uploading, your computer will turn into a seed and start sending the blocks already downloaded out over the Internet to other people using torrent clients. You have become a host. This is considered fair play, and people who block this process, yet continue to download, are called leeches—for obvious reasons. Even after you have downloaded your file, the client software will continue to send blocks to other clients, unless you turn it off. For many people, the idea of strangers getting something from their computer will freak them out.

BitTorrent appears to be here to stay. Once understood, it is quick and easy. I would expect that most large files, such as open-source software and, hopefully, full operating system upgrades will be available as torrents. This will save the problem of needing to download the complete files all in one go. This will be especially useful for slow, or flaky, Internet connections.

---

Jack is the publisher of *ComputorEdge* Magazine. He's been with the magazine since first issue on May 16, 1983. Back then, it was called *The Byte Buyer*. His Web site is *www.computoredge.com*. He can be reached at *ceeditor@computoredge.com*

---

---

Return to Table of Contents


## Editor's Letters

**"Readers write in with letters to the editor."** by ComputorEdge Staff

"Free-E-Filing Software," "ISO Info Helpful," "I Want Some Paper," "Skeptical About Firefox," "Netbooks for Business," "A Way with Words," "Windows Key Uses"

### Free-E-Filing Software

[This letter is in regard to Michael J. Ross' January 16 article, "Income Tax-Preparation Software Programs."]

Just wanted to give a heads-up that many states offer free e-filing, with software that works similar to TaxACT, TurboTax, etc. California offers its free e-filing through CalFile (*www.ftb.ca.gov/online/calfile/index.asp*), and will help to avoid the additional fees that TaxACT, TurboTax, and the others will tack on.

Colorado also offers free e-filing (*www.colorado.gov/cs/Satellite/Revenue/REVX/1177017551291*), and it may be available for other states where *ComputorEdge* is published.

-Doug Abel, Santee, Calif.

### ISO Info Helpful

[This letter is in regard to Jack Dunning's August 22 Edgeword column, which referenced ISO image files.] Helpful—I wondered what ISO files were.

-R.B.

### I Want Some Paper

I hope this New Year will be good for your mag. I sure do miss seeing it all over my house (but I must admit, *ComputorEdge* was my favorite reading material in the [restroom]!).

So I guess hard-copy magazines are going the way of the Dodo bird, so I have to adapt (like Darwin would have wanted). Since printing out CE is not possible, my question to you is this: Do you provide a method to download *ComputorEdge* so I can read it on my laptop without an Internet connection?

Cheers,

-David

*Yes, the link under the artwork (above Sudoku) on the Table of Contents page will provide a PDF of the entire issue. — Editor*

### Skeptical About Firefox

[This article is in regard to Michael J. Ross' January 9 article, "Firefox Web Browser Extensions."]

[I found the concept of extensions] confusing, and [it] makes me even more skeptical of Firefox. Maybe I'll try Opera. I keep Mozilla because it keeps tabs history.

-Lee

**Netbooks for Business**

[This letter is in response to Rich's letter in the January 9 issue, in which he wondered about using netbooks with "work"-related software.]

I purchased the Acer Aspire One 8.9-inch with standard RAM (1GB, 160-gig HD) and six-hour battery to replace a 14.1-inch Compaq as our travel computer. I got tired of lugging the "heavy" computer with all the power and mouse attachments.

I was able to install Office 2003, audio programs and photo-editing software without any trouble. Everything runs fine, but slower. At the end of every day, I download the photos my wife and I have taken, and going through 200-plus shots takes a few minutes longer. Typing our journal is as easy as on the other computer, except the keyboard is smaller.

The new computer has an integrated video camera (1.3 megapixel) that works very well and is formatted to work with Google Video Chat as I work on pictures and Word.

Our first trip with this computer was to Ecuador, and everything worked as I expected. Keep in mind that the 8.9-inch screen is "smaller." But I am carrying only 2.2 pounds of computer.

Take a look at the new HP netbook—but it is $100 more expensive.

Ciao,

-Vic Garcia

**A Way with Words**

[This letter is in response to D'Artagnan Fischer's January 2 Techno Talk column, "Digital Photography 101: Digital vs. Film Cameras."]

I can understand this easily, despite my age. This writer has a great way with words, very clear and very descriptive.

-Barbara Lutnick, Yuma, Arizona

**Windows Key Uses**

[This letter is in regard to Jack Dunning's January 9 Windows Vista Tips and Tricks column, "Hot-Key Shortcuts."]

One use of the Windows key is flag+D. This hides all windows, giving immediate access to the desktop. To get the windows back, press the keys again, as long as no other windows were opened since the last time flag+D was pressed.

Some others:

flag+L locks the computer
flag+R opens the Run box

All these work in XP; I don't do Vista.

-Phillip, Alexandria, Virginia

---

*ComputorEdge* always wants to hear from you, our readers. If you have specific comments about one of our articles, please click the "Tell us what you think about this article!" link at the top or bottom of the article/column. Your comments will be attached to the column and may appear at a later time in the "Editor's Letters" section.

If you want to submit a short "ComputorQuick Review", or yell at us, please e-mail us at *ceeditor@computoredge.com*.