



BUG-BYTES

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HOW TO RECOVER FILES

THE GOOD NEWS AND THE BAD NEWS

The good news is that if you have just some misplaced files, accidentally deleted files, or accidentally reformatted your hard drive, you can probably recover those files. Your chances of recovery are best when you immediately attempt recovery. That is before you overwrite the areas where your data is stored with new data. The bad news is when you wait too long to attempt file recovery, or especially if your hard drive fails due to mechanical problems. Failures include the following:

Dropped an external hard drive on the floor.

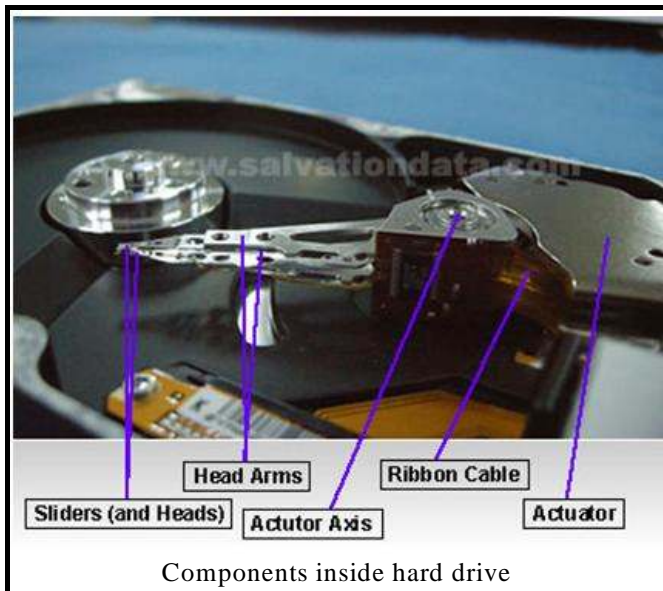
Dropped a laptop computer on a hard floor or pavement.

Catastrophic failure of your hard drive where the arms inside contact the spinning disks (scrape the platters inside). Normally, the arms of your hard drive ride on a fine cushion of air just above the surface of your hard drive platters.

Mechanical failure of the drive (motor, bearings, or electronics)

Malware infections.

The computer is very old and the hard drive is worn out.



Components inside hard drive

It is a known fact that all hard drives will eventually fail. It is not a question of whether that will happen; it is only a question of when the drives will fail. It is like death and taxes. Most drives have very high mean times to failure statistics (average time until first failure). However, you could be one of those unlucky people for whom the drive fails much earlier in the life of your computer. If you are lucky, your hard drives will perform flawlessly for the useful life of your computer, or for as long as you own it. Whichever comes first.

Sources of lost files:

Accidentally deleted files or reformatted drives.

You saved files but you don't know where that might be stored.

Moved files (dragged) to a different folder from what you intended

Your hard drive is composed of a stack of glass disks. Typically they act as a substrate for a very fine coating of iron oxide. The disks are read by moving arms that "seek" the data magnetically encoded there.

WHAT HAPPENS WHEN YOU DELETE FILES?

When you delete files, the process is far different from what you might picture in your mind. Deleting a file is not like erasing words on a sheet of paper with an eraser. The data in your file is recorded as ones and zeros on your hard drive and the data may be widely dispersed all over your hard drive.



The Master File Table (**MFT**) tells your computer where all those bits and pieces are stored so that the arms of your hard drive can seek you data wherever the data is located. When you delete a file all that happens is that your computer changes the first letter of the deleted filename in the Master File Table to a question mark. That tells your operating system that the spaces occupied by that file are now available for other data to be written there. The data is still there occupying the same space until it is overwritten, or until you empty your recycle bin with the file in it.

Speaking of the recycle bin, it acts as your safety net. That is, the recycle bin collects deleted data giving you a chance

to change your mind when you delete a file. If you quickly discover that you made a mistake you can open the recycle bin and restore the file to your hard drive. However, once you empty the recycle bin (purge it) with your deleted file in it, it is gone. You can possibly recover the purged file using special file recovery software, such as Recuva (pronounced recover). See <http://www.recuva.com/>

To restore a file that is still in the recycle bin, open the recycle bin. Right-click on the file you want to restore, and click on restore. The file will be restored to your hard drive.

WHAT HAPPENS IF YOU HAVE NOT BACKED UP YOUR DATA?

If you have not backed up your data and you have to pay a data recovery service to recover your data you are in for a rude shock. Recently two friends of Computerbugs members had to go to a data recovery service. They were told it would cost from \$700 to \$1,500 to recover their data. Presumably, this step was only necessary because (a) they did not backup their data, or did not have current backups and (b) their hard drives suffered catastrophic failures, perhaps just from old age.

HOW CAN YOU PROTECT YOURSELF AGAINST DATA LOSS?

Buy a hard drive (internal or external) to store data backups. Keep the backups current. The cost of a backup hard drive is minuscule compared with the cost of having to restore important data using a data recovery service. If you need to restore a file or files and you have a backup, then you lose no time in restoring those files. However, if you have to pay an outside recovery service, you are out both significant cash and a loss of time while the data is painstakingly restored bit by bit.

It takes only a moment to hookup an external USB hard drive to your computer. You don't even have to open your computer's case. Thus, if you wish, you can hookup your external backup drive only when you want to backup your data. Better yet, you can use one of the new one-button backup drives. They are designed so whenever you want to backup all of your data, you just push a button on the drive and it does the rest.

Here is one source for data recovery with some good additional information:

<http://www.datarecoverylabs.com/index.aspx?agent=google&k=DRSS>

Take care not to drop your computer, and to shield it from hard knocks.

Keep your computer well ventilated. Keep the insides of your computer dust free. Remove any dust curls from the front air vents of your computer. Excess heat shortens the life of hard drives.

Make it a habit to frequently save your important data files with variations of the filename. You can append a change of version number such as Bug-Bytes-01, 02, etc. That way, if something goes wrong, you only lose what you typed between versions. You may be able to set how many minutes elapse between the time that your word processor, or other programs, automatically save copies of your work.

Periodically defragment your hard drive(s) to keep your data more closely together.

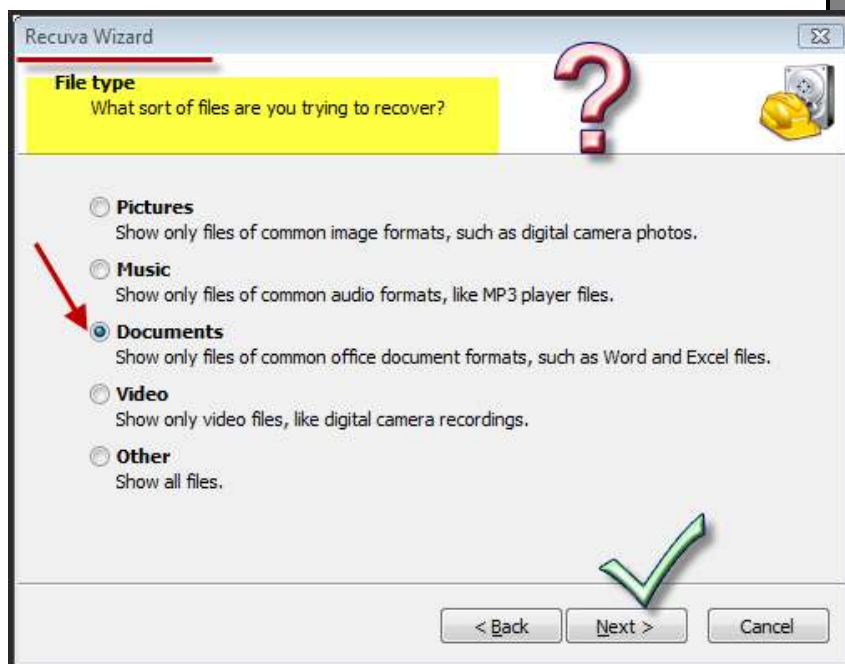
LEARN HOW TO USE DATA RECOVERY SOFTWARE

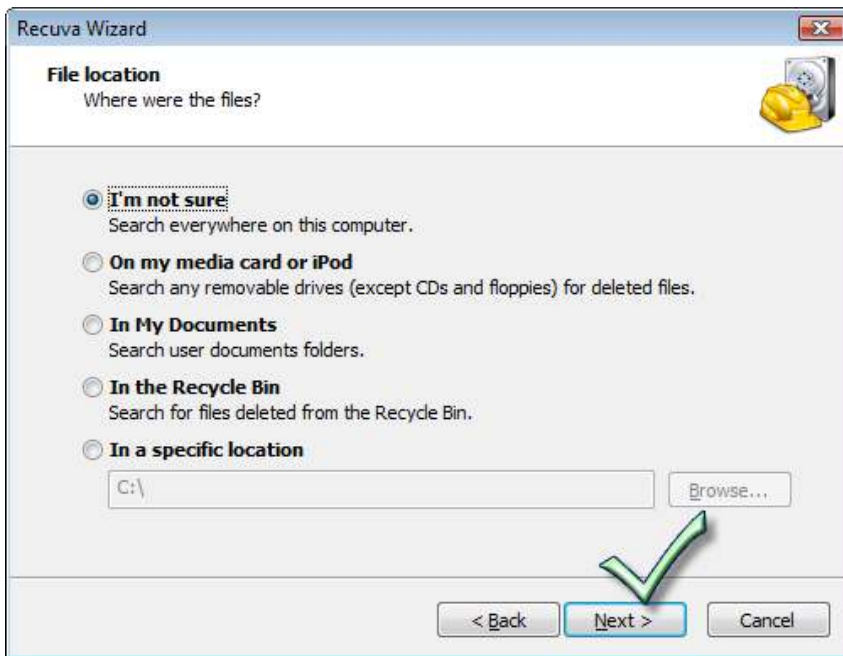
Before you need data recovery software experiment with a free program, such as Recuva™ so that you know what you can and cannot expect from the software. The following screen shots demonstrate that the recovery process is not daunting for lost files.

Limit your search to the type of files that you want to recover. This will reduce the time it takes to find your files.

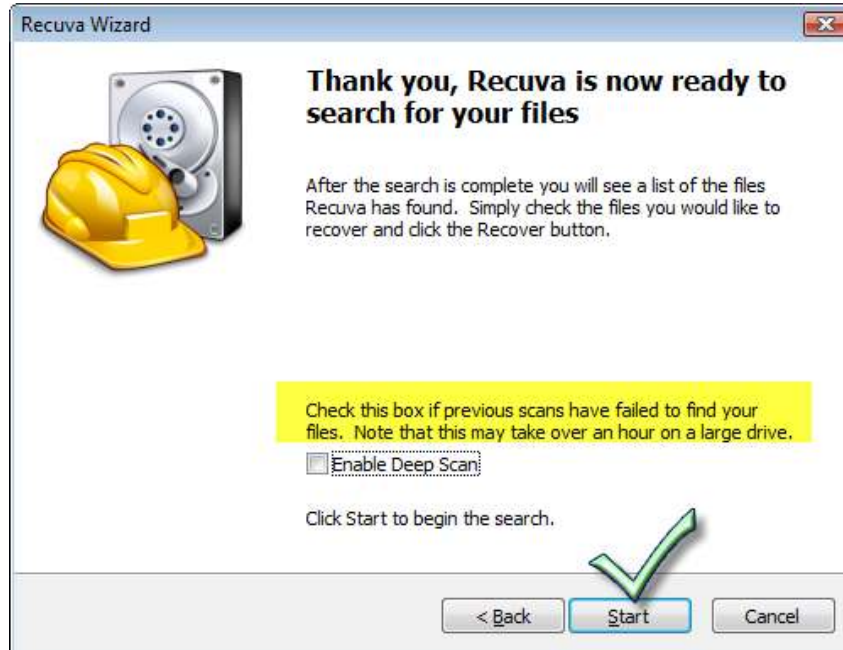
Determine, if you can where the files are probably saved on your hard drive. See the second screen shot.

Note that you can recover files from your digital camera media card, or from an iPod, with Recuva.





HOW TO DEAL WITH E-MAIL GARBAGE SYMBOLS



This article covers how to eliminate quote symbols (>, |, and ;) when you are replying or forwarding e-mail. I'll also cover how to remove such symbols from messages you receive for others and then later forward to someone else.

Start the search for your files. Choose the deep scan option if your previous scan did not turn up your lost files.

The screen shot at the top-left shows the options that are available in Recuva to locate your files. Select the file location that best fits your needs.

Then, click on the Next button to start the search.

Click on Start when Recuva says it is ready to search your files.

In the steps above, select only the files that you want to recover. Click the recovery button. The deed is done.

LESSONS LEARNED

Backup your data and keep the backup current. Attempt recovery of lost files as soon as possible. Use a program such as Recuva to recover your data.

If possible, buy a backup hard drive. This increases the probability that if need to you can recover your lost data.

Note that all hard drives will fail including from old age. Protect yourself by using a backup hard drive if possible. Practice recovering test files before the need arrives.

WHAT IS YOUR HOME PAGE?

HOW DO YOU CHANGE IT?

Your home page is the page that opens by default whenever you open your browser. It is the first page that you see.

What you see may have been determined by your computer vendor when they shipped your new computer to you, or it may have been set by someone who worked on your computer. Nevertheless, you are not stuck with that home page.

Take charge of your computer and choose the home page that gives you what you want; not a page that meets the financial requirements of your vendor.

If you are as happy as a clam with what you have, then skip this article. However, if you wonder what you may have been missing that is really good, then read on.

WHAT ARE SOME OF THE MOST POPULAR HOME PAGES?

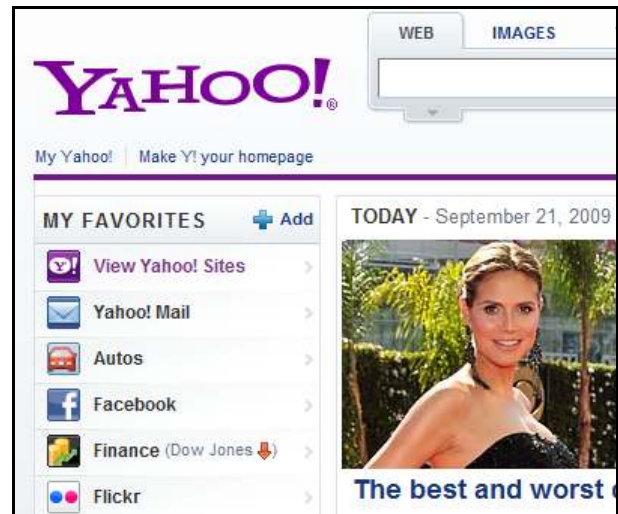
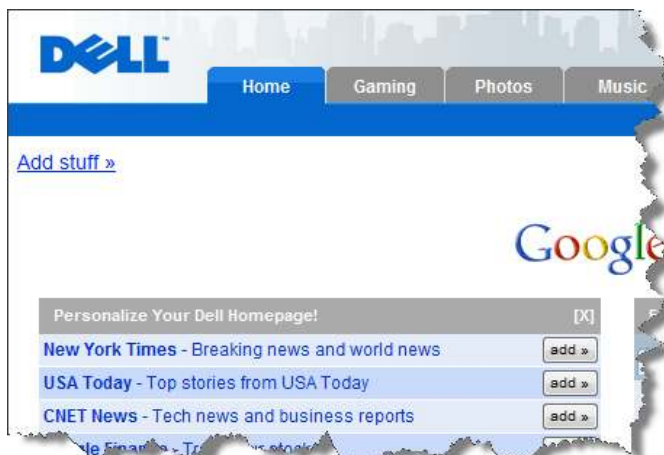
Listed below are just some of the popular home pages, also called start pages. Remember, some of the sites that are mentioned are only there because the users never changed their start page since they got their computer. The choice of start page was made for them by someone else.

For example, the start page was installed by the computer manufacturer or by a cable service technician. Examples include Acer, Dell, HP, Lenovo, and Sony (among others) and ISP services such as Charter, Qwest, and Rogue Link. By default, someone may have set your computer's browser to open to their company's web site.

Shown below are examples of start pages from Dell and Google, and in the next column samples from Yahoo and MSN. www.dell.com, www.google.com, www.msn.com.

The start page can be as bare as Google's start page with just a place to enter your search term, or it can include menus with a long list of categories, plus a full screen of your favorite news such as www.my.yahoo.com (Personalized version)

Shown immediately below and at the right are screen shots from Charter's start page and Yahoo's start page. **It is important to note that you can personalize the start page of many sources to display only those items that you want to see.** You are not stuck with the default layout.

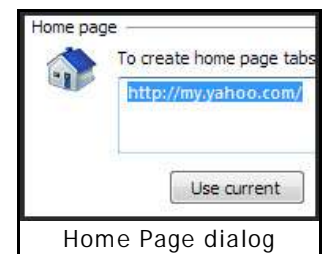


This is an example of what you see when you first open the start page from MSN. It is what you see if you type www.msn.com into your browser's address field.



TO CHANGE YOUR START PAGE

Locate the start page of your choice and display it in your browser. Click on Tools, Internet Option. Select the General tab (if it is not selected). Click on the **Use Current** button. If the correct page does not display, then type the URL (the web site address of your favorite start page) in the home page box replacing the information that is there.



HOW TO TELL WHAT PROGRAM OPENS A PARTICULAR FILE EXTENSION

Windows cannot open files on your system?

Many filext.com visitors encounter problems with Windows being unable to open particular file types.

In many cases all you need to do is identify the appropriate program in the filext.com database and install it. In other cases it may be due to registry damage. For this reason **we always recommend** that you [run a free scan](#) for registry errors.

Top 20 File Extensions

[file extension torrent](#)
[file extension pdf](#)
[file extension mp4](#)
[file extension flv](#)
[file extension 3gp](#)
[file extension xls](#)
[file extension dat](#)
[file extension dll](#)
[file extension rar](#)
[file extension vob](#)
[file extension doc](#)
[file extension pps](#)
[file extension bin](#)
[file extension m4a](#)
[file extension tmp](#)
[file extension xpi](#)
[file extension bug](#)
[file extension wmv](#)
[file extension thm](#)
[file extension dmg](#)

The three-letter file extension following a filename gives you the clue about what kind of file it is. For example, many of you recognize such common file extensions as DOC, TXT, PDF, PPS, and XLS. However people may send you files with filename extensions that you do not remember seeing before.

Add the following link to your Favorites or Bookmarks.

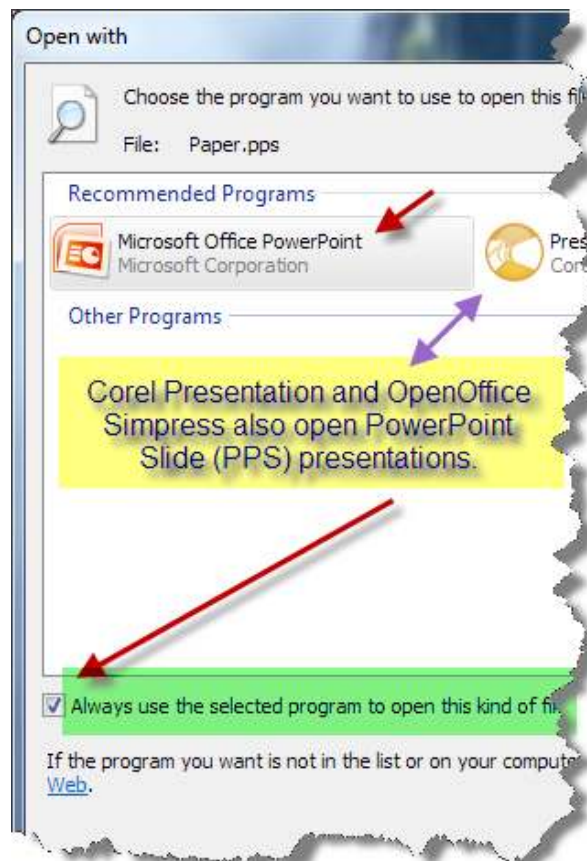
www.filext.com. Search their database to find information about the various extensions.

Frankly, I do not encounter many of the file extensions mentioned in the screen shot at the right. However, I do use www.filext.com to identify which programs are associated with particular file extensions when I run across an extension that I do not recognize

and I do not know which program opens files with that extension.

Once you identify which program opens a particular file extension, right-click on a file with that particular file extension. Then select *Open With* from the drop down menu. Select the program that opens that file. You may have to click on *Browse* to find the executable program identified by www.filext.com.

Then, make the program you selected the default program that will permanently open that type of file. That is, add a checkmark to the box in the lower of the *Open With* dialog box. See the screen shot below.



For example, PowerPoint opens PPS files, Excel opens XLS, and Word opens DOC and RTF files. WordPerfect uses WPD as its default file extension.

Music buffs will recognize MP4 and MP3 audio files and video fans AVI and WMV.

Adobe Reader and Foxit open PDF files.

Graphic fans will recognize JPG used to display photos in great detail, and GIF files to display line art and cartoons.

www.youtube.com fans may recognize the initials FLV used by Youtube videos.

The next time someone sends you a file to view that you cannot open. Pop over to www.filext.com for information on the program(s) that open the file.