

# File Management with *Windows*

## What is File Management?

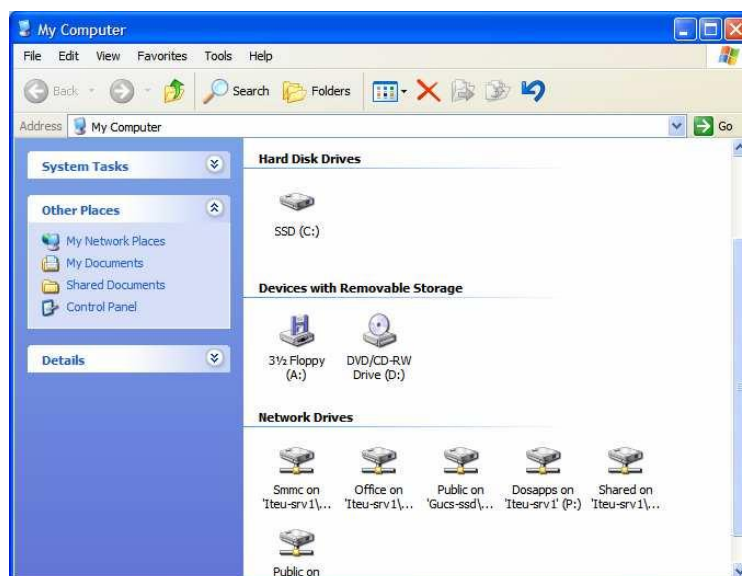
Computer programs and data, including things that you have created yourself (for instance, an essay written using a word processing program) are all stored as **files**. A file is simply a collection of data stored in a way that the computer can read it. Every command you give to a computer involves using some sort of file. When you start up a word processing package again you are running a program, and you will need to be able to save the information that you input into a file. Subsequently you may wish to make further changes so you need to know where to find the saved file, and perhaps you'll want to print it out or copy it from a hard disc onto a USB pen drive or CD disc. There are many ways of performing these basic file management tasks on *Windows*, but in this section we are going to introduce two of them, namely using *My Computer* and *Windows Explorer* (simply *Explorer*, from here on).

*Good management of files underlies all safe IT practice.* Your files and data represent an investment of time and thought, and you should ensure that you look after them carefully.

## Seeing what is on your Computer

Double-click the *My Computer* icon on the desktop. A window appears showing various icons, which include the drive letters for disc drives where files can be stored. A drive is a device for storing and reading data. It contains a disc or discs (which may or may not be removable) on which the data is stored in the form of files.

Usually drive **C:** is the computer's in-built hard disc and **D:** a **DVD/CD-Rom** drive. Drive **E:** is usually available for other portable storage, such as USB pen drives.



If you are using a computer that is part of a cluster, you may also see an icon like this, indicating a *networked drive*. This means the physical drive has a different location from the computer that accesses it. This is also identified by a letter; on university campus computers, this is often **H**.



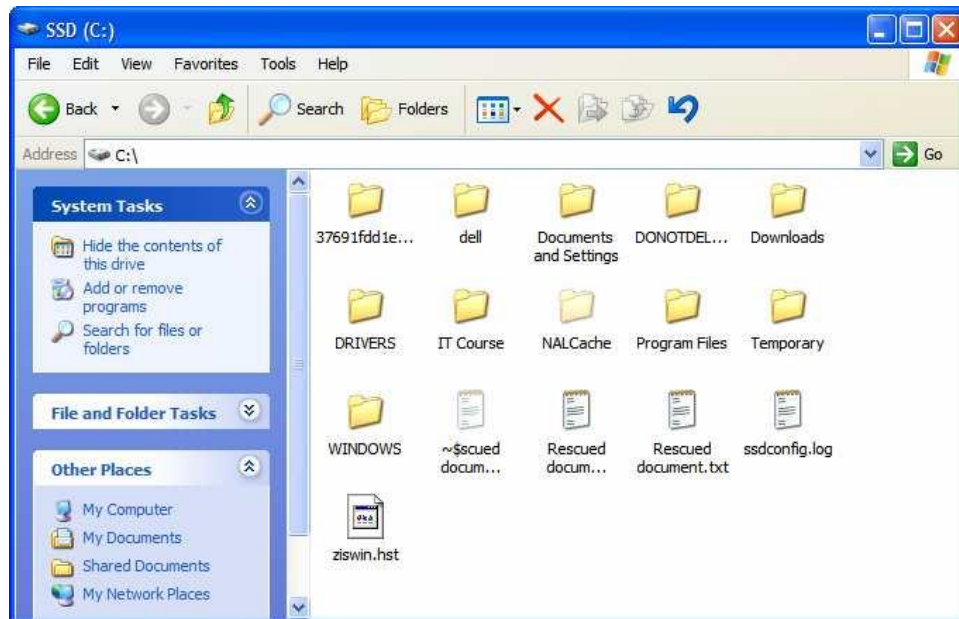


Drives that exist physically on, or attached to, your computer



Drives that your computer accesses via network connections

To see the files on a drive, double click on its icon.

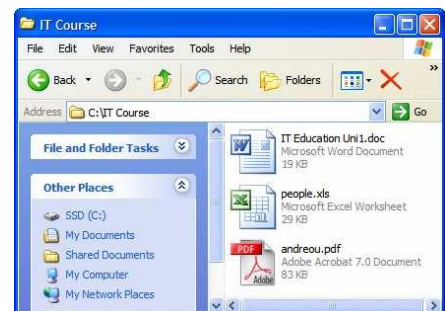


This window shows the contents of the hard disc (or **C:** drive), and each different type of icon represents a different type of file.

The most common icon you see looks like a paper document wallet, and this represents a **folder** into which can go files and other folders. In this example the folder is called *IT Course*. To see the contents of a folder, double click on its icon.



Here we can see that there are three files stored within the *IT Course* folder, and from the icons we can tell that one is a word processed document created with *Word*, one is a spreadsheet file created with *Excel* and the other a PDF document. Later on we'll expand on the names given to these files.



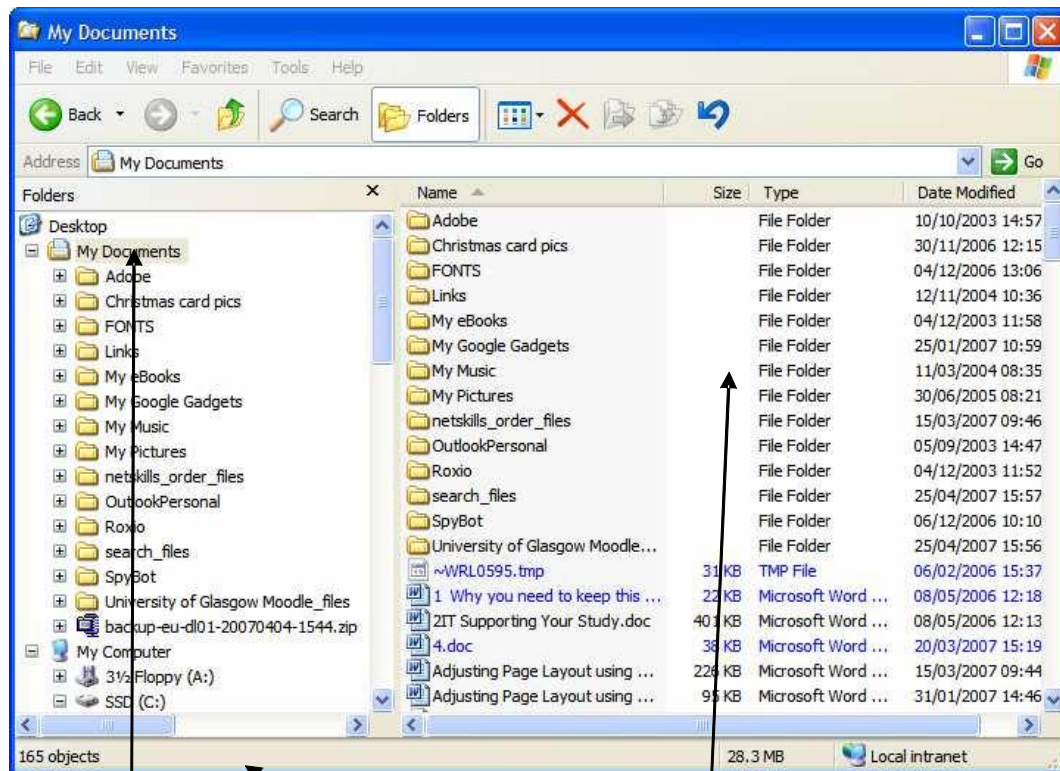
Note the buttons at the top of these windows. (If you don't see these at first, select **View** → **Toolbars** → **Standard Buttons**). The **Back** button allows you to return to the previous view – for instance from “IT Course” back to the main **C:**drive window. The **Forward** button takes you forward, so you can switch back and forth between two areas. The **Up** button takes you up one level – this is not the same as **Back** because if you had been looking at several folders at one level, **Back** would not immediately take you up a level.

If you are not sure where a file is, clicking the **Search** button brings up a window into which you can enter details of a file and search for it. Clicking the **Folders** button gives you a view of all the currently available drives/folders on the left hand side of the screen, which allows you to reach files more quickly.

The next button is the **Views** button, which allows you to view folders/files in different levels of detail from a simple icon to full file size, type and date information. After the **Views** button are three buttons (which are only active if a file is selected) that allow you to **Delete**, **Move** or **Copy** a file. The next button is the **Undo** button but remember this will not be effective on networked drives.

**Note:** some of these buttons may appear in a slightly different order on your computer. If icons just described are missing, select **View** → **Toolbars** → **Customise** and choose the ones you want to add.

*Explorer* works in much the same way as *My Computer*. To start *Explorer*, position the mouse over the **Start** button on the taskbar, and click the **right** mouse button – note that it is the right button and not the usual left one. From the menu that appears, choose **Explore** with the left mouse button. You will see that the same information appears, but its default view is with the split window, with the left hand side showing folders in the form of a hierarchy, or “tree”.



The Selected Folder      Status Bar      Contents of the selected Folder

On the left side of the window, disc drives and folders appear. As you select items from this side, you will see that the right side of the windows expands on the contents of the folder, or drive, highlighted. These contents may be sub-folders or files, or both. As you become familiar with using a computer you will probably develop a preference for using either *Explorer* or *My Computer*. They can both be used to achieve the same end result. Note that you can change how the *My Computer* and *Explorer* windows will display files and folders by selecting **Folder Options** from the **Tools** menu.

In *Windows* a **My Documents** icon appears on the desktop. On your home computer, this links directly to a folder on the computer’s hard drive and is your



default storage location when you save any file. This folder also can be seen when you open *Explorer* or *My Computer*. On university campus PCs this folder will exist on your network storage space (**H:** drive), so that you can access it from any campus computer.

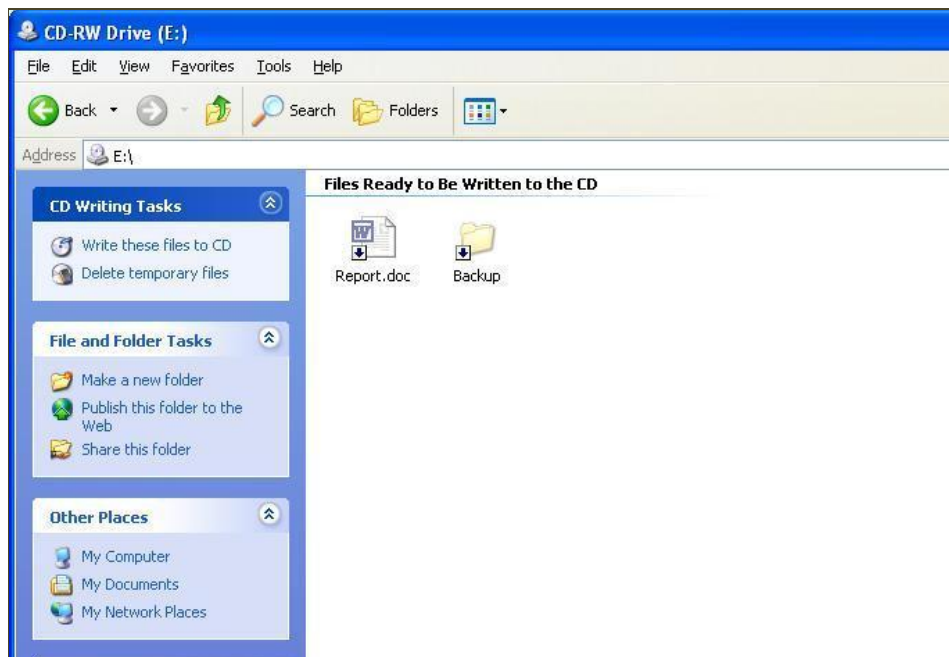
### Portable Storage Media

PCs allow you to save data to different types of portable storage medium, which allow you to transfer files between computers which are not connected by a network: e.g. transfer files between your home computer and one on campus. Some PCs in the university clusters allow you to write to an R/W CD or DVD. CDs can hold as much as 750 megabytes of data and DVDs about 4.5 Gigabytes of data.

Another storage medium is the **USB Key**, which contains a flash memory chip that can hold from 1 Gigabytes of data up to 256 Gigabytes. These can be used with any PC that has a USB port.

### Read/Write CD

You can save files to a writeable CD by copying using *My Computer* or *Explorer*. To begin the process, insert your CD into the **D:** drive and open *My Computer* or *Explorer* to access the files you want to copy. Select and **Copy** the files and then click on the *My Computer* link to access the **D:** drive (or other drive if you have more than one CD/DVD drive). You should now see a link named **Write these files to CD**.



Paste the files onto the **D:** drive. To complete the write process, click on the **Write these files to CD** link and the **CD Writing Wizard** will open.



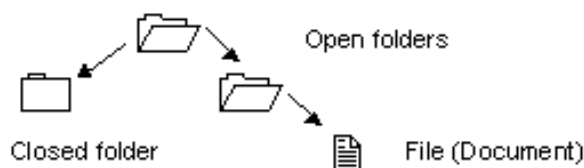
Follow the Wizard's instructions to complete writing to your CD. When finished, **don't forget to remove the CD from the PC** – especially if you're using a Campus PC!

### USB Keys

A USB Key (or Pen Drive), which is shaped like a flattened pen is attached to the USB port of a PC, after which it can be treated like any other drive on your PC. You can copy files to or from it by simple drag and drop or by using copy and paste in *My Computer* or *Explorer*. When you have finished using the USB Key, make sure to click on the **Safely remove USB Mass Storage Device** option on the **Taskbar** before removing it.

### Naming Files and Folders

Files are stored in areas called **drives** whose location the computer recognises. You already have seen that drives are given letters of the alphabet as identifiers: e.g., drive **D:** for the **CD/DVD** disc drive. Files on drives are usually grouped into **folders**, which can be nested in a hierarchical arrangement, so that top-level folders can contain sub-folders, and so on down to individual files.



Files and folders must be given names when you create them. The structure for the name of a file is different to that of a folder, in that it has as part of the name a three-character **extension**, separated from the filename by a dot (full stop). Extensions are used to help recognise the **file type** (i.e. the sort of data which the file contains); if the program, which you are using, cannot recognise a file it will not be able to use the data in it. Files with an extension **.exe** are usually programs, which you can run, whilst those with **.doc** are usually documents created by *MS Word*.

There are many file types and corresponding extensions. For instance, there are many different graphics file types, and some of the most common graphics file extensions are:

- .bmp** Windows bitmap images
- .gif or .jpg** Common formats for images on Web pages
- .wmf** Windows metafile (a common format for clipart)

## Organising your files

It is up to you to decide how to organise your files, just as you would do if you were putting pieces of paper into files, which are stored in a filing cabinet. You could elect to keep all your word processing files in one place, or store work (of all file types) for a particular project in an appropriately named folder.

When using floppy discs it is unlikely that you will have a complex structure of nested folders, indeed you may not bother to store files in a folder at all. With a hard disc or network storage area, the situation will be different, because you are likely to have a lot of disparate material, which needs to be organised or you will lose track of it. Practise looking at what's on your hard disc so that you get used to clicking on folders, at the level of nesting you want, to see what's inside them, and get a feel for the overall organisation of files on the disc.

## Setting up and Deleting a Folder

### To create a new folder:

- Double click the disc drive or existing folder that you wish to put the new folder into. Be sure about this, as it is at this point that most errors occur
- Select **New** from the **File** menu, and then click **Folder**.
- A new folder icon appears with the text *New Folder* highlighted underneath.
- Replace this text by typing in the name that you wish to allocate to it.
- Check that it is where you intended it to be. If not, delete it and start again.

### To delete a folder:

- Check there are no files, which you wish to keep, in the folder then highlight it.
- If there are any files you wish to keep, and you still wish to delete the folder, move these files to another folder.
- Highlight the folder you want to delete then select **Delete** from the **File** menu (or click the delete button on the toolbar).
- Confirm that you want the folder deleted by clicking on **Yes**. This moves the folder, and any contents, to the **Recycle Bin**.

Remember that the Recycle Bin is a holding place for deleted files and that these files are not actually deleted from the computer until you have told it to empty the Recycle Bin. (To do this double-click the **Recycle Bin** icon, and select **Empty Recycle Bin** from the **File** Menu.)



This means that you can get back files that you have accidentally deleted. However if you need to free up disc space the Recycle Bin should be cleared out from time to time.

## Examining and Running Files

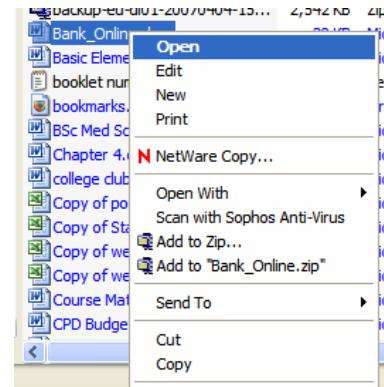
The way in which the files and folders are presented to you, and the amount of information given about them, can be changed. To do this, select the **View** menu and choose from **Large Icons**, **Small Icons**, **List** or **Details**. The **Details** option will display the name, size, type and the date that the file was last modified.

Name	Size	Type	Date Modified
Standard_2004...	776 KB	Microsoft Word...	22/06/2005...
Spreadsheets ...	771 KB	Microsoft Word...	26/05/2006...
searching web...	239 KB	Microsoft Word...	26/05/2006...
File Manageme...	257 KB	Microsoft Word...	28/05/2006...
File Manageme...	78 KB	Microsoft Word...	30/05/2006...
Evaluating web...	21 KB	Microsoft Word...	26/05/2006...

Clicking on any of these headings (at the top of the section of the window displaying the folders/files) will arrange them in a suitable order – e.g. clicking on **Name** orders alphabetically, on **Date Modified** by date, etc.

Knowing the size of the file tells you whether you can fit it onto a floppy disc. Knowing when it was last used helps you identify the latest version of a document of which you may have multiple copies as backups, all with rather similar names. You can also change the order in which files are displayed by selecting **Arrange Icons** from the **View** menu (or by clicking on the file details column headings).

A file can be **run** straight from the *My Computer* or *Explorer* window. You can do this by double-clicking on it or by right-clicking and selecting **Open**. If the file is a program (usually with an **.exe** extension) it will run. If it is a data file, such as a word processing document, it will open the application it needs, then open itself. This will only happen successfully if the application is already on your computer. Thus, double-clicking on a word processing file will only open the file if you already have the word processing software installed.



Some files will already be pre-set to open this way, but sometimes you may wish to open other file types. To do this, first click on the file you wish to open, then select **Open With** from the **File** menu and select the appropriate application from the list displayed. You should make sure the **Always use this program to open this file** box is ticked if you expect to be using this file type regularly.

## Copying, Moving and Deleting Files

### To copy a file:

- a. Highlight the file you want to copy.
- b. Select **Copy to Folder** from the **Edit** menu. A window will open displaying the folders on your computer.
- c. Choose the folder where you want to place the file. If you want to copy a file to another disc drive you can choose this in this window too.
- d. You also have the option of creating a new folder to store the copy: simply click the **Make New Folder** button.
- e. Click the **OK** button to **Copy** the file.

You can **Move** files in a similar fashion by choosing **Move to Folder** from the **Edit** menu.

Once you are used to using *My Computer* or *Explorer* you can copy and move files by opening windows for the discs or folders involved. By repositioning the windows you can then drag file or folder icons from one window to the other. Practise doing this, as it is easy to make mistakes and delete files/items that you didn't want to lose. Note that, when you drag between folders in the same drive, the file moves and is no longer in the original folder. When you drag between folders in different drives the file will be copied and will then exist in both folders.

If you copy files, think up suitable names for the copies, so that you can tell them apart easily. But don't change extensions or the application with which the file was created will not be able to read it any more. To rename a file, select it using *My Computer* or *Explorer* and choose **Rename** from the **File** menu. The file name will be highlighted and you simply type over it with the new name you want to give it. *Remember to keep the same extension for the file name!*

To **delete a file**, select it by clicking on its name and then choose **Delete** from The **File** menu or click on the **Delete** button. If you mistakenly delete a file, you can retrieve it by choosing **Undo Delete** from the **Edit** menu. Alternatively, you can open the **Recycle Bin** and, select the file you wish to retrieve, then click on the **Restore** button.

### **Backing up Files**

Backing up files is very important. Even though computers nowadays are very reliable, accidents can occur - and human error is always possible. You should always keep a backup of any file you create. When working on a file, you should back up at regular intervals so that, if anything goes wrong, you will only have lost a few changes.

At university, if you store files on a networked file server, backups will have been arranged by the cluster managers. So if you do accidentally delete files they may be able to retrieve copies from routine backup tapes.

You can't depend totally on the network back up, however. Back-ups are made regularly throughout the day but there might be a system failure just before a back-up is due and you could easily lose as much as an hour's work – if you haven't been making your own regular backups. Make more than one backup of files that are important, and keep them in different places. And, if you back up to portable storage (e.g. disc or USB pen drive) **don't forget to remove it from the PC and put it in safe place.**