# ECDL Module 2

## Using the Computer & Managing Files

**Windows Vista Edition – Syllabus Five**

**ECDL Foundation**
Approved Courseware

**CHELTENHAM**
COURSEWARE

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# Tutor Setup Information

- Copy the sample files folder to the **Documents** folder on the PC.
- At the end of the course, remove all files modified or created during the course, prior to re-running the course.
- At the end of the course, reset all program and operating system defaults that may have been modified during the course, prior to re-running the course.

# A first look at Windows Vista

## Vista – Different versions

- There are a number of different versions of Microsoft Windows Vista that you can buy.

  **Windows Vista Ultimate**.
  This version has everything it in.  Ideal for business.  Great for playing.

  **Windows Vista Home Premium.**
  Designed for home use.

  **Windows Vista Home Basic**.
  A cut down version designed for home use.

  **Windows Vista Business**.
  Designed specifically for small business.

  **Windows Vista Enterprise**.
  Designed for large organisations.

## Starting Vista

- When you start Windows Vista you may have to supply a login password.  If so enter your password and the opening screen will look something like this.

- Displayed within the centre of the screen is the **Welcome Center** window.
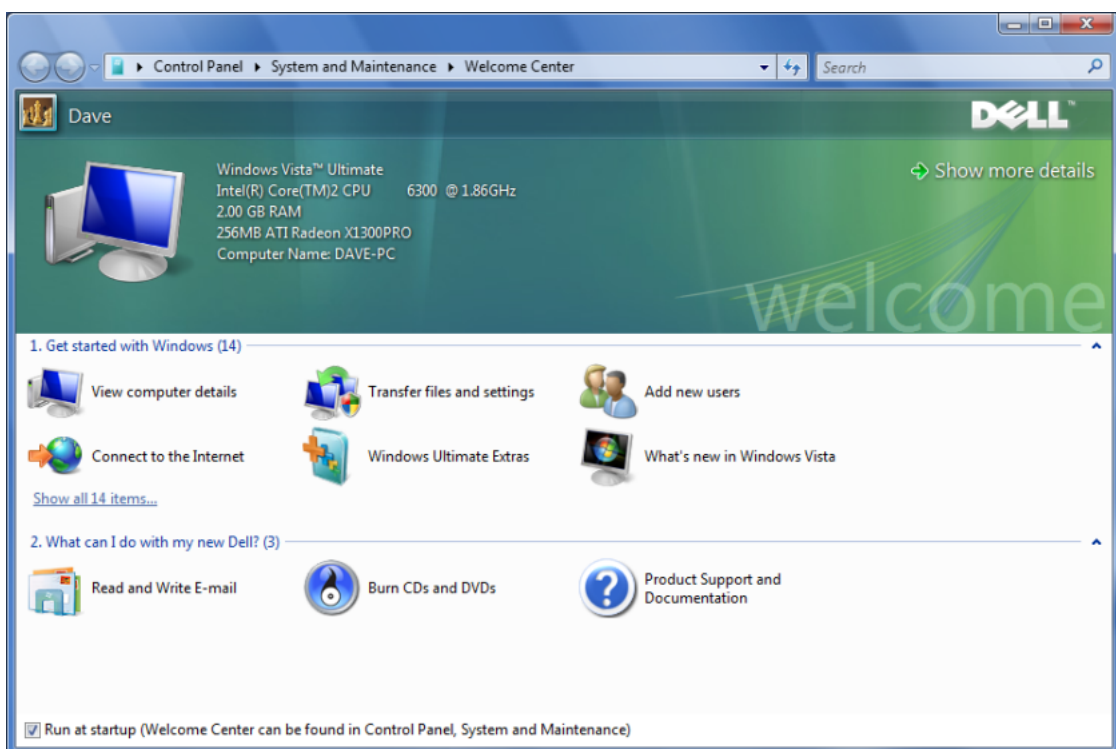


- We can use the Welcome Center window to practice basic Windows Vista skills.

## Moving a window

- Move the mouse pointer to an empty area towards the top of the window. This area is called the **Title Bar**. Press down the left hand mouse button, and while keeping it pressed down, move the mouse pointer on the screen.

When you release the mouse button, the window will have moved. Experiment with moving this window a few time until you get the hang of it.

## Drag and drop

- The concept of selecting an item (such as a window's Title Bar), and then moving it while keeping the mouse button pressed is often called 'dragging' or 'Drag and drop'. It is called this because you drag an item to a new location, and then drop it at the new location.

## Select, then manipulate

- When doing something within Windows Vista, you normally have to select an item (such as the Title Bar within a window) and once selected can you manipulate whatever it was you selected. This is a very important concept to remember. You need to select an item to tell Windows Vista what item you are interested in, before you can manipulate it. This idea is fundamental to using Windows Vista. For instance, later we will see that if you wish to format your text, you need to select a portion of text and then apply the formatting. In a different context later on when you want to move a file on your hard disk from one place to another, you need to select the file first, and then move them.

## Single clicking vs. double clicking

- Normally you click on an item to select it. This is a single click using the left mouse button. Once selected you can often double click on the selected item to open or run the item that was selected.

## Viewing your 'computer details'

- Move the mouse pointer to the item within the window called **View Computer Details**. Click once using the left hand mouse button.



**TIP**: Within this manual, from now on when you are asked to click the mouse button, it will always be the left mouse button, unless the right hand button is specifically specified.

- You will see details of your computer displayed within the window. As illustrated below.

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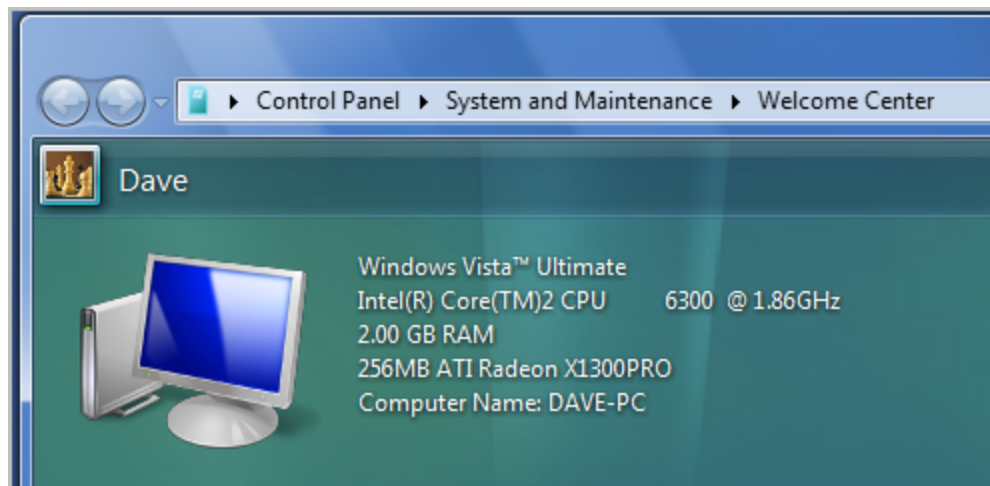
This tells you what type of Windows Vista that is installed. In the example shown **Windows Vista Ultimate** is installed. The type of CPU (Central Processing Unit) is an Intel chip running at a speed of 1.86 GHz. There is 2 GB of RAM (Random Access Memory). The video type is a 256 MB ATI Radeon X1300PRO.

You may feel you don't need to know this, but as you have seen, it is easy to get technical information about your computer if you need to!

## Resizing a window, narrower or wider

- Move the mouse pointer to the left hand edge of the Welcome Center window. You will see that the mouse pointer changes shape to become a horizontal line with an arrow on each end. Press down the left hand mouse button and while keeping it pressed, move the mouse pointer left or right. When you release the mouse button the window will be narrower or wider, depending on which direction you move the mouse pointer. Experiment with resizing the window to make it wider or narrower.

  Also experiment using the right edge of the window.

  **TIP**: Remember that this dragging action with the mouse button pressed is called '**Drag and drop**'.

## Resizing a window, taller or shorter

- Move the mouse pointer to the upper edge of the Welcome Center window. You will see that the mouse pointer changes shape to become a vertical line with an arrow on each end. Press down the left hand mouse button and while keeping it pressed, move the mouse pointer up or down. When you release the mouse button the window will be taller or shorter, depending on which direction you move the mouse pointer. Experiment with resizing the window to make it taller or shorter.

  Also experiment using the bottom edge of the window.

## Resizing a window in two directions at once

- Move the mouse pointer to one of the corner edges of the Welcome Center window. You will see that the mouse pointer changes shape to become a diagonal line with an arrow on each end. Press down the left hand mouse button and while keeping it pressed, move the mouse pointer up or down and left or right. When you release the mouse button the window will be resized both vertically and horizontally, depending on which direction you move the mouse pointer. Experiment with resizing the window.

  Also experiment using the other corners of the window to resize the window.

- Before continuing try and resize the Welcome Center window to its approximate original size and position. You should be able to see other items on the screen behind the window.

## Maximising a window

- If you look at the top-right of the Welcome Center window you will see three icons. As illustrated below.



- Move the mouse pointer over the middle of the three icons and after a short time you will see a popup explaining the function of the middle icon.
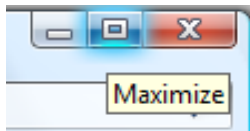


- As you can see the icon is called the **Maximise** icon. Click on the **Maximise** icon and you will see that the Welcome Center program window maximises, to fill the screen.

- Move the mouse pointer over the middle icon and wait for the popup to explain the function of the icon (which has changed slightly if you look closely).



  **TIP**: The reason for the middle icon changing its appearance (and its name), is that having already maximised the window to fill the screen, you cannot maximise any further. Thus you are offered a **Restore** icon that will restore the program window to its original size. This is an example of Windows being clever!

  Click on the **Restore Down** icon and you should see that the Welcome

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Center window is displayed within a window (i.e. not full screen). You should find that the window is the same size and position, prior to maximising the window.

## Minimising a window

- If you move the mouse pointer over the first of these three buttons, you will see it is called the **Minimize** icon.

- Click on the **Minimise** icon and you will see that the window disappears. It is minimised down to the Windows **Taskbar,** which is the name of the bar across the bottom of your screen.

- Move the mouse pointer to this minimised icon within the Windows Taskbar and you will see the following popup, which displays a 'thumbnail' picture of the minimised program.
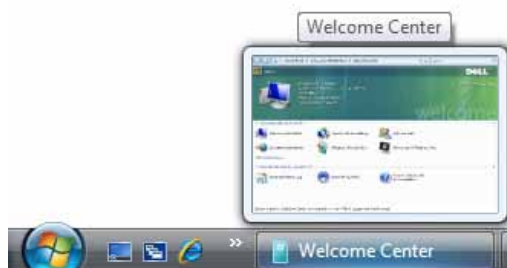
- Click on the minimised icon and the program will be displayed within a window once again, on your screen.

    **NOTE**: Minimising a program is not the same as closing a program. When you minimise a program, it is still running in your computer's memory, it is simply minimized in size, down to the Windows Taskbar. Closing a program means that the program is closed and no longer running in memory.

## Closing a window

- Move your mouse pointer to the last of the three icons. After a short delay you will see a popup explaining that this is the **Close** icon.
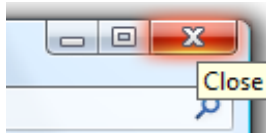
- Click on the **Close** icon and the program will close.  It is not displayed within the Taskbar as a minimised icon. The program is no longer in your RAM (Random Access Memory).  RAM is where all your active programs are stored when they are running.  If you close a program the program is removed from RAM but you still have a copy of the program stored on your hard disk. To re-run the program you will need to open the program from disk.

## The Start button

- At the bottom-left of your screen you will see a circular button.  Move the mouse pointer over this button and after a short time you will see a popup explaining that this button is called the **Start** button.



  **TIP**: Get into the habit of pointing to items within Windows and leaving the mouse pointer over the item.  In many cases, as you are beginning to see, you will get a popup message explaining the function of the item you are pointing at.

## The Start menu

- Click on the **Start** button and you will see the **Start Menu** displayed as illustrated.  This menu contains a list of all the programs that you can run, such as your word processor, spreadsheet and database programs.  It also allows you to play music, movies and any other programs that are installed on your computer.
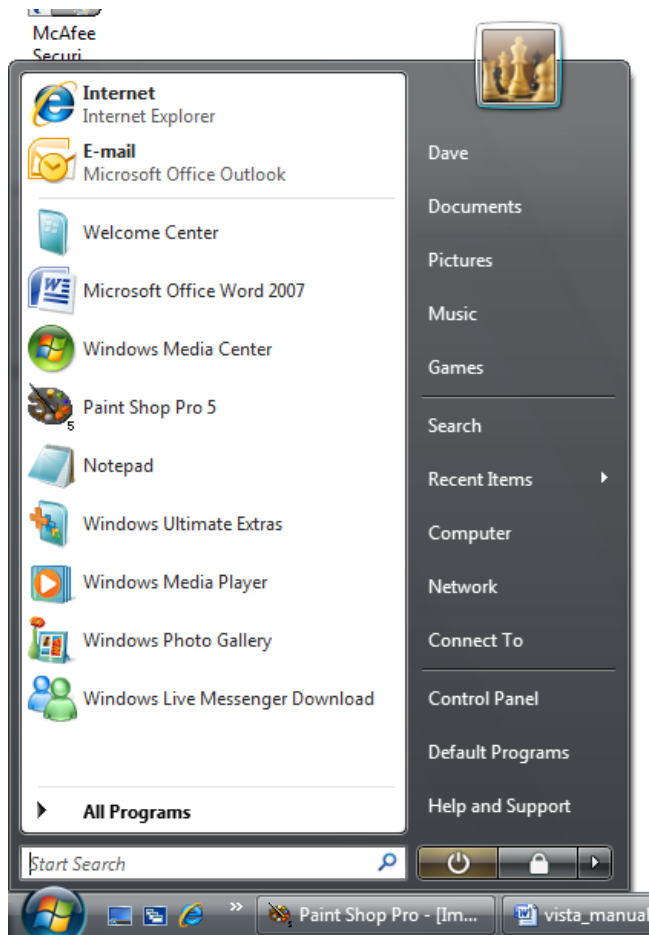
TIP: To display the **Start Menu**, press the special **Windows** key on your keyboard. Not all keyboards have this key, but most do.

## Running a program using the Start menu

- Once the **Start Menu** is displayed, click on **All Programs**.
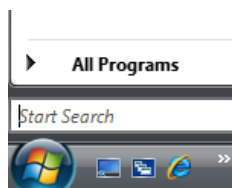
- This will display a menu similar to that shown below.
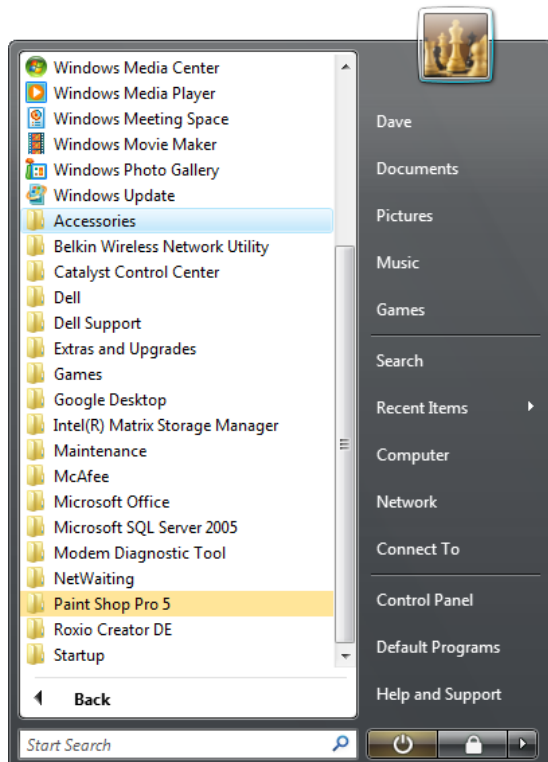


- Look for the word **Accessories** in the list and click on this. The menu will change as illustrated.
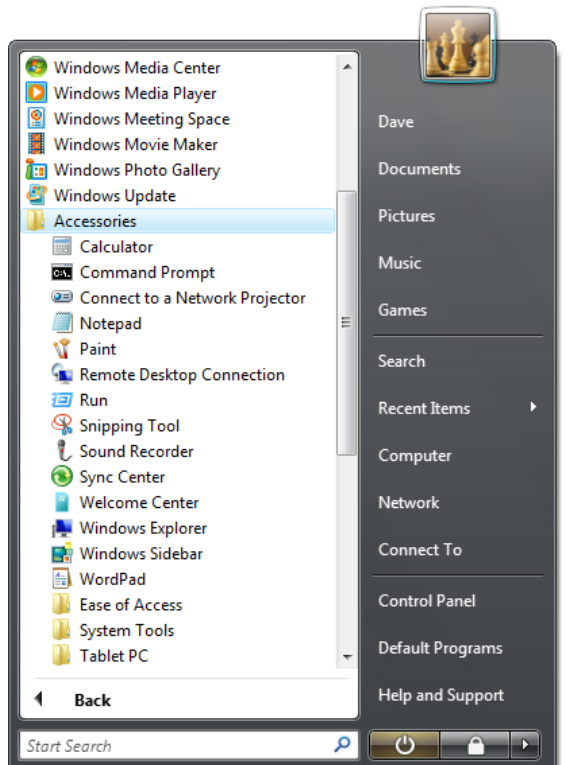


- Click on a program called **Notepad**, as illustrated.
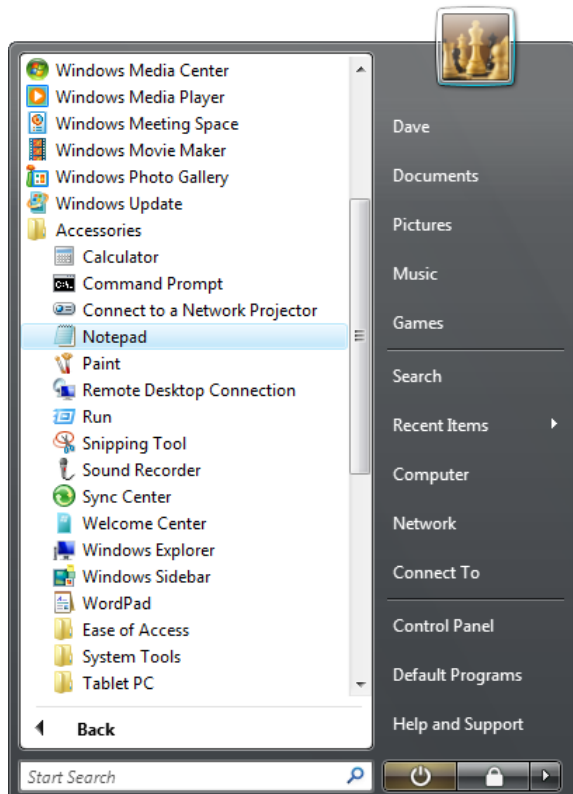
- Clicking on this program will run a program called **Notepad**. This will open in a window, as illustrated.
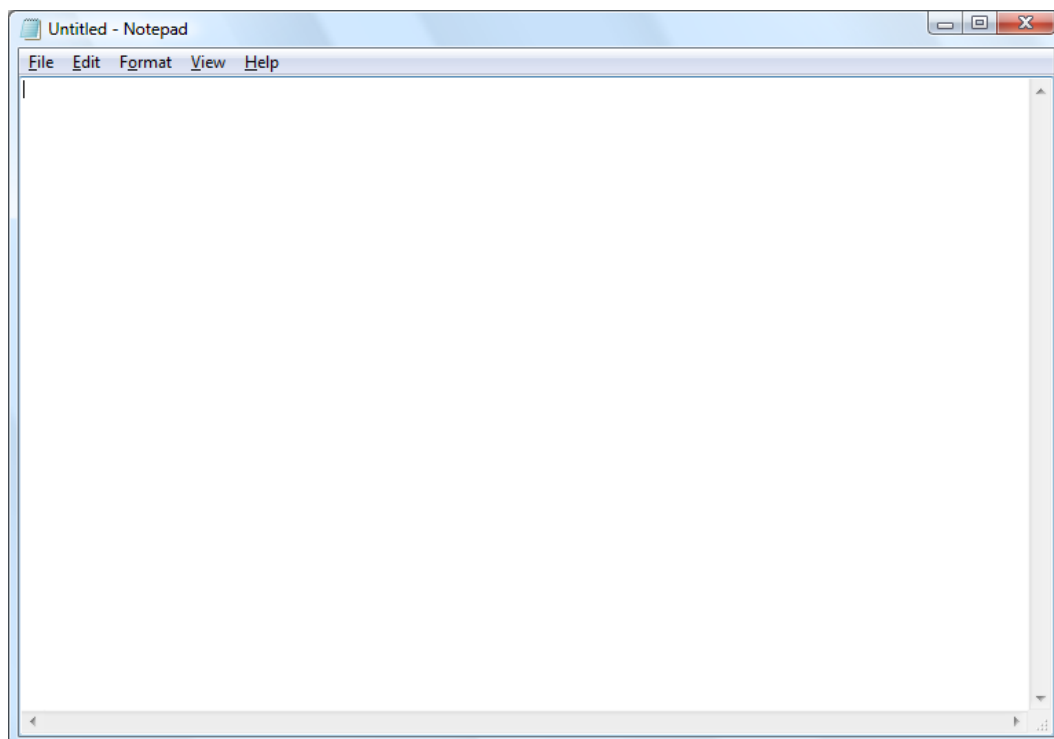


## Entering text into a program

- Click within the Notepad window and type in your name.

## Saving data

- Within the Notepad program, you will see a number of commands. This is called a drop down menu list.
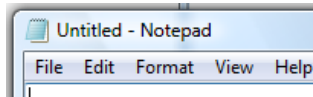


- Click on the **File** command and you will see the following drop down menu list. Click on the **Save** command, as illustrated.
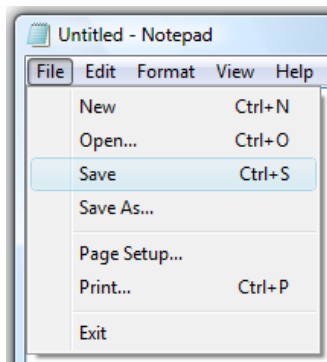


- This will display the **Save As** dialog box.
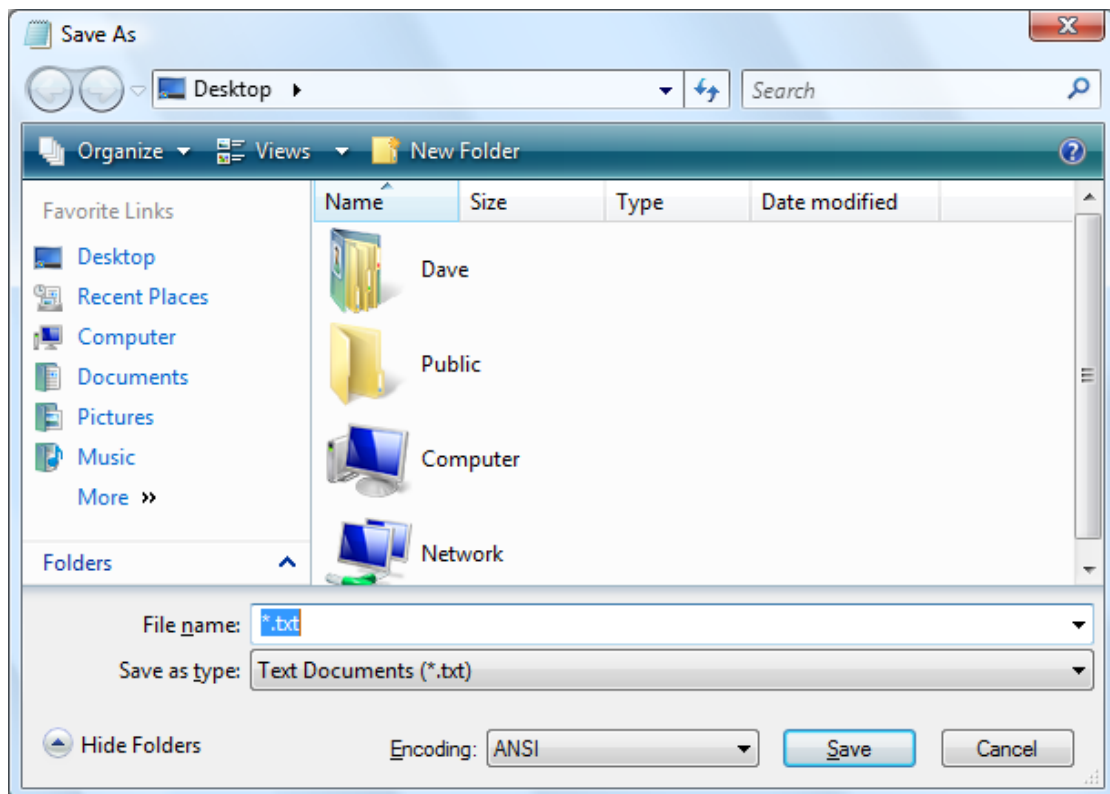


- Click within the **File name** section of the dialog box and enter the name **My First File**. This is the file name that will be used to store the Notepad file on

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your hard disk.  Click on the **Save** button within the dialog box.  The dialog box will close and the file will be saved to disk.

- Click on the Notepad **Close** icon (top-right of the window).   The program will close.

## Opening a file within a program

- Use the **Start** menu to re-open the Notepad program.  We previously saved a file to disk and called the file **My First File**.  We shall now re-open this file within the Notepad program.  To do this click on the **File** drop down menu and click on the **Open** command.  This will display the **Open** dialog box.  Select the file called **My First File.**
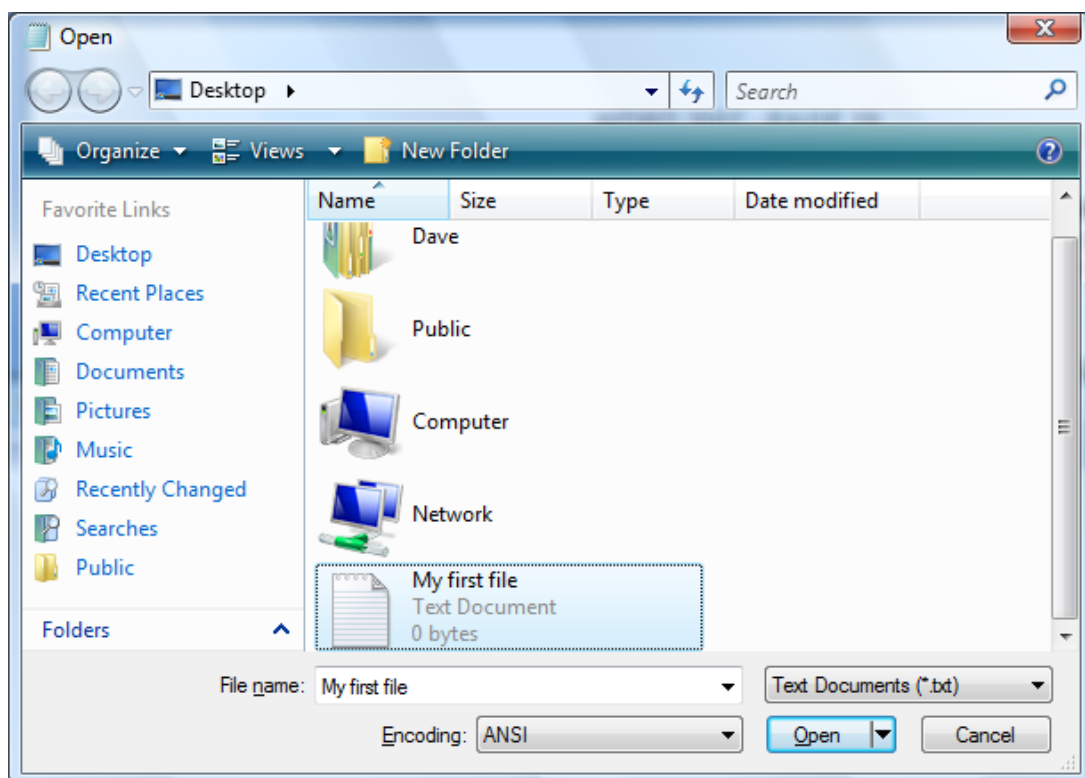


**TIP**: You may need to click on the vertical scroll bar displayed down the right of the Open window.

- Click on the **Open** button. The file will open within the Notepad program.  Type in a new line of text (just make something up).  Resave the file and close the Notepad program.

## Shutting down Windows

- Click on the **Start** button and you will see the Start menu displayed.
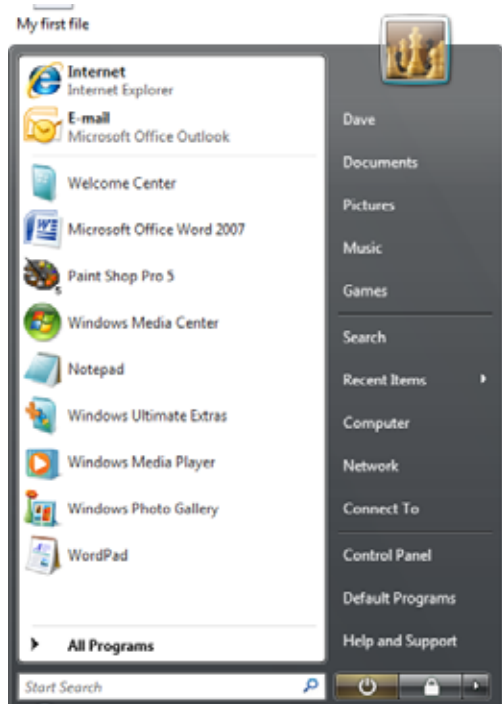
- Click on the small **right pointing arrow** at the bottom-right of the **Start** menu. You will see a new submenu displayed. Click on the **Shutdown** command.
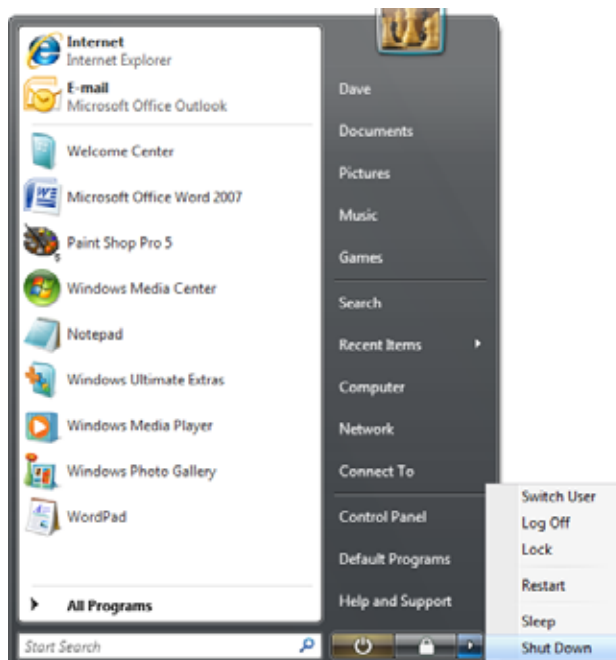


- Your computer will shutdown.

   **TIP**: if you were running any programs, such as a word processor and had not saved your changes, you would be prompted to save or discard any changes to your data.

   **TIP**: You should never just switch off your computer. To shut down your

computer you must always use the Shutdown command.  Simply switching off a computer may result in you losing data!

## Closing an application that is not responding

- Occasionally when you are running Windows Vista, you may find that you are unable to close an application that has 'crashed'.  If this happens, you need to press the **Ctrl**+**Alt**+**Del** keys simultaneously.  A list of options will be displayed.  Select the **Start Task Manager** option. This will display the **Task Manager** dialog box.
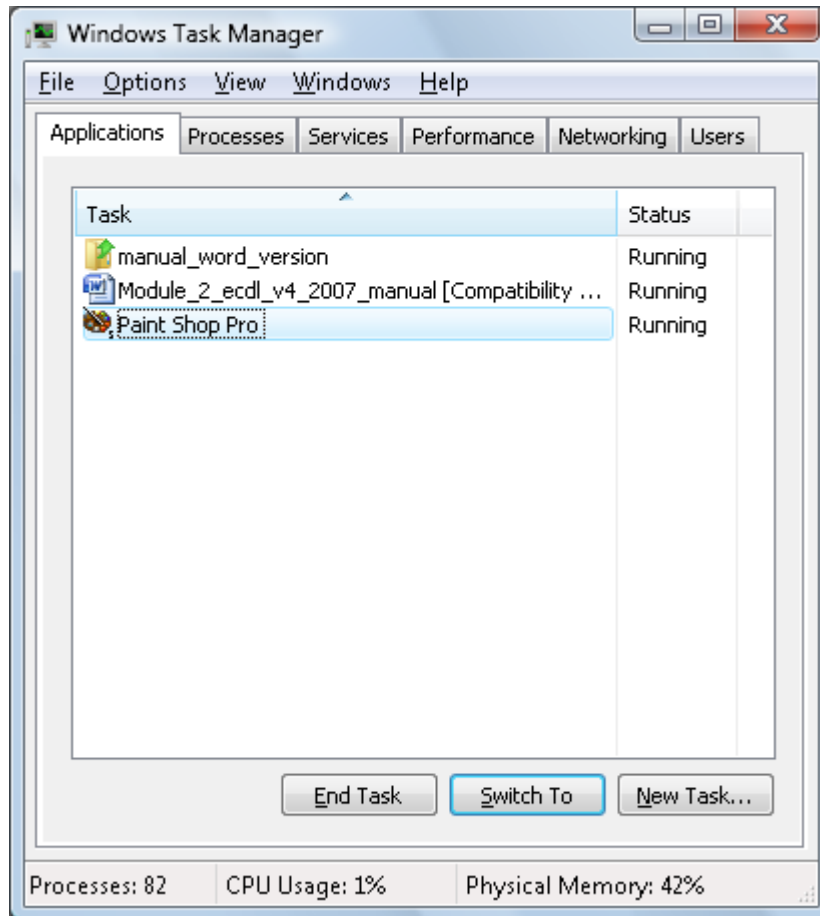


- In the example illustrated, all the programs are running normally.  If a program was no longer responding you would see a message in the **Status** column such as **Not Responding**.  In this case you would select the non-responding application from the list displayed and then click on the **End Task** button.

  **TIP**: It is a good idea to completely close down Windows and then restart Windows after a program has crashed.

# The Windows Desktop

## What is the Windows Desktop?

- Start your computer.  You will see the **Welcome Center** window displayed, once Windows has finished loading.  Click on the **Minimise** button within the **Welcome Center** window (top-right of the window).  You will now be able to see the icons displayed on your Desktop.

  The Windows Desktop is the area of the screen that you are now looking at.  It contains icons and other screen elements.

## Desktop icons

- The icons you see on the Windows Desktop will vary from one computer to another, depending on who installed and customised the Windows installation.  As a user of Windows, you can add, remove and move icons on the Desktop.  Typically the Desktop will look something like this.
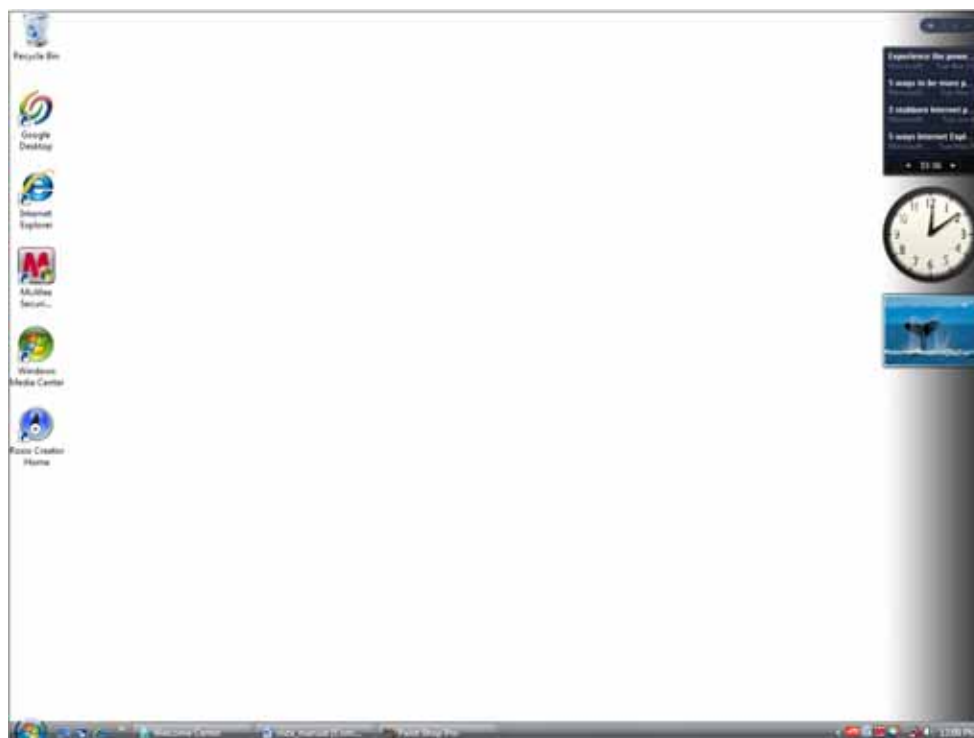


## Moving Desktop icons

- Click once on the **Recycle Bin** icon, to select it.

- Make sure that the mouse pointer is pointing to the **Recycle Bin** icon. Press down the mouse button and while keeping it pressed move the mouse pointer to a different position on the Desktop. When you release the mouse button, the icon will have moved.

   You would use exactly the same technique to move any other icons that are displayed on your Desktop.

   **TIP**: The Recycle Bin is used as a temporary store for files that you delete. More about all this later!

## Windows Taskbar

- The Windows Taskbar is the bar normally displayed across the bottom of your Windows screen. It contains a number of important items, such as the Start button, icon representation of running programs and a clock at the right edge.
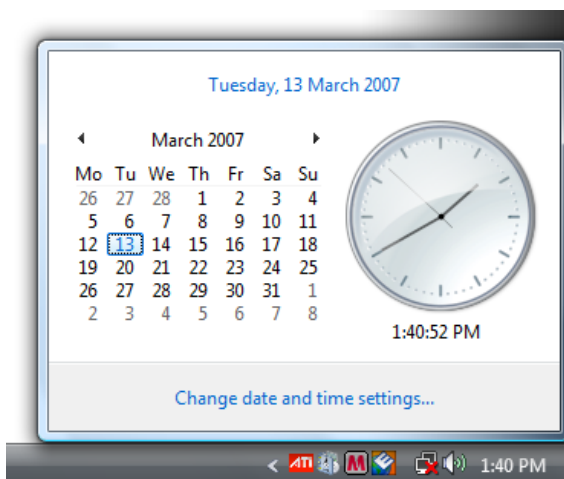
## Taskbar clock

- Located at the left edge of the Taskbar.

- If you move the mouse pointer over the time display (and wait a short time) you will see the date displayed, as illustrated.

- Clicking on the time display will display a calendar, as illustrated,

## Customising your Desktop

- Right click on an empty part of the Desktop and you will see a popup menu, as illustrated.
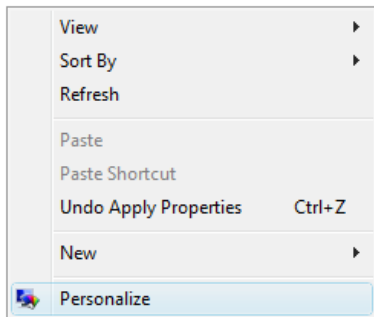


- From the popup menu click on the **Personalize** command.  This will display a dialog box, as illustrated below.



- You can use this dialog box to customise elements of your computer system.

## Customising the Desktop background wallpaper picture

- Click on the **Desktop Background** icon.

Des<u>k</u>top Background

- You will see the following dialog box displayed.



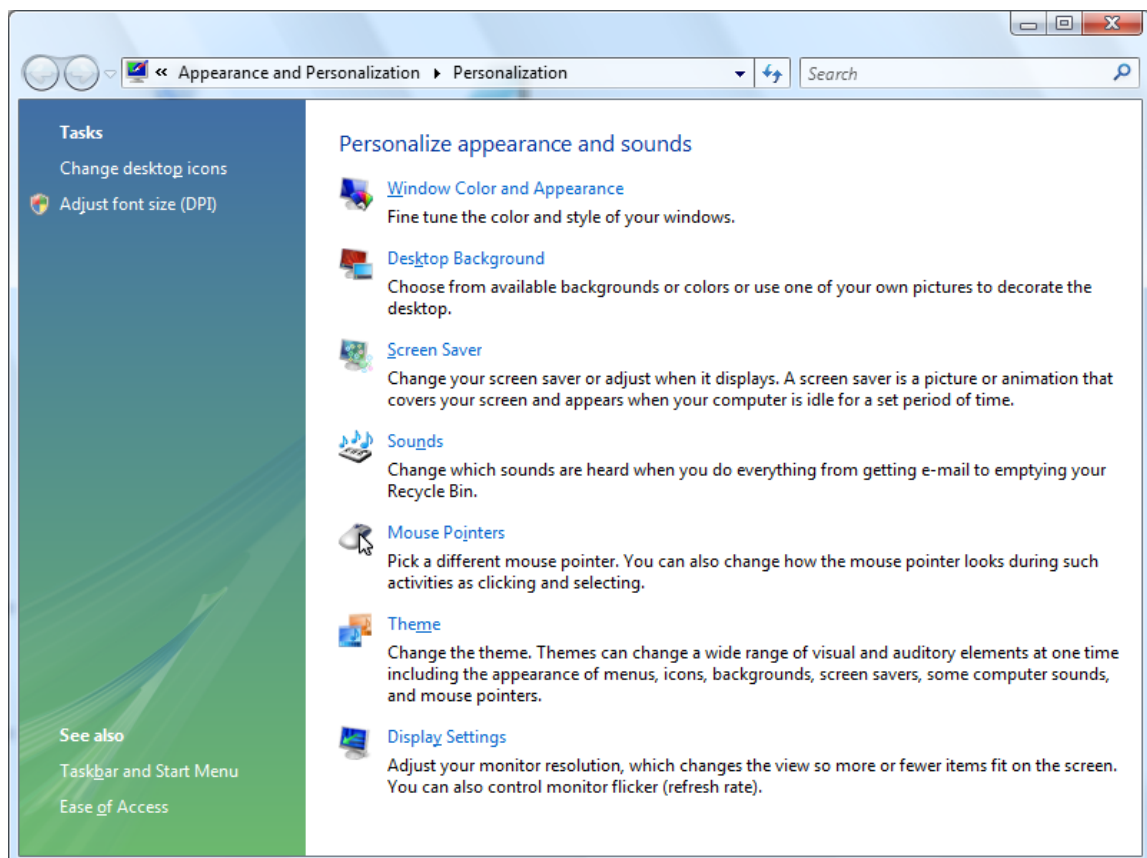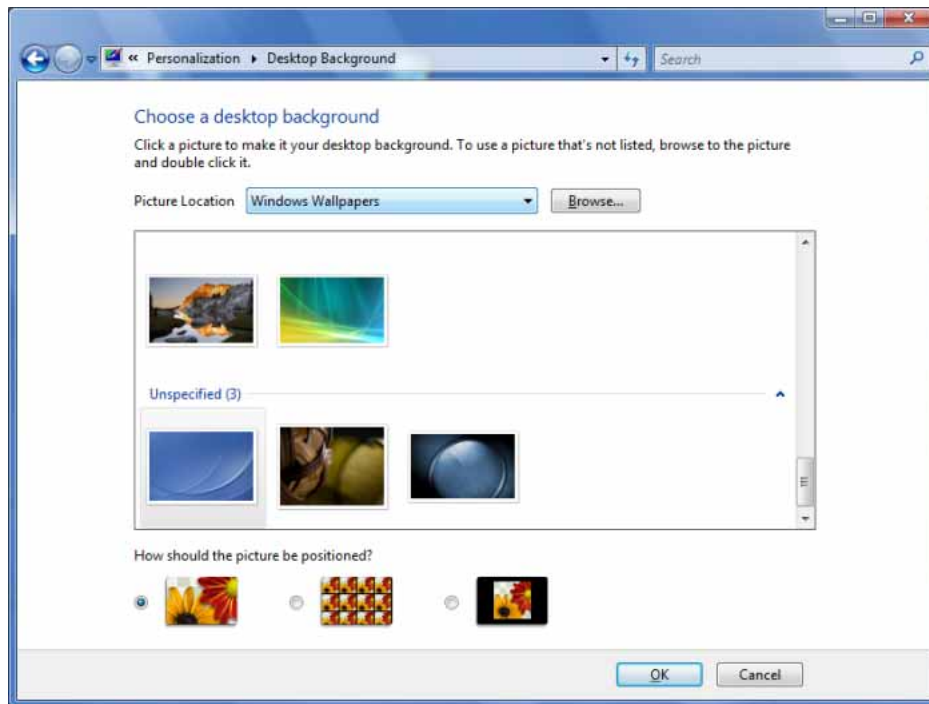- You can select a picture to be displayed on your Desktop background.

  **TIP**: You can use the scroll vertical bars to the right of the picture thumbnails to scroll up or down and see more pictures, as illustrated.



- Select a picture of your choice.

  **TIP**: You may wish to experiment with specifying how you want the picture

displayed on your Desktop, using the three controls illustrated below.



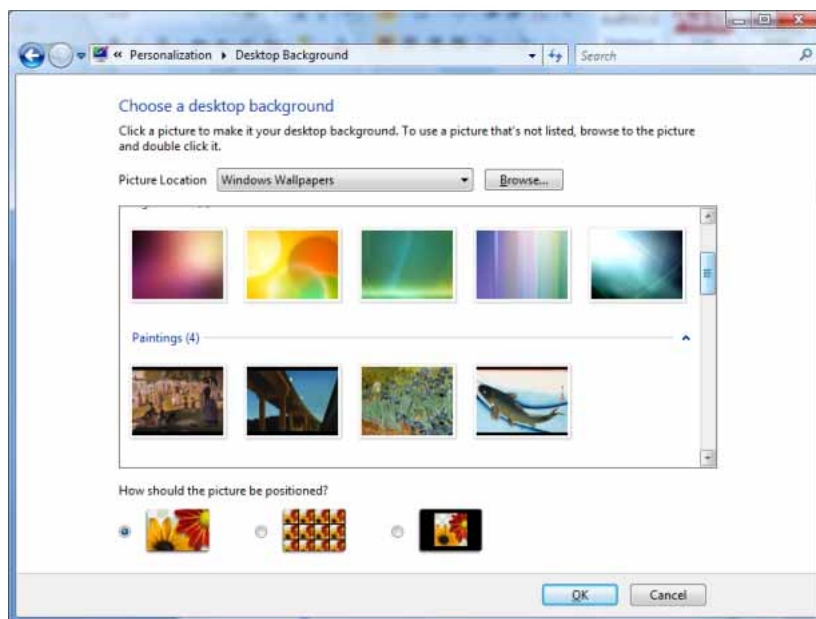- Click on the **OK** button to apply the picture of your choice to the Windows Desktop.

## Customising the Desktop background colour

- Display the **Personalisation** window.
- Click on the **Desktop Background** icon.
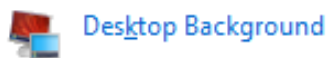


- You will see the **Personalisation** dialog box displayed.  Click on the **down arrow** to the right of the **Windows Wallpaper** section. You will see a drop down list displayed.  Click on **Solid Colours**.
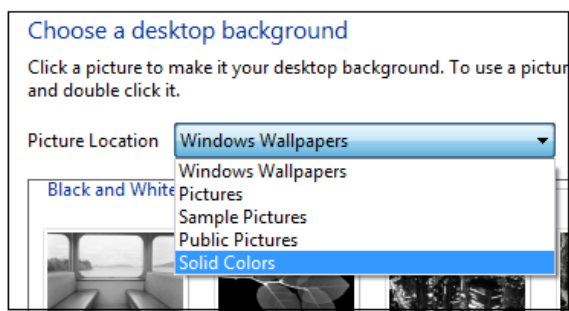


- The dialog box will then change to display a range of colours, rather than pictures.
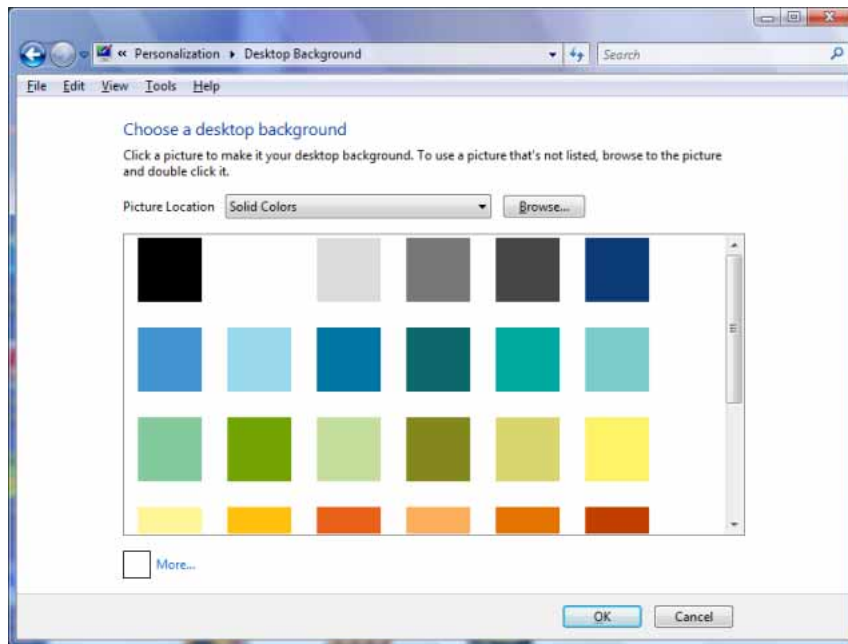
- Click on a colour to select a colour.

  **TIP**: You can use the scroll vertical bars to the right of the colour pallet to scroll down and see more colour options.

  **TIP**: When you click on a colour you will see a preview of that colour applied to your background, as illustrated.
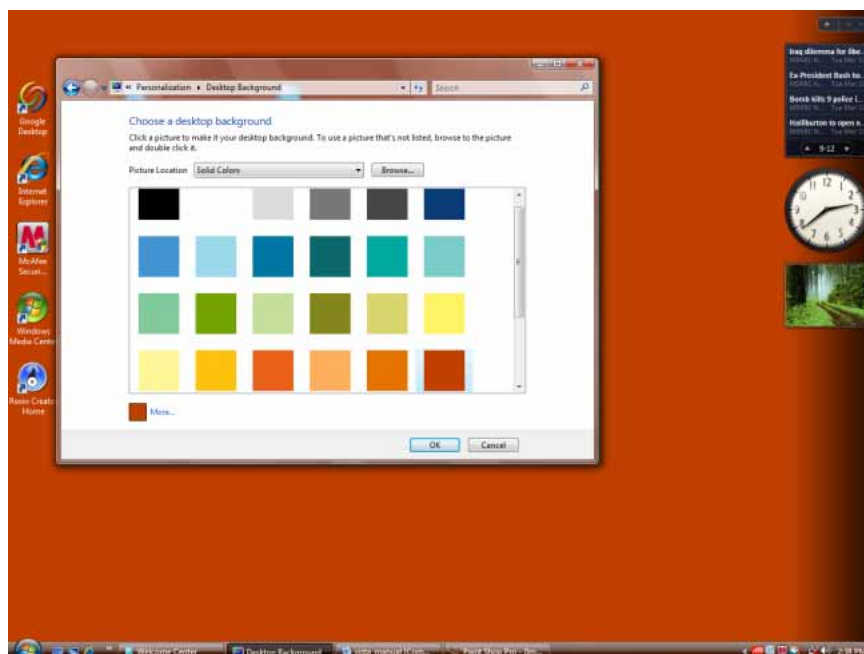


- To confirm the colour click on the **OK** button.

## Setting a screen saver

- Display the **Personalisation** window.

- Click on the **Screen Saver** icon.



- You will see the **Screen Saver Settings** dialog box.
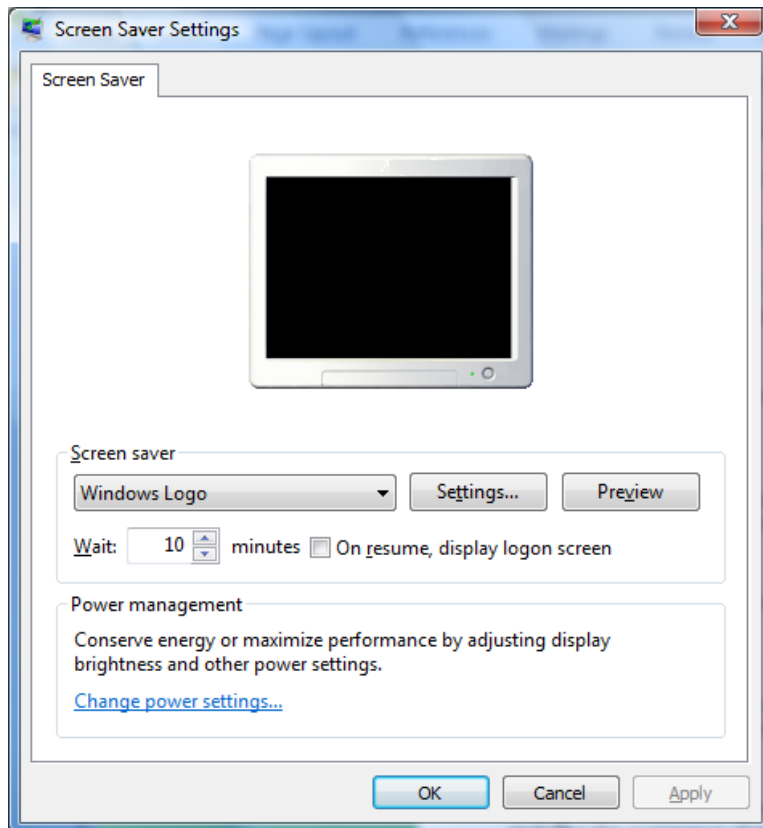


- To pick the screen saver type, click on the **down arrow** in the screen saver section and click on an item within the list. In this case click on **Ribbons**.
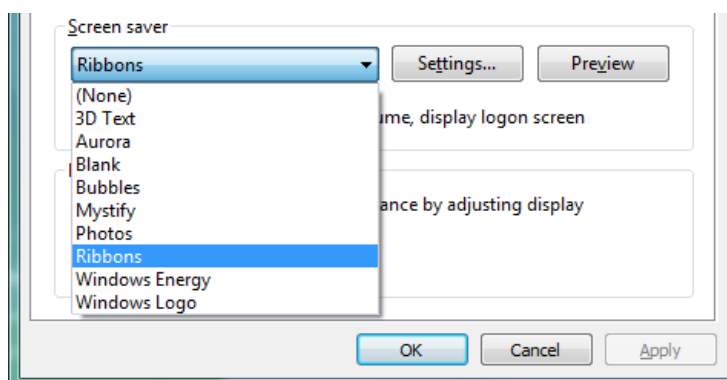


- Within the **Wait** section, click on the **up** or **down** arrows to set the time interval of inactivity, before the screen saver kicks in.

Wait: 10 ⏶⏷ minutes

- Click on the **Preview** button to preview the effect of the screen saver.

Preview

- You will see an interesting ribbon effect.



- Click on the **OK** button to apply the effects and close the dialog box.

## Setting your screen resolution

- Display the **Personalisation** window and then click on the **Display Settings** icon, which will display the **Display Settings** dialog box.

- Before changing anything, make a note of the current screen resolution setting. In the example illustrated, it is **1280 by 960 pixels**.
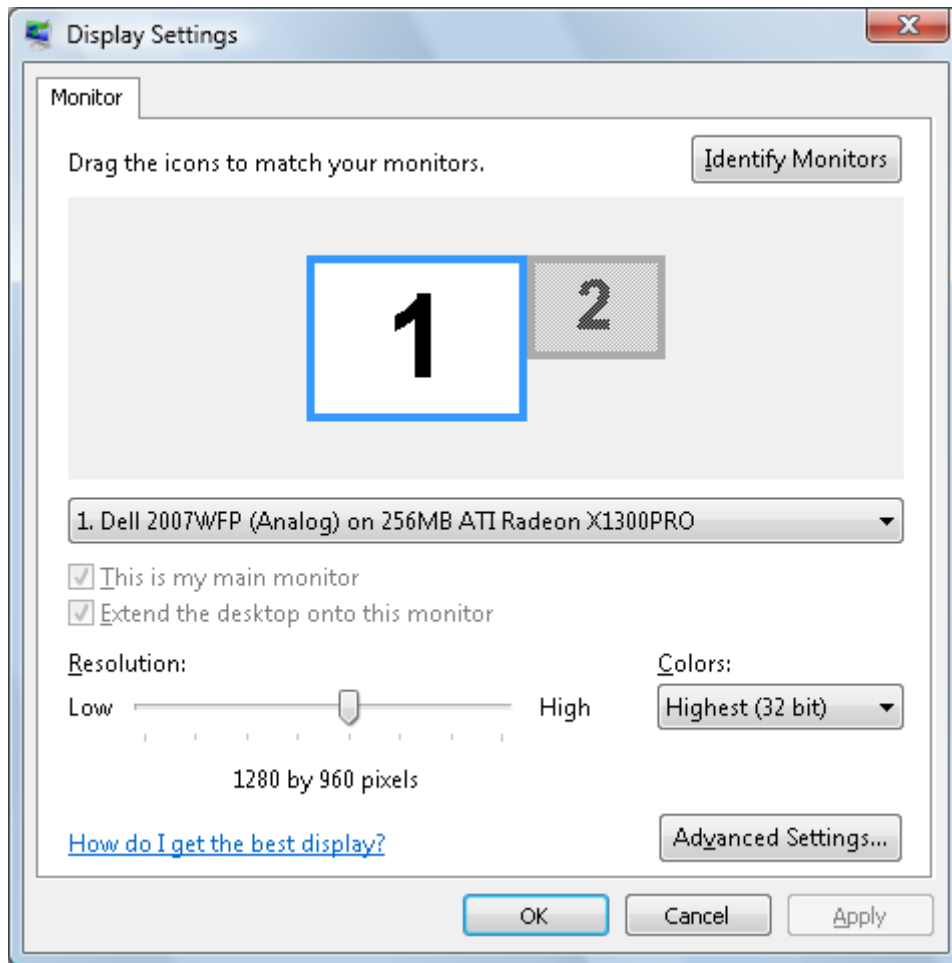  This number describes the number of points making up your screen. The higher the screen resolution, the better a picture will look on the screen.

- Use the **Resolution** slider to change the resolution. When you click on the **OK** button, you will see a warning dialog box.

**DO NOT CLICK ON THE YES BUTTON.**
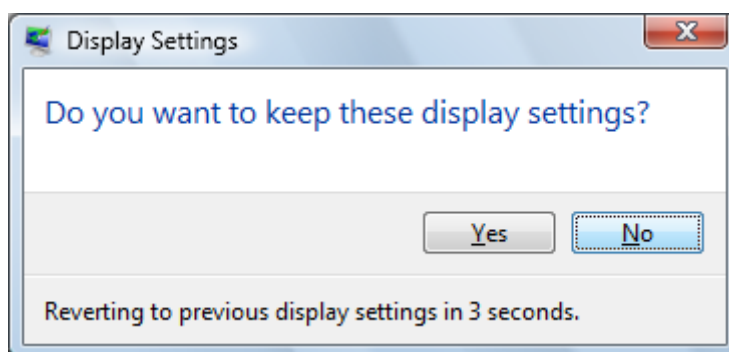


**TIP**: Changing the screen resolution can cause problems, if incorrectly applied. For this reason even of you do not click on the **NO** button, then within a set number of seconds the original screen resolution is reapplied. Do

not change the screen resolution, just remember how to change it if you ever need to.

**NOTE**: The higher the screen resolution the smaller your Desktop icons will appear on your screen.

- Wait until the original screen resolution settings are restored so that nothing is changed.

## Modify the computer date and time

- Click on the **Start** button, from within the **Start Menu** click on the **Control Panel** button.  The Control Panel will look like this.
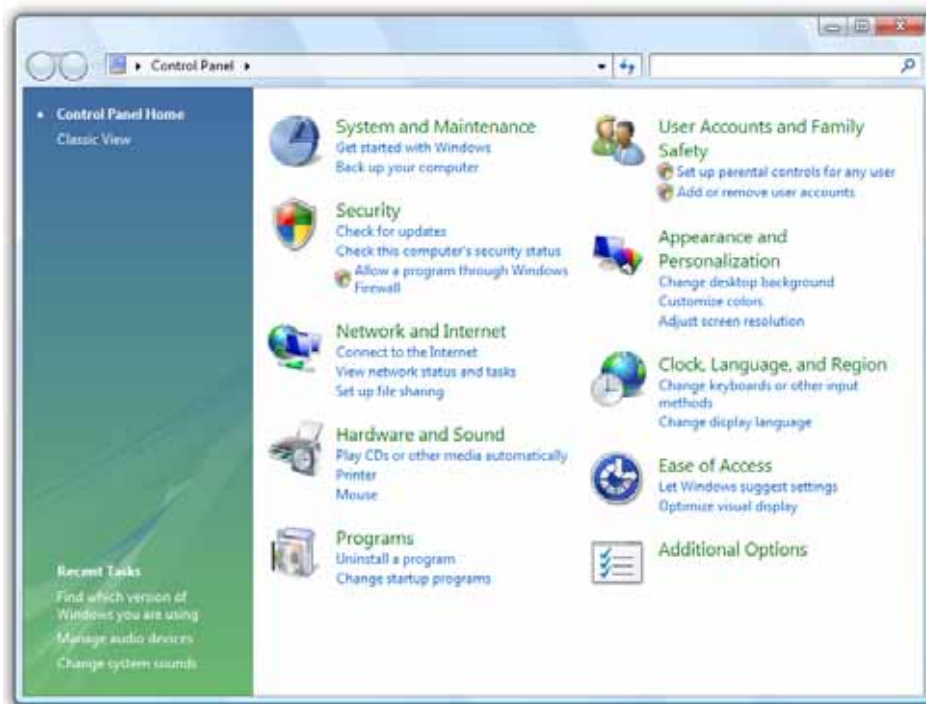


- Click on the **Clock, Language and Region** command.  You will see the following.
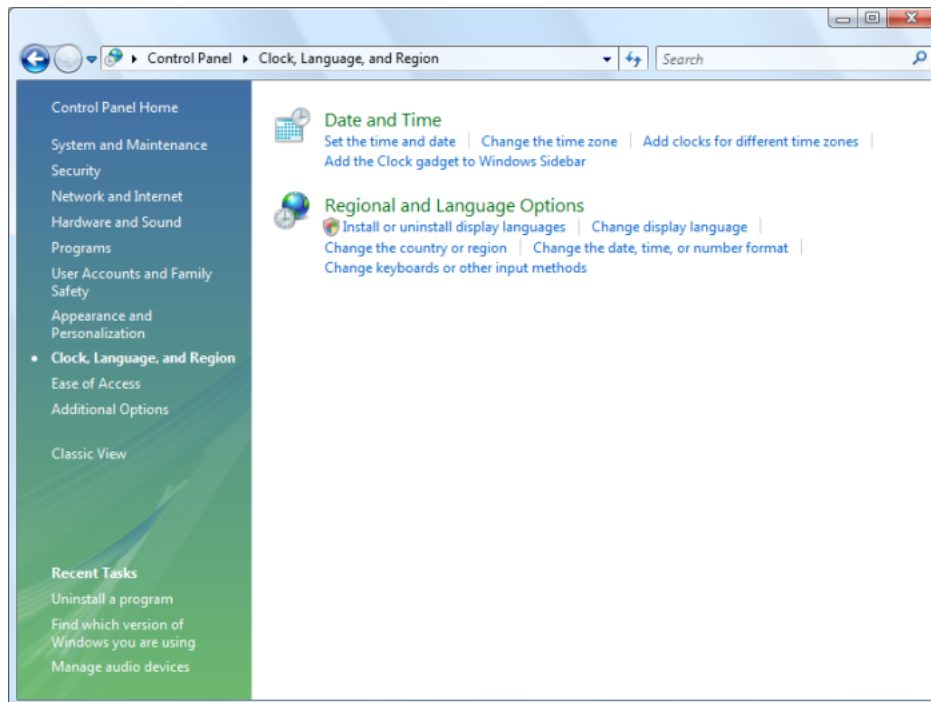
- To set the date and time, click on the **Date and Time** command.  This will display the **Date and Time** dialog box, allowing you to change the date or time.



**TIP**: Once changed, the new date and time will be remembered by the computer.  In most areas of the world Windows will change the time automatically if the time is moved forward or backward as a result of daylight saving time adjustments.

- If still open close the Control Panel.

## Setting the computer keyboard language and other regional settings

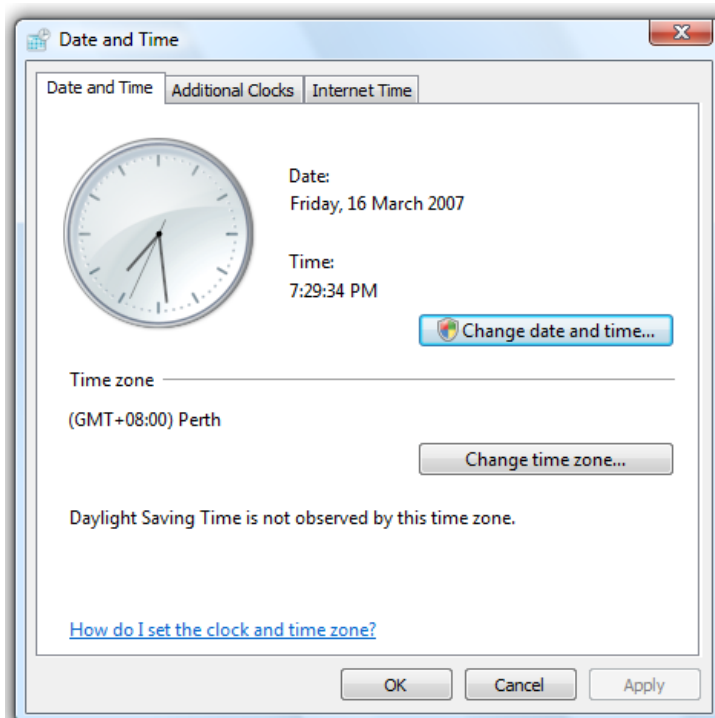- Click on the **Start** button and from within the **Start Menu** click on the **Control Panel** button. The **Control Panel** will be displayed. Within the **Clock, Language and Region** section, click on the **Change display language** link.
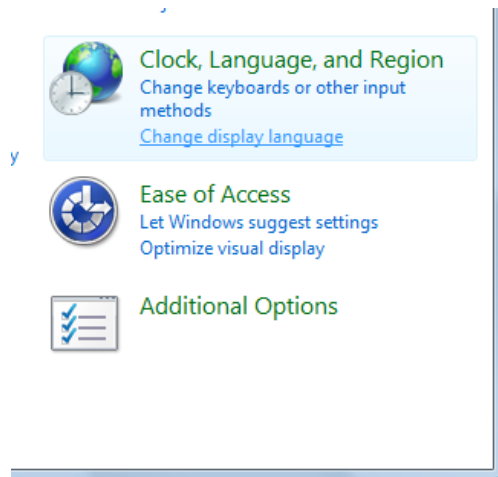
- The **Region and Languages Options** window will be displayed.
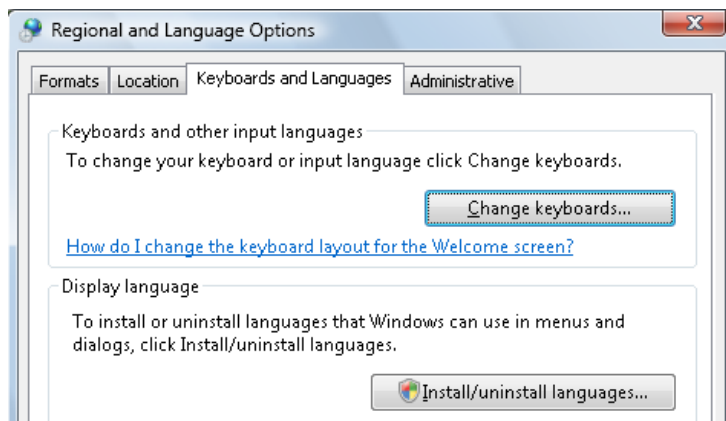
- Click on the **Formats** tab to see the current default setting.
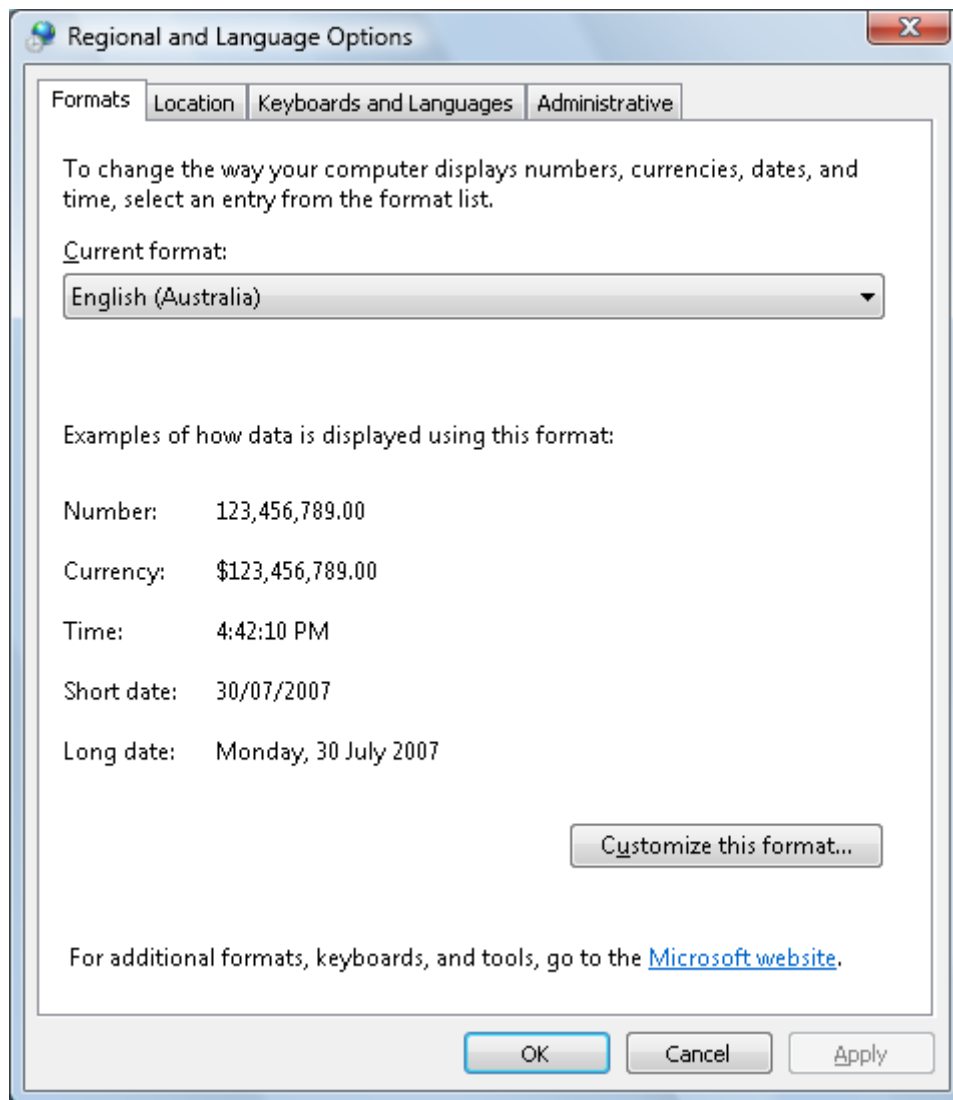
If you ever wanted to change these, you would click on the down arrow in the **Current format** section and select the required option, as illustrated below.
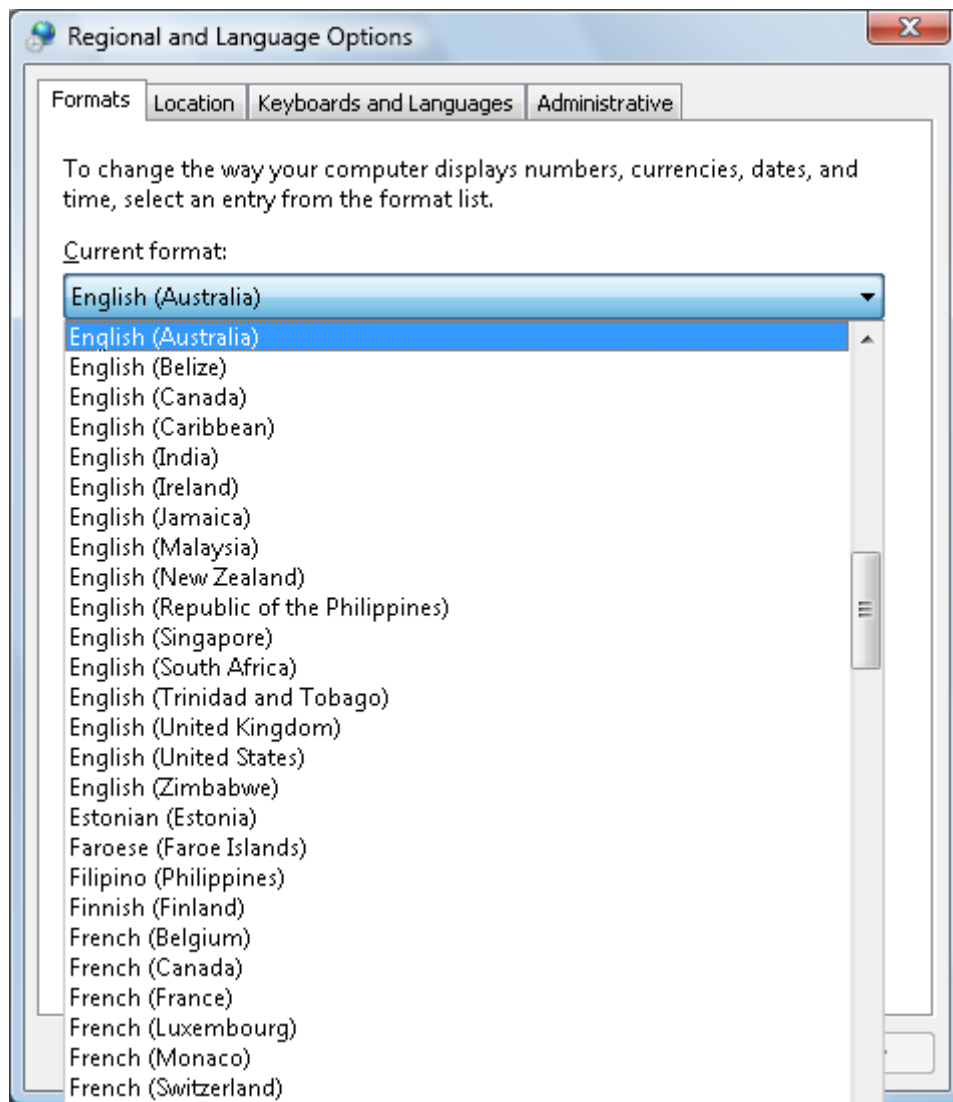
- Select the **Location** tab to set your current location, as illustrated,
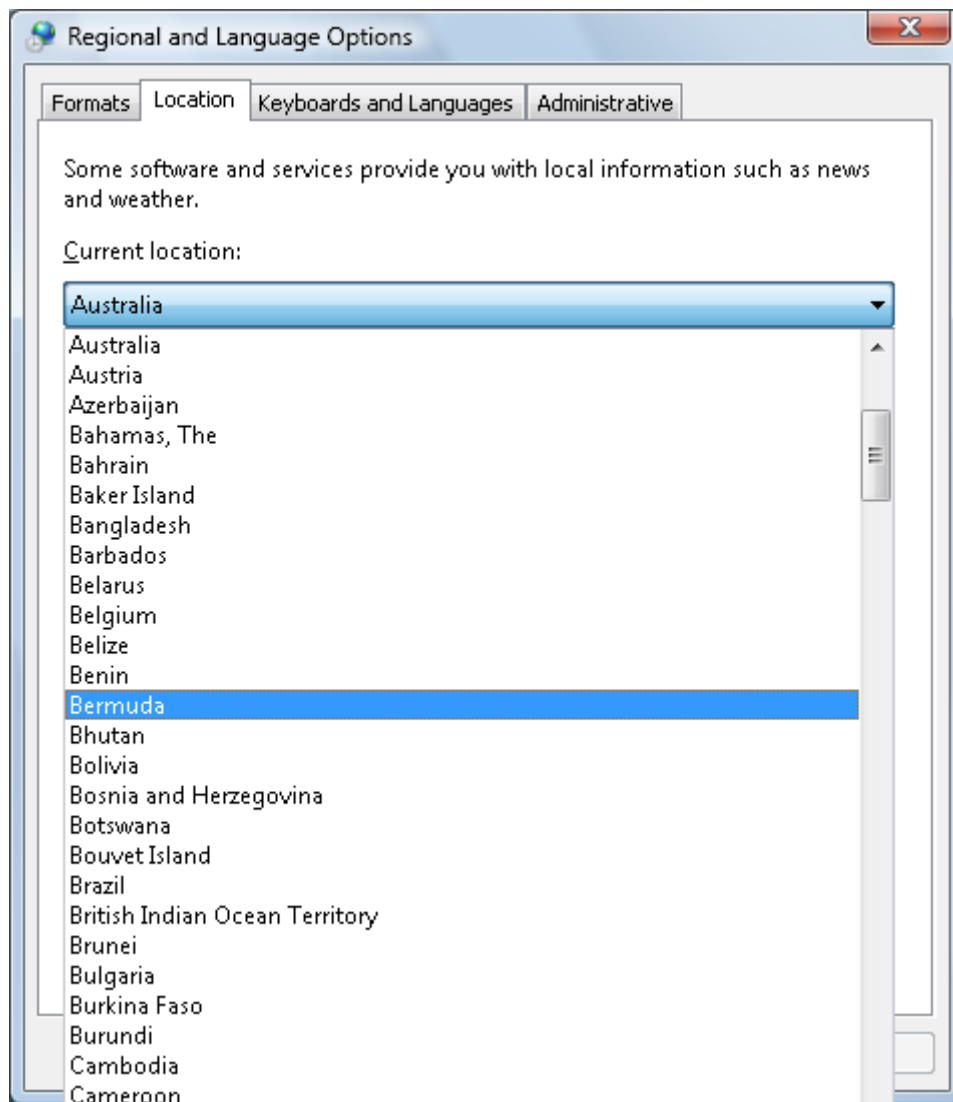
- Select the **Keyboards and Language Options** tab. Click on the **Change keyboards** button. You can use the dialog box that is displayed to set the default input language.

- If you click on the **Add** button you will see a list of available languages.
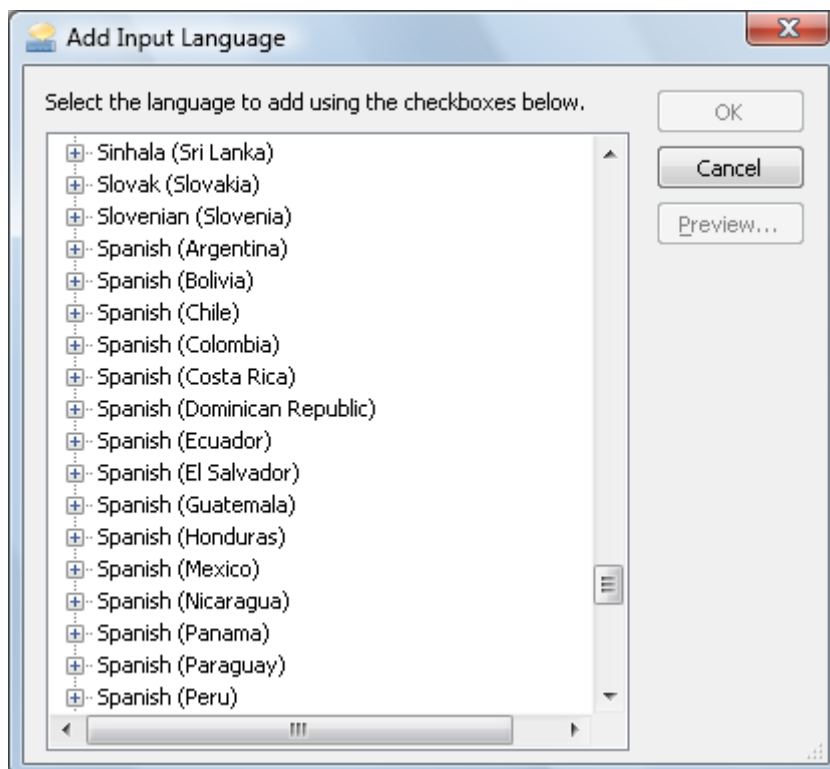
**NOTE**: Do not actually change any settings.  Remember how you would change these setting if you ever wanted to.

- Close all open Control Panel windows.

## Setting the computer sound volume

- Click on the **Start** button and from within the **Start Menu** click on the **Control Panel** button.  The **Control Panel** is displayed.  Click on the **Hardware and Sound** icon.
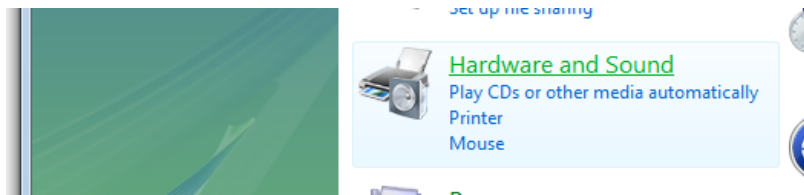
- Within the **Sound** section, click on the **Adjust system volume** link.
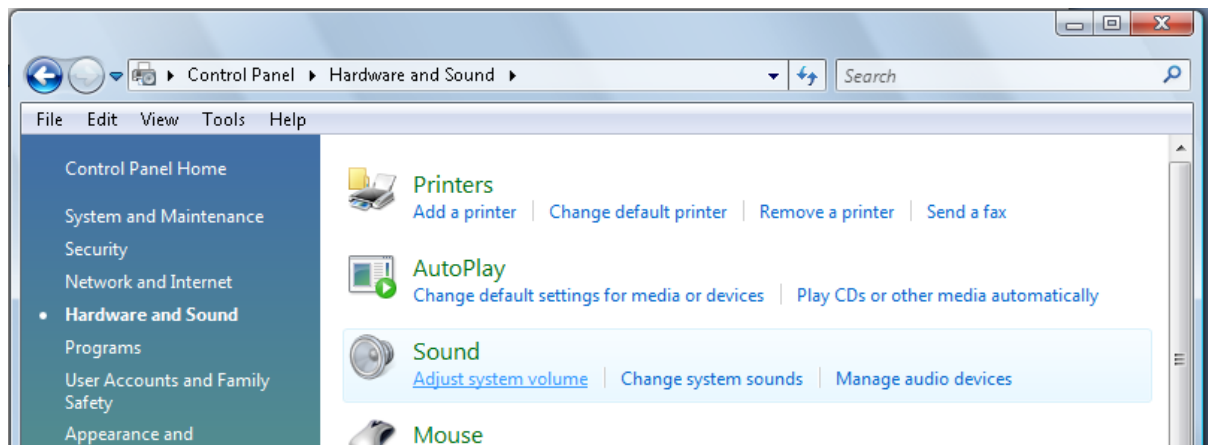
- You will see a slider control displayed, allowing you to modify the computer volume.
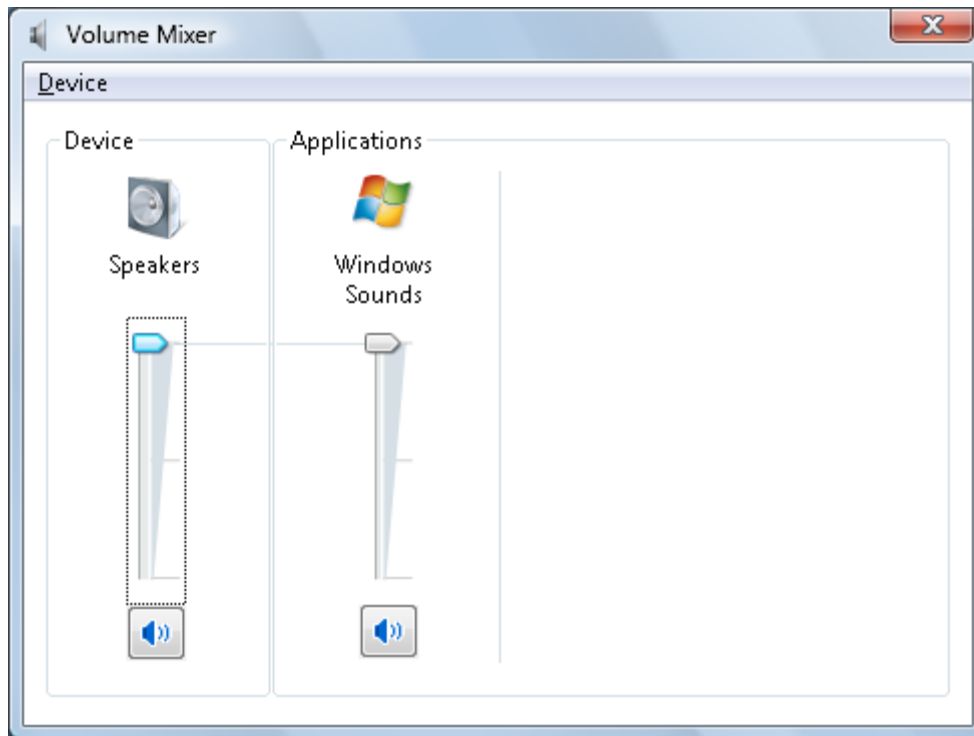
- Close all open Control Panel windows.

## The Sidebar and gadgets

- This is displayed down the right side of the screen and contains 'gadgets'. A gadget has more in common with a web page than a program and can be used to display all sorts of information.



**TIP**: If the Sidebar has been closed on your computer and you cannot see it, try pressing the **Microsoft logo** key and the **Spacebar** keys simultaneously.

- If you see the **Slide Show** gadget display move the mouse pointer over it and you will see slide navigation controls displayed on it. Try clicking on the **Next Slide** button to move the slide show forward.

- Try clicking the **View** control to display the picture within the **Windows Photo Gallery**. Then close the **Windows Photo Gallery** window.

## Reordering gadgets

- You can easily reposition gadgets within the Sidebar. To do this click on a gadget to select it. Press down the mouse button and then drag the gadget to a new position within the Sidebar. Release the mouse button and the gadget will have moved.

## Closing a gadget

- To close a gadget, click on it to select it. You will then see a small close icon displayed to the right of the gadget. Click on **Slide Show** gadget and then click on the **Close** icon, to close it down.

# Applications

## Running more than one program at a time

- Windows Vista is a 'Multitasking' operating system.  This means that it can run lots of programs at the same time.  For instance you can be receiving emails, printing and writing a letter, all the same time.  You can run lots of different programs simultaneously, such as a word processor, a spreadsheet, a database and a picture editing program.

## Starting WordPad

- The WordPad program is a very limited word processor program that is supplied free within Windows Vista.  To open the WordPad program, click on the **Start** button and then click on the **All Programs** button.
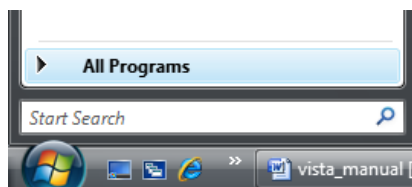
- Click on the **Accessories** group.
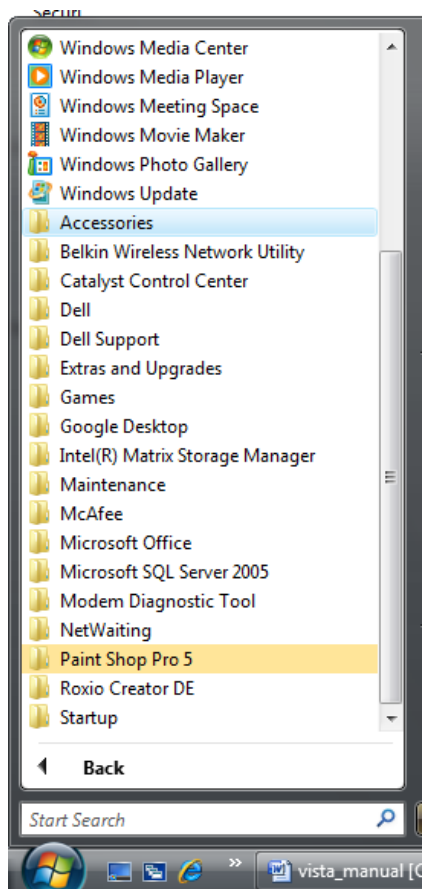
- You should see the **WordPad** program icon listed under the **Accessories** group
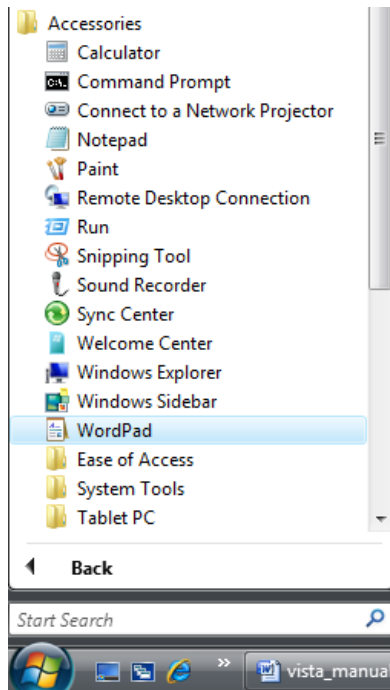


- Click on the **WordPad** command to run the WordPad program.  The program will open within a window, as illustrated.



- You can type in a line of text and then press the **Enter** key a few times.

## Using Print Screen within WordPad

- Pressing the **Print Screen** key takes a picture of your screen and copies it to a special area of memory called the Windows Clipboard.  Press the **Print Screen** key now.  Nothing appears to have happened, but you now have a picture of the screen in the Clipboard.

- Press **Ctrl+V** which is the keyboard shortcut for pasting information from the Clipboard.  You should now see a picture displayed within your WordPad program.

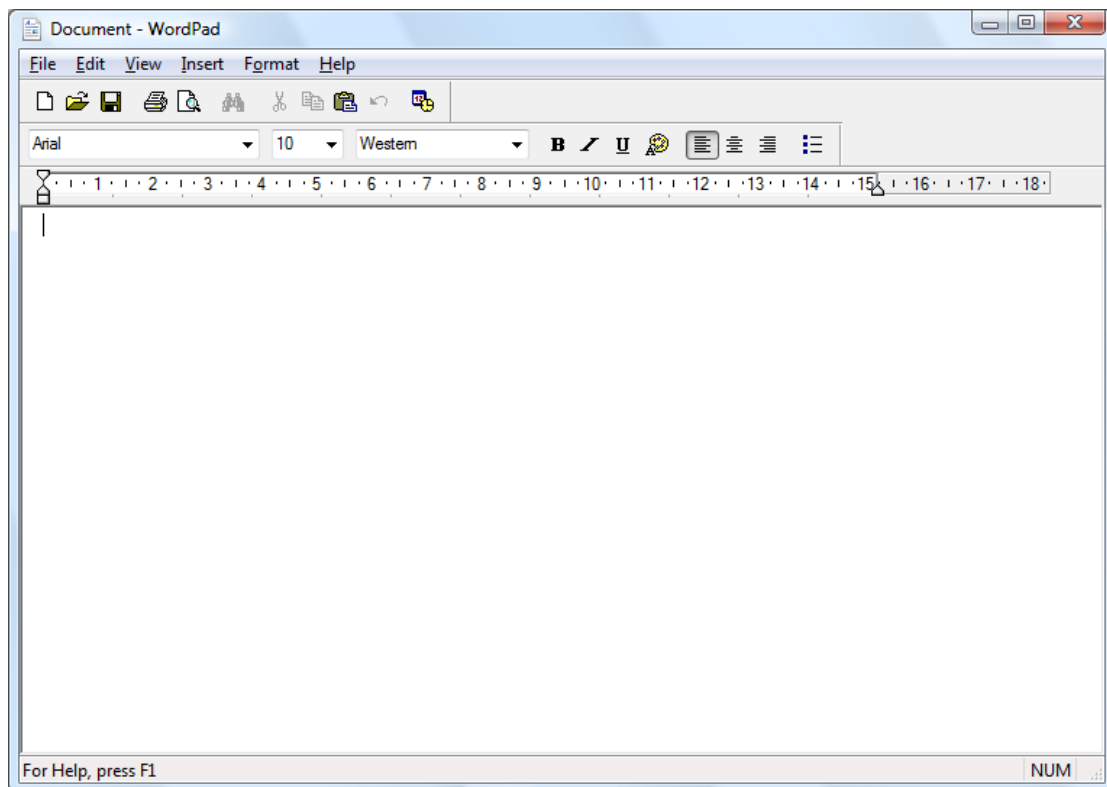    **NOTE**: Pressing the **Print Screen** key copies the entire screen contents to the Clipboard.  If you just want to copy the active window, then after selecting the active window, press the **Alt** key while pressing the **Print Screen** key.  Then release the **Alt** key.

- Click on the **Save** icon to save the data to disk.

    

    A dialog box is displayed.  You will need to type in a file name, and then click on the **Save** button

- If you have time you might want to investigate the function of some of the other icons within the program.  You will find that if you point to an icon, and leave the pointer there for a short time, that a popup is displayed explaining the function of the icon.  An example of a popup is illustrated below.
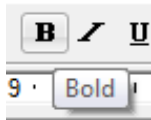
    

    **TIP**: If you wish to format a portion of text with bold formatting you first need to select the portion of text.  To select text within a program such as WordPad, click at the start of the text you wish to select and after pressing down the **Shift** key click at the end of the portion of text you wish to select.

- Leave the program window open.

## Identifying the parts of an application window

- The WordPad window is typical of an application window.
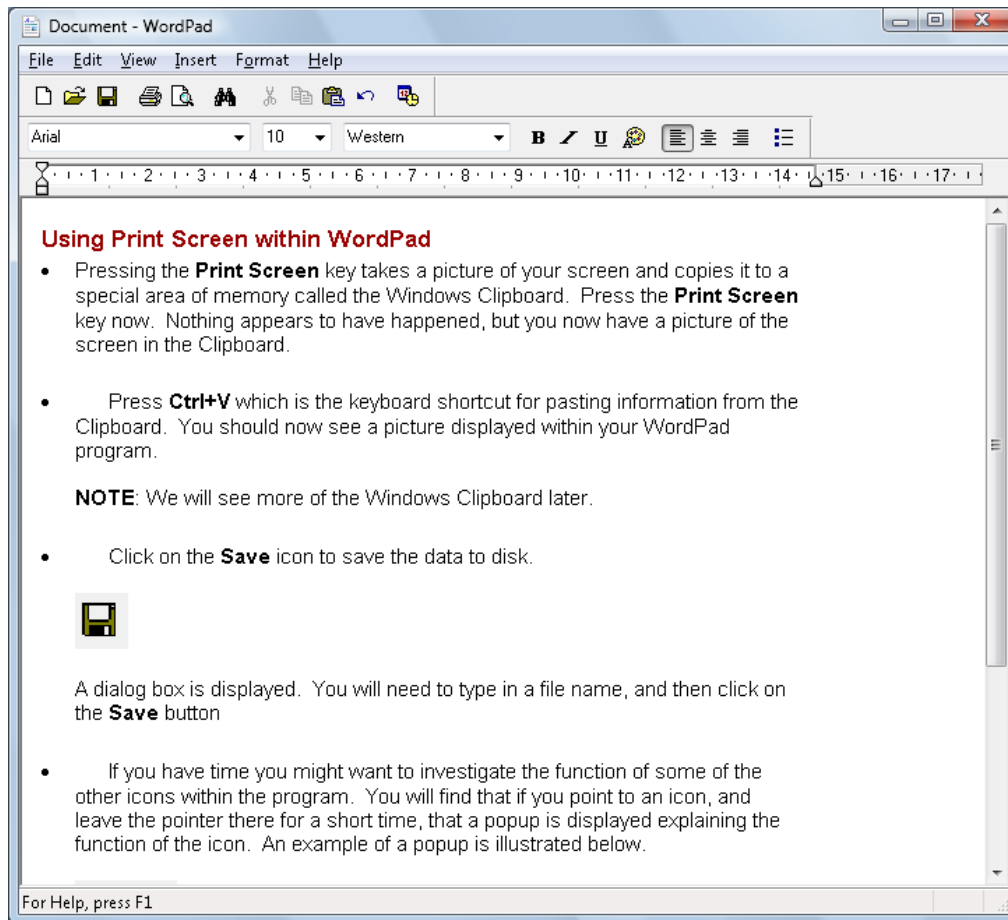
There are a number of items that you need to be familiar with.
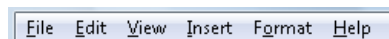
**Title bar.**
This is the bar running across the top of the application window and normally displays the title of the program window.



**Menu bar.**
The Menu bar contains a number of drop down options, often including items such as **File** and **Edit**.



Clicking on one of these options displays a list of commands that you can choose from, as illustrated for the **File** menu option.
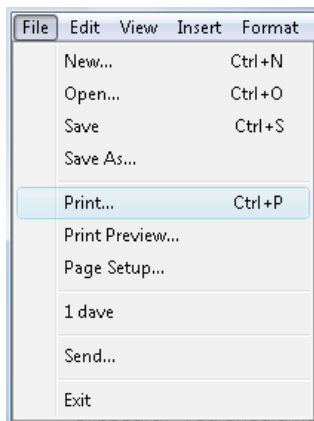
**Toolbar.**The Toolbar contains icons or buttons which you can click on to perform a particular task, such as printing a document.



**Status bar.** The Status bar is normally displayed along the bottom edge of the application window.  It can display status information, such as the number of pages contained within a document.



**Scroll bar.** Scroll bars are normally displayed only when needed.  If the data within a window will not fit within the window you may see horizontal and/or vertical scroll bars displayed.

- **Office 2007 applications.**
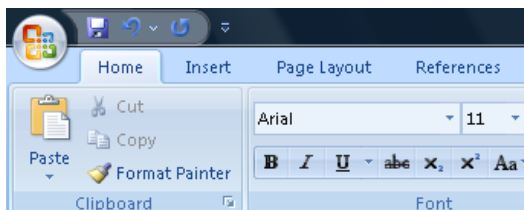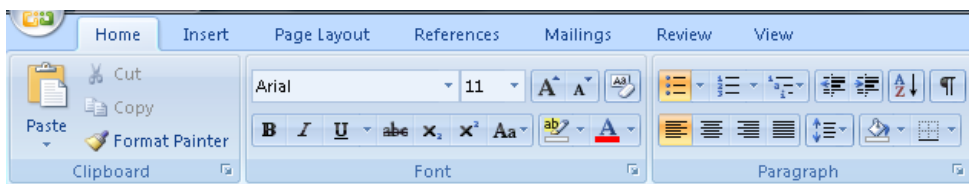  When Microsoft introduced Microsoft Office 2007, they gave programs a new look and introduced the concept of the **Ribbon**, as illustrated below.



- The ribbon is divided into tabs, such as **Home**, **Insert**, **Page Layout** as illustrated below.



- Each tab is divided into groups, such as **Clipboard**, **Font** and **Paragraph**, as illustrated below.



- Each section contains the icons or buttons that you can click on, as illustrated below for the **Font** group.
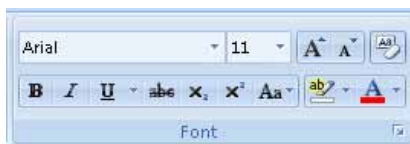


## Notepad

- To open the Notepad program, click on the **Start** button and then click on the **All Programs** button. Click on the **Accessories** group. You should see the **Notepad** program icon listed under the **Accessories** group. Click on the **Notepad** command to run the Notepad program. The program will open within a window, as illustrated.
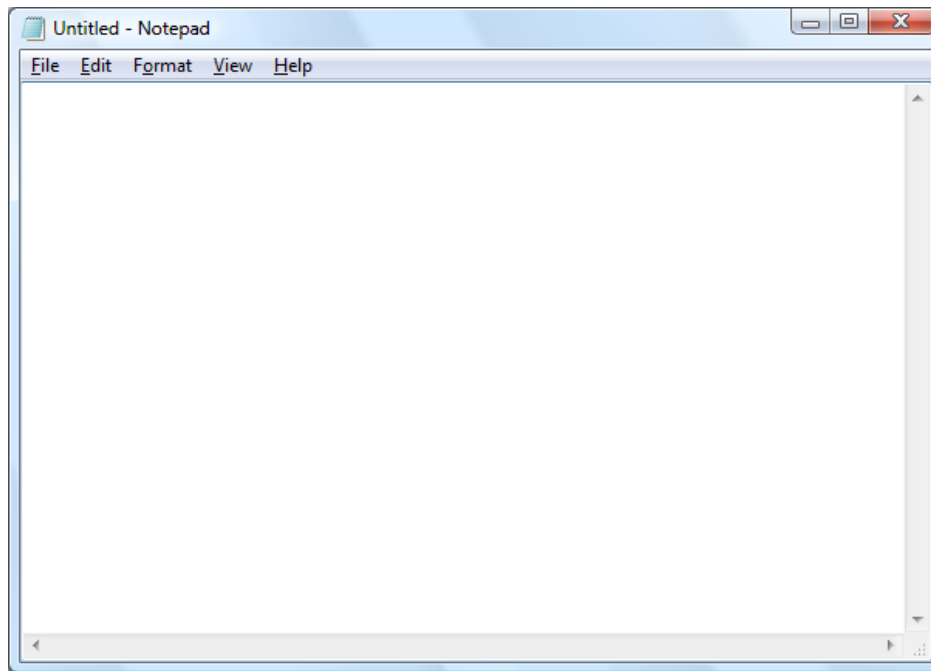
- This is a text-only editor. Unlike a modern word processor, you cannot insert pictures into the Notepad window. You will notice that unlike the WordPad program you cannot apply any formatting to the text, such as bold, italic or underlining.

- Leave the program window open.

## Calculator

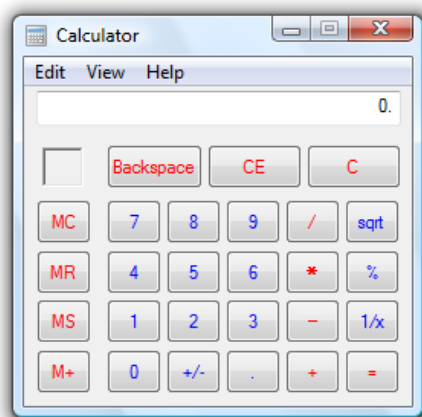- To open the **Calculator** program, click on the **Start** button and then click on the **All Programs** button. Click on the **Accessories** group. You should see the **Calculator** program icon listed under the **Accessories** group. Click on the **Calculator** command to run the Calculator program. The program will open within a window, as illustrated.



- Experiment with using the calculator to add two numbers together.

    **TIP**: If you click on the **View** drop down menu, you can select the **Scientific** calculator.
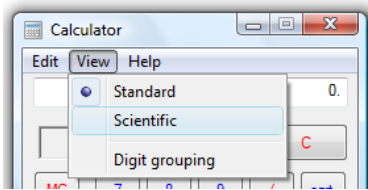
This will look like this.
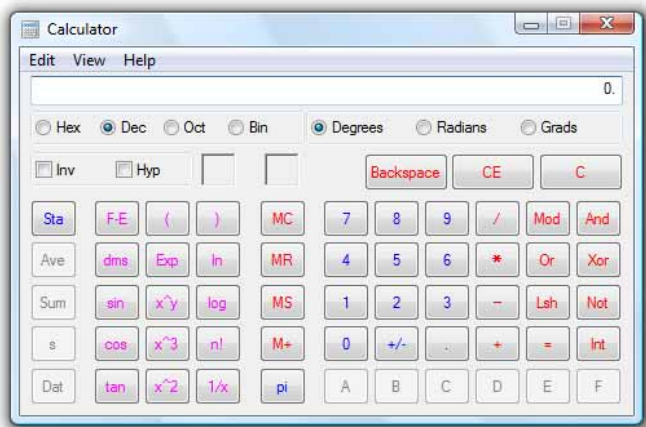


- Leave the program window open.

## Welcome Center

- The Welcome Center normally runs automatically each time you start the computer. If you have closed the Welcome Center window you can always restart the program by clicking on the **Start** button and then clicking on the **All Programs** button. Click on the **Accessories** group. You should see the **Welcome Center** program icon listed under the **Accessories** group. Click on the **Welcome Center** command to run the program.
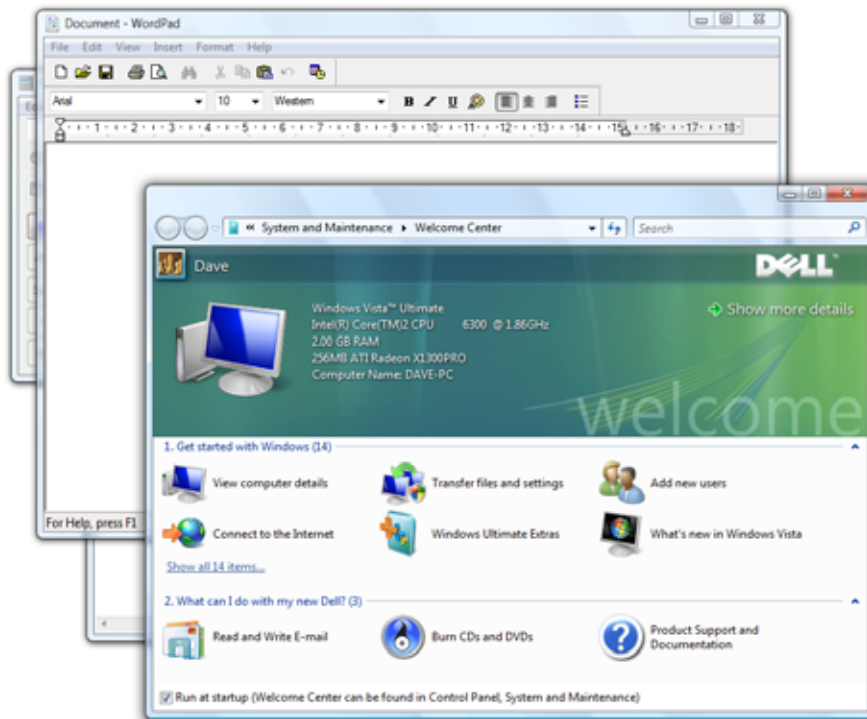


- Leave the program window open.

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## Switching between programs

- You should see a number of programs displayed on the screen, as illustrated.



- To switch from one program to another press down the **Alt** key (and keep it pressed).  Press the **Tab** key once and you will see a bar displayed across the middle of the screen.



- Press the **Tab** key a few more times and you will sequence around the programs displayed within the bar.  When you release the **Alt** key the program that was highlighted within the bar is displayed on your screen and the other programs are minimised to the Windows Taskbar.  Practice this technique a few time to switch from one program to another,

## The 'Switch between windows' icon

- Click on the **Switch between windows** icon (displayed at the bottom-left of your screen).

- The program windows will be displayed as illustrated.
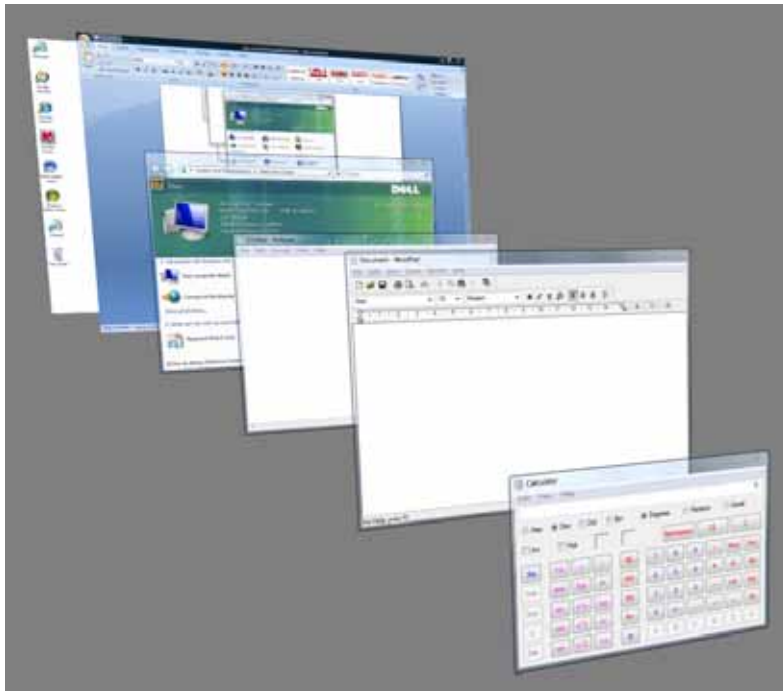


- Click on the program window you wish to bring to the forefront.
- Click on the **Show Desktop** icon before continuing.



## Using Windows Flip 3D

- Press the **Windows Logo** key (and keep it held down). Repeatedly press the **Tab** key and you will cycle through the windows displayed on your screen. Release the **Windows Logo** key when you see the window you require.

## Cascading windows

- If necessary, click on the **Show Desktop** icon (bottom-left of your screen) so that all the programs are displayed in their program windows.



- Right click on an empty part of the Windows **Taskbar** (this is the bar that is normally displayed across the bottom of the Windows screen). From the popup menu displayed, click on the **Cascade Windows** command.
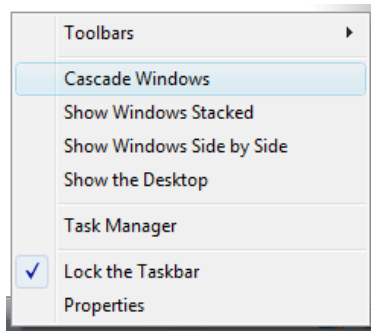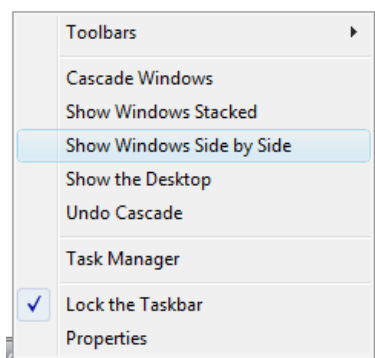
The program windows will be displayed cascaded across the screen.
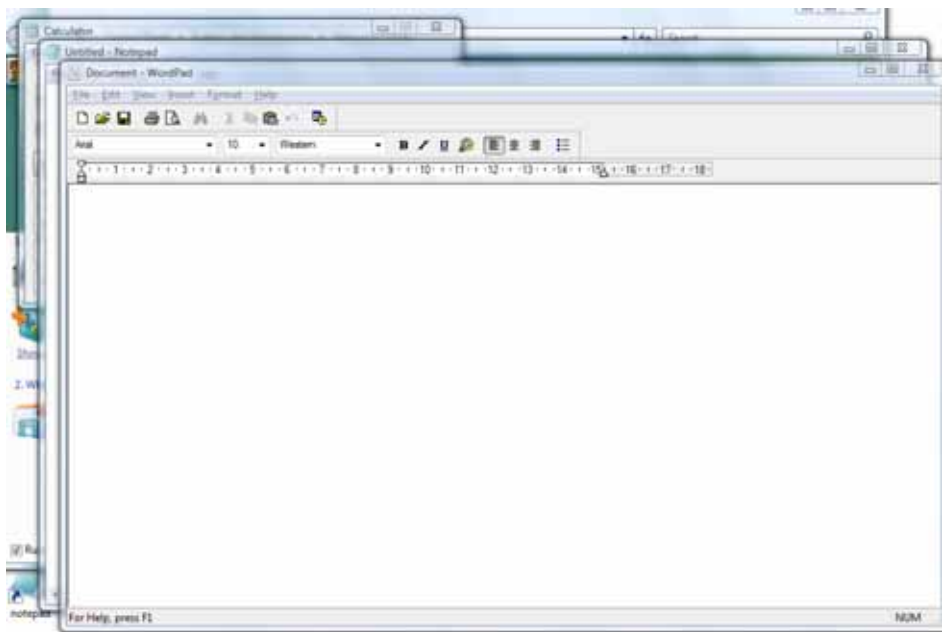


## Displaying windows side by side

- Right click on an empty part of the Windows **Taskbar** (this is the bar that is normally displayed across the bottom of the Windows screen). From the popup menu displayed, click on the **Show Windows Side by Side** command.

- The program windows will be displayed, tiled side by side, as illustrated
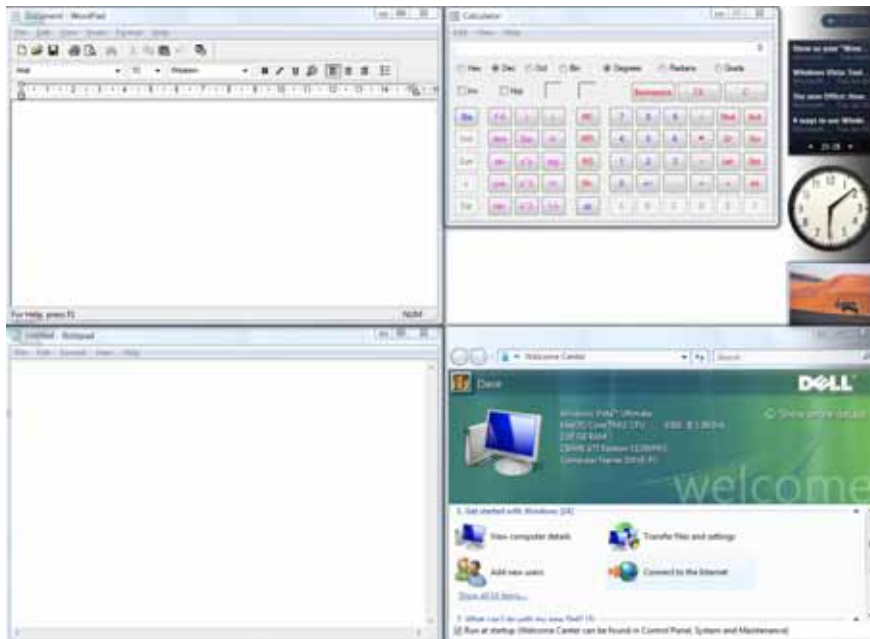


- Close all the open programs before continuing.

  **TIP**: To close a program click on the **Close** icon displayed at the top right of each program window.

## Installing programs

- Within large organisations it is normally the IT support staff that installs or removes programs. In many cases it is a disciplinary offence to install programs onto computers without specific permission. This is because of the risk of accidentally infecting a computer with a computer virus or similar program.

- With small organisations or home use then it may be up to you to install new programs. Always check so that you do not get yourself in trouble!

- Programs are normally supplied on CD or DVD and these disks, once inserted into the CD/DVD drive should start automatically and display instructions onscreen covering the installation procedure. If you need to install software, read the onscreen instructions **VERY** carefully at each stage. If help is available and you get stuck always ask rather than assuming the installation will be OK. If in doubt ask!

  **TIP**: You can find lots of free programs when surfing the Web. Be VERY careful about installing programs unless you are absolutely sure that the programs are supplied by a reliable source.

## Removing programs

- **WARNING: This section is just for reference.  Do not remove any programs during this training course.**

  As with installing programs only do this if you have been given specific authority within your company to remove a program. If in doubt ask!  You use the Control panel to remove programs.
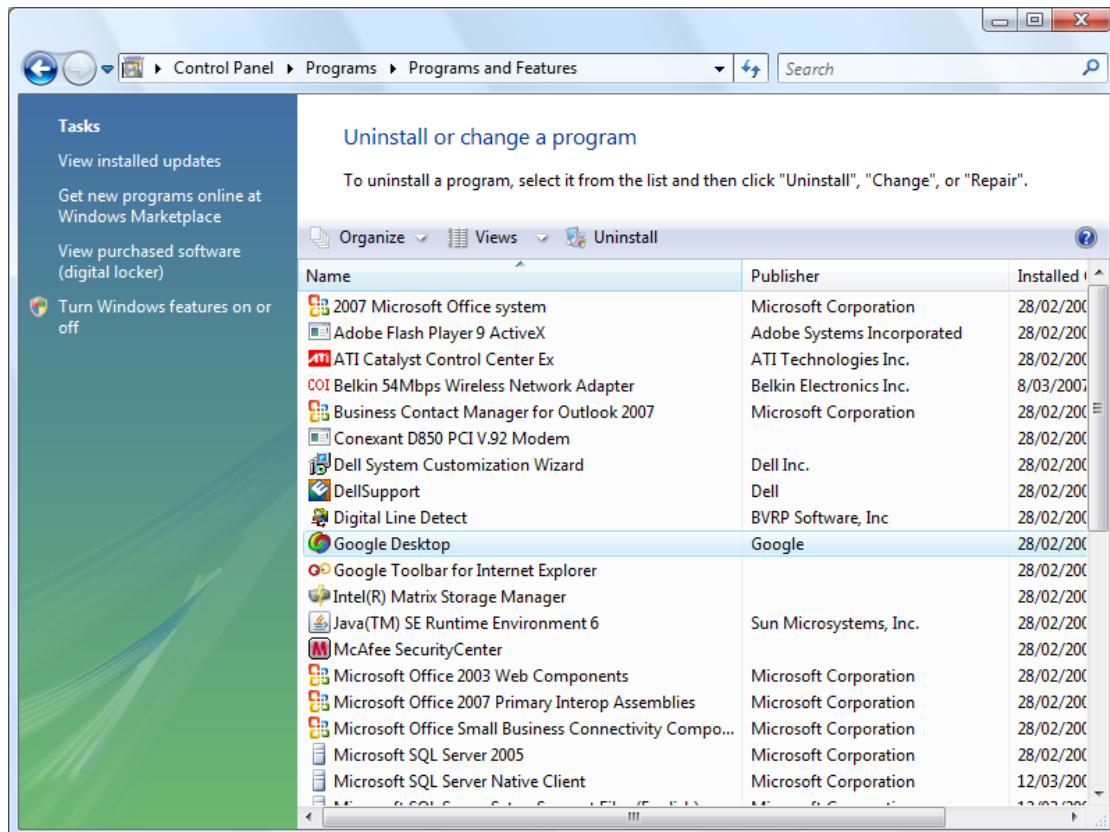
- Click on the **Start** button and from within the Start Menu, click on the **Control Panel** button.
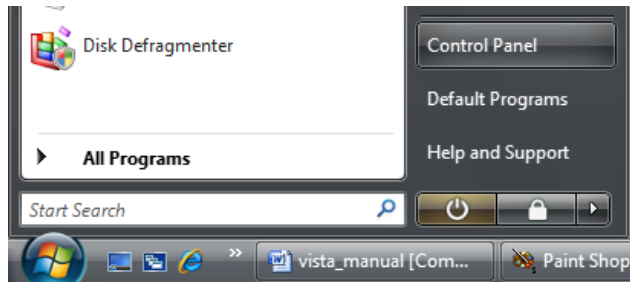


- The **Control Panel** window looks like this.
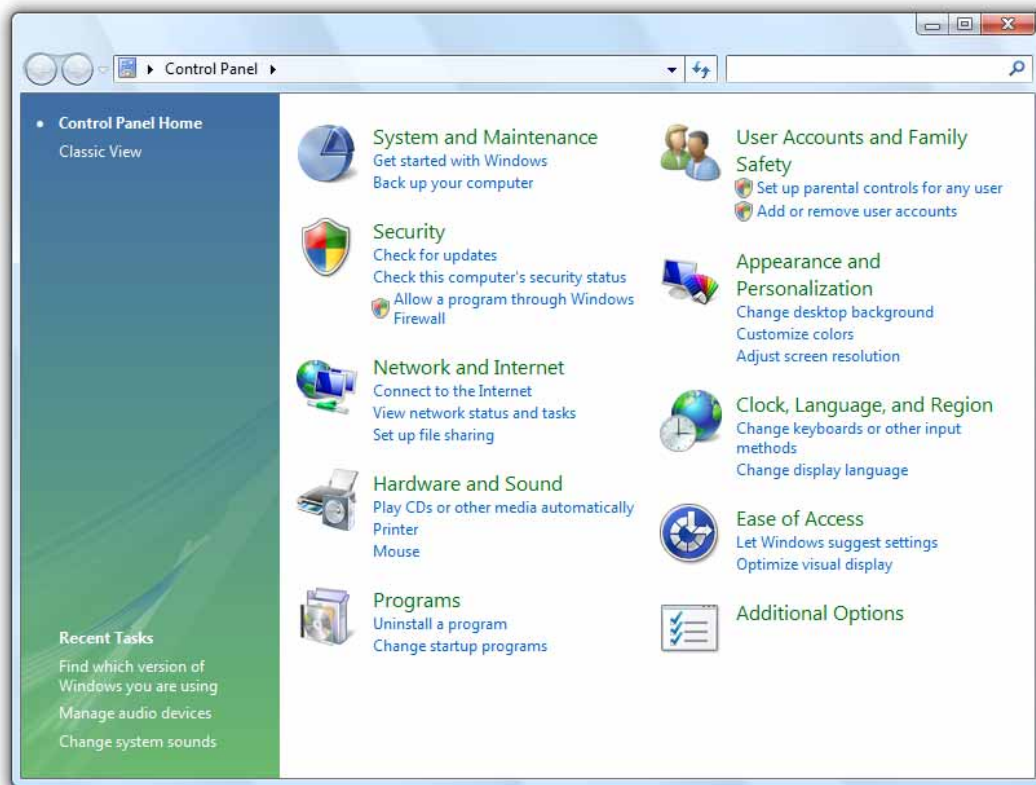


- Within the **Programs** section click on the **Uninstall a program** command. This will display a list of programs that you can uninstall.

- Click on the program that you wish to uninstall. In the example shown, the **Google Desktop** program has been selected. Once selected click on the Uninstall command (displayed above the list). You may see some warning screens, in which case read them very carefully before deciding whether to proceed or not. If in doubt, do not remove a program as it can cause problems if you delete programs that should not be deleted. Close any open windows before continuing.

## Creating and using a Desktop shortcut

- You have seen how to run program by clicking on the program within the Start menu. We will now place a 'Shortcut' program icon on the Desktop. This makes it much easier to run programs that you use on a regular basis. We will now create a Desktop shortcut for the Welcome Center.

- Click on the **Start** button and then click on the **All Programs** button. Click on the **Accessories** group. You should see the **Welcome Center** program icon listed under the **Accessories** group.

- **Right click** on the **Welcome Center** program icon. From within the popup menu displayed Select the **Send To** command. From the submenu displayed select the **Desktop (create shortcut)** command.
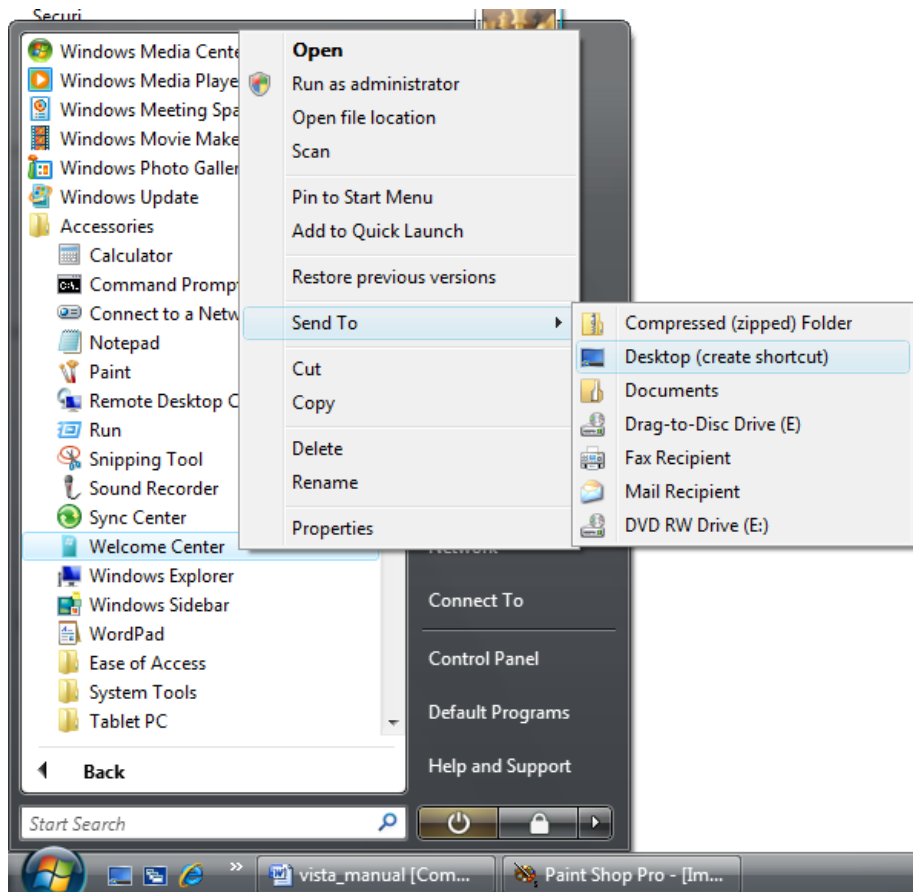
- You will see the following icon displayed on your Desktop.



- Double click on this icon to run the **Welcome Center** window.

- Close all open windows before continuing.

## Deleting a Desktop shortcut

- Select the Desktop shortcut you created. Press the **Del** key. You will see a warning dialog box asking if you are sure you want to send the shortcut to the Recycle Bin. Click on the **Yes** button to remove the shortcut icon.

## Shutting down an application that has frozen

- Normally you close a program by clicking on its **Close** icon, displayed at the top-right of a program window. Sometimes a program will crash or freeze and you may not be able to close it down in the normal way. In this case, if possible switch to any programs that are still responding and close them

down (saving any data if necessary).

- Click on the **arrow** to the right of the **Start** button, and from the popup menu displayed select the **Shutdown** command.
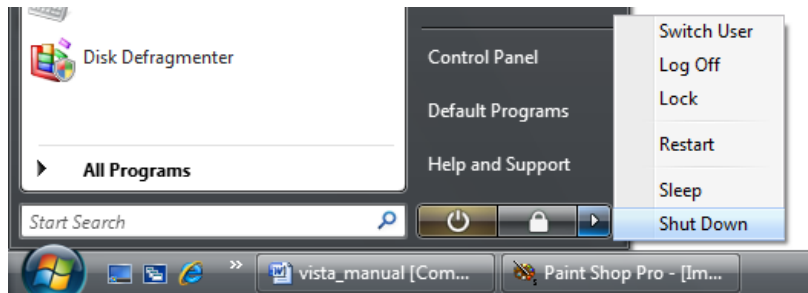


- If this does not work physically switch off your computer.  In the case of Desktop computers there is normally a power switch on the front or at the back of the computer.  When using a laptop computer you may have the hold down the on/off button for a short time in order to switch off the laptop.  Wait for at least 30 seconds and then switch the computer back on.  It may display a different opening screen than normal, in which case follow the on-screen instructions.

## Restarting the computer

- If you need to restart the computer rather than completely close it down, click on the **arrow** to the right of the **Start** button, and from the popup menu displayed select the **Restart** command.
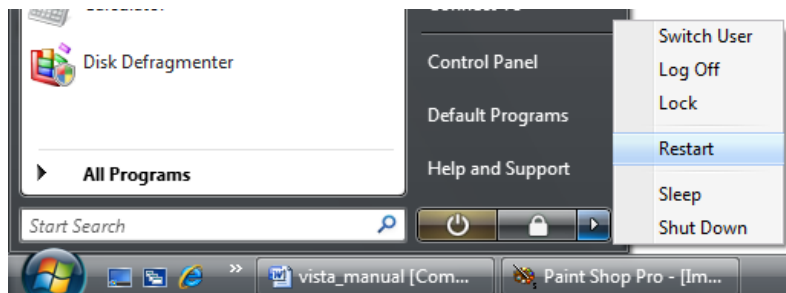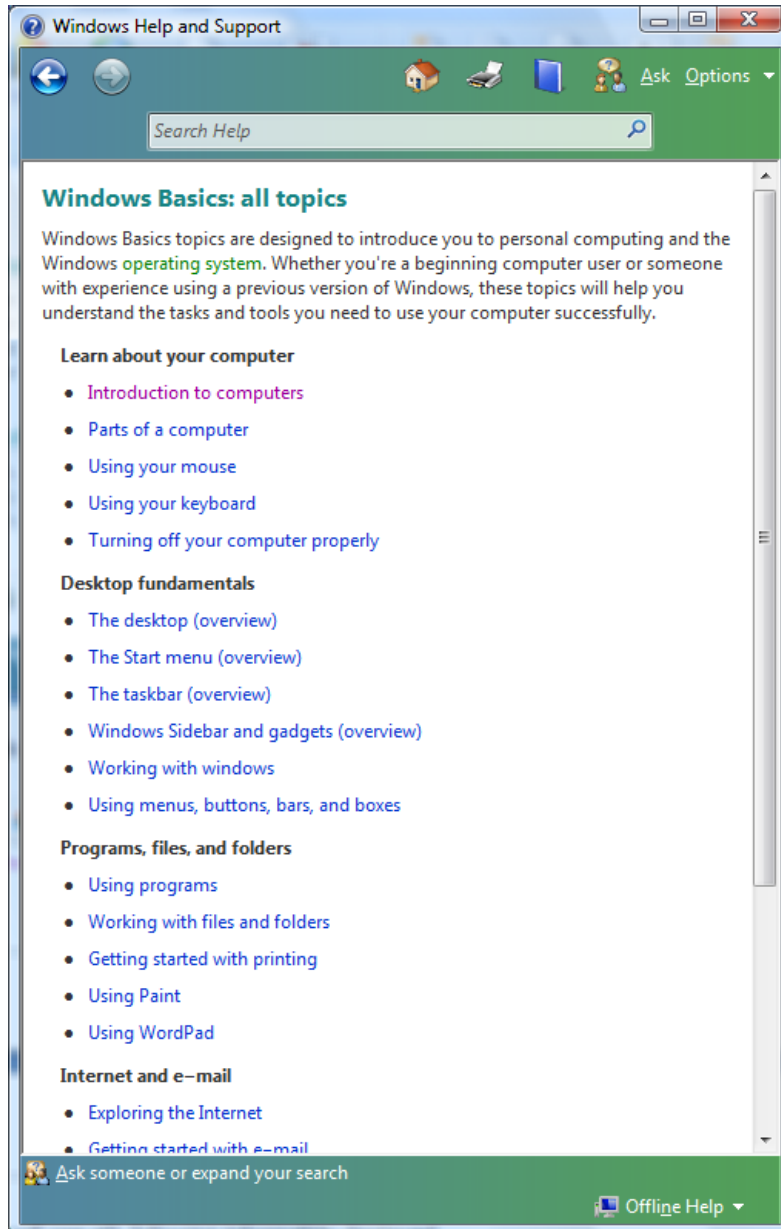
# Help

## How to get help

- The easy way to display the Windows help feature is to press the **F1** key on your keyboard. This will display the **Windows Help and Support** dialog box.
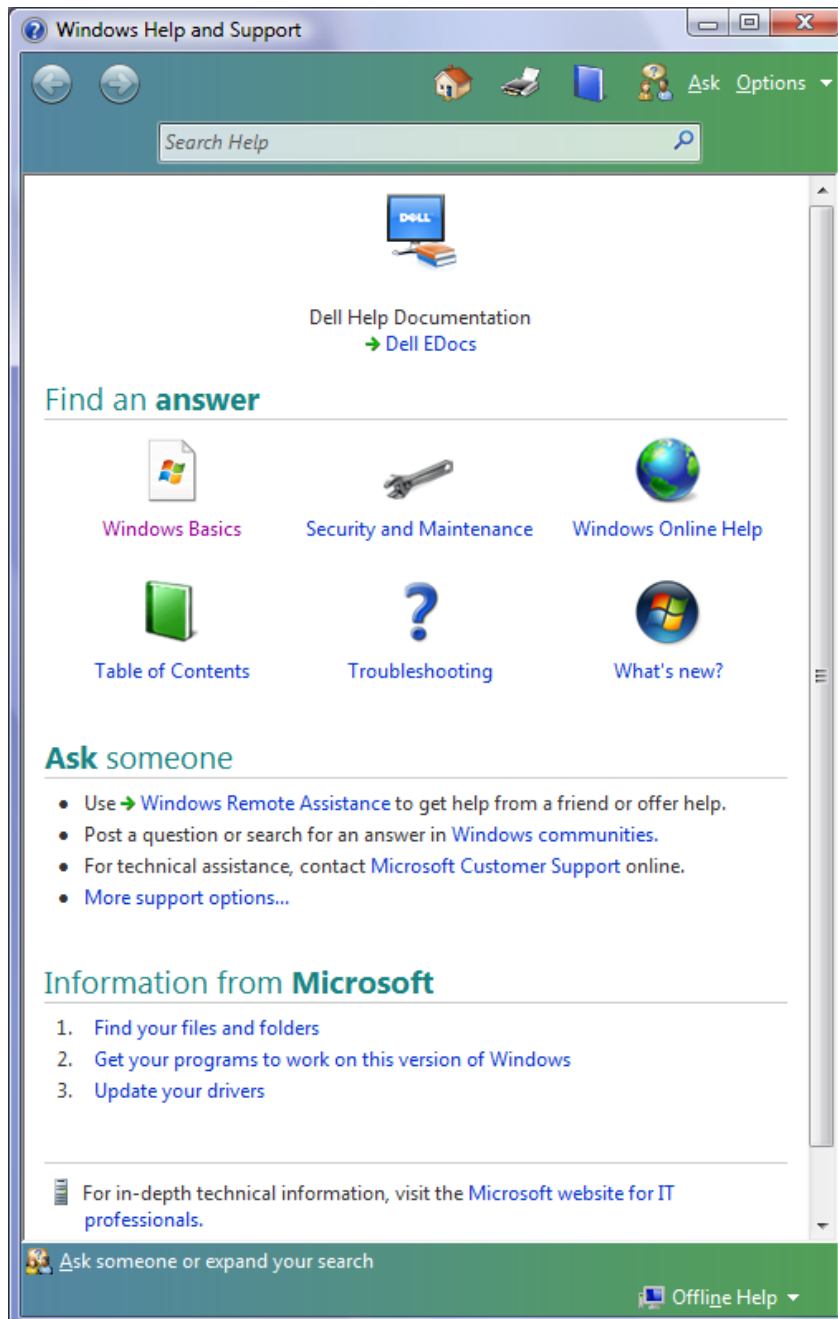


- Click on the **Windows Basics** icon.

Windows Basics
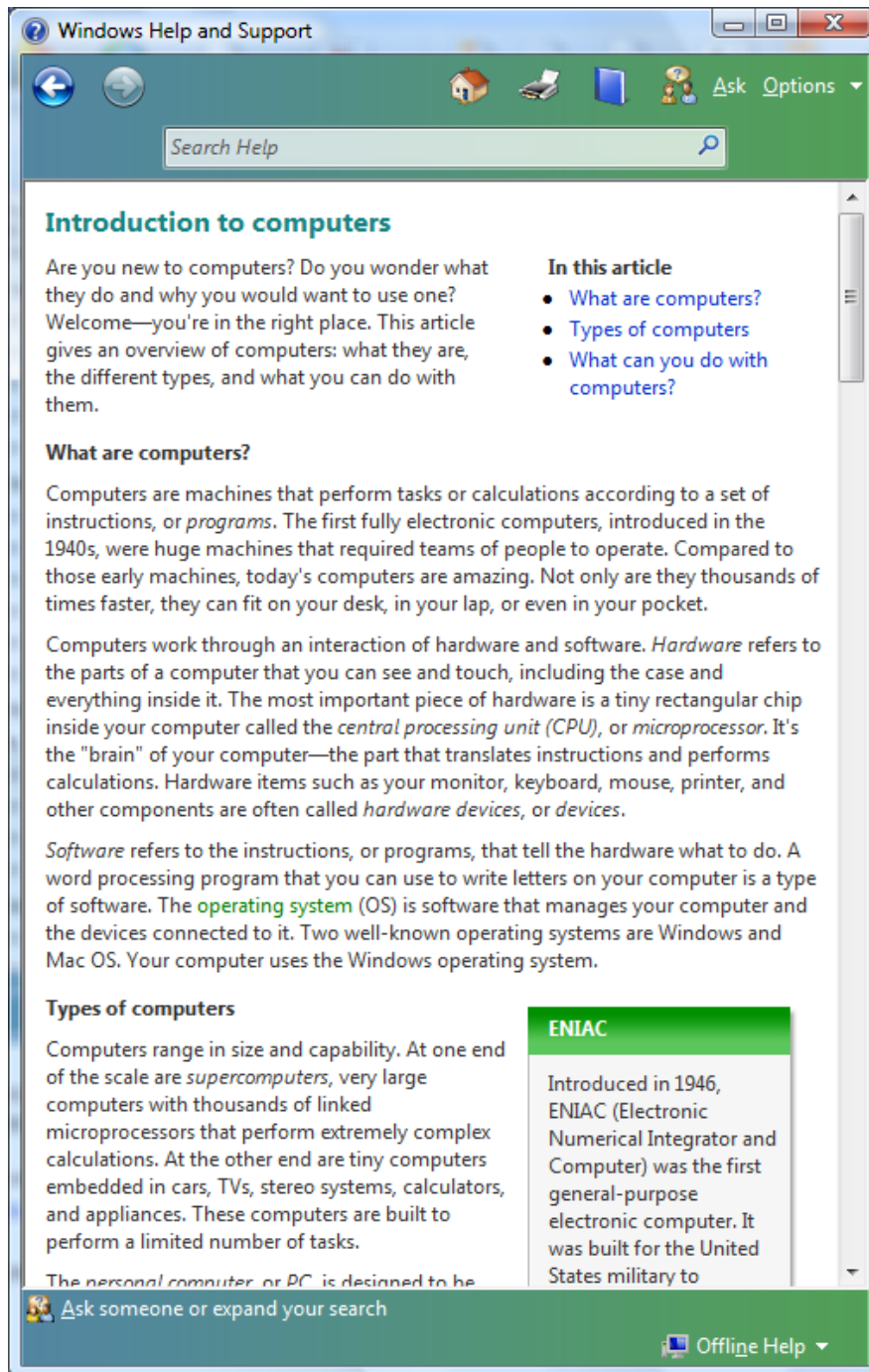
You will see the following information displayed.



- You can click on any item to learn more. For instance click on the first item titled '**Introduction to computers**'.


Learn about your computer
- Introduction to computers

You will see the following detailed information on this topic.

## The Help 'Back' and 'Forward' buttons

- You can click on the **Back** button to move back to the last screen displayed within the Help dialog box.

- You can click on the **Forward** icon to move forward within the pages you visited.

## Printing a Help topic

- You can click on the **Print** icon to print out the Help displayed on screen.
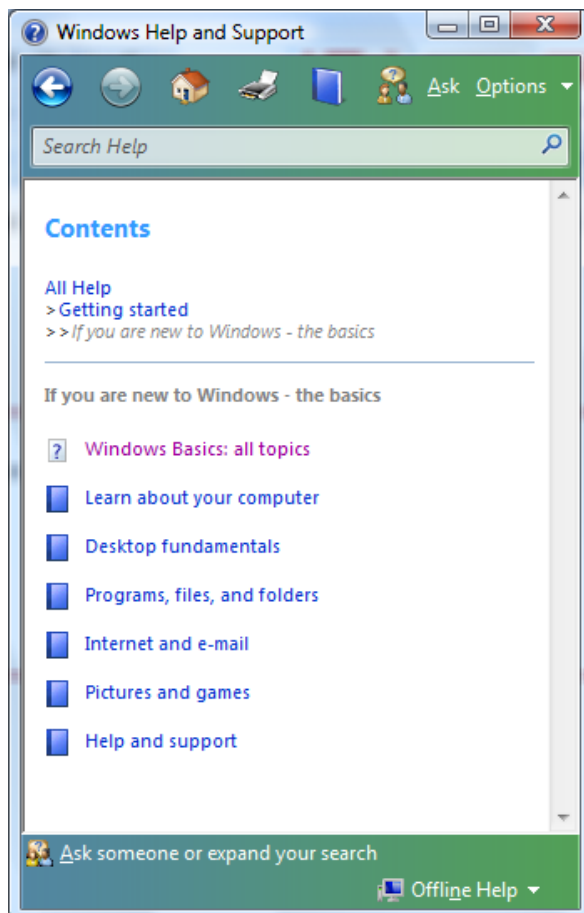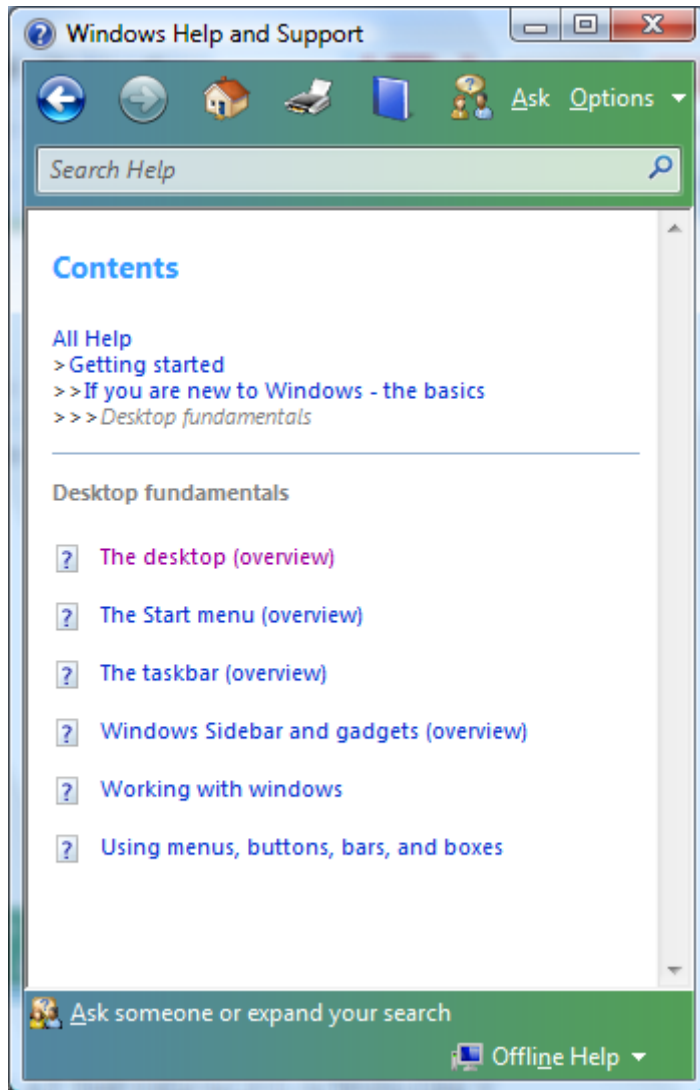
## Browsing for Help

- Click on the **Browse** icon

- The dialog box will display the following.

- You can click on a topic such as **Desktop Fundamentals**. The dialog box will then offer a range of help associated with the item you click on, in this case **Desktop Fundamentals,** as illustrated.



- Clicking on one of these options, for instance '**The Start menu (overview)**', will display the following.
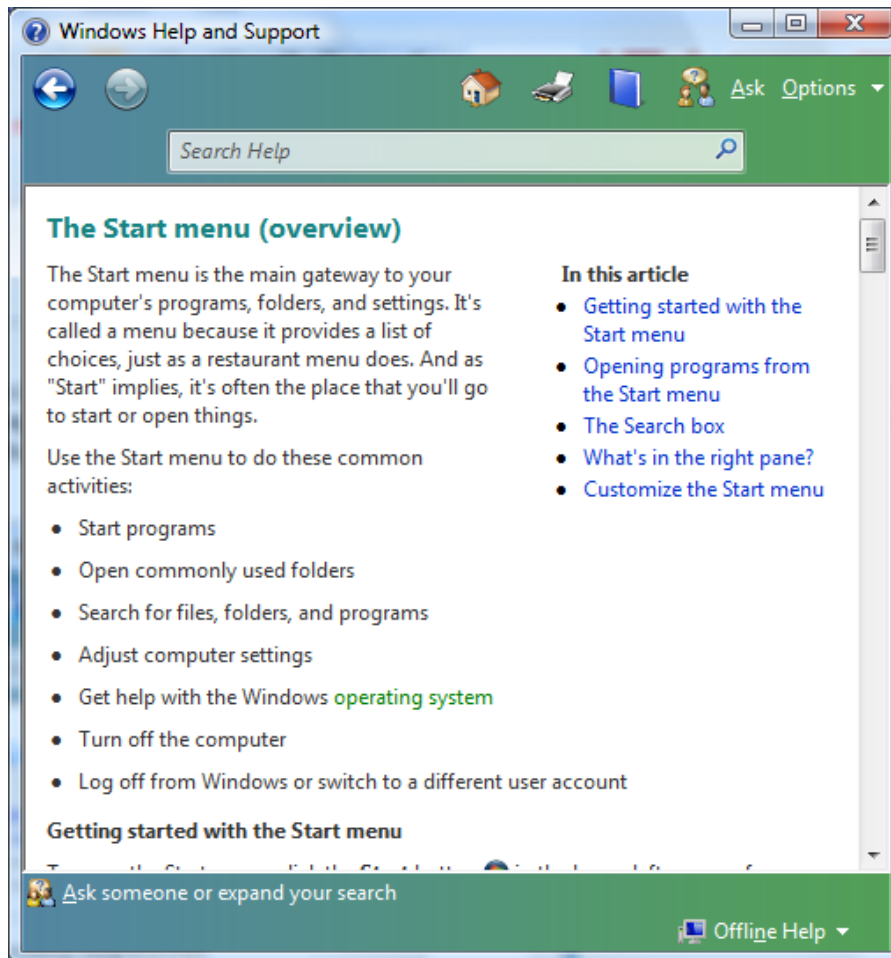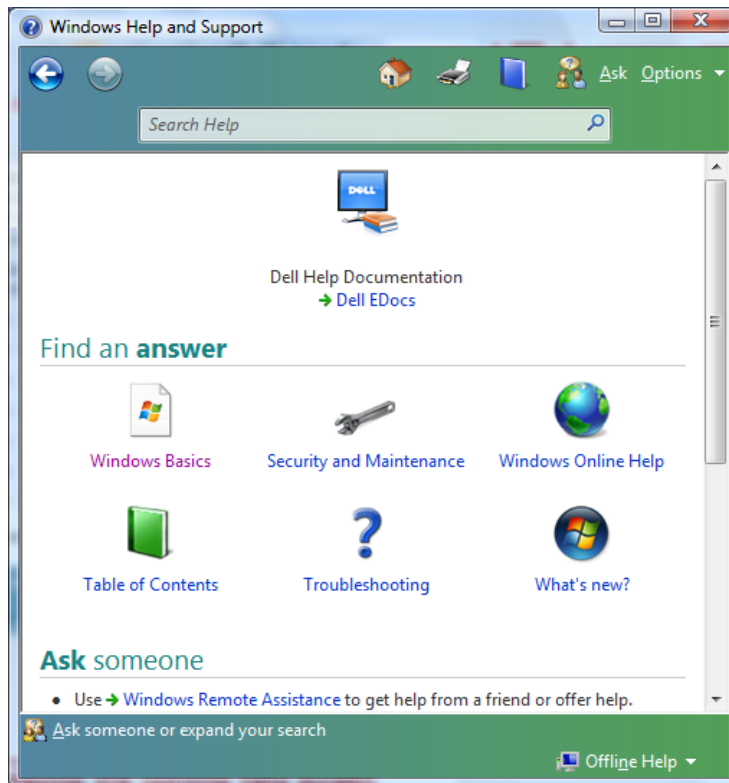
## Re-displaying the opening help screen
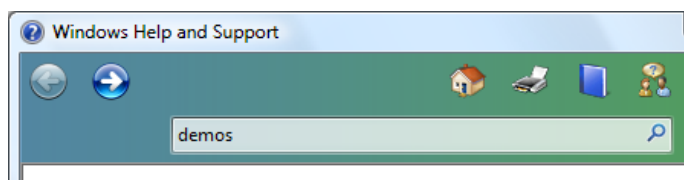
- Click on the **Help and Support Home** icon.



This will once again display the opening Help screen, as illustrated.
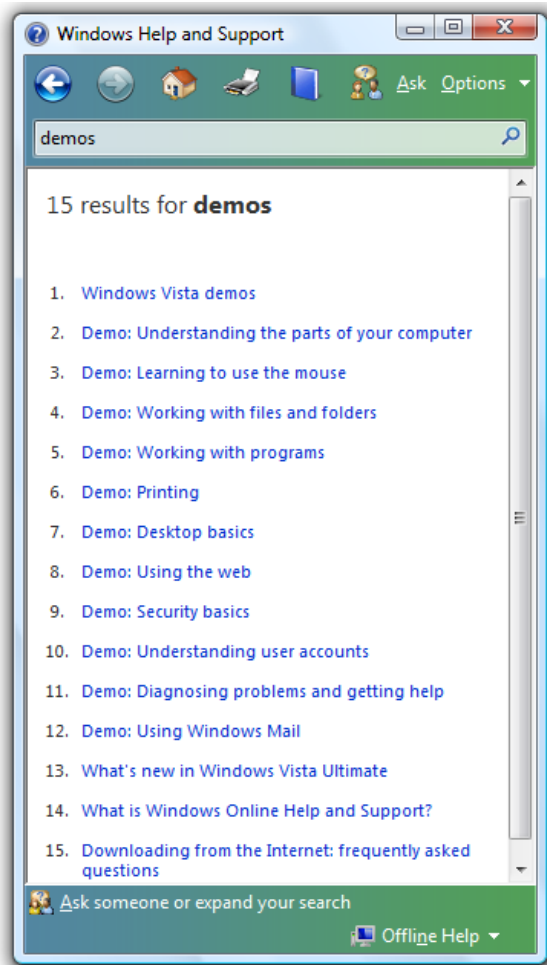
- Take some time to explore some of the other options available within the Help window.

## Demos

- Display the **Windows help and Support** window. Search using the word **Demos**, as illustrated.



- You will see the following screen displayed.

- You can click on any of these demos and watch a screen presentation on selected topics.  You can run these as many times as you like and get more expert in the use of various techniques within Windows Vista. Close any open windows before continuing.

# Files, Folders and Disks

## What are files?

- When you load a program such as a word processor this means that you copy the files containing the word processor program from your hard disk into your RAM memory. RAM is short for Random Access Memory and is simply a term to describe the memory chips contained within your computer. Once the word processor is loaded into RAM you can use it to create a document. When you have finished editing the document, you may want to save a copy of the document to your hard disk as a file.

  Basically there are two types of file that you need to concern yourself with, the program files (such as word processor, spreadsheet, databases etc) and the data files that you create and save to disk. Once saved to disk you can later reopen that file and make further changes, or print the data file.

  In many ways you can think of data files as physical sheets of paper, containing your data. You then place these sheets within a folder so that you keep all similar documents together.

## What are folders?

- Files are stored on a disk in folders. This concept is very familiar to anyone used to working within an office. Think of a 3-draw filing cabinet. When you wish to file a document within the filing cabinet you first need to decide in which draw to file a particular document. When you open a filing cabinet draw it often contains hanging dividers allowing you to group similar document together.

## Types of drive and drive letters

- When you save a data file you normally save it to your hard disk. This disk is contained within your computer and you cannot normally see it. By convention the hard drive is called 'Drive C'. If you have two hard disks within a single computer they will normally be described as drive 'C' and drive 'D'.

- There are other types of drive, such as a CD or DVD drive. You can plug 'removable hard disk' into the back of your computer. You can plug so called 'memory sticks' into the USB sockets on your computer. Don't worry what USB stands for (Universal Serial Bus), they are just sockets that allow you to plug things into your computer. There are many different names for these USB memory sticks, such as 'Flash drives' or 'USB drives'

- As you add more drives to the computer, Windows assigns a drive letter to them. The hard disk is usually called drive C. The next disk that is added (probably the CD/DVD drive) will be called drive D, the next drive would be

Drive E and so on.

- If you are connected to a network, your network administrator may have set you up with additional 'network drives'. These are actually located within a different computer on your network and can have any free drive letter that the network administrator thinks is appropriate (such as Drive T).

## Running the Windows Explorer program

- **Right click** on the **Start** icon. From the popup menu select **Explore**.
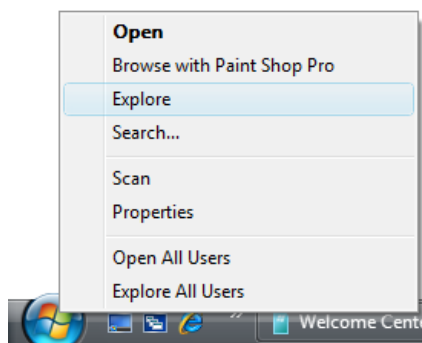
This will display the Windows Explorer window.
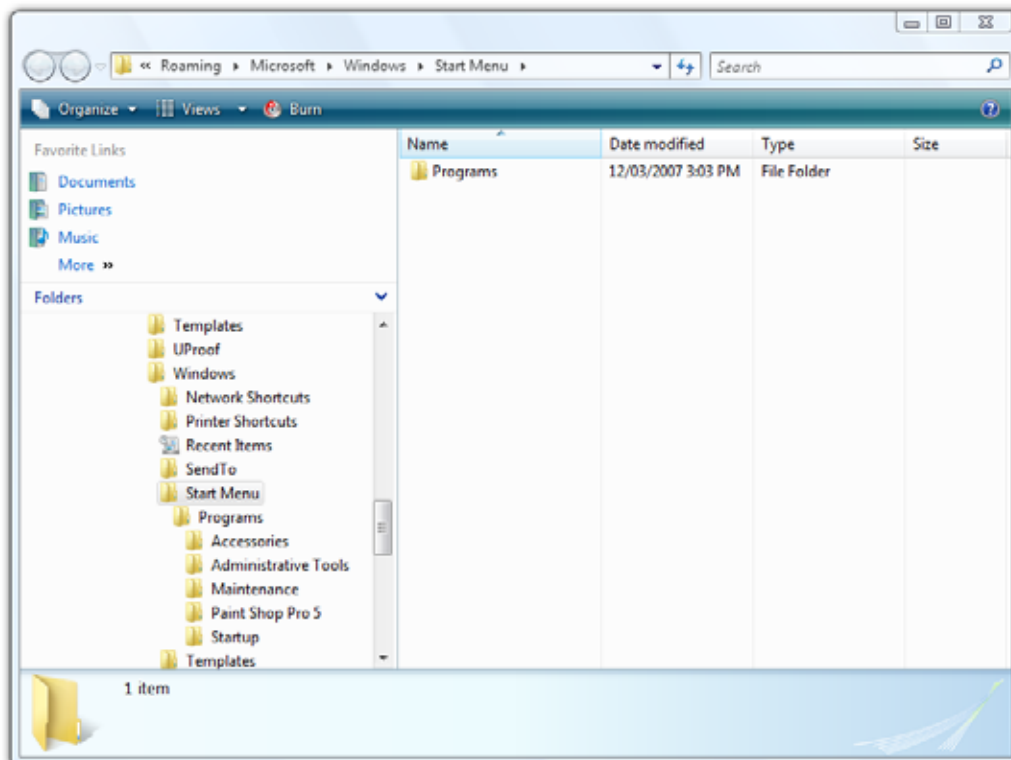
**TIP**: Do not confuse the **Windows Explorer** (which is generally used for exploring your computer, disks, folders and files) with the **Internet Explorer** (which is used for exploring the Internet and surfing the Web). They are two entirely separate programs with very different functions.

## Views within the Windows Explorer

- You will see a number of commands displayed in a bar across the top of the Windows Explorer window.



- Click on the **down arrow** to the right of the **Views** command. You will see a popup menu, as illustrated.
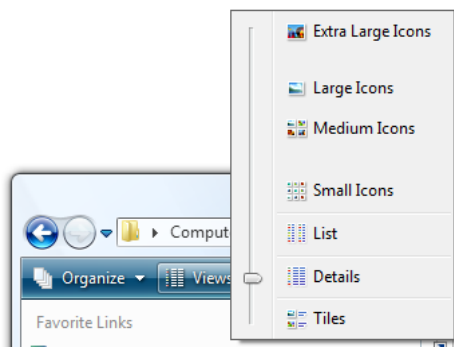


- In the example illustrated, we are viewing the contents of the Windows Explorer in what is called **Details** view. In details view, illustrated below, you can see details such as the name of a file or folder, the date it was last modified, the type of file or folder as well as the size of the file.
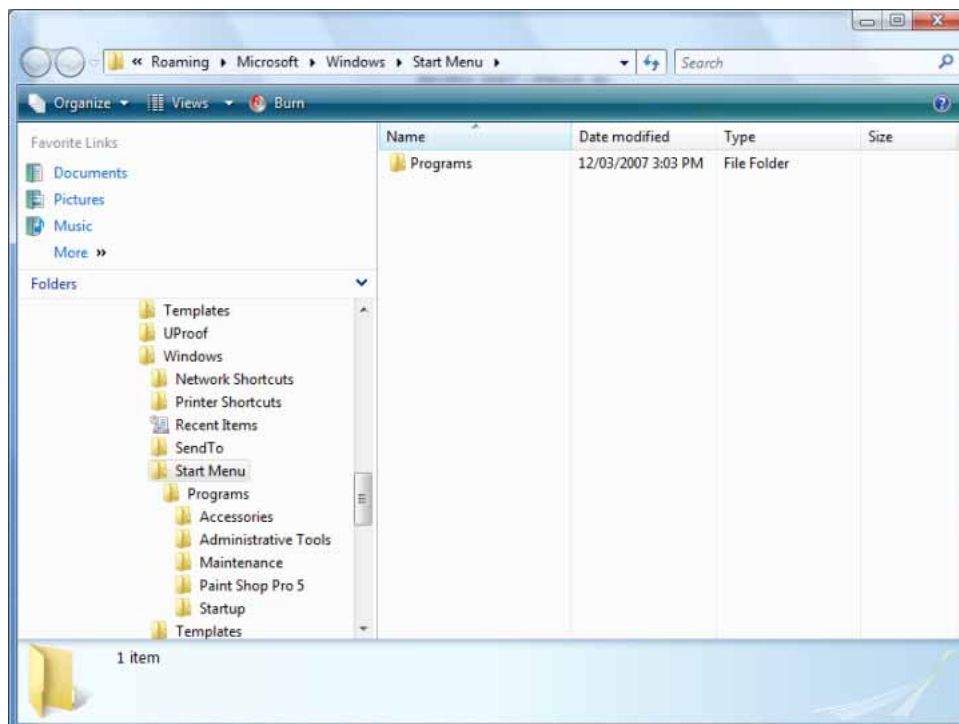
- We will see later how to select a particular file or folder and view details of that file or folder. In the example shown below, we have selected the Notepad program file. As you can see this file is an 'application' file (i.e. a program file) and the file size on disk is 148 KB.



- The other common view that is used is one of the icon views.
- Click on the **Medium Icons** view.
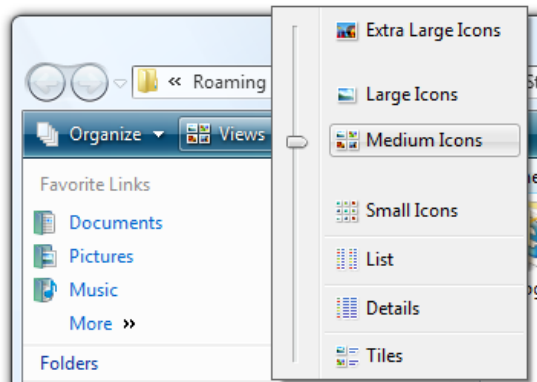


- Your display will now change as illustrated.
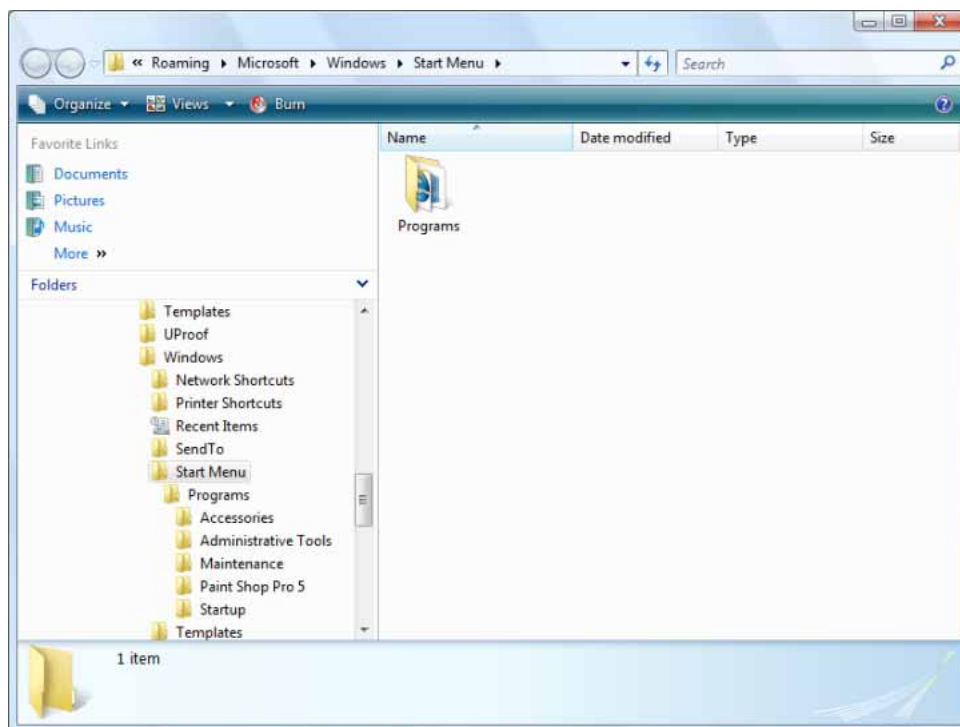


- There are other views but normally you will use Details or one of the Icon views.

    **TIP**: If you have difficulty seeing the icons you can use the **Large** or **Extra large** icon views.

- Before continuing set the **View** type to **Details**.

## Using the Windows Explorer scroll bar

- When you first start the Windows Explorer the screen will look something like this. In the example shown, the **Start Menu** folder is selected by default.
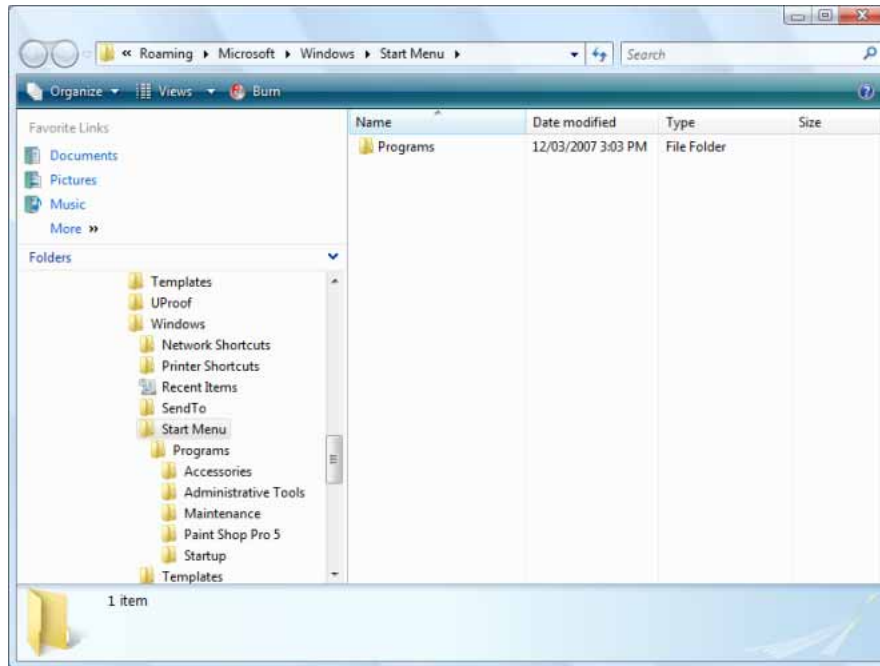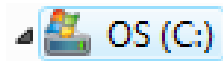
- Use the vertical **Scroll Bar** to scroll up to see the contents at the top of the left side of the window. You will see something like this.
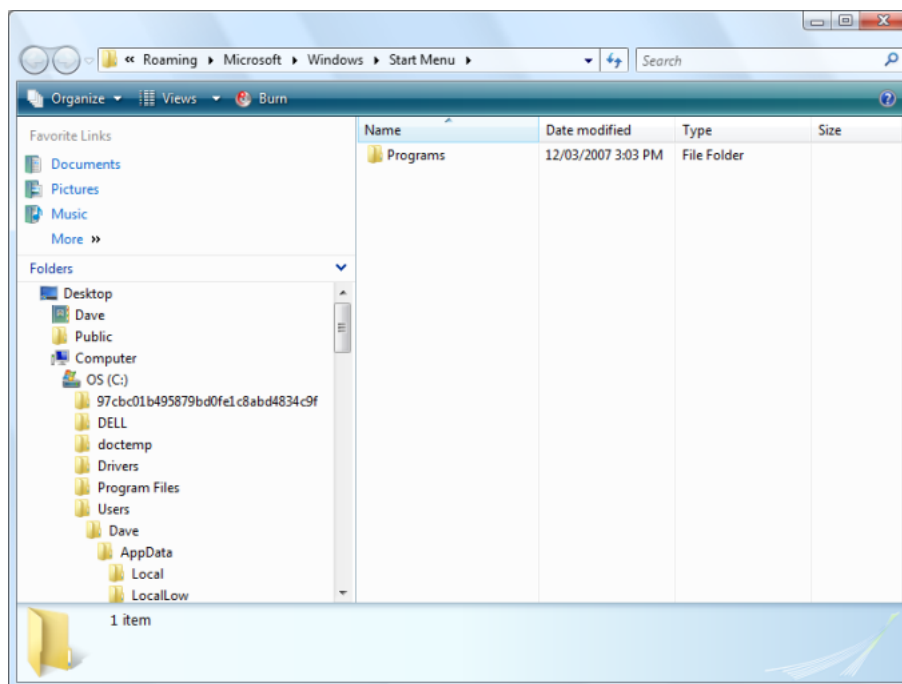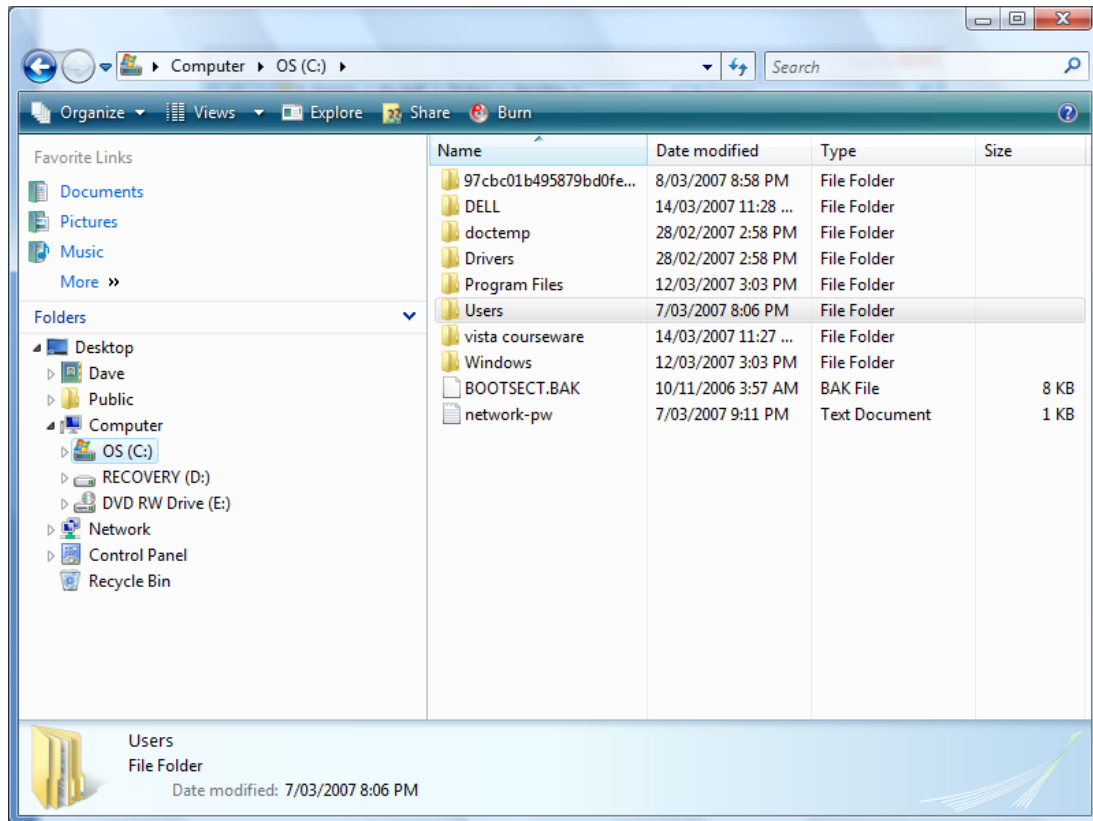
## Expanding and contracting drives and folders

- Double click on the **Drive C** icon.



The screen will change as illustrated.



The contents of the **C drive** (your hard disk) are displayed within the right side of the window. In the example shown the folders contained on the hard disk have a folder shaped icon, as below.



- Double click on the drive C: icon again and the folder structure on your hard disk will expand again, as illustrated.
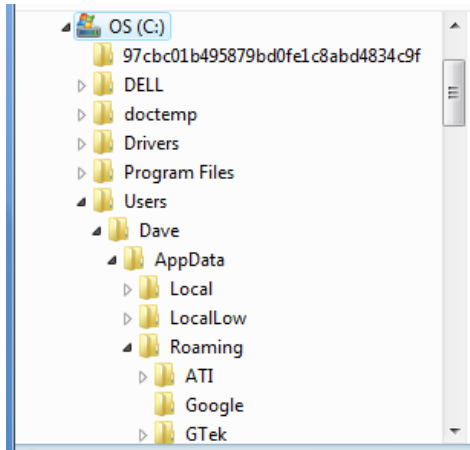
- You will notice the folders displayed in the left side of the window are prefixed with one of the following shapes.



- Click on one of the dark triangle shapes.



  You will see that it then changes to the shape below.



- The shape below indicates that when you click on it, the folder substructure will expand to display the subfolder(s) contained within the parent folder.



- The shape below indicates that when you click on it, the expanded folder substructure will contract to just display the parent folder.
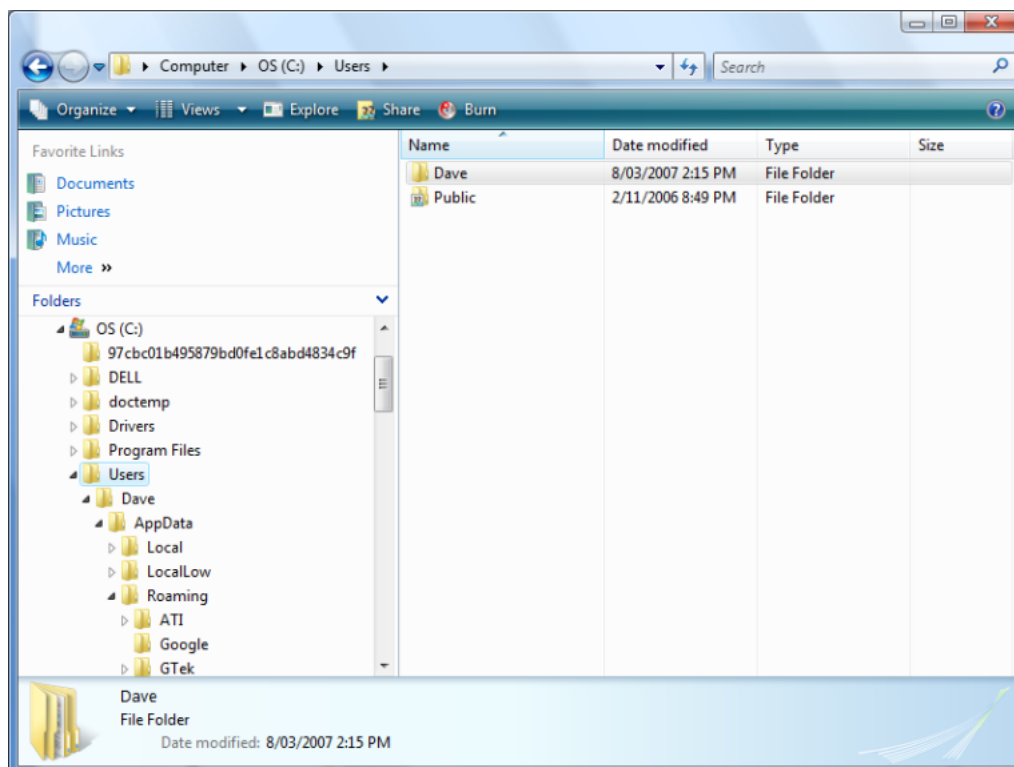


- Experiment with clicking on both the expanding and contracting icons and view the effect on the structure displayed on your screen.

- Before continuing close the Windows Explorer program and then restart it.

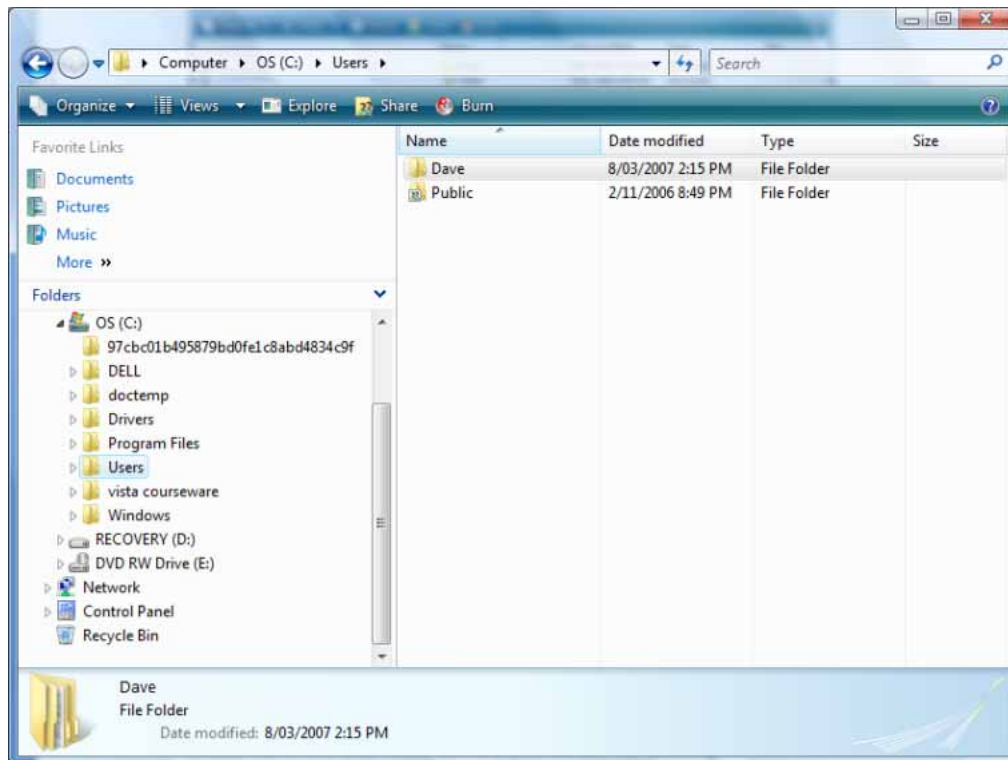## Types of Windows Explorer icons

- Your screen should look like this:
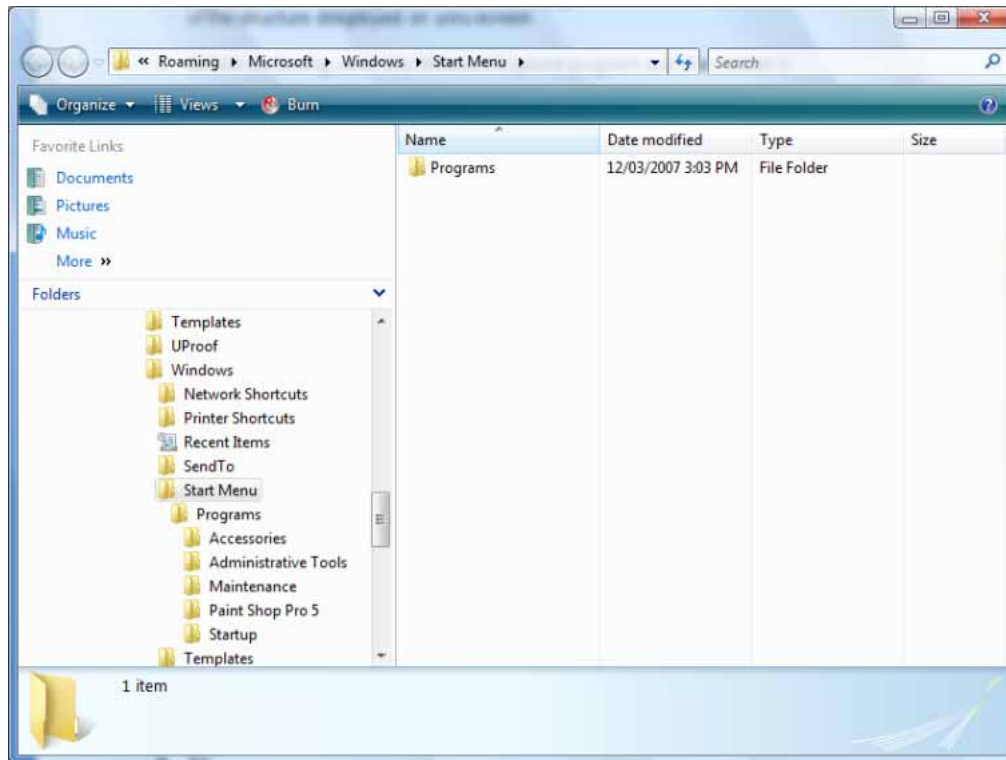


- Scroll up the screen and select the **Users** folder icon.

- Double click on the **Users** folder icon and you will see that the **Users** folder collapses, to just display the **Users** parent icon in the left side of the window.



- Click on the **Windows** folder.  You will see the Windows parent folder displayed in the left side of the screen, with the contents of the Windows folder (i.e. files and subfolders) displayed on the right side of the window.
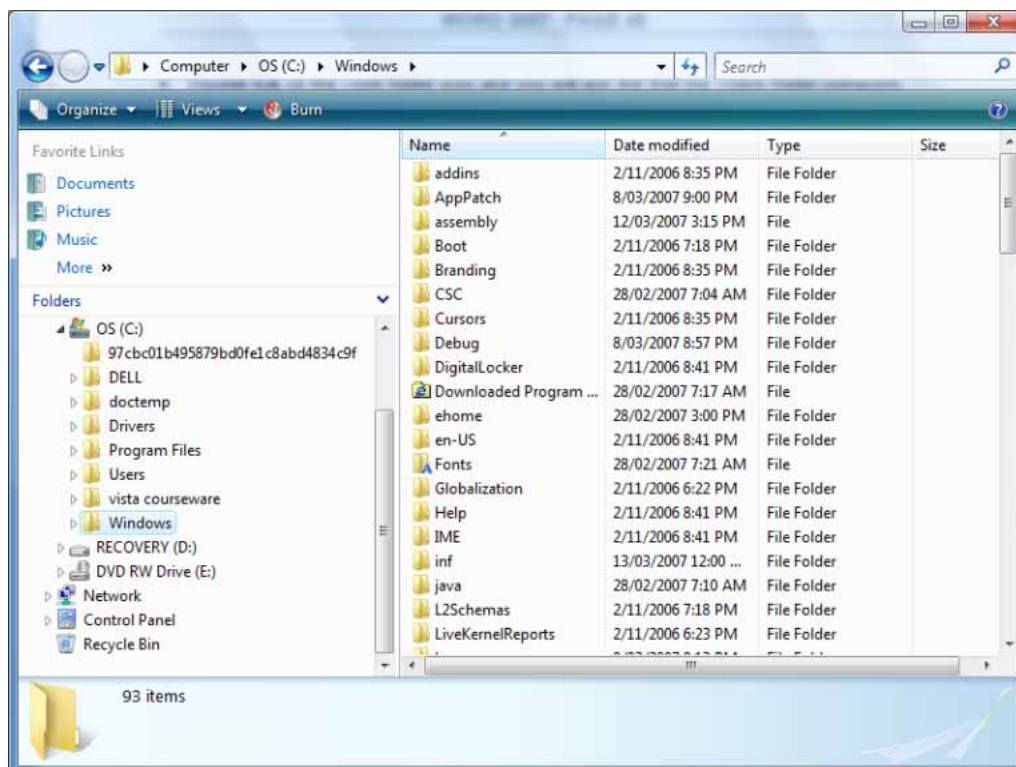
- Scroll down the contents within the right side of the window and soon you will see a variety of different icons representing different types of files.
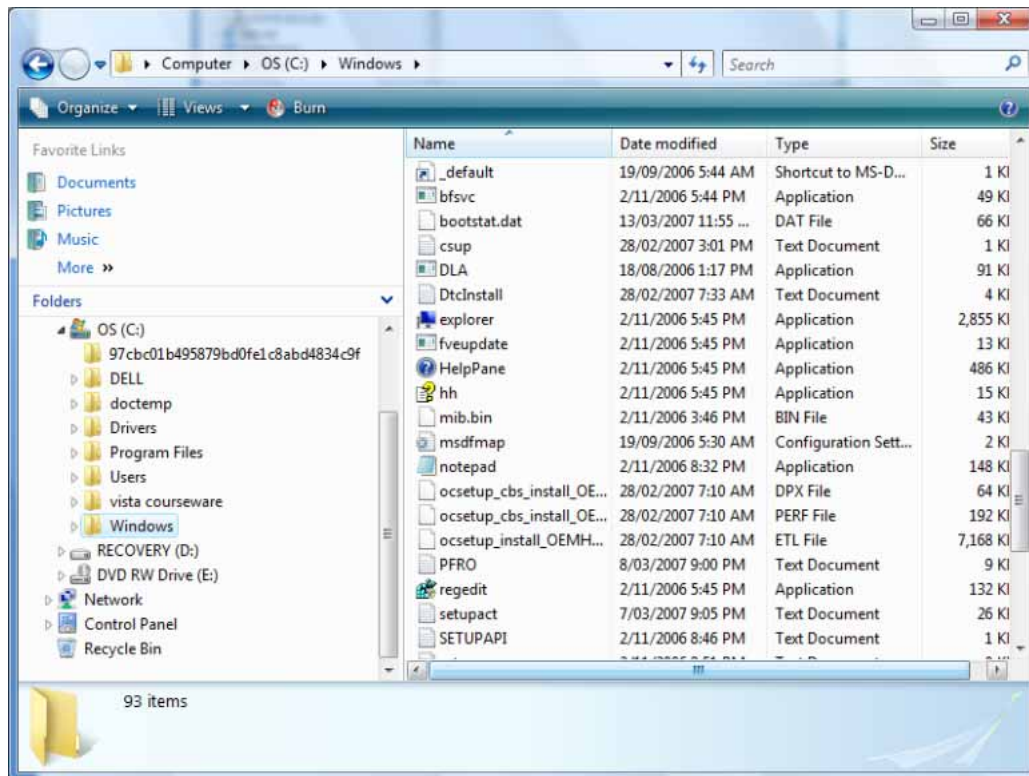


- You should be able to see the following icon displayed.



This is a program icon. Double click on this and you will run the Windows Explorer program.

## Drives, Folders and Files

- When accessing a hard disk, whether it is local to your machine or perhaps located on a network, Windows uses a system of drive letters to serve as logical pointers to the different physical drives you have access to. From each drive letter it is possible to access all of your files stored on that particular physical drive.

- If all of the files were held together in one place on each drive, the system would be very difficult to use because of the sheer number of files involved. To help organise your files it is possible to create folders (also referred to as directories) to help divide and even sub-divide the files stored within the various logical drives available. A system of hierarchical folders within folders which represent your hard disk are often referred to as the folder (directory) tree, in the same way the very top of the file system is known as the root folder (directory).

- Finally, at the very end of this structure are the various files which we use.

## Data storage devices

- **Hard Disk**: Stores your operating system, application programs and data. When you save data, it is normally saved to the hard disk.

  **Diskette (floppy disk)**: The original IBM PC did not have a hard disk, the operating system, programs and data had to be contained in one or two diskettes. Later a hard disk was added, after which point diskettes were used for supplying programs which could be installed (i.e. copied) to the hard disk, or you could back up small amounts of data to the diskette. Most modern PCs are no longer supplied with a diskette drive, due to the fact that diskettes are unreliable and are easily damaged. They only hold very small amounts of data.

  **CD / DVD**: These have largely replaced diskettes as a way of supplying programs. They can hold a lot more data.

  **USB Flash Drives:** These are small, stick-like devices that plug into a USB port. They can stores Gigabytes of information and are an easy way to transfer data from one computer to another. There are security considerations attached to use of these devices as it is easy to copy large amounts of data to these devices and then take that information out of the office, for this reason many companies ban the use of these devices. When using a USB flash drive the drive is listed within the Windows Explorer program in exactly the same way that your hard disk is. It will have a drive letter associated with it.



  **Network Drives**: Seen by your computer as a normal drive, but in reality the network drive is a folder located on another computer which is connected to the network.

## File sizes and disk storage capacities

- Each file stored on a disk is a certain size. Some files such as those that only contain text are very small while others containing applications or high videos can be enormous. The capacity of storage disks is often quoted in Gigabytes.

- The basic storage unit is called a bit. The relationship between storage values is illustrated below:

  **Bit**:
  1 or 0 level of storage is called a Bit

**Byte**:
Eight bits is called one Byte

**KB, Kilobyte**:
A Kilobyte (KB) consists of approximately one thousand Bytes

**MB, Megabyte**:
A Megabyte (MB) is approximately one million Bytes

**GB, Gigabyte**:
A Gigabyte consists of approximately one thousand Megabytes

**TB, Terabyte**:
A terabyte (TB) is approximately one thousand Gigabytes

## Online Storage

- With the advent of high speed internet connections it is now possible to store your files online.  This allows you to access your files from any computer with an Internet connection.  If you wish you can also give permission for other people to access your files, for example you could allow family members to access your digital photo collection.

# Manipulating folders

## Navigating to the sample files folder

- The sample files and folders have been installed into a folder called **Cheltenham Courseware**.  The subfolder structure of this sample folder looks like this.
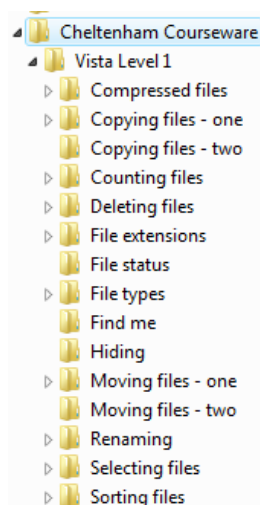


- To navigate to this sample folder and files, right click on the **Start** button (bottom-left of the screen).  From the popup menu displayed select the
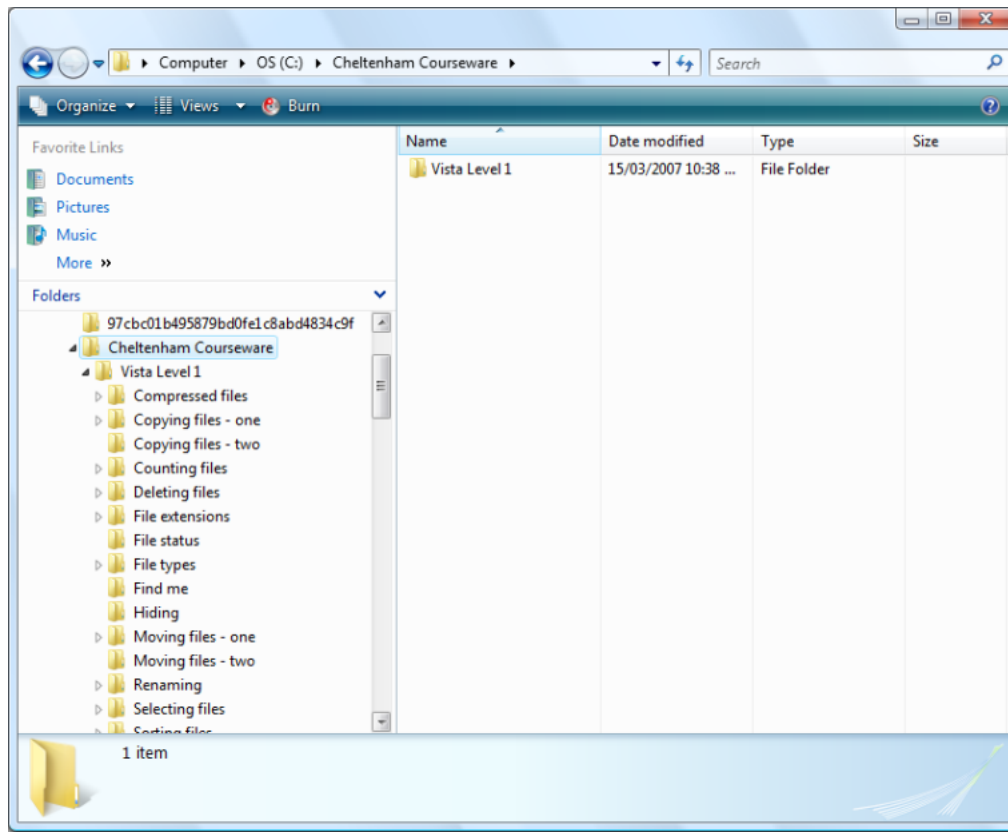
**Explore** command, which will display the **Windows Explorer** window.
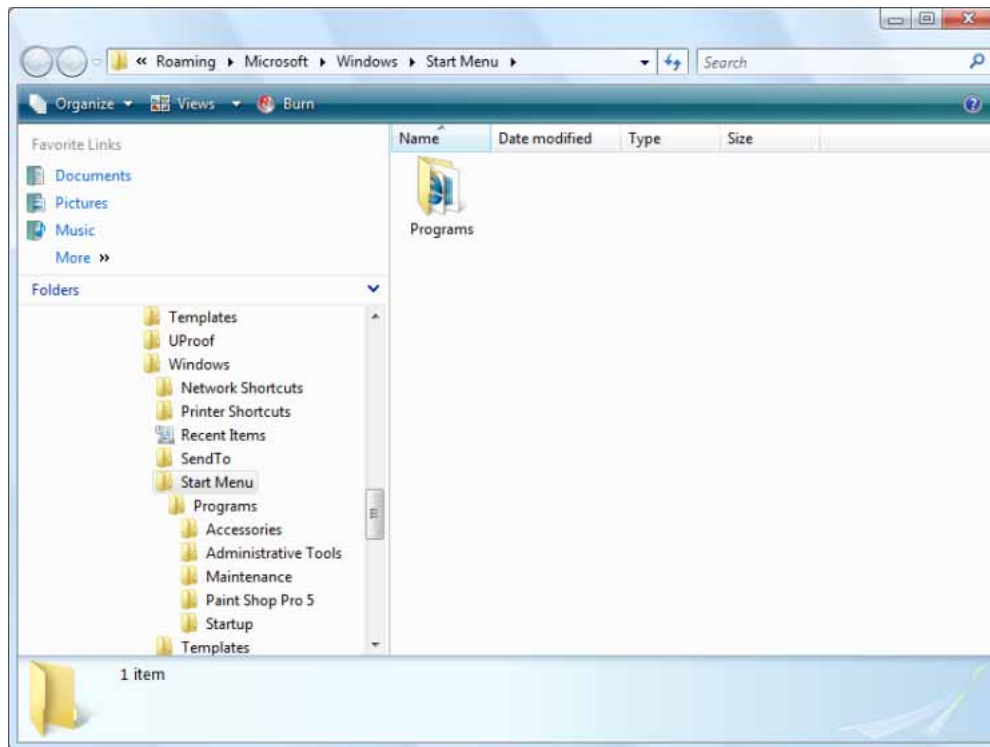


- Use the scroll bars within the left side of the window to scroll up the folder display. You should now be able to see the folder called **Cheltenham Courseware**.
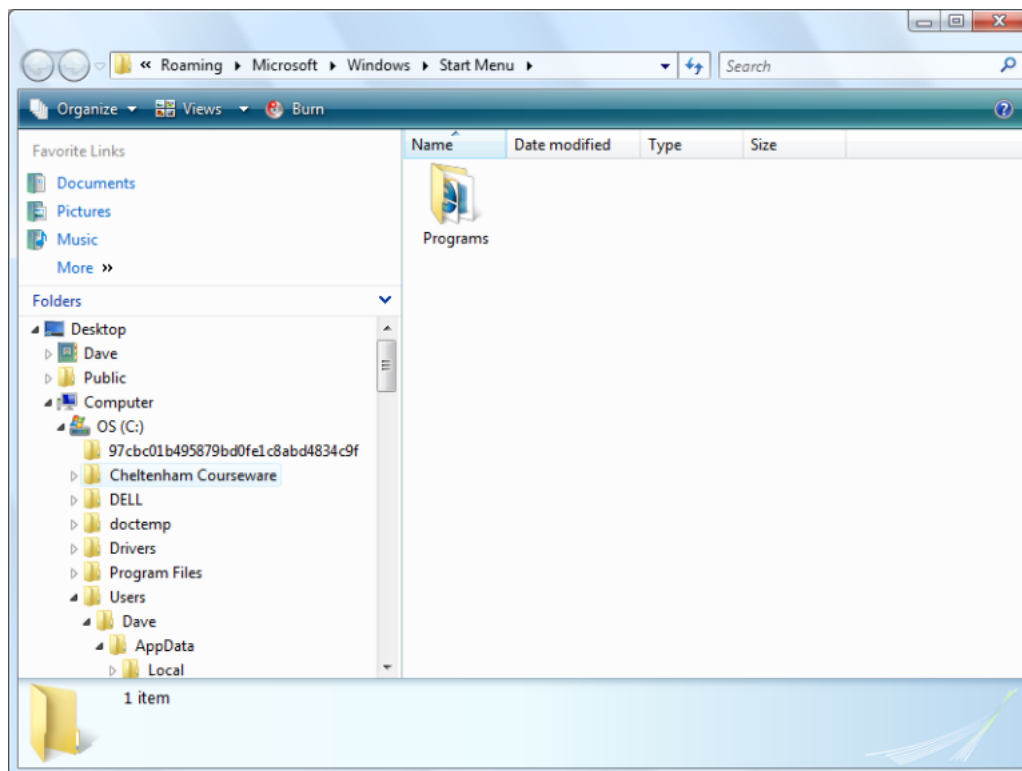
- Double click on the **Cheltenham Courseware** folder and you will see the following displayed.
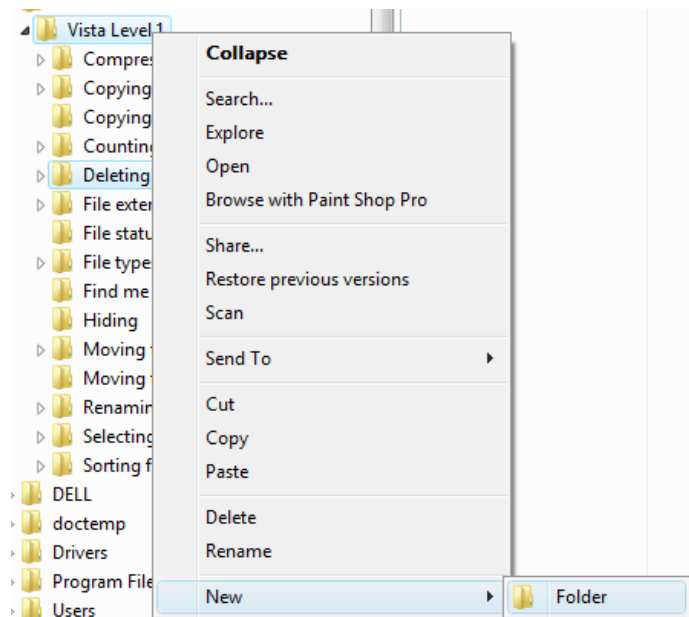


- The samples for this course are contained within the folder called Vista level 1.
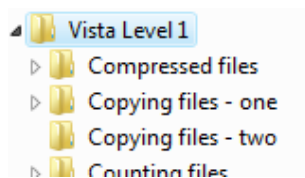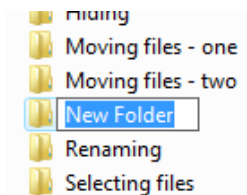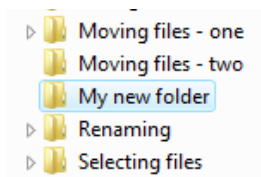


## Creating a folder

- Select the folder called **Vista Level 1**.
- Right click on the **Vista Level 1** folder and from the popup menu displayed click on the **New** command. A submenu is displayed, click on the **Folder** command.

- You will see a new folder is created and displayed within the left side of the Windows Explorer window.



- You can type in the new name and press the **Enter** key. In this case type in the name **My new folder** and press the **Enter** key. Your screen will now look like this.



## Creating a subfolder

- Select the folder called **My new folder**. Create a new subfolder, under this folder called **My backups**. Your screen will now look like this.
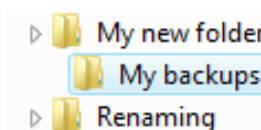
## Good practice when naming files or folders

- Use meaningful names for your files and folders. If you do this then when you access the file or folder at a later date, then just by looking at the file name you will be able to tell what the file or folder relates to.

- If a file or folder relates to a particular organisation you could include the name of the organisation within the name. If the file or folder relates to a particular purpose such as accounts or sales, then again you could include this information within the name.

- Sometimes it may be useful to include date or year information within a file name. This is particularly useful when naming files and folders that contain photographs taken with a digital camera.

## Renaming a folder

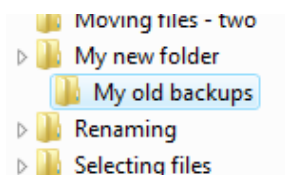- Select the folder called **My backups** and you will see the selected folder displayed like this:
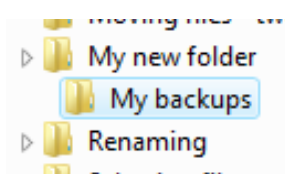
- Press the **F2** key and the folder will now be displayed like this.
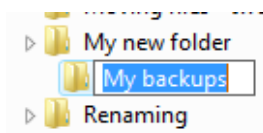
  **NOTE**: This is called editing mode. You can edit the file name by typing in a new name.
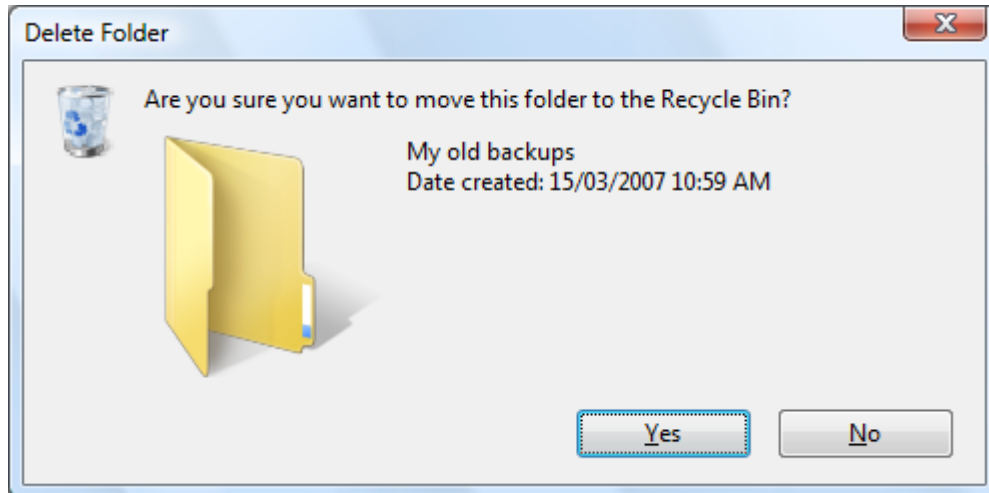
- Type in **My old backups** for the new file name. When you press the **Enter** key you will see the following.

  **TIP**: You can use the same technique to rename files.

## Deleting a folder

- Select the folder called **My old backups**.
- Press the **Del** key. You will see the following dialog box warning you that you are about to delete the folder.

- Click on the **Yes** button and the folder will be deleted.

  **TIP**: The folder is not actually deleted; it is moved to the Recycle Bin.  If you realise that you have accidentally deleted the wrong file, or if you simply change your mind, you can normally retrieve the deleted file from the Recycle Bin.

  **WARNING**: Files are not held in the Recycle Bin forever and in some cases when you delete a file it may be permanently deleted and not even go to the Recycle Bin.  Be very carefully about deleting files.  If in doubt do not delete a file!

  We will see more about the Recycle Bin later.

## Displaying folder details

- Click on the folder called **Vista Level 1** (displayed within the left side of the Windows Explorer), as illustrated.
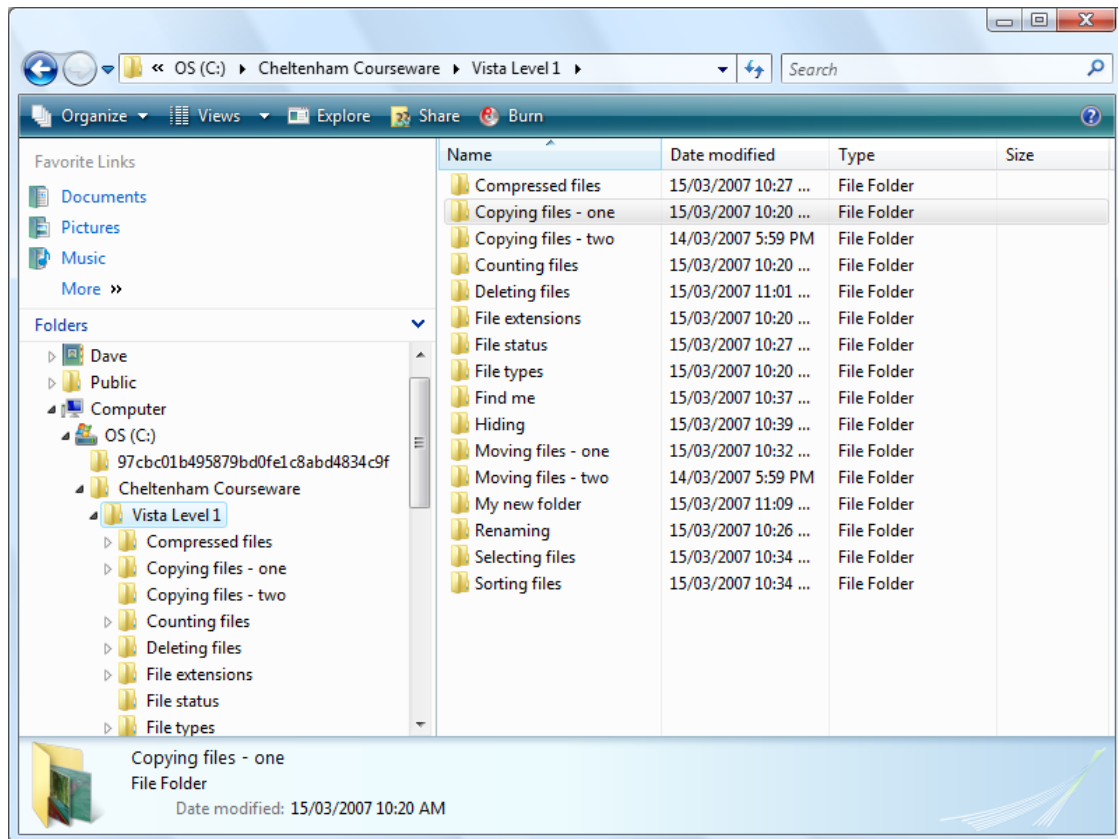
- You will see the subfolders contained within the Vista level 1 folder displayed on the right side of the window. For each subfolder, you can see the folder name and the date last modified.

- Move the mouse pointer over the folder called **Counting files**. After a short delay, you will see the following popup, displaying more details about the folder, such as the total size of the folder contents. Slowly move the mouse pointer down the list of folders and you will see details displayed for the other folders.



- Right click on the folder called **Counting files**. From the popup menu displayed select the **Properties** command.
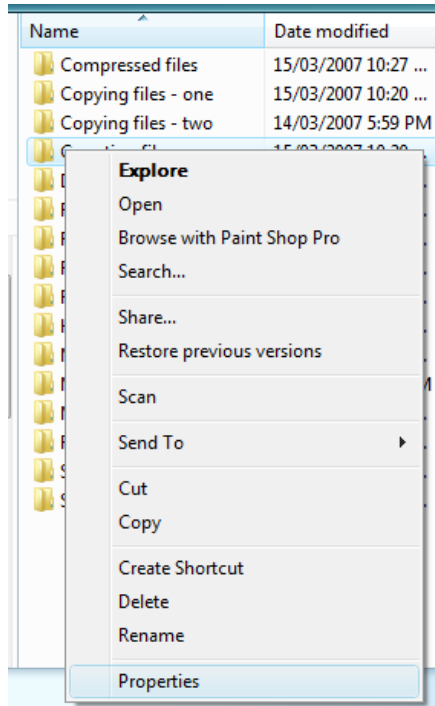
This will display even more information about the folder, such as the fact that the folder contains **15 files**. Click on the **OK** button to close the dialog box.
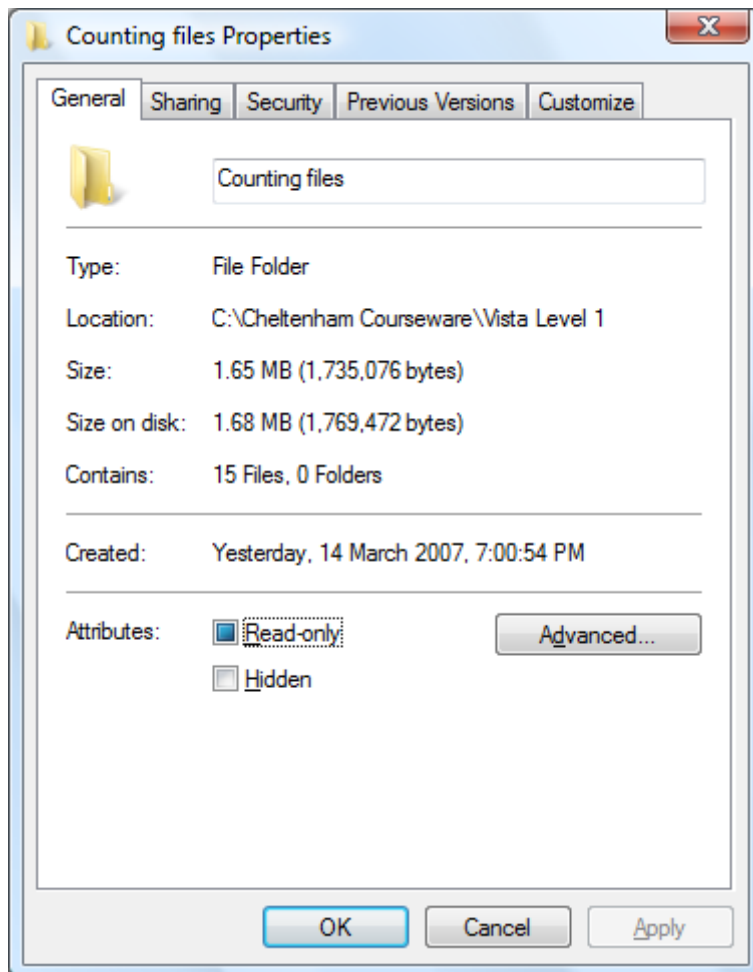
## Manipulating files

### Viewing file details

- Click on the **Counting files** folder (within the left side of the window). You will see the files within this folder displayed in the right side of the window, as illustrated. You can view the file name, date modified, file type and file size.
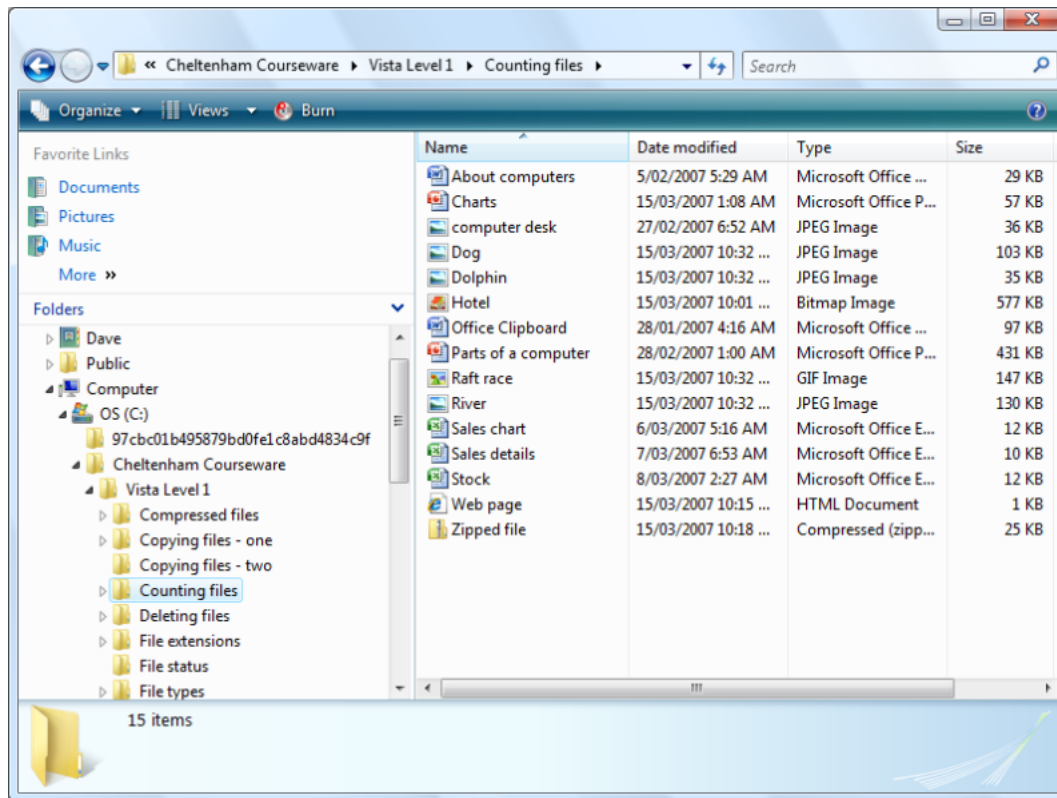
- Move the mouse pointer over (but do not click on) the file called **Dolphin**. You can see from the **Type** column that this is an image file. After a short delay you will see a popup displaying more information about the image, such as the dimensions of the image.
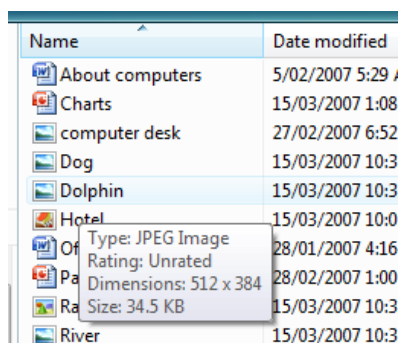
  Slowly move the mouse pointer down the list of files and see what additional information is displayed about other types of files when you point to a file.

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- Click on the file called **Dog**. This is an image file and you will see a preview of the image in the bottom-left section of the window.
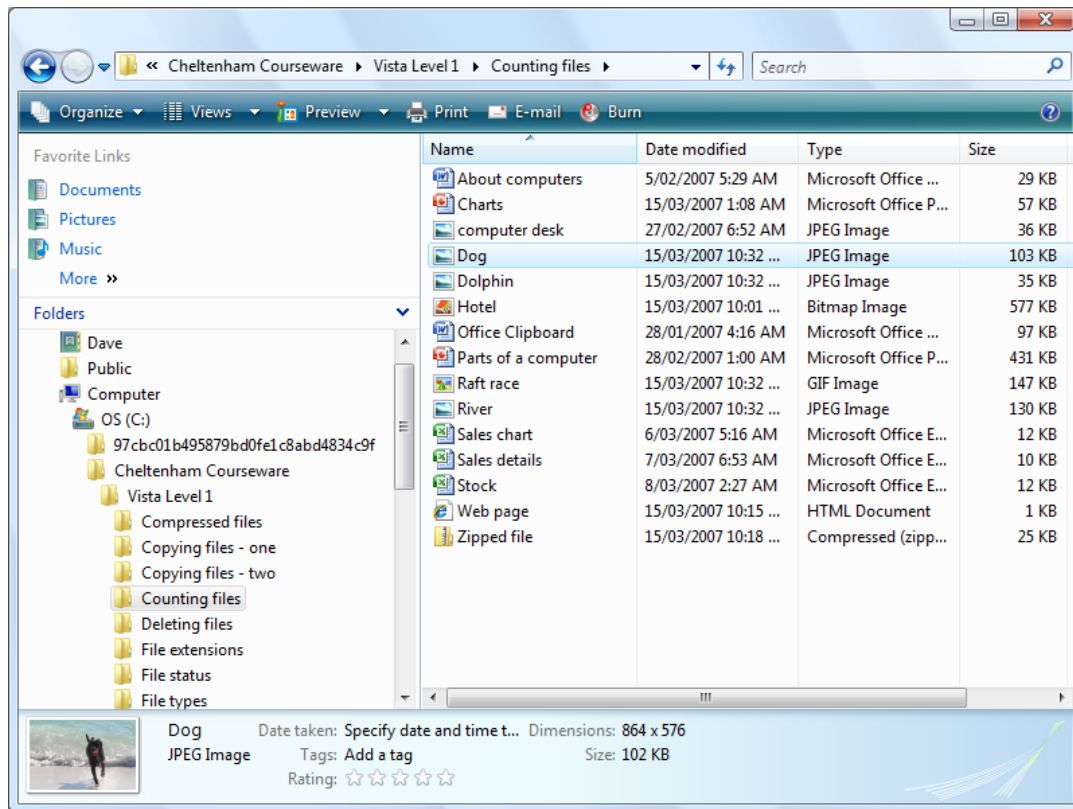


- Right click on the selected file and from the popup menu displayed select the **Properties** command.
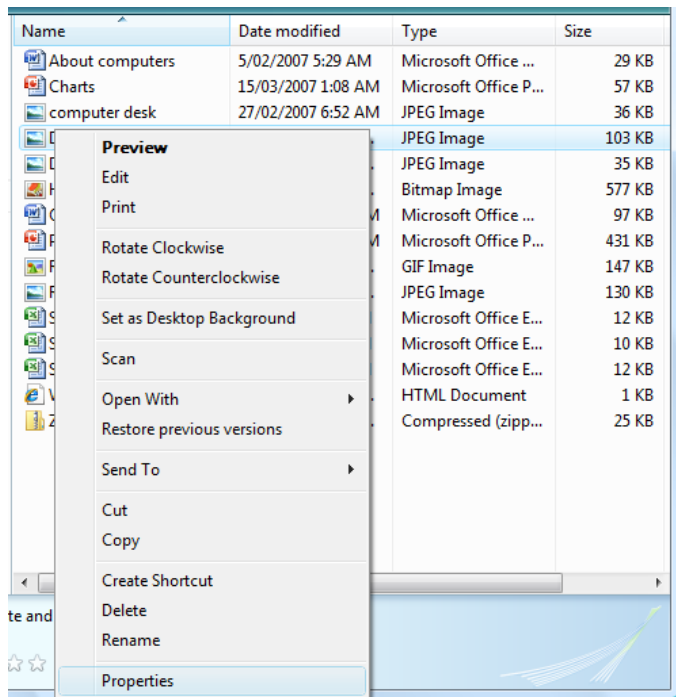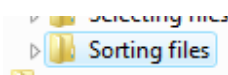
- This will display the **Properties** dialog box for the selected file, displaying even more detailed information about the file. Click on the **OK** button to close the dialog box.
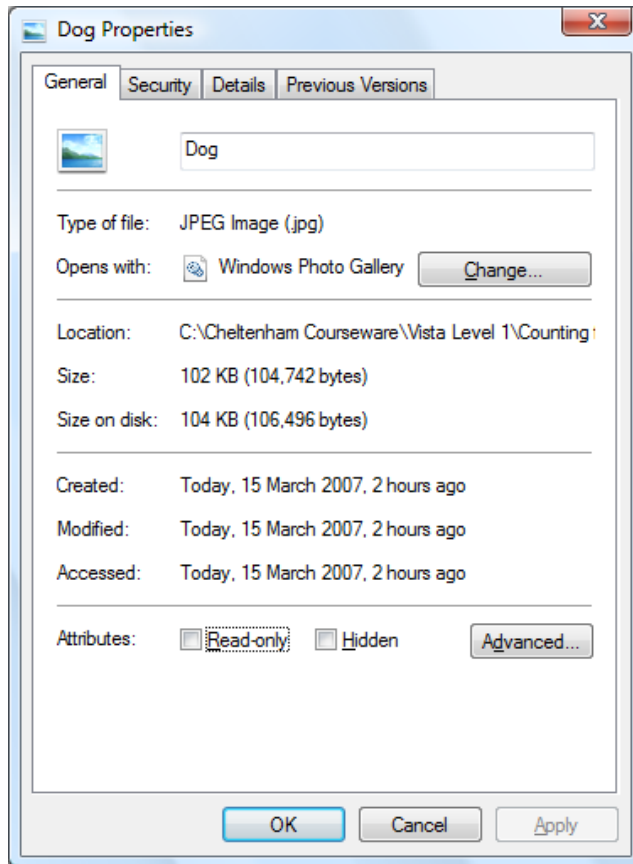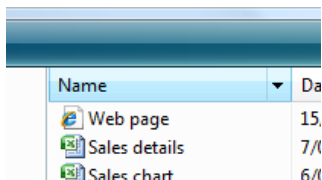


## Sorting the file list within the Windows Explorer

- Within the left section of the window, select a folder called **Sorting files**.



- Move the mouse pointer to the word **Name** displayed at the top of the first column of information.



- Click once. Click a few more times. Each time you click the list is ordered A-Z or Z-A, as illustrated.

- Move the mouse pointer to the words **Date Modified** displayed at the top of the second column of information. Repeated clicking on this will reorder the display in ascending or descending date order.

- Move the mouse pointer to the word **Type** displayed at the top of the third column of information. Clicking on this will sort the files by type, as illustrated.



**TIP**: In the example illustrated, the **Type** column is not wide enough to display the information within it. To make the column wider, move the mouse pointer to the vertical line separating the top of the **Type** and **Folder** column. You will see the mouse pointer changes to the shape of a small cross with arrows pointing left and right. Press the mouse button and drag the column border to the right and when you release the mouse button the column will be wider. The column will then look like this. You may also have to make the program window itself wider to display the information!

- You can use the **Size** column to sort the files according to their file size.

## Recognising common file types

- View the contents of the **File types** folder.
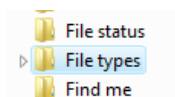


- This folder contains a range of different file types.



- **Common file types include.**

  **Application (executable) files:**
  These are files that contain programs and which you can 'run'. If you select an executable file within the Windows Explorer and double click on it, then

the file will run the program within it. There are many different types of executable files. Mostly we will be interested in running application program files that contain our programs, such as a word processor or a spreadsheet program. Do not confuse the executable files with the data files. If you look within the **Windows** folder on your hard disk you will see a number of application files, as illustrated below.

| | | | |
|---|---|---|---|
| explorer | 14/11/2007 1:02 PM | Application | 2,855 KB |
| fveupdate | 2/11/2006 6:45 PM | Application | 13 KB |
| HelpPane | 2/11/2006 6:45 PM | Application | 486 KB |
| hh | 2/11/2006 6:45 PM | Application | 15 KB |
| notepad | 2/11/2006 9:32 PM | Application | 148 KB |
| regedit | 2/11/2006 6:45 PM | Application | 132 KB |

As you can see from the illustration above, provided that you view the files within the Windows Explorer in **Details** view, then the file type is normally listed. In the case above you can see it is listed as an **Application**, i.e. executable file.
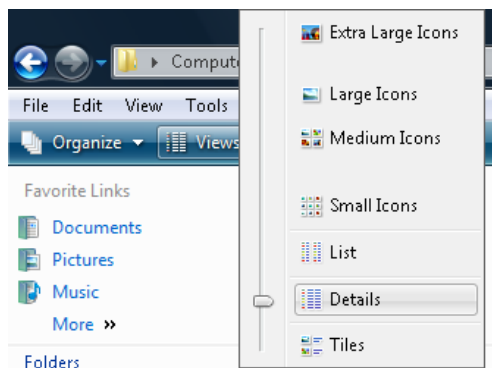
**Text Documents:**
As the name suggests text documents contain only text. No pictures or formatting information can be stored in a text-only file.

**Bitmap Images:**
This is a type of picture format.

**GIF Images:**
This is a type of picture format.

**JPEG Images:**
This is a type of picture format.

**Microsoft Office Word Documents:**

These are documents created using the Microsoft Word, word processing program.

**Microsoft Office Excel Worksheet:**
These are documents created using the Microsoft Excel spreadsheet program.

**Microsoft Office PowerPoint Presentation:**
These are document created using the Microsoft PowerPoint presentation program.

**Microsoft Office Access Database:**
These files are created using the Microsoft Access Database program.

**HTML documents:**
These are documents formatted for displaying on a Web site.

**Zipped (compressed) files:**
These are compressed files.  You compress files to save disk space or to make them smaller when you send them via an email attachment.

**Adobe Acrobat PDF files:**
PDF is short for Portable Document Format.  This format was introduced by a company called Adobe and can be created by a program called Adobe Acrobat.  The idea of PDF files is that you can create file with your own particular make and version of software, such as a word processor or spreadsheet and then save the file as a PDF formatted file.  This PDF file can then be viewed by anyone using a free PDF reader, such as the Adobe Acrobat Reader program.  To put it another way, if someone procures some artwork in a program such as Adobe Photoshop, they can save the file in PDF format, send it to you and you can then view the file, without the need to have the Photoshop program installed on your computer.  PDF files are a way of exchanges documents.  There are many other products that will create PDF files for you as well as the full versions of the Adobe Acrobat program.  Often you can create PDF files which have a much smaller files size compared to the original format.  This makes PDF files ideal for storing documents on a web site, or for attaching as files to emails.

**Audio files MP3:**
There are files that store sound, normally music or speech.  The icon used to display these files will vary according to what programs you have installed to play your music files.

**Video files: AVI, Video files - MPG & WMV (Windows Media Video)**

These are different types of file formats used to store Video. The icon used to display these files will vary according to what programs you have installed to play your video files.

**Temporary files:**

These files, as the name implies, are normally created as temporary files which are deleted after use.  Both Windows and application programs can create temporary files which are used to store information on a temporary basis and which are deleted when they are no longer used.  If the computer crashes you may find that some files which were meant to be temporary are present as they were not automatically deleted.

## Selecting multiple files

- Within the left side of the window, click on the folder called **Selecting files**.

- This will display the following files.

- Click on the file called **Sales details**.  This will select that file, as illustrated.

- Click on another file, such as **Charts**.  The second file will be selected and the first file de-selected, as illustrated.

| Name | Date modified |
|------|---------------|
| Web page | 15/03/2007 10:15 ... |
| Sales details | 7/03/2007 6:53 AM |
| Sales chart | 6/03/2007 5:16 AM |
| Stock | 8/03/2007 2:27 AM |
| Zipped file | 15/03/2007 10:18 ... |
| About computers | 5/02/2007 5:29 AM |
| Dolphin | 15/03/2007 10:32 ... |
| computer desk | 27/02/2007 6:52 AM |
| Charts | 15/03/2007 1:08 AM |
| Office Clipboard | 28/01/2007 4:16 AM |
| Dog | 15/03/2007 10:32 |

**TIP**: Selecting multiple files is useful as once you have selected multiple files, you can manipulate all the files at the same time, rather than one file at a time, as we will see later.

- To select more than one file you need to use a trick.  Click on the file called **Dog**.  Then press the **Ctrl** key (and keep it pressed).  Then click on the file called **Sales Details**.  Finally click on a file called **Raft race**.  Release the **Ctrl** key and all three files will remain selected, as illustrated.

| Name | Date modified | Type | Size | Tags |
|------|---------------|------|------|------|
| Web page | 15/03/2007 10:15 ... | HTML Document | 1 KB | |
| Sales details | 7/03/2007 6:53 AM | Microsoft Office E... | 10 KB | |
| Sales chart | 6/03/2007 5:16 AM | Microsoft Office E... | 12 KB | |
| Stock | 8/03/2007 2:27 AM | Microsoft Office E... | 12 KB | |
| Zipped file | 15/03/2007 10:18 ... | Compressed (zipp... | 25 KB | |
| About computers | 5/02/2007 5:29 AM | Microsoft Office ... | 29 KB | |
| Dolphin | 15/03/2007 10:32 ... | JPEG Image | 35 KB | |
| computer desk | 27/02/2007 6:52 AM | JPEG Image | 36 KB | |
| Charts | 15/03/2007 1:08 AM | Microsoft Office P... | 57 KB | |
| Office Clipboard | 28/01/2007 4:16 AM | Microsoft Office ... | 97 KB | |
| Dog | 15/03/2007 10:32 ... | JPEG Image | 103 KB | |
| River | 15/03/2007 10:32 ... | JPEG Image | 130 KB | |
| Raft race | 15/03/2007 10:32 ... | GIF Image | 147 KB | |
| Parts of a computer | 28/02/2007 1:00 AM | Microsoft Office P... | 431 KB | |

- Click on a different file and the multiple files are no longer selected.

- Sometimes you may wish to select a block of files that are displayed next to one another.  To do this we use a different trick.  First list your files in alphabetical **A-Z order** by clicking at the top of the **Name** column.  Your files are listed as illustrated.

- Click on the file called **Dog**. Press the **Shift** key and keep it pressed. Click on the file called **River** and then release the **Shift** key. All the files between the first and second file that you clicked on remain selected, as illustrated.



- Click on a different file and the multiple files are no longer selected.

  **TIP**: These tricks using the **Shift** or **Control** keys also work when selecting multiple folders.

## Counting the number of files, files of a particular type in a folder

- Display the contents of the folder called **Counting files**.
- First list your files by type by clicking at the top of the **Type** column.
- Select all the **JPEG** image files as illustrated.

- As you can see there are four JPEG image type files. If there were a lot more you can use a trick to count up the number of selected files. Right click over the selected files and you will see a popup menu. Click on the **Properties** command which will display a dialog box. Within the dialog box it tells you how many files you have selected, as illustrated.
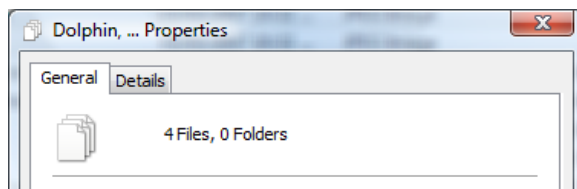


- Close any open dialog boxes.

## Changing file attribute status

- Display the contents of the folder called **File status**.
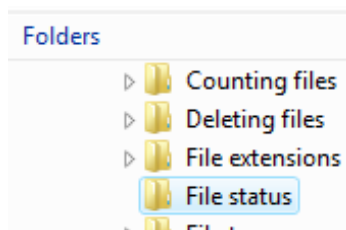


- Click on a file called **Sales chart**. Right click on this file and from the popup menu displayed select the **Properties** command. This will display the **Properties** dialog box for the selected file.
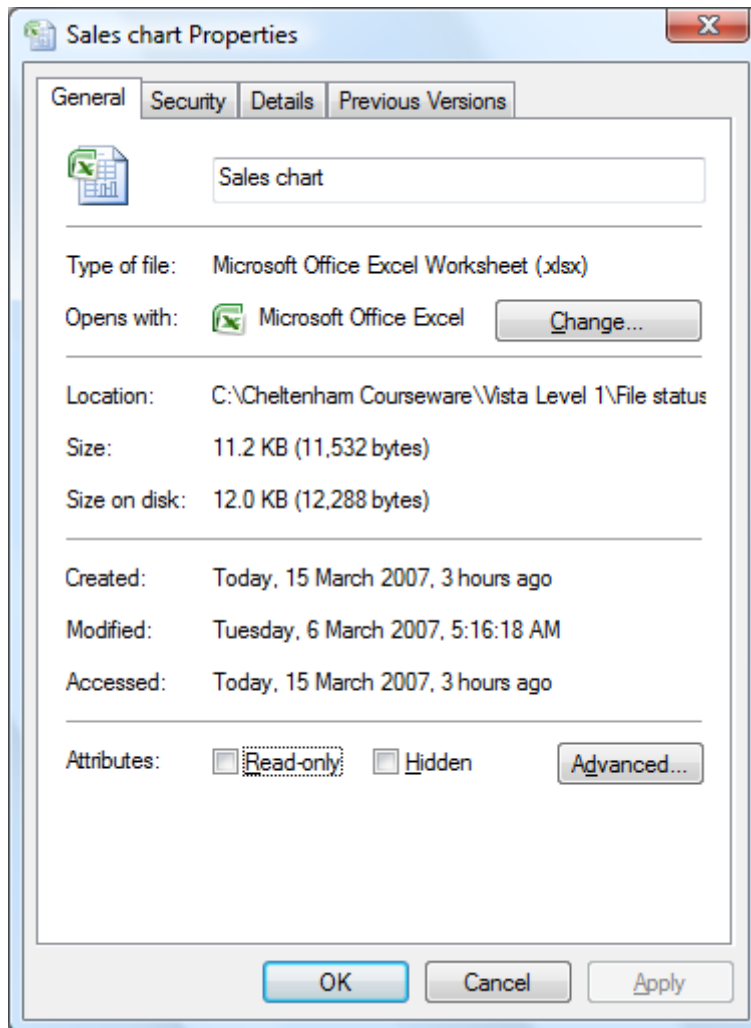
- In the **Attributes** section of the dialog box you can click on the **Read-only** check box.
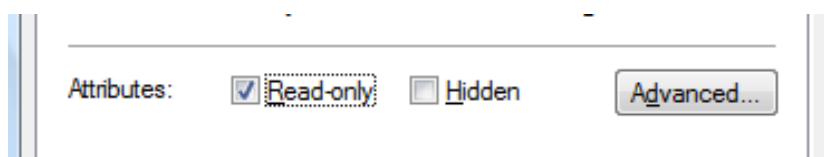


- This will mark the file as read-only.  Try it now and then press the **OK** button to confirm the action.

  **NOTE**: If you make a file read-only you can still delete the file (by selecting it and pressing the **Del** key).  However if you were to open the file then the file would open without any problem, but if you edited the file you would have the save the file using a different file name as the original file name is marked read-only.

- Use the same technique to mark the file read/write again, and after closing the properties dialog box, re-open the dialog box to confirm this change. Close all open dialog boxes before continuing.

## Renaming files

- Display the contents of the folder called **Renaming**.
- Select the file called **Stock**.  Press the **F2** key and type in a new file name called **Stock Levels**.  Press the **Enter** key to confirm the file renaming.

  **NOTE**: Normally you just see the file name without what is called the file name extension.  The file name extension is normally 3 or 4 letters, preceded by a dot (period).  For instance a text-only file has a file name extension of .TXT.

  **WARNING**: To keep the display simple and uncluttered the file name extensions are not normally displayed within the Windows Explorer.  If you do see the file name extension displayed, **be very careful not to alter the extension** when you are renaming a file.

  Windows can use the file name extension to tell what sort of file type a particular file is.  If you change the extension Windows may no longer understand how to process a particular file!

## Deleting files

- Display the contents of the folder called **Deleting files**.
- Select the file called **About computers**.  Press the **Del** key to delete the file and you will see the following.
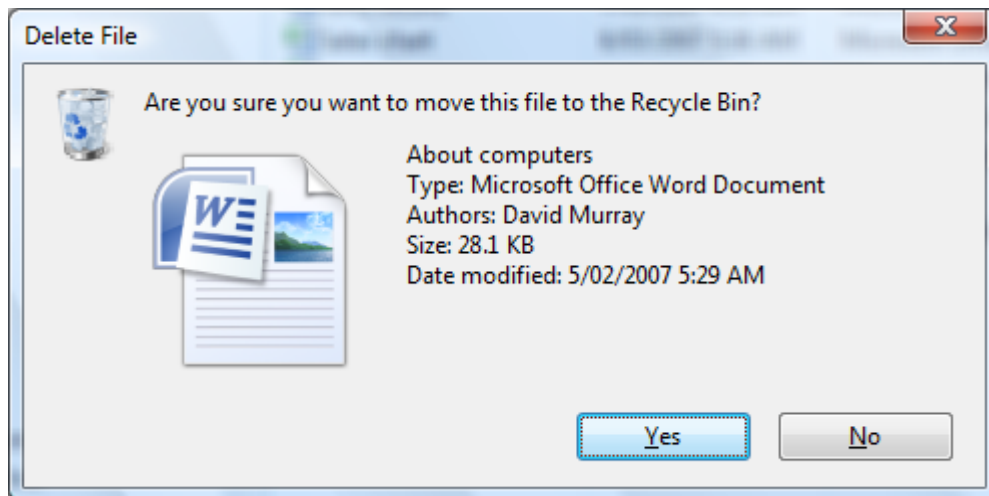


- Click on the **Yes** button to confirm the deletion.  The file appears to be deleted but is actually moved to the **Recycle Bin**.  The Recycle Bin is an area on your hard disk used to store files that you have deleted.

  **TIP**: If you wish to delete a file completely rather than send it to the Recycle Bin, press the **Shift** key while you are deleting the file.  **Use this trick with caution as you will NOT be able to recover the file once you have deleted it!**

## Restoring files and folders from the Recycle Bin

- Click on the **Show Desktop** icon (displayed at the bottom left of your screen next to the **Start** button).

- This will allow you to see the **Recycle Bin** icon on the Windows Desktop.

- Double click on the **Recycle Bin** and you will see the following.
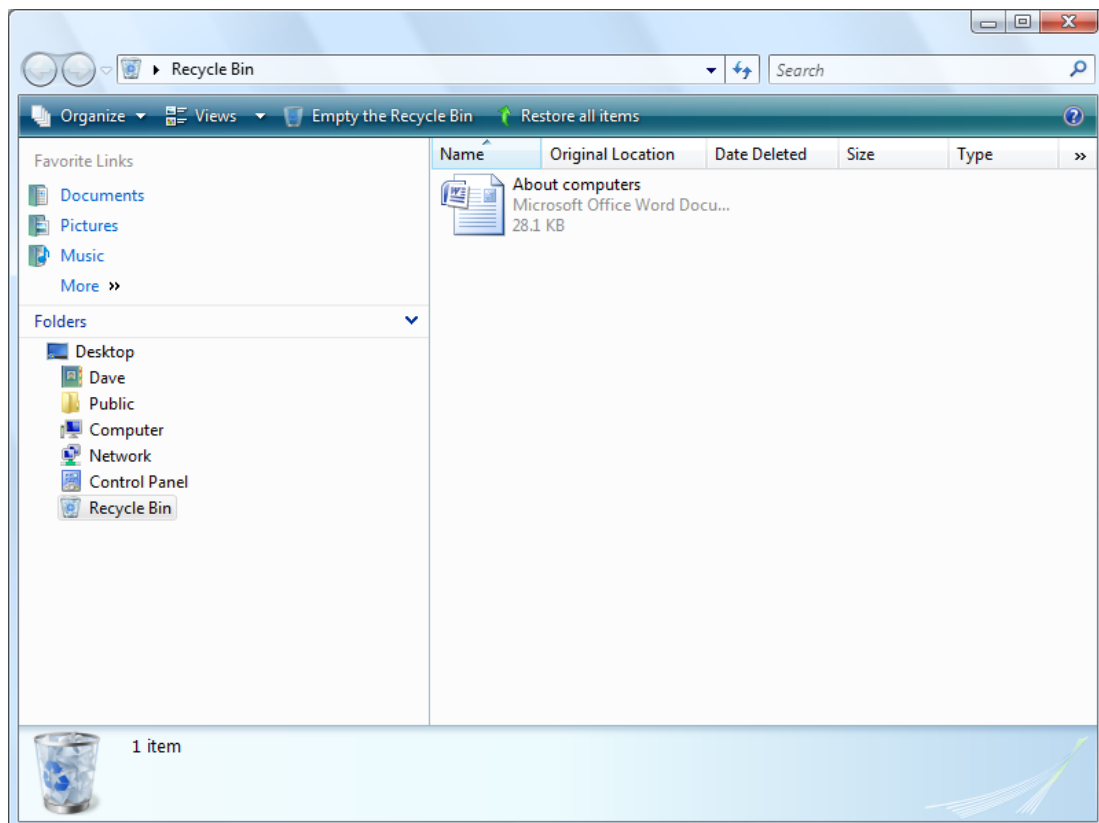
**TIP**: You may see lots more files contained within the Recycle Bin. If so ignore the other files, just concentrate on the file we have just deleted.

- To restore the **About Computers** file, first select the file and then click on the **Restore this item** command displayed towards the top of the window.
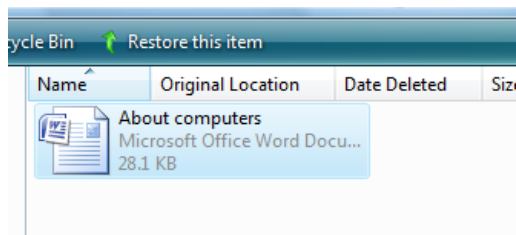
- The file will no longer be displayed within the Recycle Bin. Close the Recycle Bin. Click on the **Show Desktop** icon again and you should see the Windows Explorer window with the file that you deleted once again displayed.

## Emptying the Recycle Bin

- Experiment with deleting more files within the **Deleting files** folder. Open the Recycle Bin. If you want to permanently remove files from the Recycle Bin rather than restoring them (i.e. un-deleting them), then click on the **Empty Recycle Bin** button displayed within the Recycle Bin.



# Copying and moving files

## The Windows Clipboard

- The Windows Clipboard is an area of memory used for moving or copying items from one place to another. There are a number of Clipboard related, keyboard shortcuts which you should memorise.
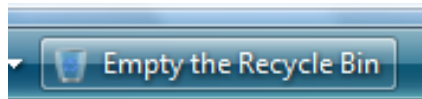
    **Ctrl+X** - Moves the selected item to the Clipboard.
    **Ctrl+C** - Copies the selected item to the Clipboard.
    **Ctrl+V** - Pastes the item from the Clipboard.

## Moving files between folders

- Display the contents of the folder called **Moving files - one**.
- Select a file called **About computers**. Press **Ctrl+X**. This cuts (i.e. moves) the selected file to the Clipboard.
- Select the folder called **Moving files - two**. Press **Ctrl+V.** This will paste the contents of the Clipboard to the selected folder.
- Experiment with selecting multiple files and moving them from one folder to another.

    **TIP**: You can use the same technique for moving entire folders from one place to another.

**TIP**: You can use the same technique for moving a file from a folder on one disk to a folder on another disk.

## Copying files between folders

- Display the contents of the folder called **Copying files - one**.
- Select a file called **About computers**. Press **Ctrl+C**. This copies the selected file to the Clipboard.
- Select the folder called **Copying files - two**. Press **Ctrl+V.** This will paste the contents of the Clipboard to the selected folder.
- Experiment with selecting multiple files and copying them from one folder to another.

   **TIP**: You can use the same technique for copying entire folders from one place to another.

   **TIP**: You can use the same technique for copying a file from a folder on one disk to a folder on another disk.

## Backups

- Within a business environment you will normally use a computer that is connected to a network. In many cases your important data files will be automatically backed up for you and stored securely elsewhere on the network. You need to check with your IT support people that backups are performed automatically.

- In many small businesses or organisations little or no attention is given to the need to backup your data, until the day your computer breaks down or gets stolen, at which point you may have lost years of data.

- If the data you produce is important it is your responsibility to make sure that it is regularly backed up.

- You can backup across a network or to a removable device attached to your computer. You can copy your files to a CD or DVD disk and then store these safely. Alternatively you may have the facility to backup to a tape device. Many people backup data to so called 'memory sticks'. Memory sticks are small devices you can plug into your computer sockets, within the Windows Explorer they look just like a normal drive and have a drive letter assigned to them.

- Whatever backup method you use, there are three basic principles when it comes to backups.

   **Off site storage:** It is no use backing up your data to say a DVD, and leaving the backup copies next to your computer. If your computer gets stolen, chances are the backup disks will also get stolen. Always store your backups offsite.

**Regular backups**: Perform separate backups on a regular basis.  Even if one of the backups contains an error, the chances are that the rest will be OK.

**Check the backup:**  Every so often just check that you can restore the backed up data to a computer.  Do not overwrite the latest version of your data with an earlier version, just simply check that the backup mechanism has not been corrupted.  Also check what has been backed up.

## Online Backups

- Many copies now backup data online.  This may be over the private Local Area Network, to an offsite server that is owned by the company.  This has the advantage that backup data is easily access by everyone that needs access within the company so that backups can be shared when necessary.
- Many companies now have automated backups that back up over the Internet, on some cases to servers in different countries that are house in secure bunkers.  This makes the backed data almost impossible to lose, although storing your data in a different country may raise data protection issues in some countries.

## Backing up data to a removable drive

- If you have a memory stick available, insert the memory stick into one of the 'USB' sockets on your computer.  You will see the **AutoPlay** window displayed.
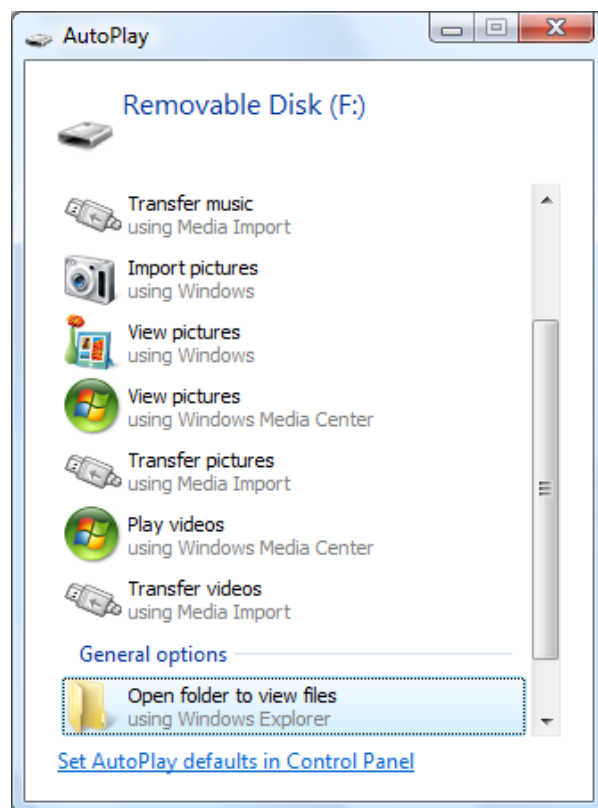
- Click on the **Open folder to view files** option. This will open the **Windows Explorer** allowing you to copy files to this device. You can select the files within one of your sample folders and press **Ctrl+C** to copy the file to the Clipboard.

- Select the removable drive and press **Ctrl+V** to paste the contents of the Clipboard to the removable drive.

```
▲ 🖥 Computer
   ▷ 💾 OS (C:)
   ▷ 📀 RECOVERY (D:)
   ▷ 💿 DVD RW Drive (E:)
   ▷ 🔌 Removable Disk (F:)
▷ 📡 Network
```
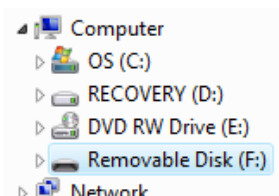
# File compression

## What is file compression?

- File compression lets you make the size of files smaller. This is useful when you need to save space on a disk or when you are sending a file as an email attachment and you want to keep the size of your attachments as small as possible.

## Extracting compressed files

- Display the contents of a folder called **Compressed files**. This folder contains a single file called **Zipped file**, as illustrated.

| Name | Date modified | Type |
|------|---------------|------|
| 📁 Zipped file | 15/03/2007 10:18 ... | Compressed (zipped) Folder |

- Select the file called **Zipped file**. Double click on this file and the Zipped file will decompress and display 3 files which were compressed and stored within the Zip file.
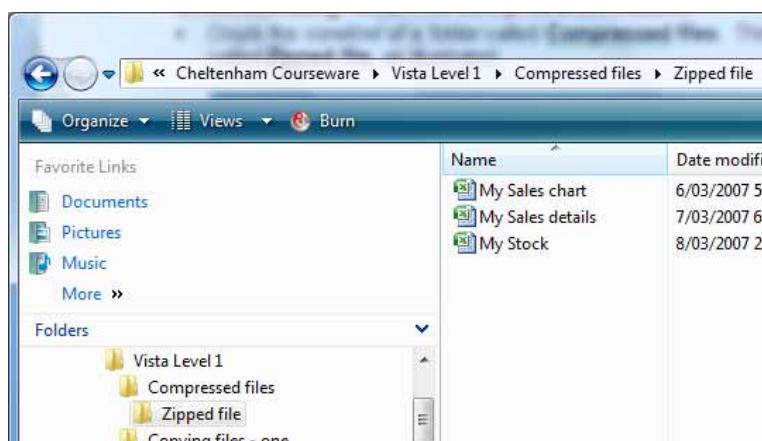
## Compressing files

- Select all the files within the **File Types** folder.  Right click over the selected files and from the popup menu displayed select the **Send To** command. From the submenu, click on the **Compressed (zipped) Folder** command.
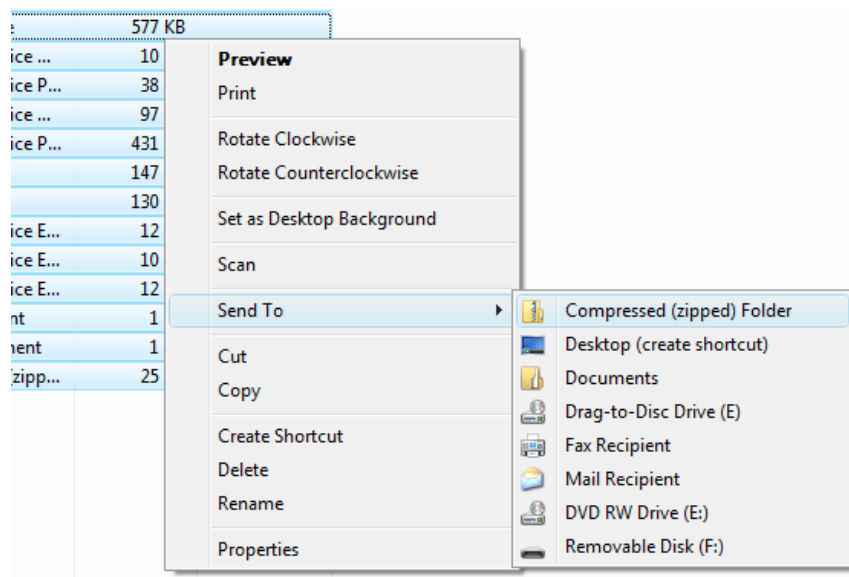


- The selected files will be compressed into a single file.  You can type in a new name for the ZIP file, in this case called i.e. **My backups**.

## Disk formatting

- **WARNING:  These notes relating to formatting are just for reference.**

  **DO NO FORMAT A DISK UNLESS**
  **SPECIFICALLY DIRECTED TO DO SO**
  **BY YOUR TUTOR.**

  The hard disk inside your computer is formatted ready for use when you first purchase your computer.  You can think of formatting a disk as printing lines on a notepad so that you can later write on the notepaper.  When PCs were first introduced they all had floppy disk drives rather than the CD/DVD drives that we are familiar with today.  There are still many PCs with built-in floppy disk drives and you can insert a removable floppy disk into these drives. Floppy disks are generally supplied pre-formatted, but sometimes it may become necessary to reformat the disk.

  **WARNING**: If you format a disk then you will lose any data contained on that disk.  Formatting wipes a disk clean!

- To format a removable disk, first open the **Windows Explorer** (by right clicking on the **Start** button and from the popup menu displayed, selecting the **Explore** command).
- Select the removable disk you wish to format, as illustrated.
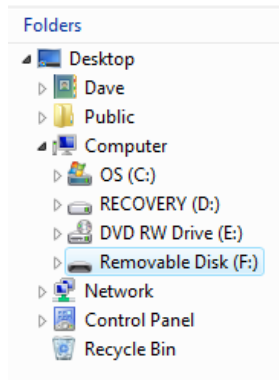
- Right click in the disk you want to format and from the popup menu displayed, select the **Format** command.
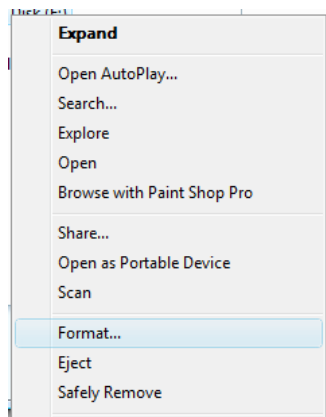


- You will see the **Format Removable Disk** dialog box, as illustrated.
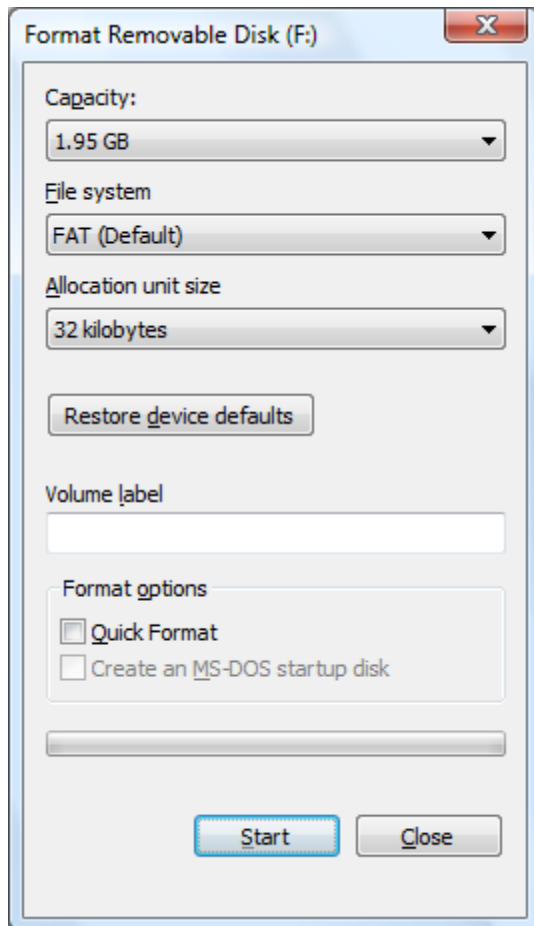
- To start the format process click on the **Start** button, but remember that if you do this you will lose any data contained on the removable disk.  You will see a warning dialog box.
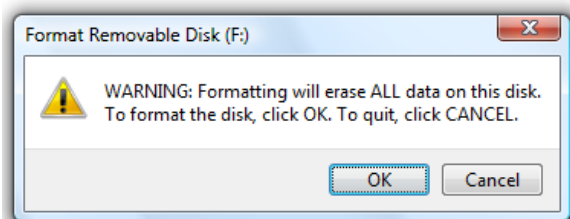


**TIP**: Never use the **Quick Format** option.  While this option is very quick, the results may be unreliable.

# Searching for data

## Viewing recently accessed files

- Click on the **Start** button and then click on the **Recent Items** command. You will see a submenu allowing you to click and open recently opened files.

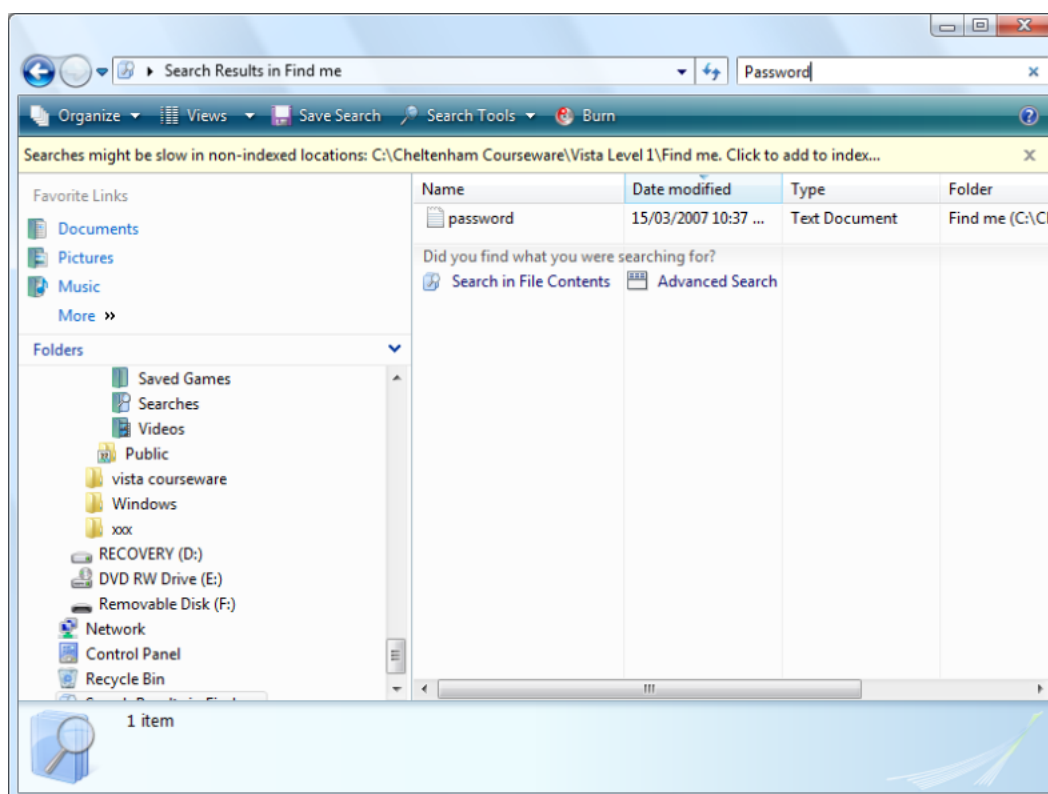## Searching for files on your hard disk

- Click on the **Start** button and then click on the **Search** command.
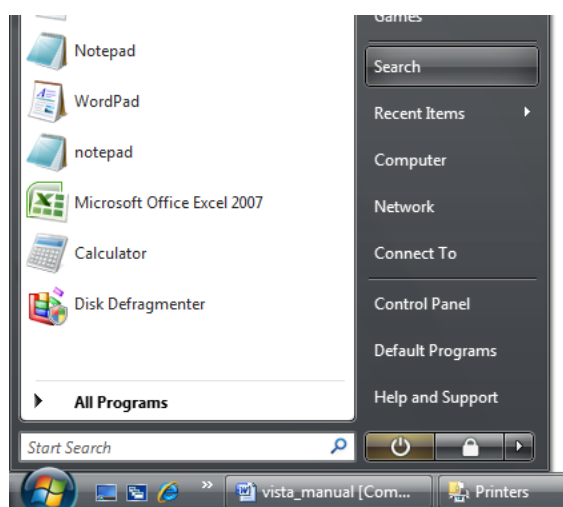
- This will display the **Search** dialog box.
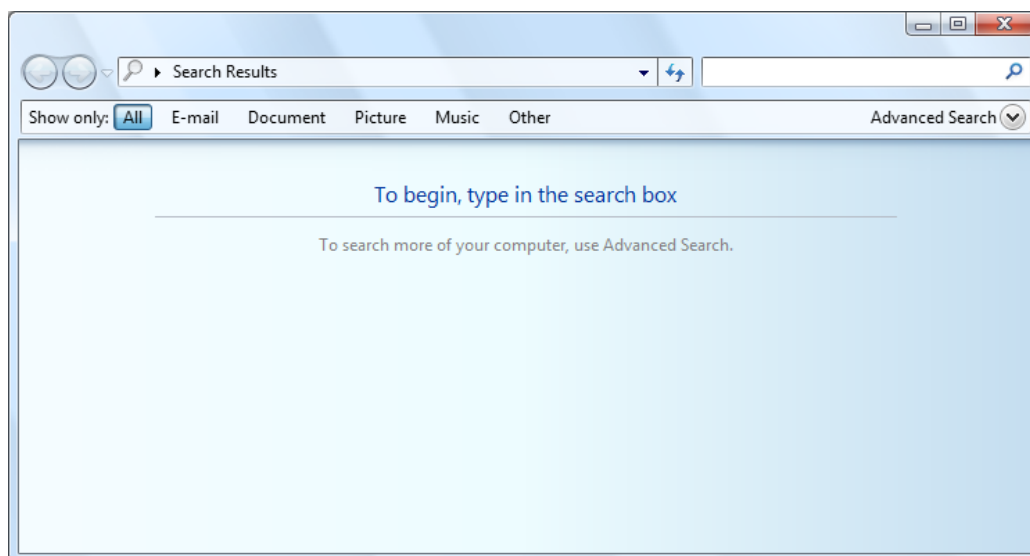


- To find a file called **Password**, you would type in the name of the file into the dialog box, as illustrated. You will see that additional information is now displayed within the dialog box.
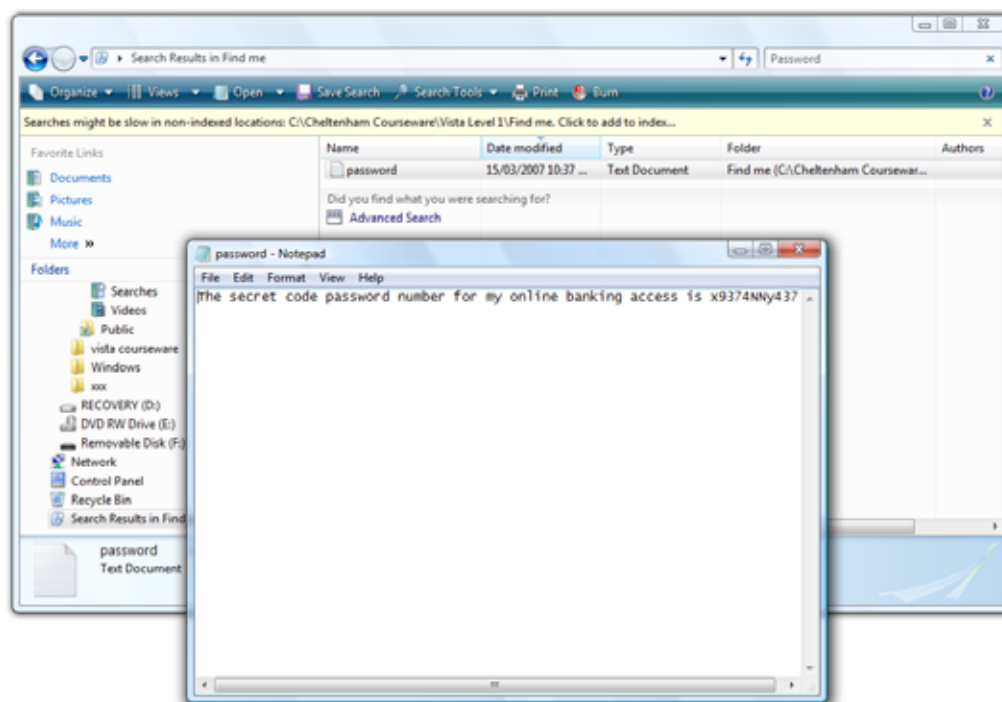


- Click on the **Search in File Contents** icon and you will see the following displayed.
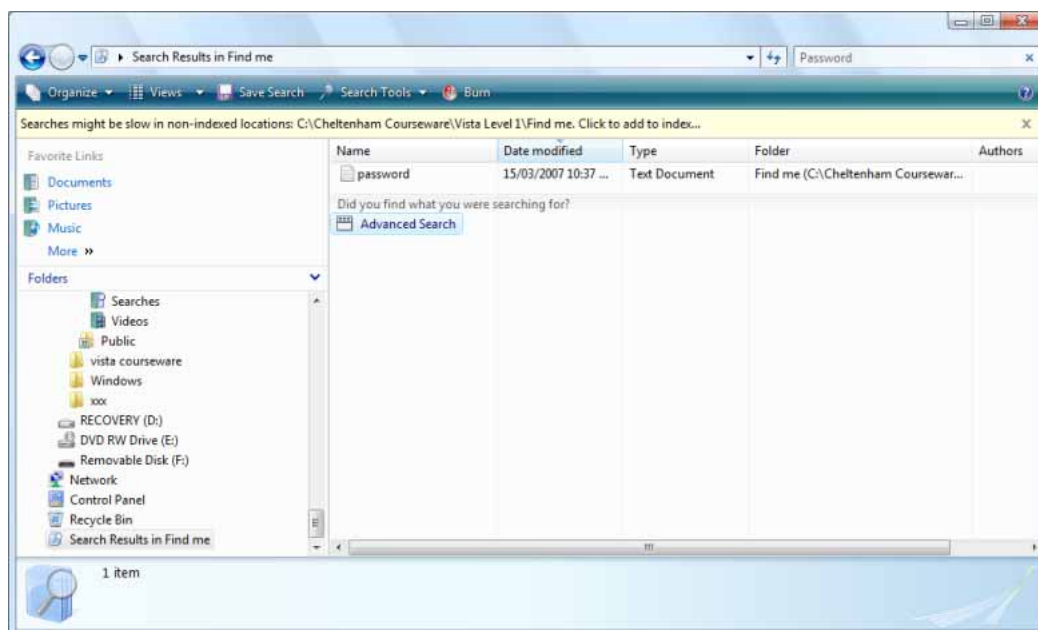
**TIP**: You may want to resize the window so that the window is wider. You may also want to resize the columns so that you can see the **Folder** location (i.e. the folder in which the file is stored).
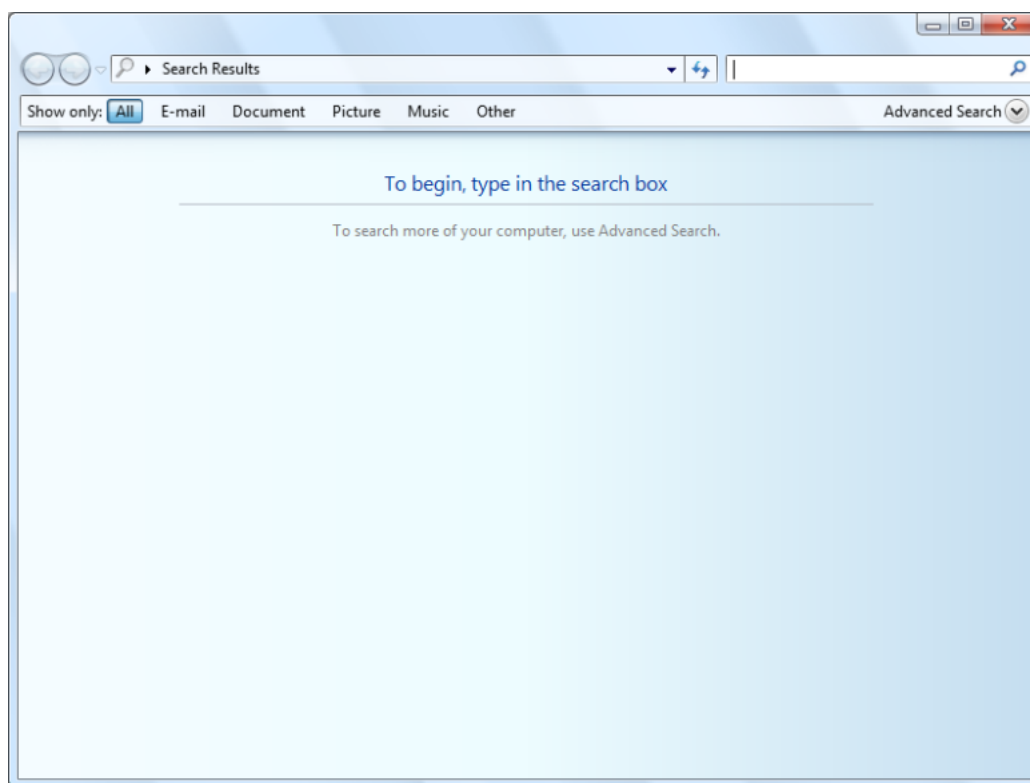
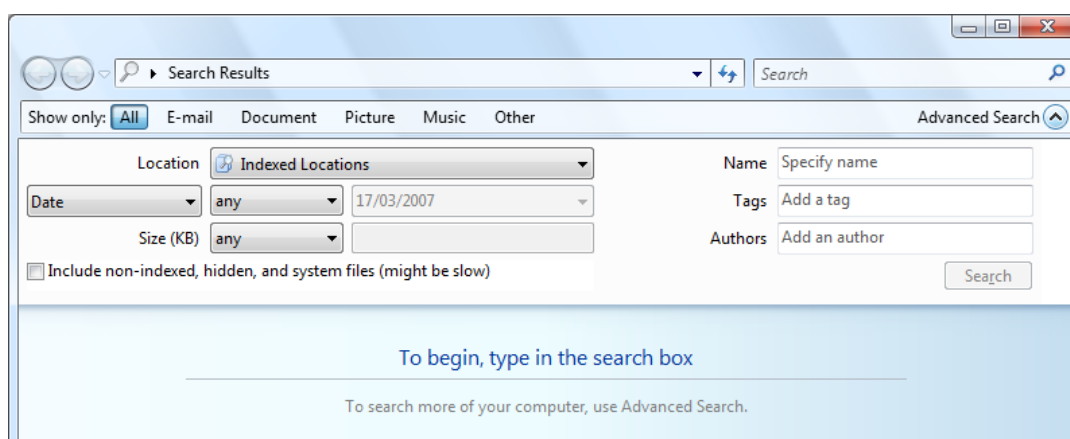- Double clicking on the file will display the file contents, as illustrated.



- Close all open windows.

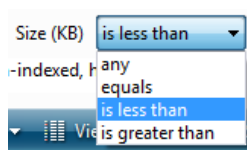## Advanced searching by file size

- Click on the **Start** button and then click on the **Search** command. You will see the following dialog box displayed.
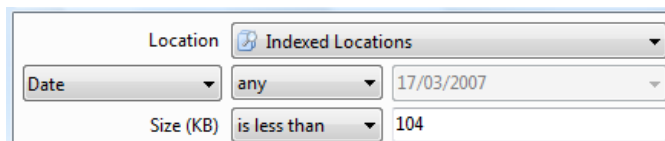


- Click on the **down arrow** to the right of the **Advanced Search** section. This will display the following options.



- Click on the **down arrow** next to the **Size** section and you will see a drop down list displayed.
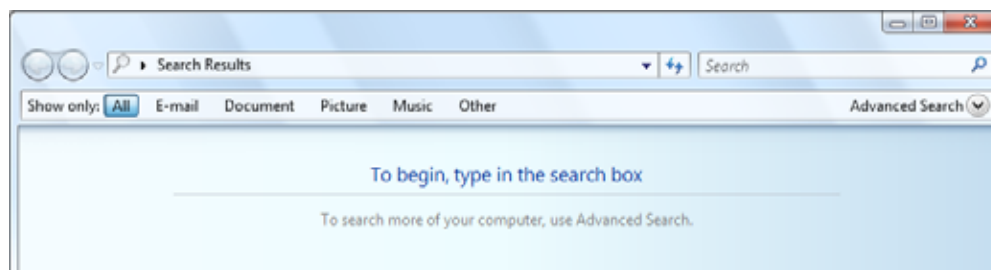
- Select **is less than**. In the next box, type in the number **104**. This will allow us to find all files with a file size of less than **104** KB.
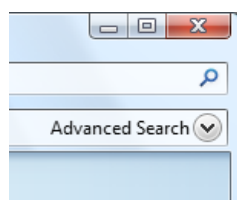
- Click on the **Search** button and you will see a list of all files under **104 KB**.
- Close the search dialog box.

## Advanced searching by date

- Click on the **Start** button and then click on the **Search** command. You will see the following dialog box displayed.
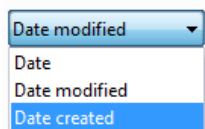
- Enter the search word '**Windows**'.
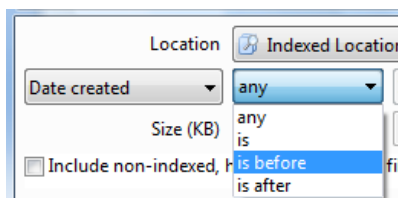- Click on the **Advanced Search** button.

- This will display the advanced options including the **Date** searching options.

- Click on the **down arrow** to the right of the date section and you can select **Date Modified** or **Date Created.** In this case select **Date Created**.

- Click on the **down arrow** to the right of the **Any** section. In this case choose '**is before**'.



- Click on the **down arrow** to the right of the next box, as illustrated below. Select a date a few months before today's date.
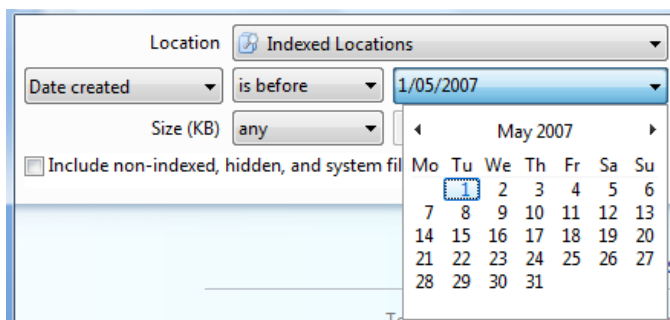


- Click on the **Search** button. If you look carefully at the search results you will find that only files with the word '**Windows**' in the file name and files that were created before the specified date are listed.
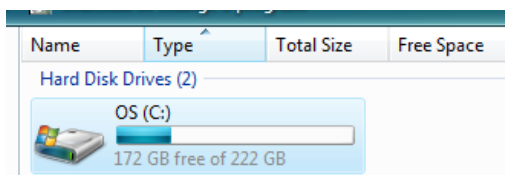- Close the search dialog box.

## Advanced searching by file content

- You can search for a file if you know the file name. In real life you may create a document and remember what is in the document, but not remember where you saved the document, or what the file was. The good news is that you can search for file content. For instance let's say you created a document continuing an unusual word or phrase, such as **xyzzy**, then this can be used to find the file.
- Click on the **Start** button and then click on the **Search** command. Type in the search phrase, in this case, **xyzzy**, as illustrated.
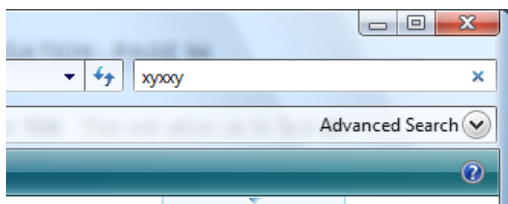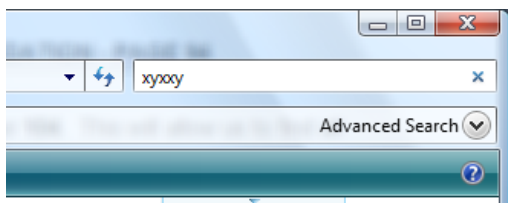
- In the **left section** of the dialog box, click on the **Computer** icon, as illustrated.
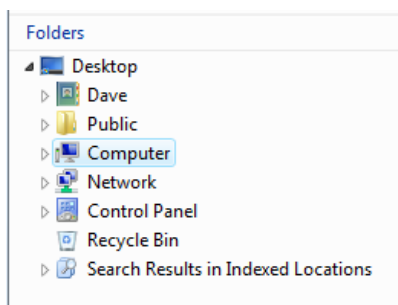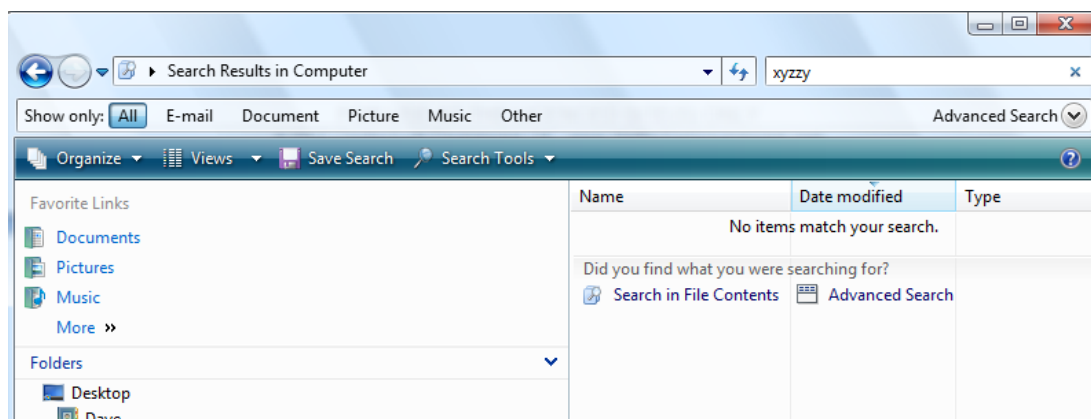
- In the right section of the dialog box, click on the **Hard disk** icon, as illustrated. This is telling Vista that the file is somewhere on your hard disk, but you don't know where.

- You may find that you have to retype your search phrase into the search box, **xyzzy**, as illustrated.

- Vista will start searching for files. After a short delay you will see the following.

- Within the right hand section of the dialog box, click on the in the **Search in File Contents** icon. Vista will start the search again. This may take longer, and you will see a search progress bar, displayed across the top of the window.



- Eventually, you should see the file containing the specified contents, displayed in the right hand section of the window.
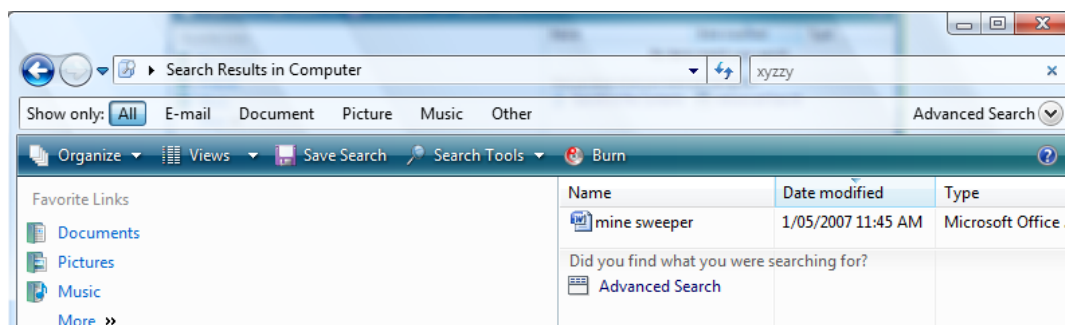


- As you can see the file is called **Mine sweeper**. Double click on this file to open it, and you will see information about a cheat that used to work in the Windows Mine Sweeper game.
- Close the Word document and close the Search dialog box before continuing.

## Advanced searching using partial file names and specific locations

- Sometimes you may not remember the exact file name. Take an example were we know the file name starts with the word **Swim**, but we cannot remember the rest of the name. Windows will still be able to find the file for us.
- **Right click** on the **Start** button and then click on the **Explore** command to open Windows Explorer.

- In the left side of the dialog box, click on the word **Computer**.
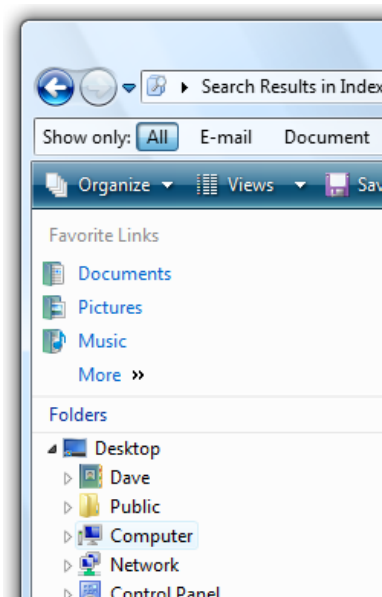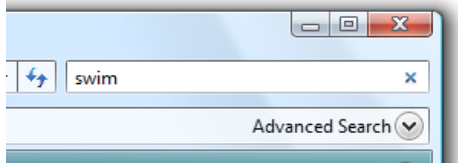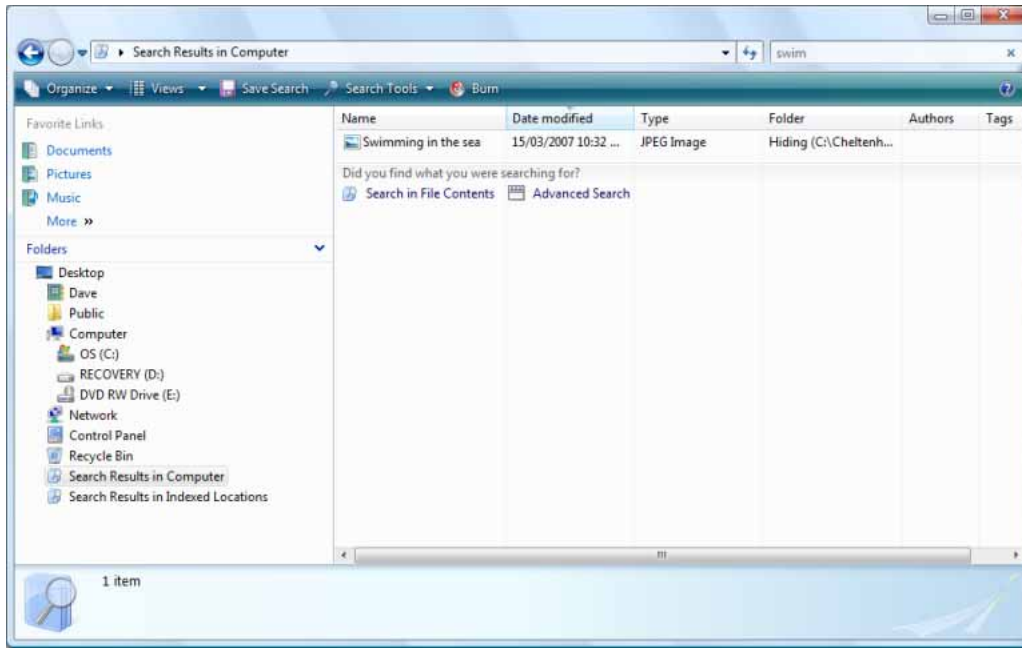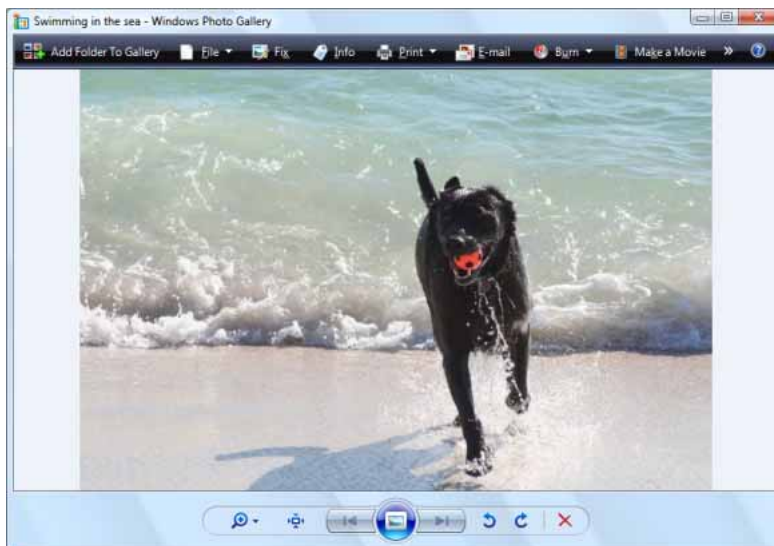


- The screen will change as illustrated.
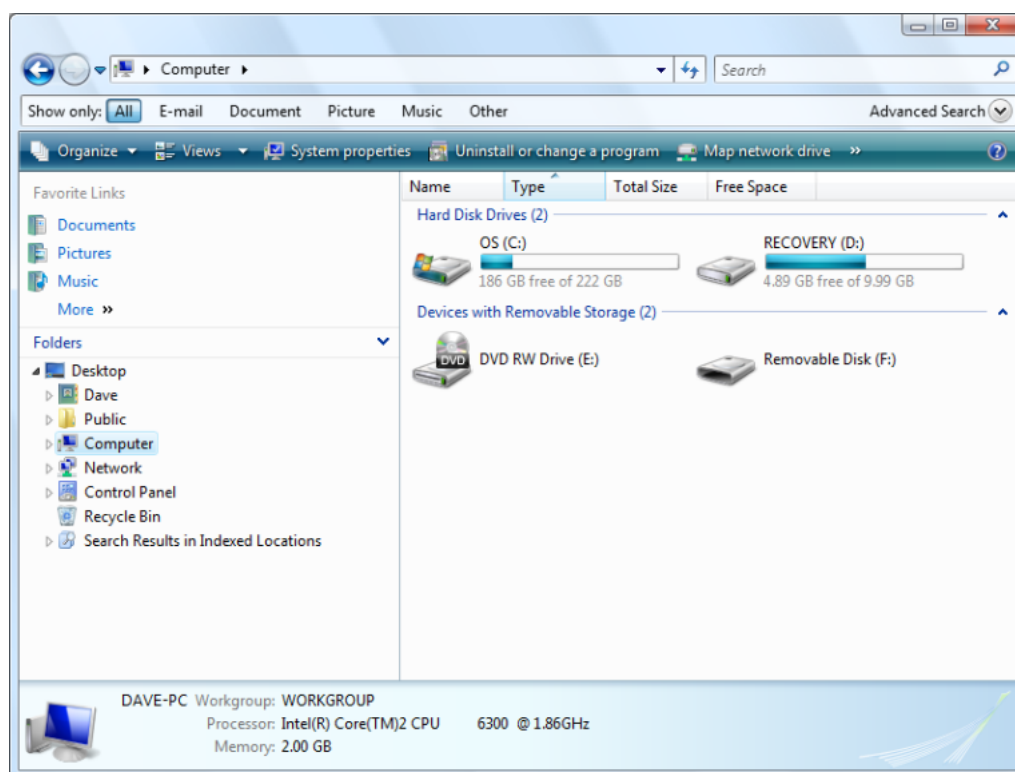


- Select the disk you want to search, in this case, the **Hard Disk**. In the search box type in the word **swim**, as illustrated.

- The search will then find the following file.



- Double click on the file (actually called **Swimming in the sea**). You will see the following picture.



- Close all open windows.

## Searching for a file using wildcards instead of the full name

- In some cases we may only know part of the name, in which case we can use wild cards.

  **For example:**

  **To search for all files whose names start with z**
  we would search for z*

  **To search for all files whose names start with za**
  we would search for za*

  **To search for all files whose names start with za
  and contains 5 characters**
  we would search for za???

  **To search for all Microsoft Excel files whose names start with za
  and contains 5 characters**
  we would search for za???.xls

- Use this information to search all the subfolders under your samples folder for any files whose names start with the letters **sa**.
- Close the **Search** dialog box, once the search is complete.

# Viruses, Spyware and Cookies

## Computer viruses

- Viruses are small programs written so that they can jump from one computer to another (via disk or a network), which can cause disruption or damage to the computer system. Even data files such as a Word document can contain a virus. As well as causing damage to your data, or in some cases even destroying your data, viruses can cause other effects, such as using your email system to email all your email contacts and in the process infect other people's computers.

- Basically if you access files which are virus infected, then that virus may be transmitted to your computer. Never accept diskettes/CD-ROMs/DVDs which have not been properly virus scanned first by your computer support team. Never connect to the Internet without an active virus checker program scanning all the files you download.

## Spyware

- Spyware is software that installs itself on your computer and then spies on your computer activity. Often spyware is used to collect marketing information but more serious versions can collect sensitive data which could later be used in a criminal way. If you download and install free software, then this may have types of spyware hidden within it. There are many different programs that you can use to detect and remove spyware on your computer.

## Cookies

- Cookies are commonly used to allow visitors to a web site to personalise their relationship with the web site. For instance a weather web site could use a cookie to remember that you live within a particular area of the country. The next time you visit that web site, the weather that will be displayed will relate to your location. Some cookies are less innocent. Cookies are often downloaded automatically from a web site when you visit the web site, so you can acquire them without realising it. Most anti-spyware programs will also detect cookies for you.

## Virus checking programs

- An up to date virus checker should help protect you from losing data due to virus attacks and you should find that your email system does not get jammed up due to multiple email viruses.

- You will have less chance of being sued for damages by other organisations that you accidentally infected with a virus.

- Running a virus checker on a computer which contains a virus is known as disinfecting the PC as the virus program will detect and then eliminate the

virus.

- You will save time and money by preventing virus attacks as opposed to dealing with the effects of an attack.

    **NOTE**: Get all the security updates and patches for your version of Windows so that Windows itself is less vulnerable to virus attack.

## Scanning for viruses

- Many virus checking programs will scan your PC when you first switch on in the morning and some will even run detailed scans automatically, as well as automatically updating themselves so that you are protected against new virus types. In the example shown, we have started the **McAfee** antivirus program (via the quick launch toolbar). In this case to scan the computer for viruses we would simply click on the **Scan** button.



- This particular program will display a dialog box similar to that shown while the virus scan is running.
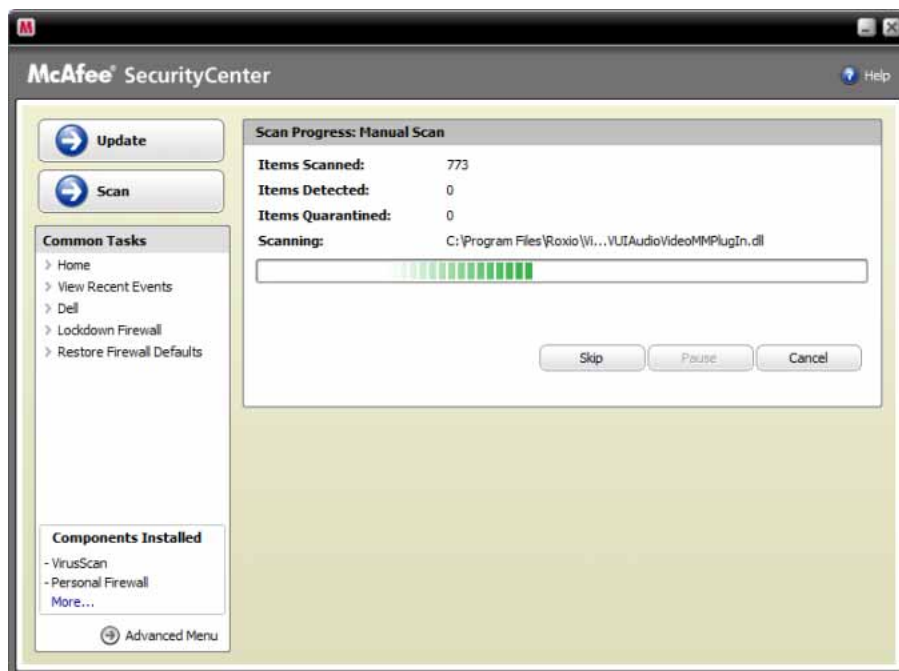
- At the end of the process you should see a message telling you that your computer is free of viruses. If a virus is detected during the scan and you work in a large organisation inform your IT technical support team immediately. Do not panic! If you are running a computer at home, then normally, let the virus checking program remove any viruses which it finds.
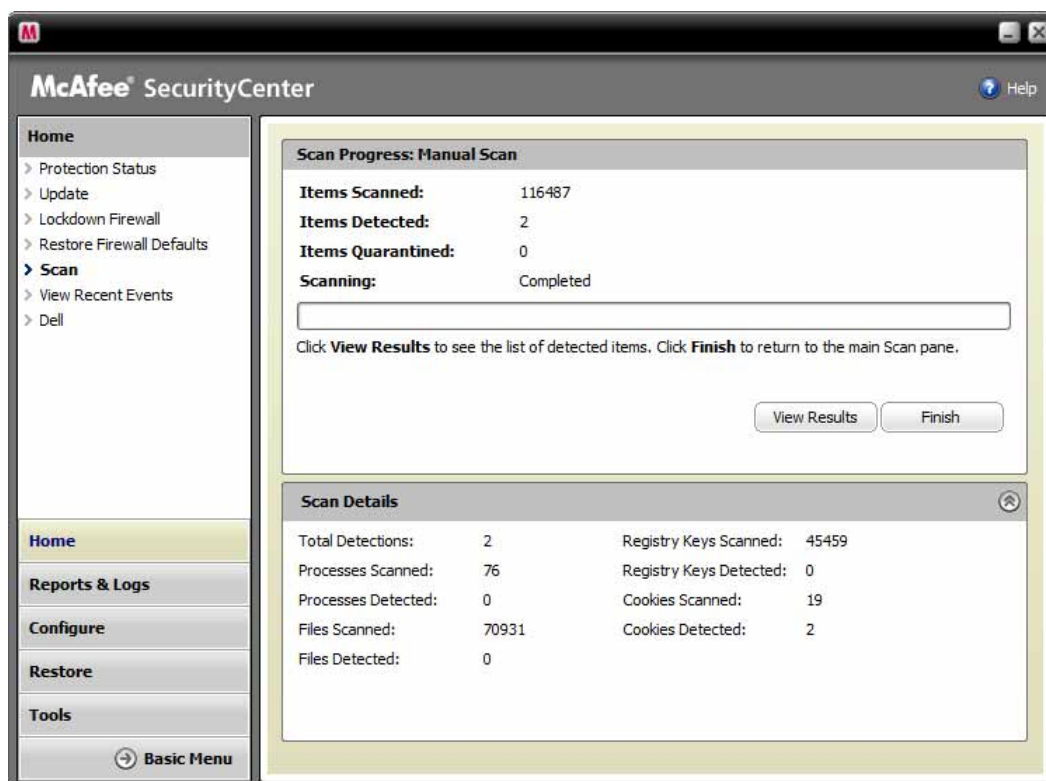
## Updating anti-virus programs

- As new viruses are constantly emerging, it is vital to update your virus program on a regular basis. Many programs will do this automatically. You can also run the update manually to make absolutely sure you have all the latest updates.  In the case of the McAfee example show below, you would click on the **Update** button and follow the on-screen instructions.
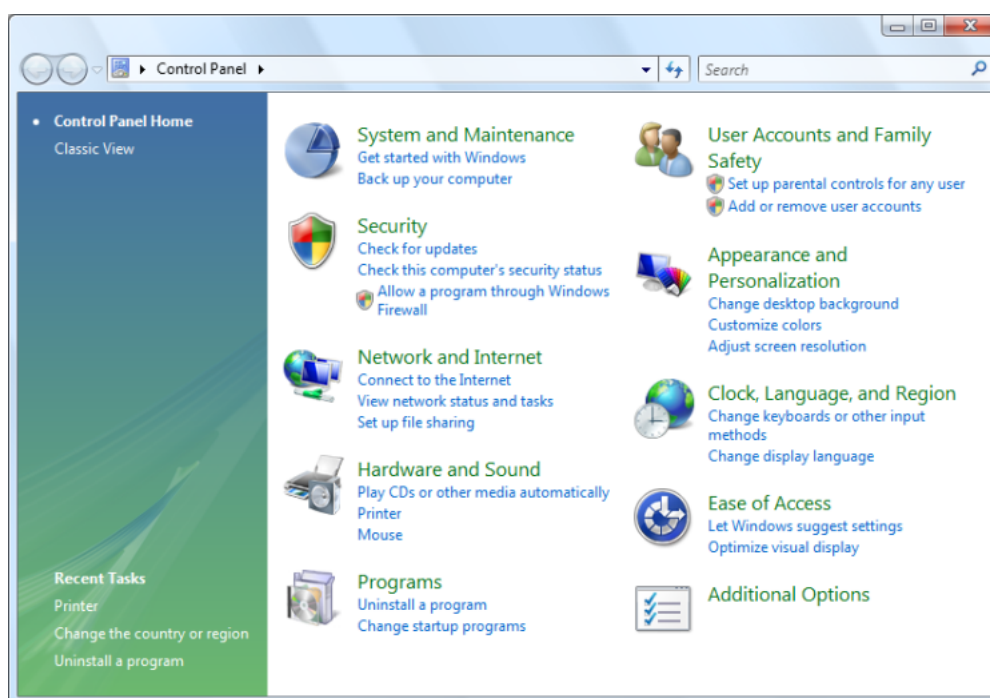
# Printing Issues

## Selecting a printer

- In many larger organisations you may have the choice of printing to more than one printer. To see which printers are available you can use the Control Panel. To do this click on the **Start** button and then click on the **Control Panel**.
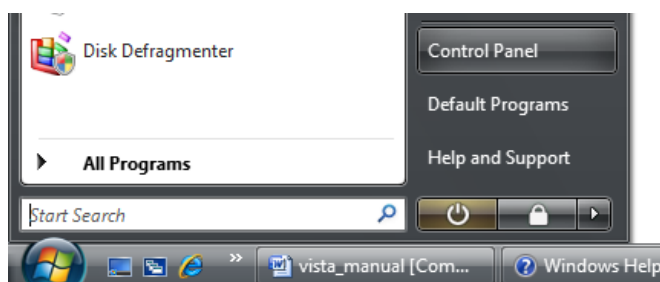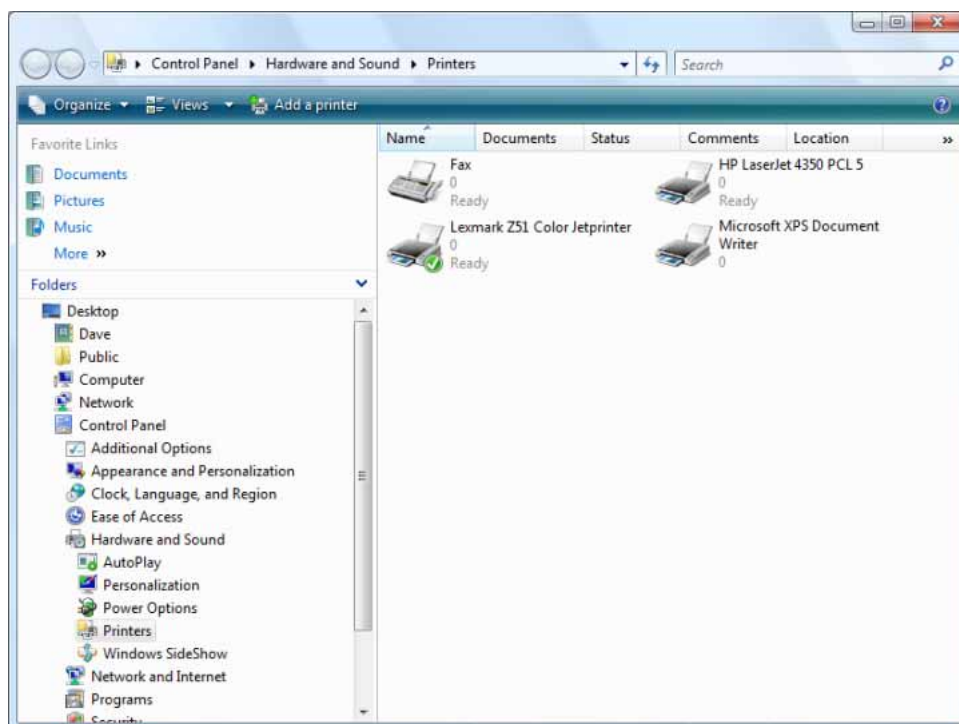


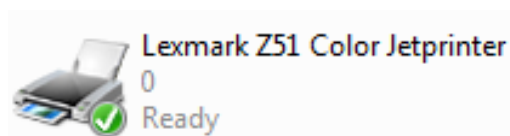- You will see the **Control Panel** displayed, as illustrated.



- Within the **Hardware and Sound** section click on the **Printer** link.
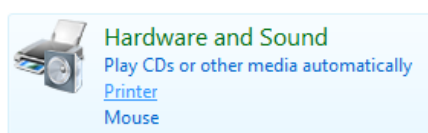


- You will see a screen similar to the following.

- In this example the **Lexmark** printer is set as the default printer. The default printer is marked with a tick.
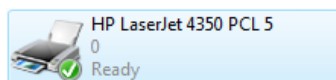


  **NOTE**: You will have different printers installed.

## Changing the default printer

- To set a different printer as the default printer, right click on the printer icon you wish to set as the new default printer. Click on the **Set as Default Printer** command.
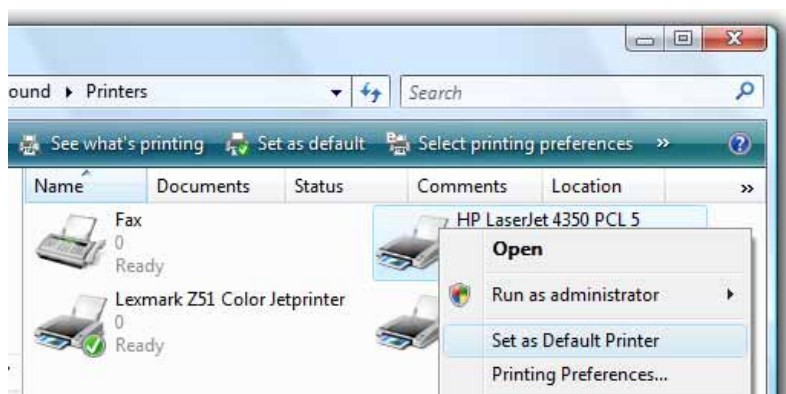
- In this example we have changed the HP printer to become the default printer.
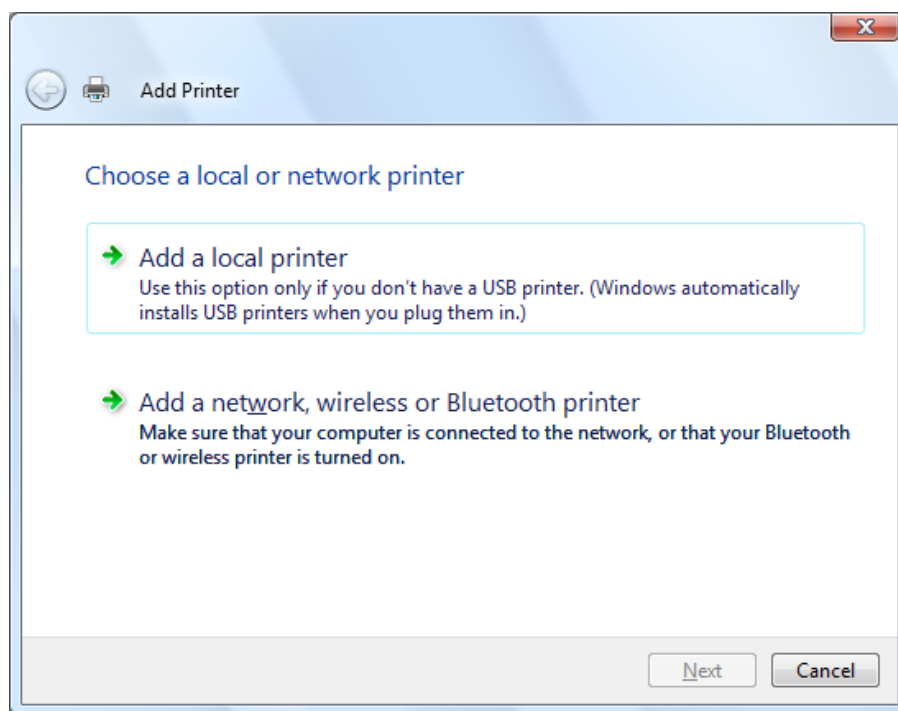


## Installing a new printer on the computer

- Click on the **Start** button and then click on the **Control Panel**. Click on the **Printer** link within the **Hardware and Sound** section. Click on the **Add a printer** button.



- You will see the following dialog box.



- If the printer is attached directly to your computer, click on the **Add a local printer** option. If your printer is on a network use the second option. In this example use the **Add a local printer** option. You will see the following dialog box. Select a port or use the default and click on the **Next** button.
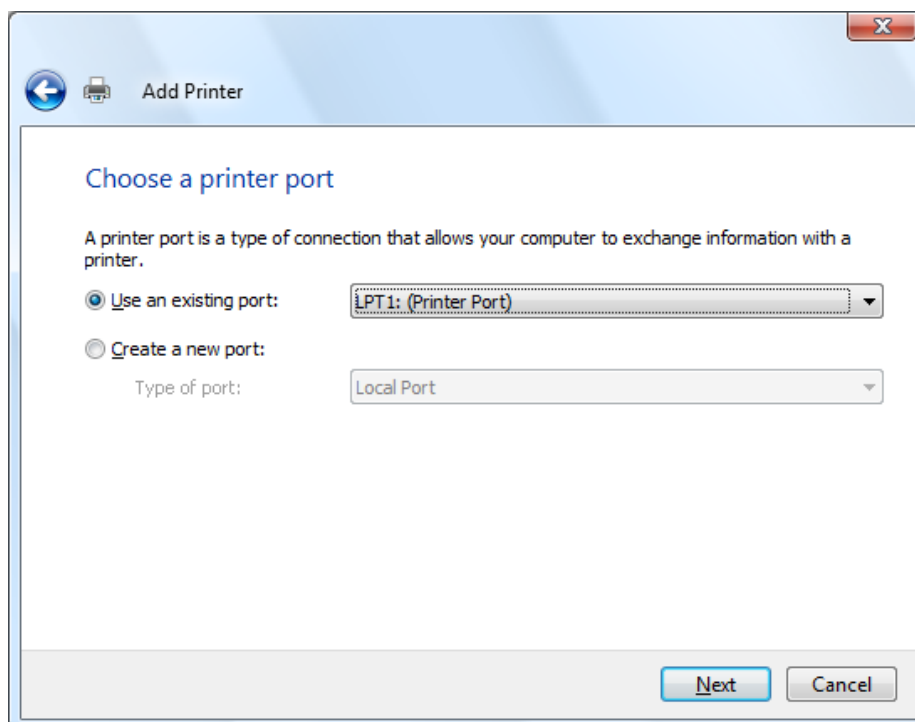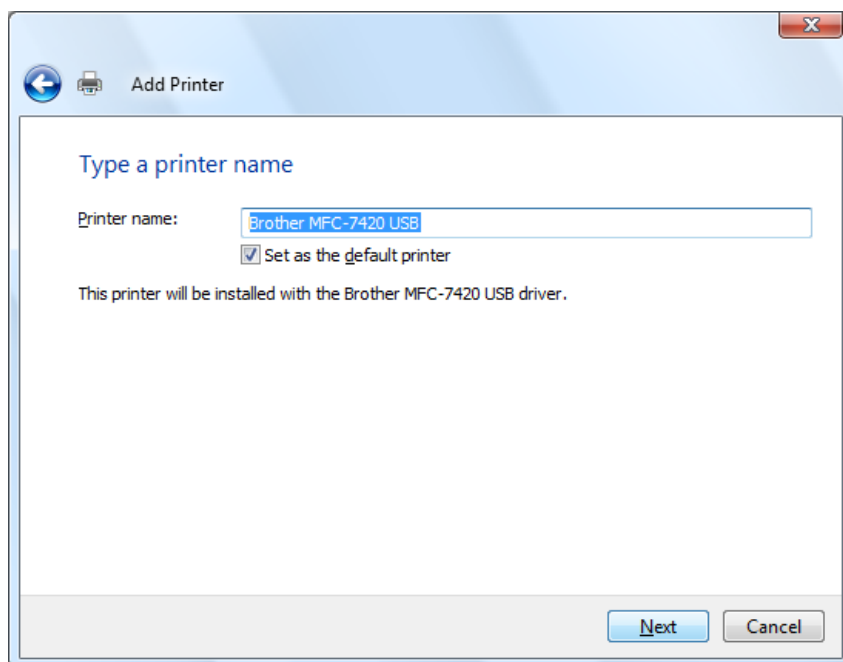
- The next screen allows you to select a make and model of printer to install.
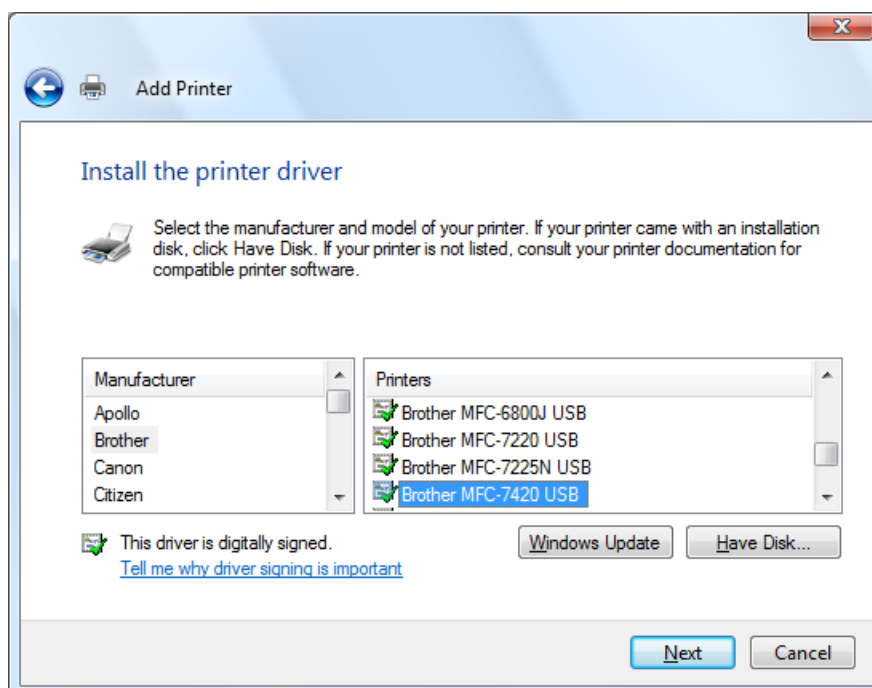


**TIP**: You may have to insert a disk to install a printer that Windows does not know about.

After you have selected a make and model, click on the **Next** button.

- The next screen allows you to give the printer a name. Accept the name displayed or type in a new name. Then click on the **Next** button.

- The final screen allows you to test that the printer is correctly installed and connected. Click on the **Print a test page** button.
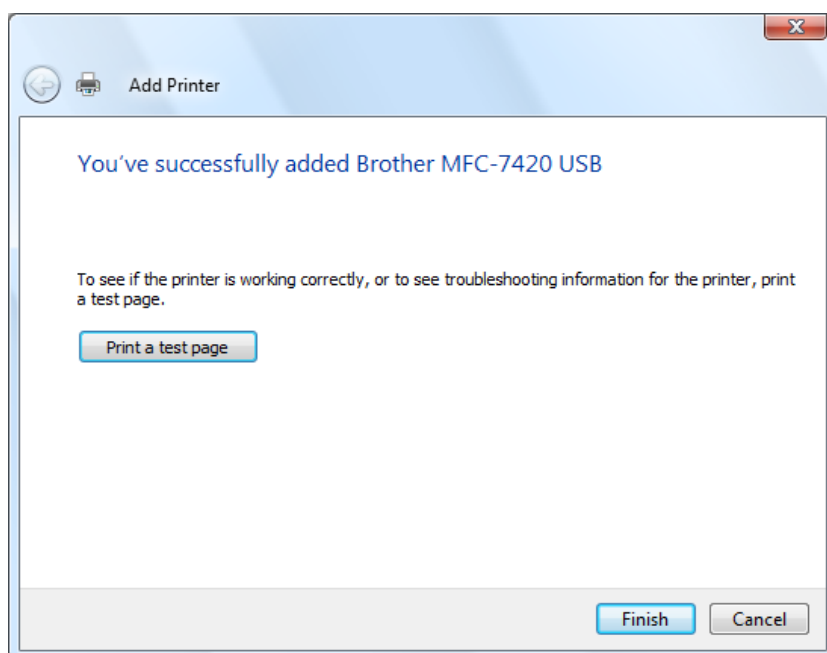


- Click on the **Finish** button.

## Printing from an application

- Once the printer is correctly connected and installed, you normally print from within your applications. For instance, if you have written a memo within a program such as **Microsoft Word**, you would simply click on the **Office Button** and then select the **Print** command.
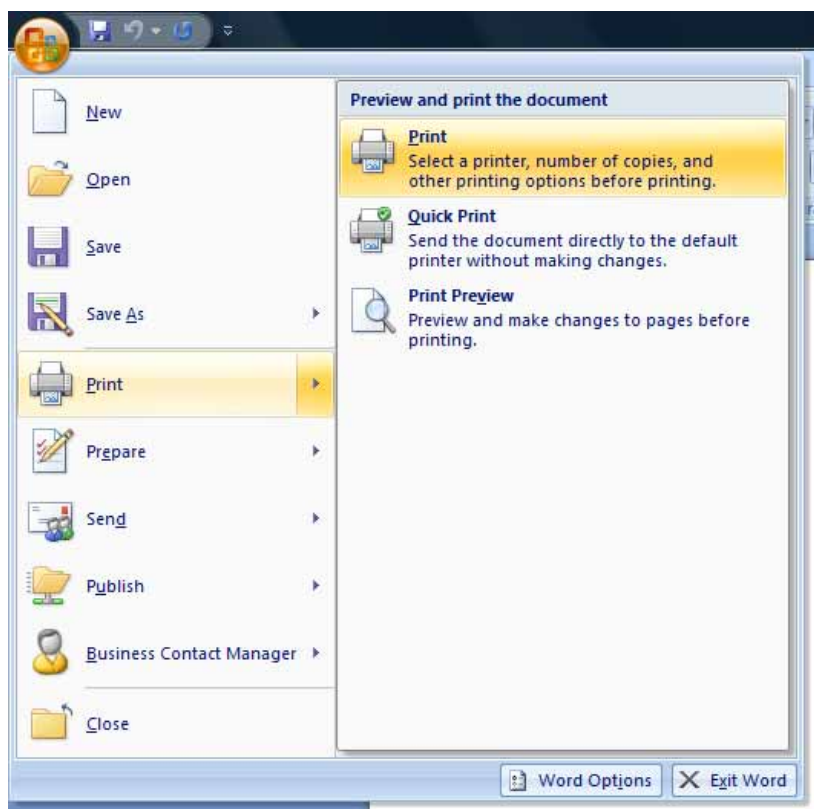
**TIP**: Within many applications, the keyboard shortcut for printing a document is **Ctrl+P.**

## Using the Print Manager

- When you print a document the printing is handled by a part of Windows called the Print Manager. After starting a document printing, you can view the Print Manager by clicking on the **Print Manager** icon displayed at the bottom-right of the screen.



You will see something like this displayed on your screen.
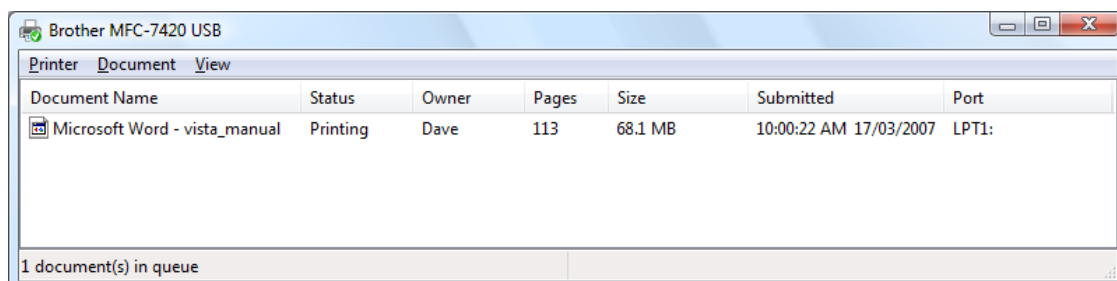


- As printing is a slow process, if you try and print a lot of documents at the same time you will see the documents queued up within the Print Manger. You can pause the printing of a document by selecting the document within the print queue, right clicking and selecting the **Pause** command. To restart

the printing select the **Restart** command.
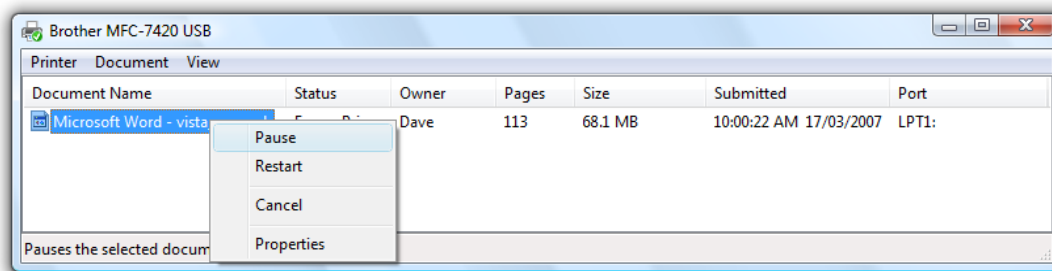


- To cancel the printing of a particular document right click over the document and select the **Cancel** command.
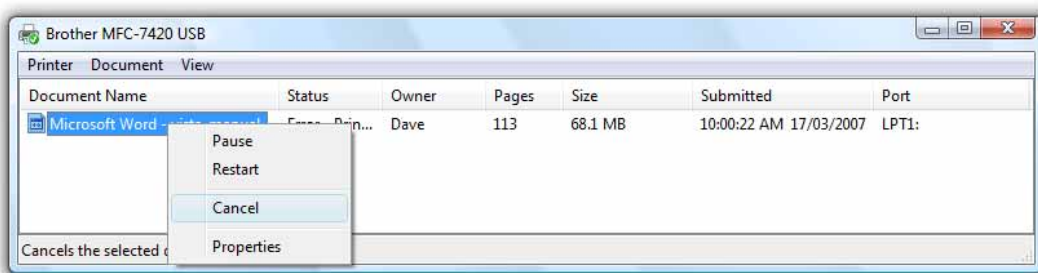


- You will see a warning screen. Click on the **Yes** button to confirm that you wish to cancel.