Microsoft Windows 7

13 – Printing

CORPORATE LEARNING & DEVELOPMENT

PRINTING

Much of the work you create on your computer will need to be printed. In fact, it is more than likely that you already own a printer or have recently purchased a printer. A printer allows for the ***output*** of ***processed*** data. Windows 7 makes that output possible by communicating with the printer's ***driver***. We won't get too technical here, but will introduce you to the way that Windows 7 manages your printers and printing jobs.

In this booklet we will show you how to:

- gain an understanding of printing requirements and functions in Windows 7
- set the default printer
- pause a printer
- print files from Windows Explorer
- manage the print queue
- share a printer
- connect to a network printer.

UNDERSTANDING PRINTING IN WINDOWS 7

If you're reading this then chances are you've purchased a printer ready to install and use. Here you will gain an understanding of the equipment you will need to install a printer, as well as how the printer communicates with Windows 7 to print your documents, files, photos and so on.

What You Will Need To Print In Windows 7

Firstly (and obviously!), you will need a *printer*. It is likely that you have purchased and are ready to install (or already have installed) an *inkjet* or *laser* printer. Or, you may have an all-in-one printer that also includes a copier and scanner. Regardless of the type of printer you have, the installation process and management of your printer will be pretty much the same across all printers. You will also need a *power cable*, of course. Printer *cartridges* (toners) are also a must.

For most printers, you will also need a *connector*. This is the cable that connects to both the printer and the computer to enable communication between your printer and Windows 7. There are two types of connectors:

- **USB**: if you have purchased a computer recently, chances are it will have a USB (Universal Serial Bus) cable. This enables you to plug in to one or more USB ports on your computer. USB ports make it possible to connect more than one printer (or any USB device) to your computer.

- **Parallel**: for older printers you may need to connect to a parallel port. Although much larger than a USB connector, it serves the same purpose.

Some of the latest printers also offer *wireless* connectivity. This means that a physical connection between the computer and the printer is not required for communication, and you can theoretically print from anywhere within the wireless range. That's one less unsightly cable dangling from your computer!

Most printers also allow for network (Ethernet) connectivity. If you intend to make your printer available on a network, you will need a network cable to do this (unless you are connected wirelessly).

A *printer driver* is also essential. The printer driver is a small software program that enables communication between Windows 7 and your printer, and converts data into printable form. Printer drivers generally need to be installed using the CD that came with your printer, although Windows 7 does include printer drivers for many popular brands and types of printers.

What Happens When You Click On Print

Windows uses a *print spooler* to manage what is being sent to the printer and when it should be printed. Printers take time to print text or graphics on paper. The computer can process the information and have it ready for printing far quicker than the printer can print it.

As a consequence print queues occur when a lot of printing needs to be done. Without a print spooler to manage the queue and tell the printer what and when to print you would be sitting around twiddling your thumbs waiting for the process to be completed. The print spooler hurries up the print processing and frees up the computer so that you can get on with other tasks.

Managing Printers In Windows 7

Printers and printing jobs are managed through the *Devices and Printers* window in Windows 7. This is accessible from the *Start* menu.

Double-click on the printer icon of your installed printer to manage your printer, such as viewing, deleting and pausing print jobs, changing your printer's settings and customising your printer. The picture to the right shows the window to manage a printer.
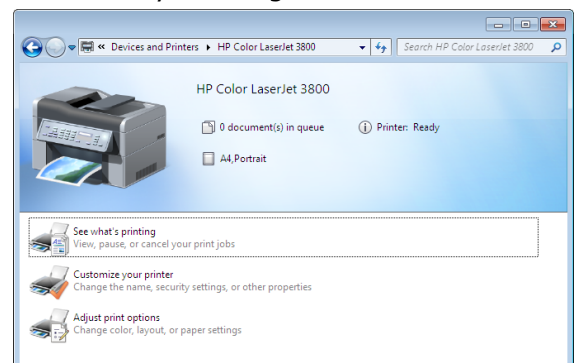
VIEWING AVAILABLE PRINTERS

When you click on the **Print** button to print a file, the print job is sent to the **default** printer. This is the printer that all jobs will be sent to unless you change the default printer. You may have more than one printer available to print to, either connected directly to your computer (locally) or on the network (remotely). You can check available printers in the **Devices and Printers** window.

Try This Yourself:

Before starting this exercise ensure you are viewing the desktop...

1 Select **Start** > **Devices and Printers** to open the **Devices and Printers** window

You may need to scroll down the window a little to view installed Printers (if you have printers available), and your listing will most likely look different to the one shown...

2 Click on the printer that appears with a green tick

This is the default printer...

3 View the **Status** bar to see information about the printer

The Status bar provides information about the printer, including its state (the icons here show that it is the default printer as well as being a network printer)

4 Click on the drop arrow ▾ for the **Views** button ▣▾ to the right of the toolbar

The item where the slider is positioned is the current view…

5 Click on **List** to display all devices and printers in a list

6 Click on **close** ✖
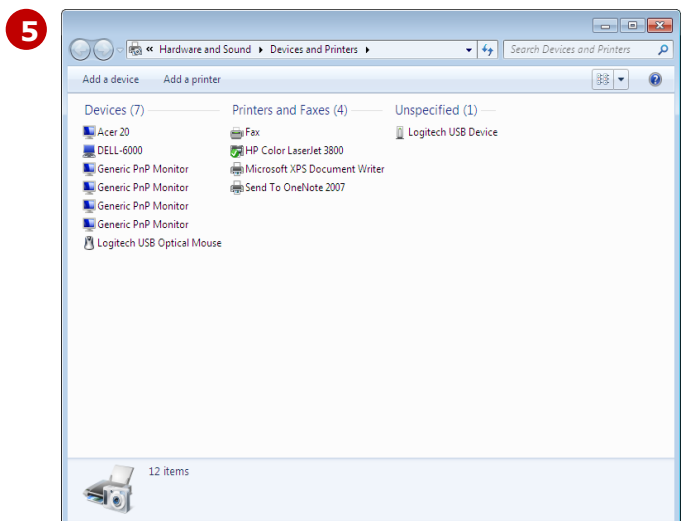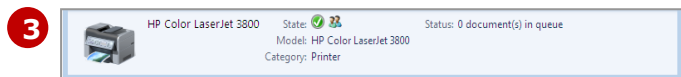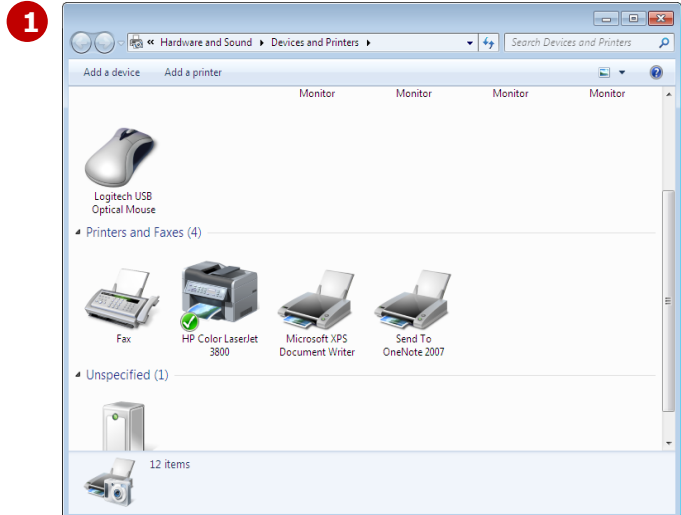
For Your Reference…

To view available printers:
1. Select **Start** > **Devices and Printers**
To check the status of a printer:
1. Click on the printer to select it and view the details in the **Status** bar

Handy to Know…

- The **Devices and Printers** window will display any device that is connected to your computer, either locally or on the network.
- The **Devices and Printers** window can be accessed by selecting **Start** > **Control Panel** and clicking on **View devices and printers** in **Hardware and Sound**.

INSTALLING A USB PRINTER

Almost any hardware device that you attach to your computer these days will be plug-and-play. This means that installing a device is just a matter of plugging the device into your computer and letting Windows 7 do the rest! When you plug in a device, Windows 7 will usually recognise the device and attempt to install it automatically. All you have to do is know how to use it!

Try This Yourself:

Before starting this exercise you will need a USB printer that is switched on and is plugged into your computer...

1 Plug the USB cable into an available USB port on your computer (if nothing happens you may need to try another USB port)

A message will appear in the Notifications area of the Taskbar informing you that Windows is installing device driver software ...

2 In the **Notifications** area of the **Taskbar**, click on the icon that the message bubble points to to display the **Driver Software Installation** dialog box
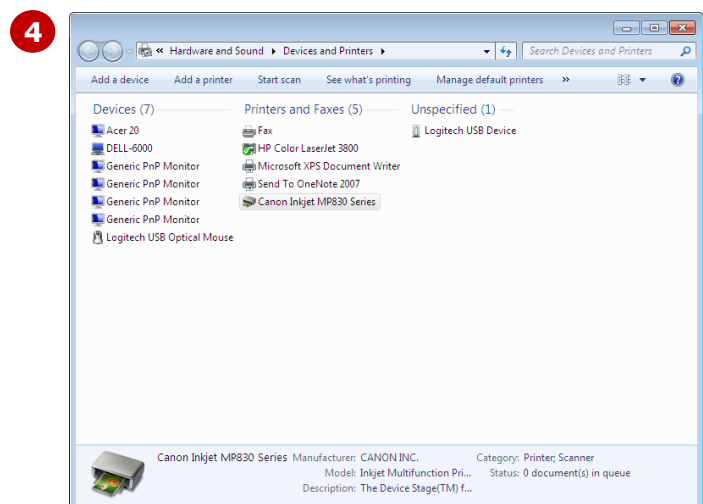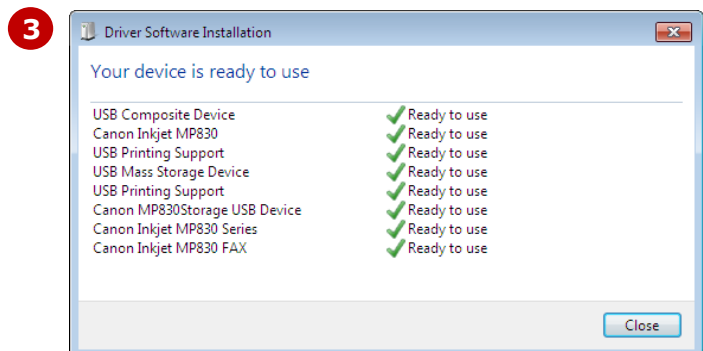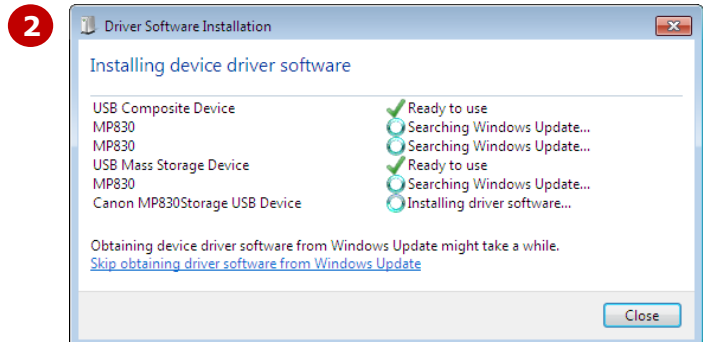
In this box you can view the tasks that Windows 7 completes during the installation process....

3 When you receive the message that **Your device is ready to use**, click on **[Close]**

If all went well your printer should now be ready to use...

4 Select **Start** > **Devices and Printers** to view the installed printer in the printer list

5 Click on **close** ❌

2

Driver Software Installation

Installing device driver software

USB Composite Device	✓ Ready to use
MP830	⟳ Searching Windows Update...
MP830	⟳ Searching Windows Update...
USB Mass Storage Device	✓ Ready to use
MP830	⟳ Searching Windows Update...
Canon MP830Storage USB Device	⟳ Installing driver software...

Obtaining device driver software from Windows Update might take a while.
Skip obtaining driver software from Windows Update

[Close]

3

Driver Software Installation

Your device is ready to use

USB Composite Device	✓ Ready to use
Canon Inkjet MP830	✓ Ready to use
USB Printing Support	✓ Ready to use
USB Mass Storage Device	✓ Ready to use
USB Printing Support	✓ Ready to use
Canon MP830Storage USB Device	✓ Ready to use
Canon Inkjet MP830 Series	✓ Ready to use
Canon Inkjet MP830 FAX	✓ Ready to use

[Close]

4

« Hardware and Sound ▸ Devices and Printers ▸   Search Devices and Printers

Add a device   Add a printer   Start scan   See what's printing   Manage default printers   »

Devices (7)   Printers and Faxes (5)   Unspecified (1)
Acer 20   Fax   Logitech USB Device
DELL-6000   HP Color LaserJet 3800
Generic PnP Monitor   Microsoft XPS Document Writer
Generic PnP Monitor   Send To OneNote 2007
Generic PnP Monitor   Canon Inkjet MP830 Series
Generic PnP Monitor
Logitech USB Optical Mouse

Canon Inkjet MP830 Series   Manufacturer: CANON INC.   Category: Printer; Scanner
                            Model: Inkjet Multifunction Pri...   Status: 0 document(s) in queue
                            Description: The Device Stage(TM) f...

For Your Reference...

To install a USB printer:
1. Plug the printer's power cable into a power supply and turn it on
2. Plug the USB cable into an available USB port on your computer
3. Let Windows 7 do the rest!

Handy to Know...

- Most popular printers will install automatically as the printer drivers are already installed on Windows 7. For older and less common printers, you may need to install the printer driver yourself from the disk provided with the printer, or by downloading the driver from the manufacturer's website.
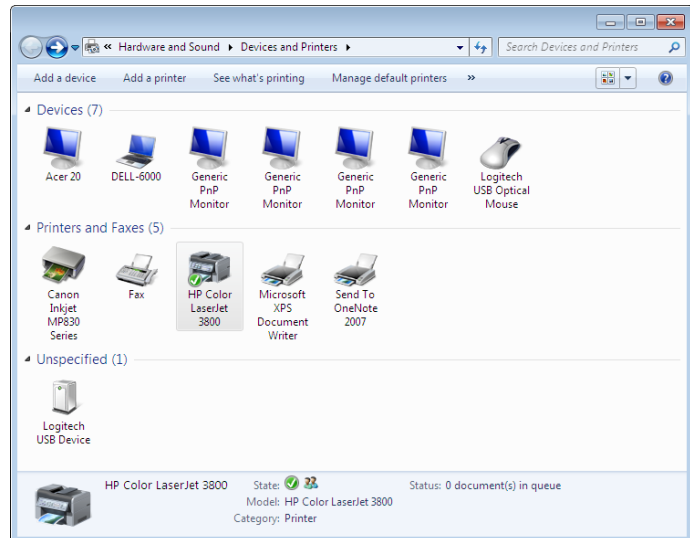
SETTING THE DEFAULT PRINTER

If you have more than one printer available on your computer for printing, you will need to select which printer will be the *default* printer. The default printer is the printer that Windows will print to automatically whenever you click or press *Print*, unless you select another printer to print to. You can select or change the default printer in the *Devices and Printers* window.

Try This Yourself:

1 Select **Start** > **Devices and Printers** to display the *Devices and Printers* window

2 Click on the drop arrow for the *Views* button to the right of the toolbar to display a menu of view options

3 Click on **Medium icons**

This may make the icons easier to see. If you only have one printer installed, this will be the default printer...

4 Right-click on the printer you have just installed to display a shortcut menu

5 Select **Set as default printer** if this option appears without a tick

The printer you installed is now set as the default printer and will appear with a green tick on the icon...

6 Click on *close* to close both the print queue window and the *Devices and Printers* window
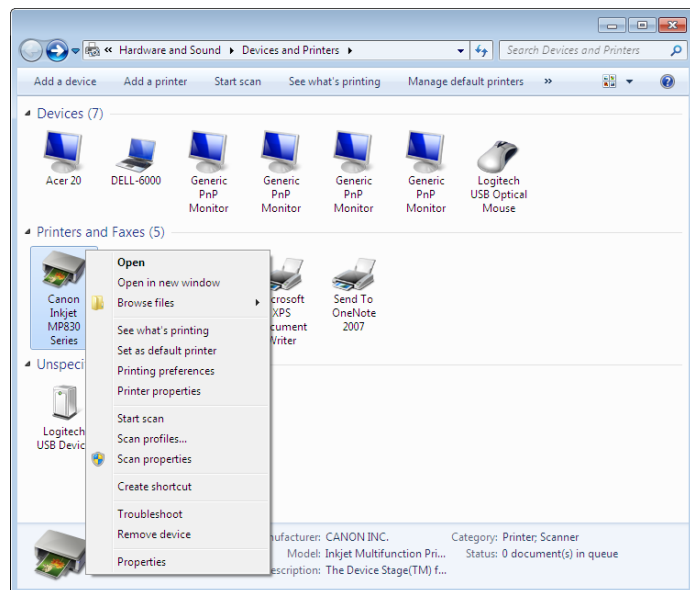
For Your Reference...

To set the default printer:
1. Select **Start** > **Devices and Printers**
2. Right-click on the printer you want to set as default, and select **Set as default printer**

Handy to Know...

- If you use a laptop and find that you use different printers depending on your location, you can set default printers for each location. In the *Devices and Printers* window, select the default printer for your current location, and click on **[Manage default printers]**. Here you can select your location and the default printer to be used, and then click on **[Add]**.

PAUSING A PRINTER

All print jobs that you send to the printer can be managed in the printer's *print queue*. The print queue displays all current and paused print jobs. By pausing the printer you can send jobs to the printer and then manage the paused printer to see how the print queue works!


Try This Yourself:

> *Before starting this exercise make sure your printer is switched on and ready to use...*

1 Select **Start** > **Devices and Printers** to display the *Devices and Printers* window

2 Click on the default printer to select it

3 Click on **[See what's printing]** in the toolbar

> *The print queue window is displayed...*

4 Select **Printer** > **Pause printing**

> *This will stop any stored jobs from being printed, and the title bar of the print queue window shows that the printer is Paused...*

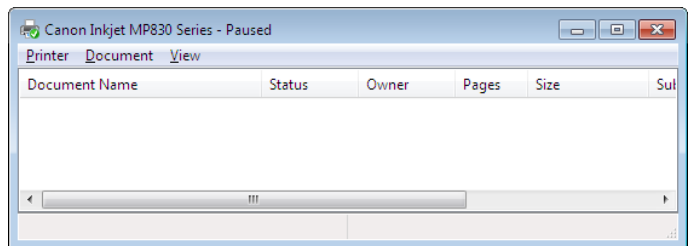**5** Click on *close* [X] to close the print queue window

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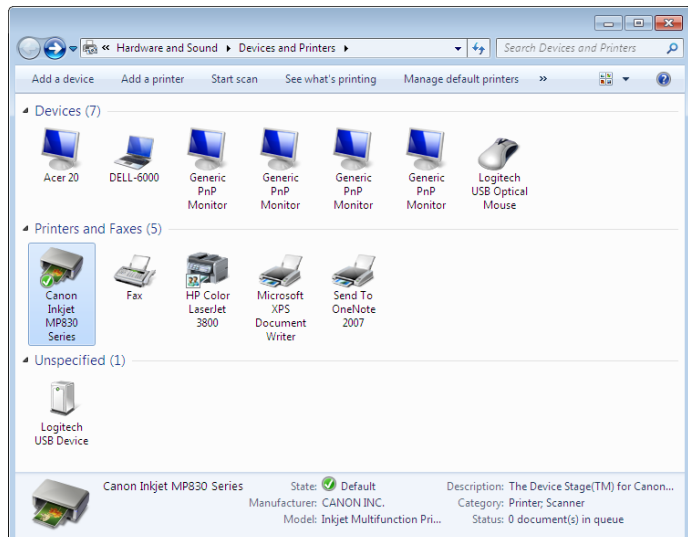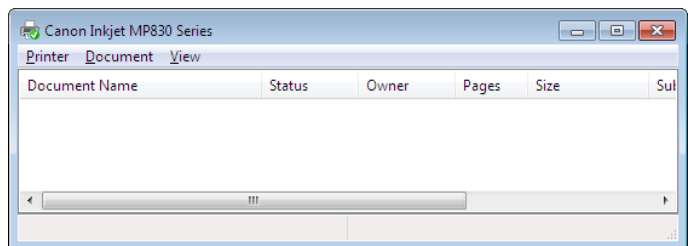
For Your Reference...

To pause a printer:
1. Select **Start** > **Devices and Printers**
2. Select the printer and click on **[See what's printing]**
3. Select **Printer > Pause printing**

Handy to Know...

- Pausing your printer can be especially useful if you have several users connected to the printer, or have several jobs in the queue and an urgent print job is required. You can pause the printer and then manage each print job so that the most urgent jobs are printed first.
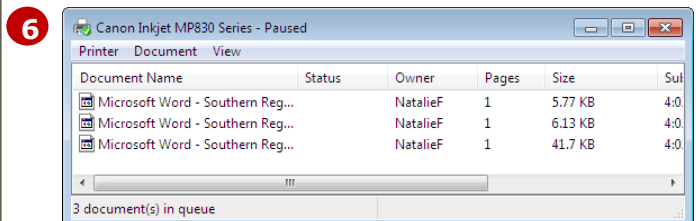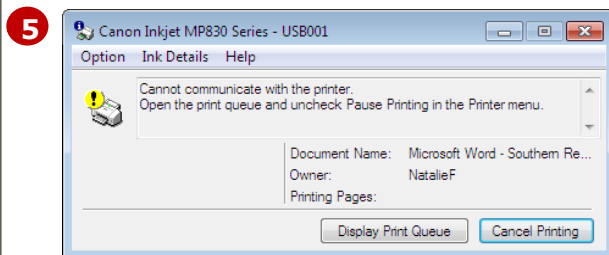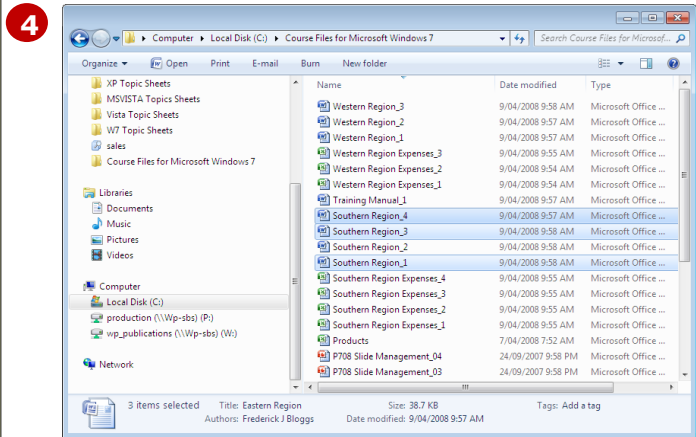

PRINTING FILES FROM WINDOWS EXPLORER

For most day-to-day printing, you will print a file, such as a document or photo, from the program in which it was created. You have several options for printing before you click the *Print* button, each option specific to the program you are printing from, as well as the file type. In this exercise, however, you will print some files directly from *Windows Explorer* to see how the print queue works.

Try This Yourself:

Before starting this exercise make sure your printer is switched on and ready to use, and you have completed the previous exercise...

1 Click on **Windows Explorer** in the *Taskbar*

2 Click on *Local Disk (C:)* in the *Navigation* pane to display its contents in the right pane

3 Double-click on *Course Files for Microsoft Windows 7* in the right pane to view the contents of this folder

4 Click on *Southern Region_1.docx*, hold down Ctrl and click on *Southern Region_3.docx* and *Southern Region_4.docx*

Three files should now be selected...

5 Click on **[Print]** in the toolbar

The files will open for a moment and you will receive a message notifying you that Windows cannot communicate with the printer (this message may also be minimised to the Taskbar), as the printer is paused...

6 Click on **[Display print queue]** to display the print queue windows

Leave the print queue window open for the next exercise

For Your Reference...

To print files from Windows Explorer:
1. Click on **Windows Explorer** in the *Taskbar*
2. Navigate to and select the file/s to print
3. Click on **[Print]** in the toolbar

Handy to Know...

- Windows doesn't print multiple files in the order you selected or in the order they are listed in Windows Explorer.
- You cannot send multiple file types to the printer at the same time.

MANAGING THE PRINT QUEUE

Go to the print queue to manage your print jobs. Not only does it show you what is printing but it also allows you to manage the jobs in the list. For example, you can pause individual print jobs so that more urgent jobs are printed first, you can delete jobs before they are printed (very useful indeed), and, of course, you can also resume paused print jobs.

Try This Yourself:

Before starting this exercise ensure you have completed the previous exercise and your printer is switched on and ready to use...

1 Hover over the line between the ***Document Name*** and ***Status*** column headings so that the mouse pointer changes to a crosshair

You will expand the Document Name column so that you can see the full file names of the jobs...

2 Double-click to expand the column

3 Right-click on ***Southern_Region_3*** and select **Pause**

4 Right-click on ***Southern_Region_4*** and select **Cancel**

5 Click on **[Yes]** to cancel the document and remove it from the queue

6 Select **Printer** > **Pause Printing** to remove the tick

Print jobs that are not paused will begin printing...

7 Right-click on ***Southern_Region_3*** and select **Resume**

This job is sent to the printer

①

③

⑤

⑥

⑦
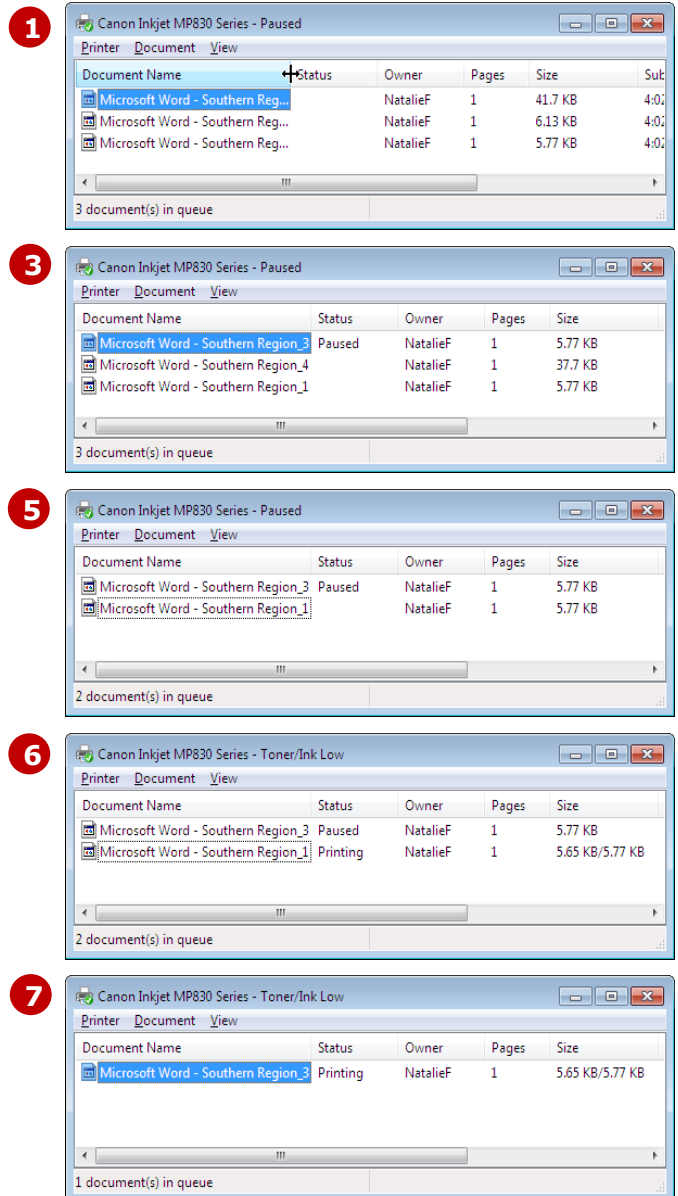
For Your Reference...

To pause a print job:
   1. Right-click on the job and select **Pause**
To resume a print job:
   1. Right-click on the job and select **Resume**
To cancel a print job:
   1. Right-click on the job and select **Cancel**

Handy to Know...

- You can use Ctrl and Shift selection techniques to manage multiple print jobs.
- To cancel all jobs, select **Printer** > **Cancel All Documents** and then click on **[Yes]**.

SHARING YOUR PRINTER WITH OTHERS

If you are part of a network, you can share your printer with other users on the network. Enabling printer access to other users involves a couple of steps. First, you must enable sharing of your printer. Next, other users on the network can then connect to the network printer from their computer. This exercise will take you through the first step.

Try This Yourself:

Before starting this exercise ensure you have installed a printer or have a printer connected to your computer...

1 Select **Start** > **Devices and Printers** to open the *Devices and Printers* window

2 Right-click on the printer you want to share and select **Printer properties** to display the *Printer Properties* dialog box

3 Click on the *Share* tab

4 Click on *Share this printer* so that a tick appears beside this option

The printer name appears in the Share name field. You can leave this as is or type a new name, but make sure the name will be meaningful to those looking for the printer when they want to connect it to their computer...

5 Click on *List in the directory* so that a tick appears beside this option

The printer will appear in a list of available printers when other users go through the process to connect to the printer...

6 Click on **[OK]** to apply the settings and close the window

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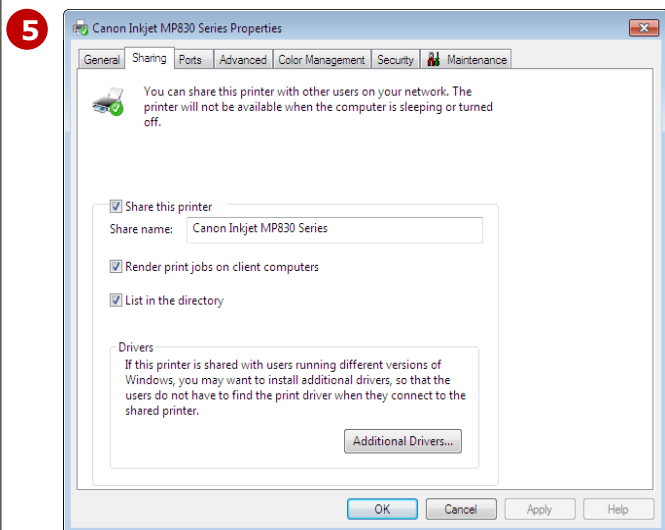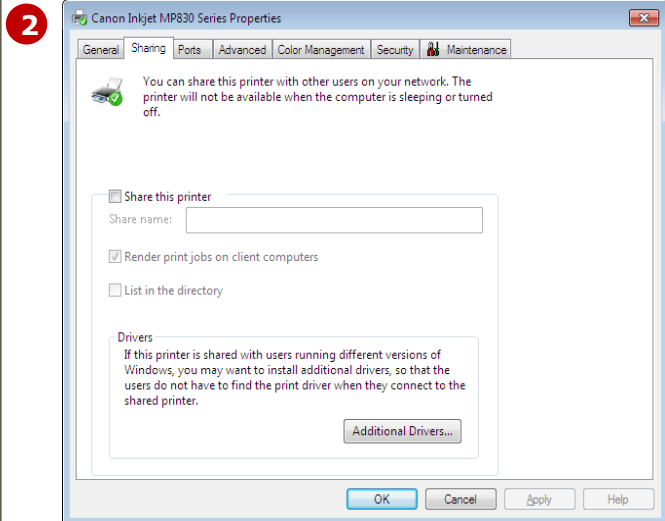
For Your Reference...

To share a printer on a network:
1. Select **Start** > **Devices and Printers**
2. Right-click on the printer to share and select **Printer properties**
3. Click on *Share this printer*, and then click on *List in the directory* to enable both options
4. Click on **[OK]**

Handy to Know...

- You can only share a printer that is connected directly to your computer.
- For other users to connect to your shared printer, you (and the other users) must be on a network.
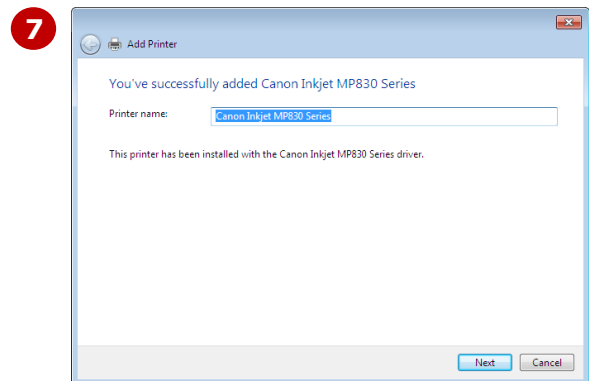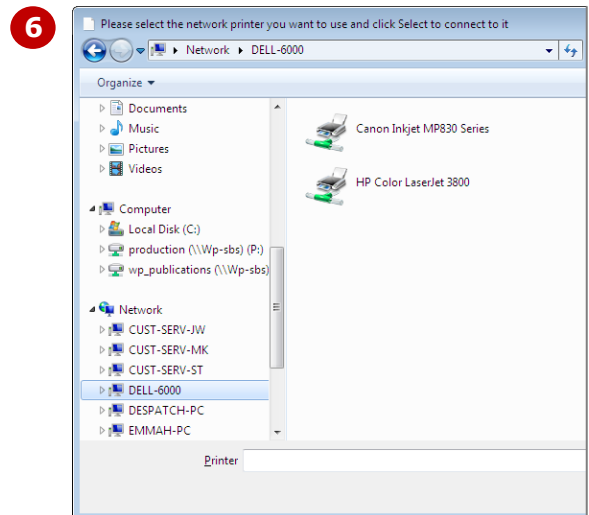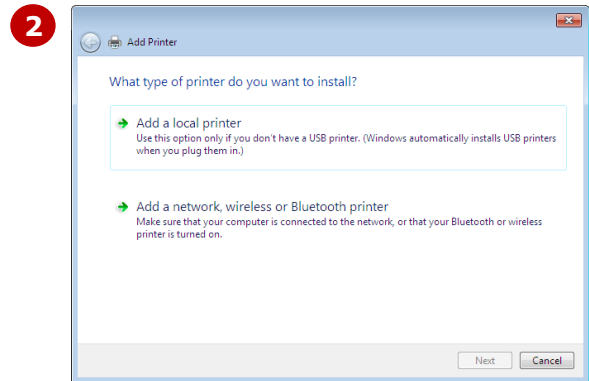

CONNECTING TO A NETWORK PRINTER

Network users can connect to any network printer (or device) that has been shared on that network. For this to occur, the printer owner (that is, the user who has the printer connected to their computer) must first enable printer sharing. Next, the user (or the network administrator) then needs to go through a series of steps to connect their computer to the network printer.

Try This Yourself:

To complete this exercise you must be on a network that has shared printers available...

1 Select **Start** > **Devices and Printers** to open the *Devices and Printers* window

2 Click on **[Add a printer]** in the toolbar

3 Click on *Add a network, wireless or Bluetooth printer*

Windows will search for printers and after a few moments a list of printers should appear. If no printers appear, complete steps 5 to 7...

4 Select the printer to add, click on **[Next]** and go to step *8*

5 Click on *The printer that I want isn't listed*

6 Select *Browse for a printer* and click on **[Next]**

You need to know the name of the printer owner's computer to locate it on the network. In this case, it is DELL-6000...

7 Navigate to the user's computer, click on the printer to select it and click on **[Select]**

You will then receive a message that installation was successful...

8 Click on **[Next]** and then click on **[Finish]**

The printer will now appear in the Devices and Printers window

For Your Reference...

To connect to a network printer:
1. Select **Start** > **Devices and Printers**
2. Click on **[Add printer]** and click on *Add a network, wireless or Bluetooth printer*
3. Follow the prompts to add the network printer

Handy to Know...

- There are several reasons why the network printer you want to connect to might not show up in the list of available printers, or why you cannot locate the printer on the network. Select **Start** > **Help and Support** and type **why can't I connect to a network** in the *Search* box, and click on the first result for further information.

CONCLUDING REMARKS

Congratulations!

You have now completed the **Printing** booklet. This booklet was designed to get you to the point where you can competently perform a variety of operations as outlined in the task list on page 2.

We have tried to build up your skills and knowledge by having you work through specific tasks. The step by step approach will serve as a reference for you when you need to repeat a task.

Where To From Here…

The following is a little advice about what to do next:

- Spend some time playing with what you have learnt. You should reinforce the skills that you have acquired and use some of the application's commands. This will test just how much of the concepts and features have stuck! Don't try a big task just yet if you can avoid it - small is a good way to start.
- Some aspects of the course may now be a little vague. Go over some of the points that you may be unclear about. Use the examples and exercises in these notes and have another go - these step-by-step notes were designed to help you in the classroom and in the work place!

Here are a few techniques and strategies that we've found handy for learning more about technology:

- visit CLD's e-learning zone on the Intranet
- read computer magazines - there are often useful articles about specific techniques
- if you have the skills and facilities, browse the Internet, specifically the technical pages of the application that you have just learnt
- take an interest in what your work colleagues have done and how they did it - we don't suggest that you plagiarise but you can certainly learn from the techniques of others
- if your software came with a manual (which is rare nowadays) spend a bit of time each day reading a few pages. Then try the techniques out straight away - over a period of time you'll learn a lot this way
- and of course, there are also more courses and booklets for you to work through
- finally, don't forget to contact CLD's IT Training Helpdesk on **01243-752100**