A Kerridge Commercial Systems Company

IQ Retail - TECHNICAL SPECIFICATIONS (2019)

25 Quantum Road | Moonstone Building | First Floor | Technopark | Stellenbosch | 7600
Tel: +27 21 880 0420 | Fax: +27 21 880 0488 | Email: info@iqretail.co.za | www.iqretail.co.za
VAT Number: 4760205510 | Company Reg. 2000/020305/07

P R E F A C E

This is the technical specifications guide for IQ Retail Accounting Software Systems. It will cover in detail, the technical specifications which are applicable to all IQ Accounting Software related systems.

The technical specifications document will by no means make an expert of you, but it will aid in configuration of Windows Operating Systems in order for IQ Accounting Software Systems to function correctly.

Although every effort has been made to keep this document up-to-date, some of the screen examples may not be exactly the same as the those reflected in previous versions of Microsoft Operating Systems. This is due to the continuous development of Microsoft.

Unfortunately, there will be a discrepancy from time to time. We do apologize for the inconvenience that it may cause.

Should you feel that the technical specifications document is inadequate or requires further explanation or more and better examples, please feel free to email us.

We would love to have some feedback in order to improve the technical specifications document in some way or another.

Regards,

IQ Retail

Contents

1 TECHNICAL SPECIFICATIONS – ALL SYSTEMS 5
1.1 SUPPORTED OPERATING SYSTEMS 5
1.2 HARDWARE REQUIREMENTS 5
1.2.1 BUSINESS INTELLIGENCE SERVER REQUIREMENTS 5
1.2.2 WORKSTATION REQUIREMENTS: (MAXIMUM 10 USER SETUP)* 5
1.2.3 STANDALONE SERVER REQUIREMENTS: (MAXIMUM 10 USER SETUP)* 6
1.3 SUPPORTED NETWORKING OPTIONS 6
1.4 ANTI-VIRUS 6
1.5 PRINTERS, SCANNERS AND PRINTING 6
1.5.1 POS PRINTERS 6
1.5.2 CASH DRAWERS 7
1.5.3 HANDHELD SCANNERS 7
1.5.4 GENERAL PRINTING 7
2 DRIVE MAPPINGS 7
2.1 NETWORK DRIVE MAPPING 7
2.2 SHORTCUT SETUP IN WINDOWS 10
3 COMPATIBILITY 17
3.1 DISABLE WRITE CACHING ON THE HARD DRIVE 17
3.2 OPPORTUNISTIC LOCKING 20
3.2.1 STEPS TO FOLLOW 21
3.3 NETWORK CARD SETUP 23
3.4 OFFLINE FILES SETTING 28
3.4.1 DISABLE THIS OPTION WITHIN YOUR WINDOWS OPERATING SYSTEM 28
4 WINDOWS 7 31
4.1 ADDITIONAL WINDOWS SETTINGS 31
4.1.1 DISABLE USER ACCOUNT CONTROL (UAC) 31
4.2 REGISTERING THE OCX FILE 33
4.2.1 OCX FILE 33
4.2.2 HOW TO REGISTER THE VCF15.OCX FILE IN WINDOWS XP 34
4.2.3 HOW TO REGISTER THE VCF15.OCX FILE IN WINDOWS 7 PROFESSIONAL x32 35
4.2.4 HOW TO REGISTER THE VCF15.OCX FILE IN WINDOWS 7 PROFESSIONAL x64 37
4.3 PREFFERED SECURITY SETTINGS 38
4.3.1 IQ ACCOUNTING PACKAGES SETUP IN A SERVER ENVIROMENT 38
4.4 IQREGISTRATIONSERVICE CONNECTION 41

5 SETTING UP WINDOWS 2003 AS A TERMINAL SERVER 44
5.1 INSTALLATION 44
5.2 TERMINAL SERVER LICENSING 47
5.3 TERMINAL SERVER CONFIGURATION 49
5.3.1 TERMINAL SERVICES MANAGER 49
5.3.2 TERMINAL SERVICES CONFIGURATION 51
5.3.3 REMOTE DESKTOP CONNECTION 53
5.3.4 TIPS 54
6 UPGRADE (IQENTERPRISE\IQBUSINESS AND PAYROLL (ONLY) 58
7 HARDWARE CONFIGURATION 61
7.1 POS PRINTING PERFORMANCE FOR IQENTERPRISE\IQBUSINESS 61
7.1.1 LPT PORT CONFIGURATION 62
7.1.2 COM PORT CONFIGURATION 65
7.2 HARDWARE SETUP OF IQENTERPRISE AND IQBUSINESS 69
7.2.1 PRINTERS 69
7.3 IQENTERPRISE\IQBUSINESS RECEIPT LAYOUT DESIGN 76

1 TECHNICAL SPECIFICATIONS – ALL SYSTEMS

1.1 SUPPORTED OPERATING SYSTEMS

SUPPORTED:

Windows 2008 Server, Windows 7 Professional (x32, x64) and Windows 7 Ultimate (x32, x64), Windows 8 Professional (x32, x64), Windows 8 Enterprise (x32, x64), Windows 10 Professional, Windows 10 Enterprise and Windows Server 2012.

NOT SUPPORTED:

Windows XP Home, Windows Vista Home, Linux (All Versions), Windows Vista Home Basic, Windows Vista Home Premium, Windows 7 Home Premium, Windows 2008 Home Server, Windows 8 Standard and Windows 10 Home.

NOTE: Windows XP Home, Windows Vista Home, Windows 7 Home Premium, Windows 8 Standard Windows 10 Home, will only be supported if installed as a Stand-Alone system, NOT supported running across any network.

1.2 HARDWARE REQUIREMENTS

1.2.1 BUSINESS INTELLIGENCE SERVER REQUIREMENTS

1.2.1.1 Recommended Software Requirements

Software: .Net Framework 4.0

Memory: Your server will need additional memory (RAM) to run the BI server. This can be calculated by taking the size of your IQ Data (divided by 10) * 1.3 (allows for 30% growth).

Example: 20GB / 10 * 1.3 = 2.6GB MEMORY

1.2.2 WORKSTATION REQUIREMENTS: (MAXIMUM 10 USER SETUP)*

1.2.2.1 Minimum Requirements

Processor: CORE 2 DUO CPU or Higher (No Celeron or Sempron CPU's) **Memory** 2GB RAM **Hard Drive:** 80GB

Network: Gigabit Network Card/Adapter

UPS: (Uninterrupted Power Supply)

1.2.2.2 Recommended Requirements

Processor: CORE 2 DUO CPU or Higher (No Celeron or Sempron CPU's)
Memory: 4GB RAM

Hard Drive: 120GB

Network: Gigabit Network Card/Adapter

UPS: (Uninterrupted Power Supply)

1.2.3 STANDALONE SERVER REQUIREMENTS: (MAXIMUM 10 USER SETUP)*

1.2.3.1 Minimum Requirements

Processor: CORE 2 DUO CPU or Higher (No Celeron or Sempron CPU's)
Memory 8GB RAM

Hard Drive: 320GB

Network: Gigabit Network Card/Adapter

UPS: (Uninterrupted Power Supply)

1.2.3.2 Recommended Requirements

Processor: CORE 2 QUAD CPU or Higher (No Celeron or Sempron CPU's) **Memory:** 16GB RAM **Hard Drive:** 500GB

Network: Gigabit Network Card/Adapter

UPS: (Uninterrupted Power Supply)

***NOTE**: If you have 10 users or more on your network, we strongly recommend you speak to your IQRetail Value Added Reseller regarding the system requirements recommended for your specific environment.

1.3 SUPPORTED NETWORKING OPTIONS

We do **NOT** recommend or support Wireless Networking for any setup. The recommended setup is a Gigabit Network Card/Adapter.

NOTE: We do **NOT** support peer to peer networks. We require a switch between 2 terminals for the managing of data being sent from one computer to another.

NOTE: For new installations that are more than two computers (e.g.: server and terminal) cloning of hard drives is not a supported option. The reason for this is that the registration process of the IQ Accounting Systems uses specific hardware serial numbers and the cloning of a hard drive will cause registration problems.

1.4 ANTI-VIRUS

We currently recommend NOD32 Anti-Virus Software.

NOTE: NO ant-virus program is allowed to scan any IQ Systems data files. Set the anti-virus programs scanning to exclude all IQ related data files.

1.5 PRINTERS, SCANNERS AND PRINTING

1.5.1 POS PRINTERS

We suggest any Epson compatible Slip/Receipt Printers connecting to a COM port, LPT port or USB port. However, we recommend using parallel (LPT) or USB printers, they are much faster and easier to configure and more reliable.

NOTE: We currently support or suggest Slip/Receipt Printers connecting to a USB port on the Enterprise 5 system. We only support 40-column receipt printers in the Point Of Sale module.

1.5.2 CASH DRAWERS

We suggest any type of cash drawer that adheres the standard cash drawer design and configuration, connecting to a COM port or direct to printer.

NOTE: We do not currently support or suggest Cash Drawers connecting to a USB port.

1.5.3 HANDHELD SCANNERS

We suggest any handheld scanners connecting to a PS2 port (Keyboard Wedge) or USB port.

1.5.4 GENERAL PRINTING

The software packages don't require any special printing needs. You can use your existing printers connecting to a LPT or USB port (Not for POS slip printing needs).

NOTE: The Server, Terminals and Network also require a UPS (Uninterrupted Power Supply). All software packages require internet access.

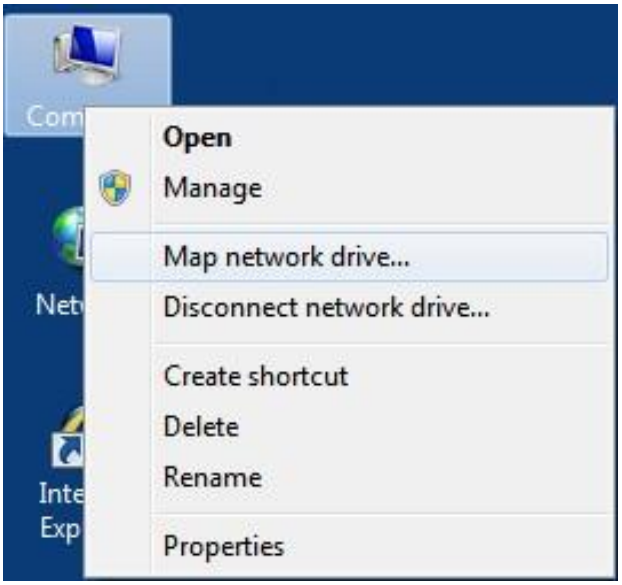
NOTE: Due to the nature of today's ever-increasing demand and technology requirements the above minimum requirements may change without prior notice. Please contact IQ Retail (PTY) LTD to obtain the latest hardware and operating system requirements.

2 DRIVE MAPPINGS

2.1 NETWORK DRIVE MAPPING

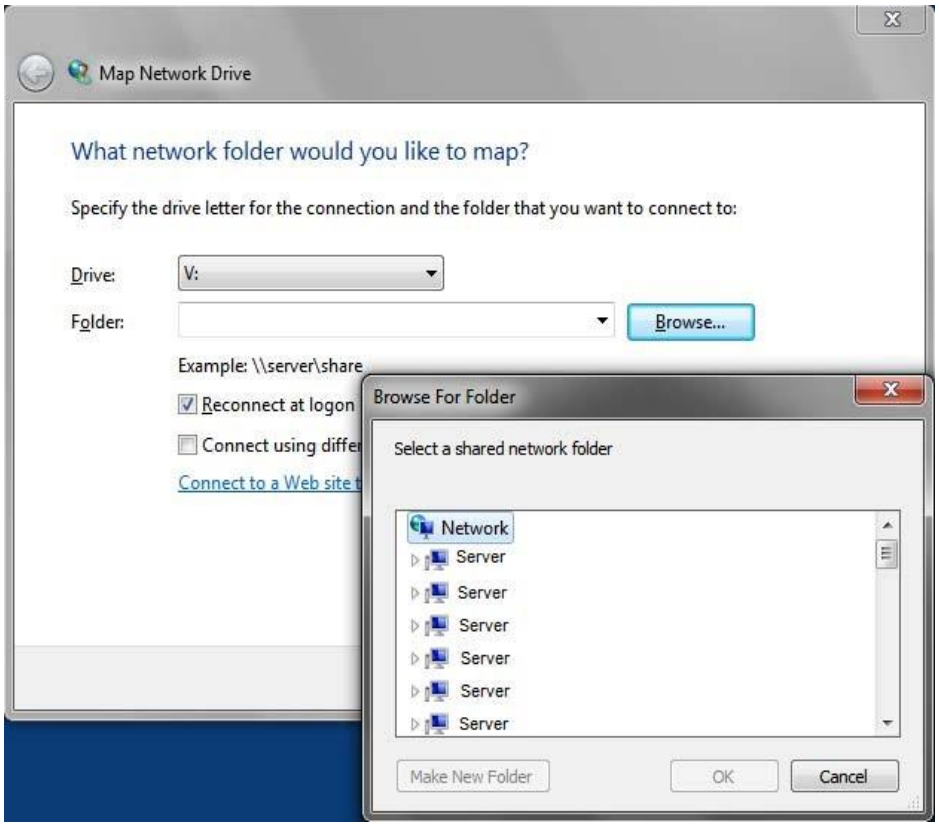
Right click on My Computer.

From the menu that appears, select the "map network drive" option.

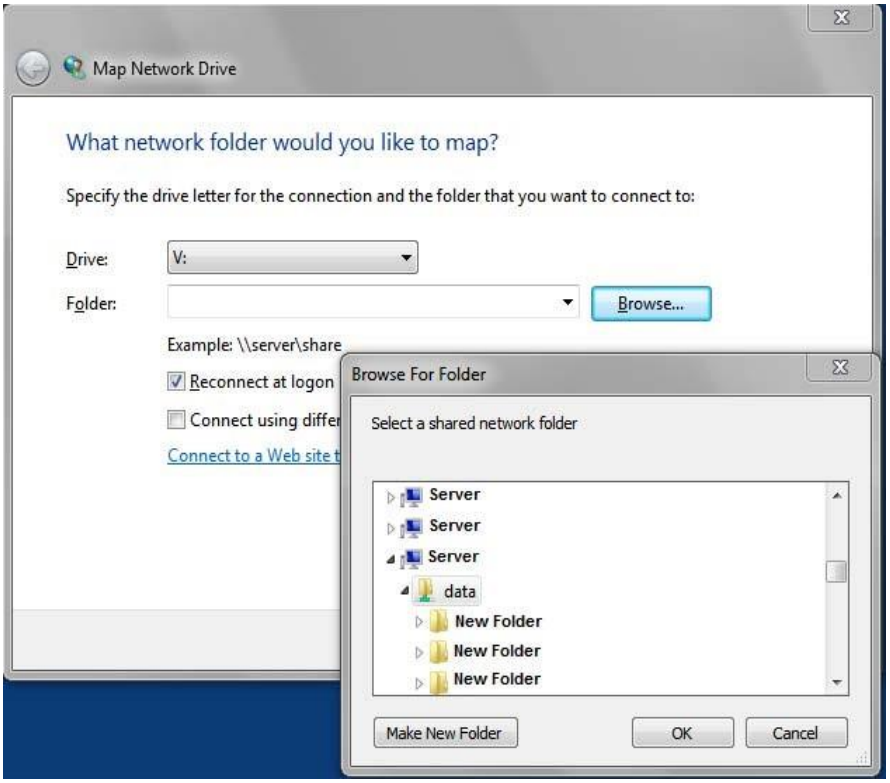


The “Map Network Drive” screen should next appear. It will automatically default the “Drive” option to the appropriate network drive to be used. This option may be changed, but it is recommended that it should be left as is if not 100% sure

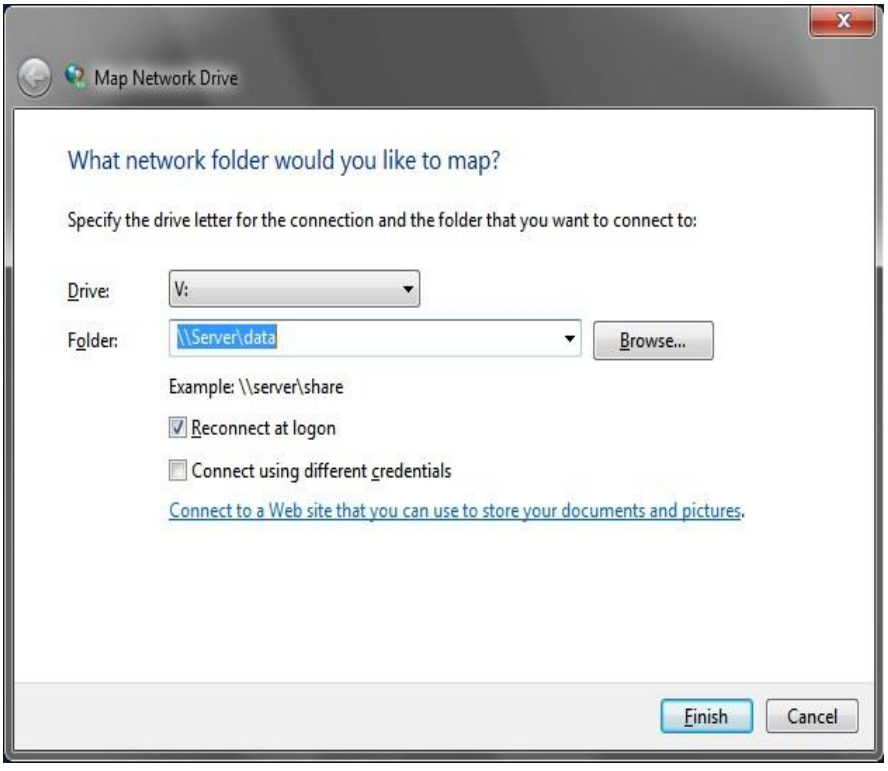
Click on the down arrow for the “Folder” option. A list of the available workstations or servers should appear. If not then click on the “Browse” option to find the available servers or workstations.



From the list, select the domain or workgroup where your server or the workstation is located. Once you have found your server or workstation, double click that particular workstation or server to open and see which drives are available.



Now select your server's "C: drive" then click the "OK" button to accept.



Your "path" of your mapped network drive has to look the same as the above illustration.
To complete the procedure, click the "Finish" button.

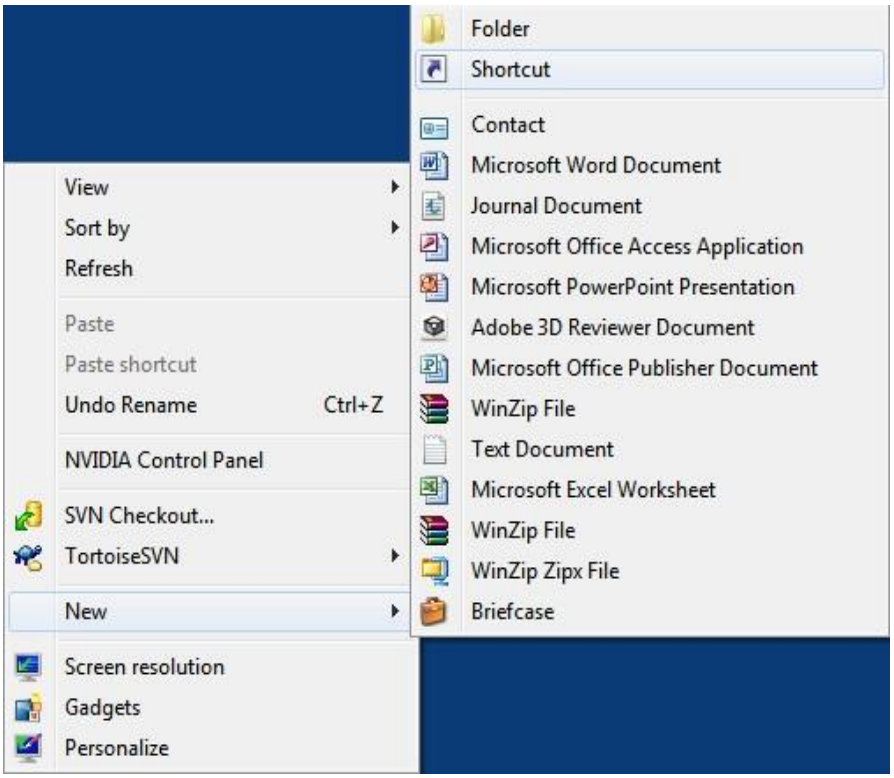
2.2 SHORTCUT SETUP IN WINDOWS

The shortcut setup is intended only for workstations / terminals where the IQ program will be run. This need not be done on the computer where IQ was installed on.

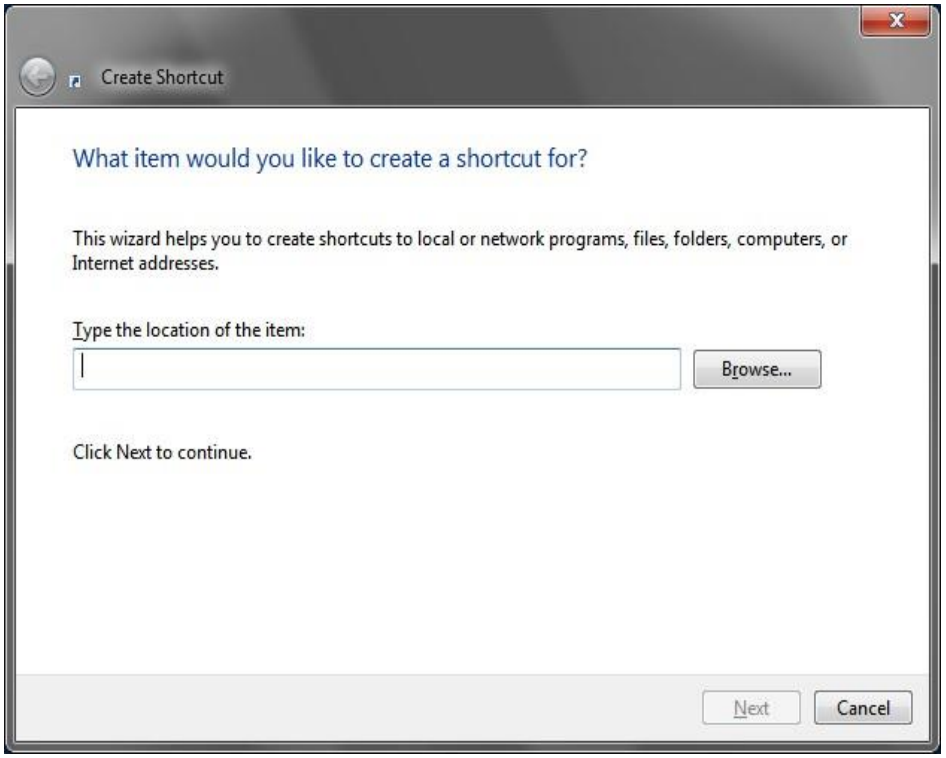
Before installing IQ on a network, it is assumed that the network software and hardware has already been installed and correctly setup (i.e. all workstations have been mapped correctly to the server) thereby allowing all workstations access to the server with full read and write access permissions.

Before creating the shortcut make sure that Windows Desktop is visible. Place your mouse cursor on an open space of the Desktop, i.e. do not highlight or place the cursor on any desktop icons.

Now click your right mouse button once.

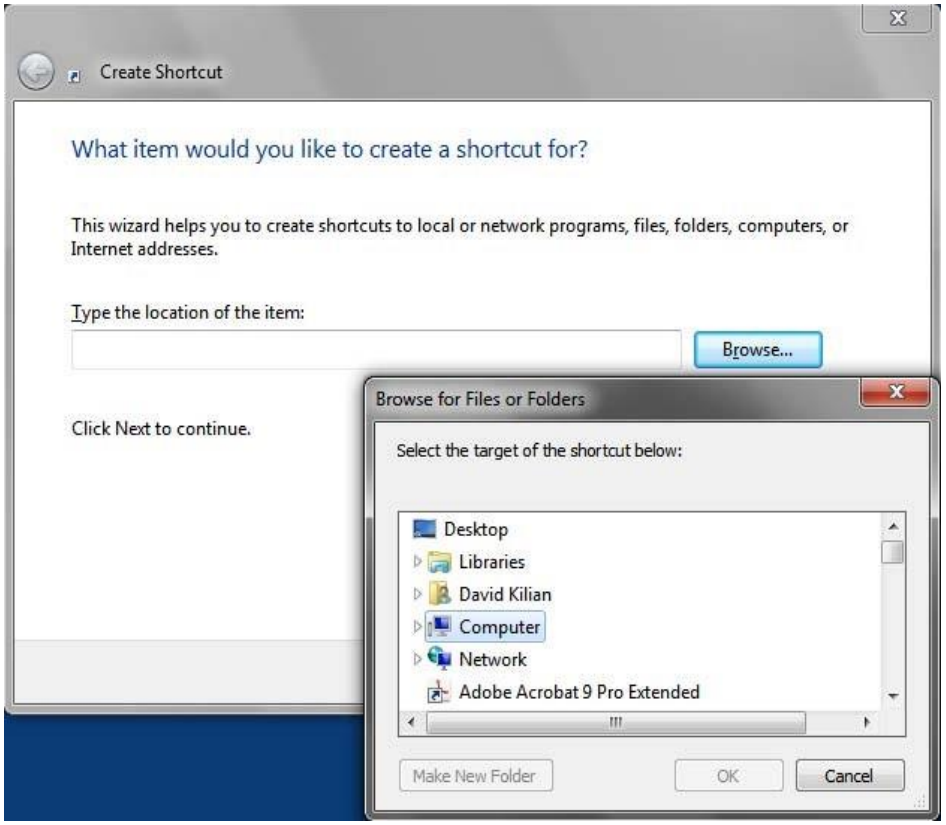


The following menu should appear. Select the New option followed by the Shortcut option.

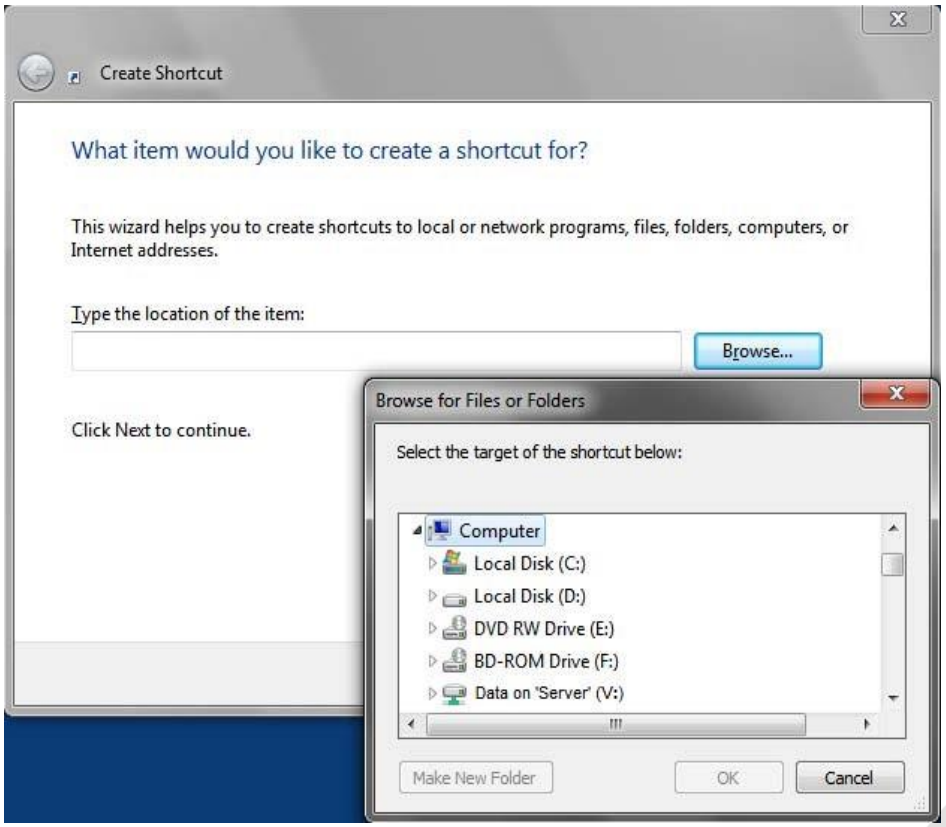


The Create Shortcut dialogue box will appear next asking for the location of the item (i.e. the location of the IQWIN.EXE, IQELITE.EXE, IQENTERPRISE.EXE, IQREST.EXE program file) to run the relevant IQ program.

Should you not know the command line path select the “Browse” button. The Browse dialogue will appear next.

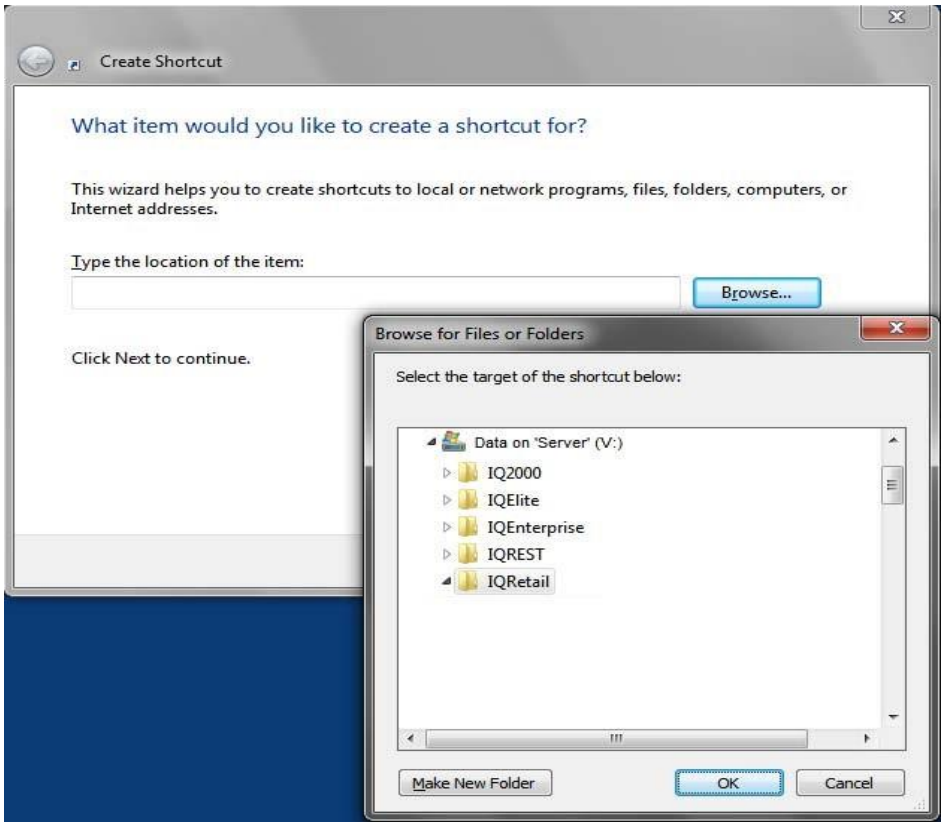


This dialogue box will open as above by default. Now open “My Computer” by double clicking.

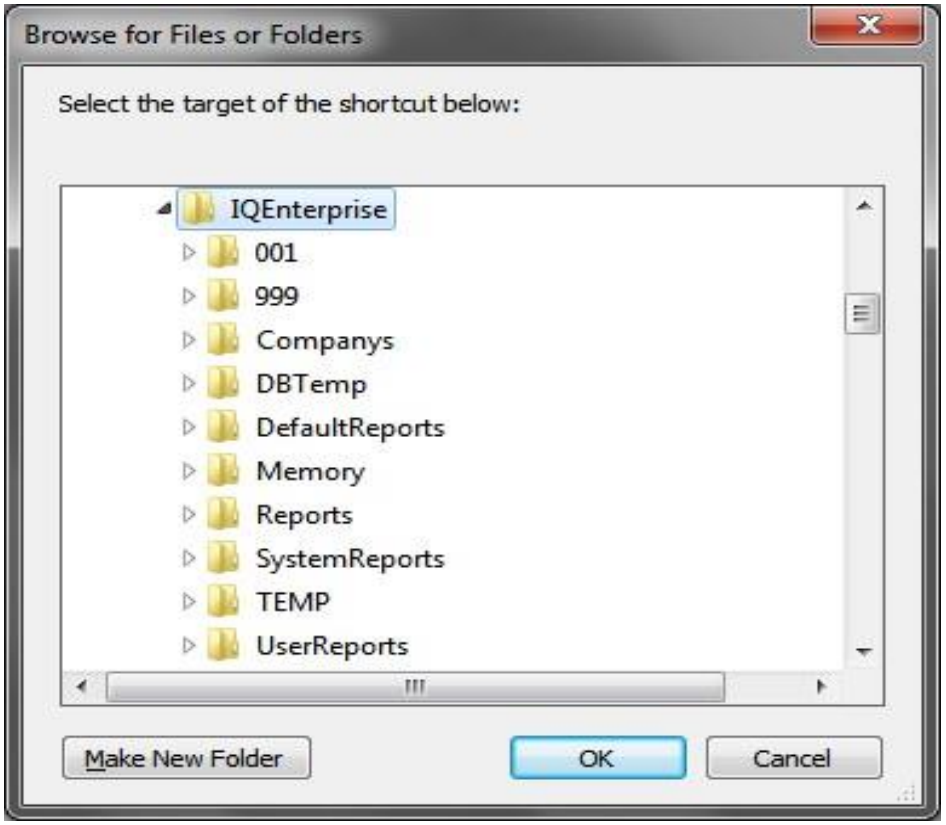


Now the next step is to find your mapped network drive. Remember the mapped network drive we created was called \\Server\data.

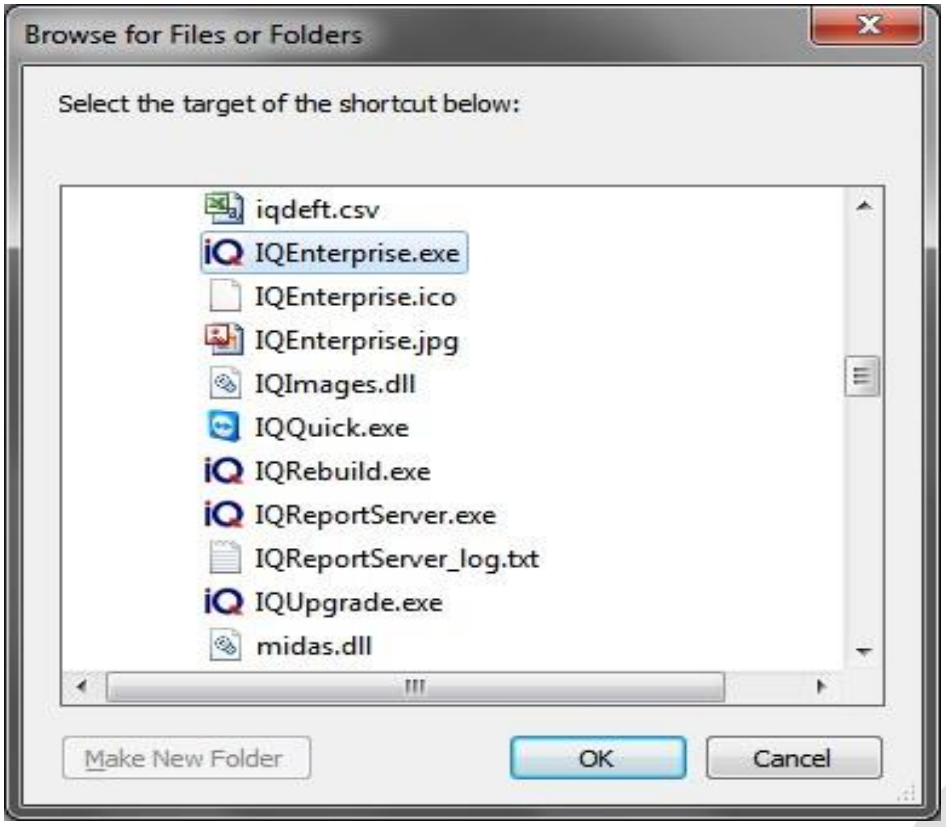
Find the mapped drive on the list and double click to open.



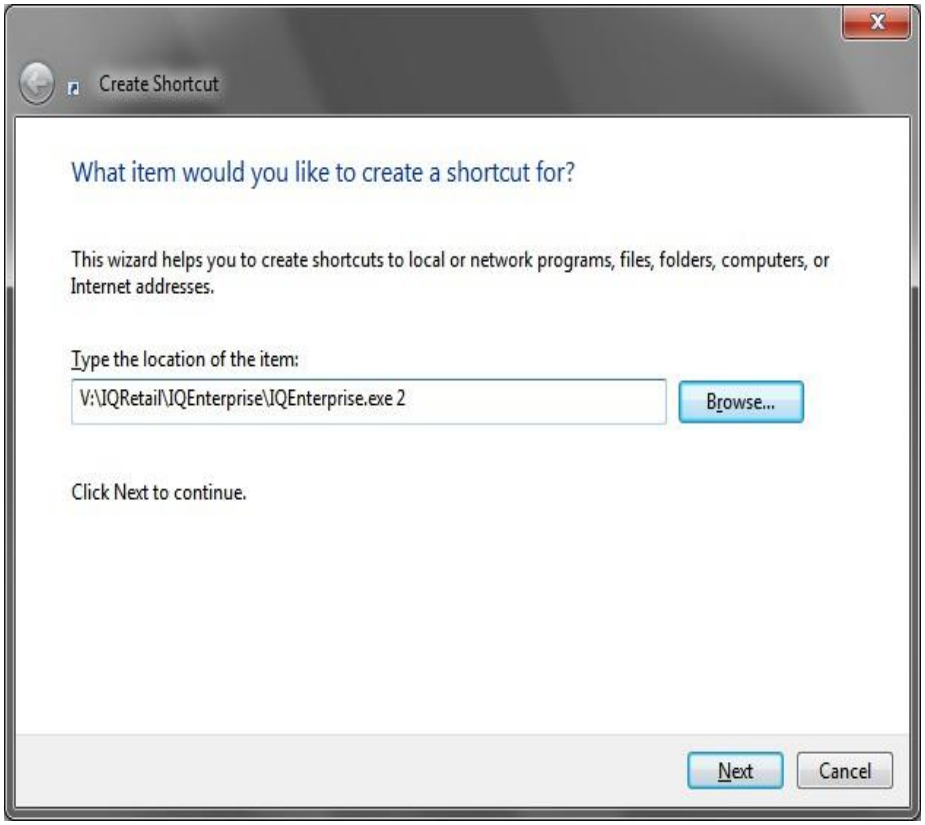
Select from the list the IQ2000, IQElite, IQEnterprise directory folder and double click on it with the left mouse button or click on the Open button. (This case we will use IQEnterprise).



Next the contents of the IQEnterprise directory will appear. Locate the file IQEnterprise and either double click on it, or click on the OK button when the IQEnterprise file is highlighted.



The Create Shortcut dialogue box will reappear, but this time it should have the Command Line displayed with program path to the IQEnterprise program on the server or the computer it was originally installed on.



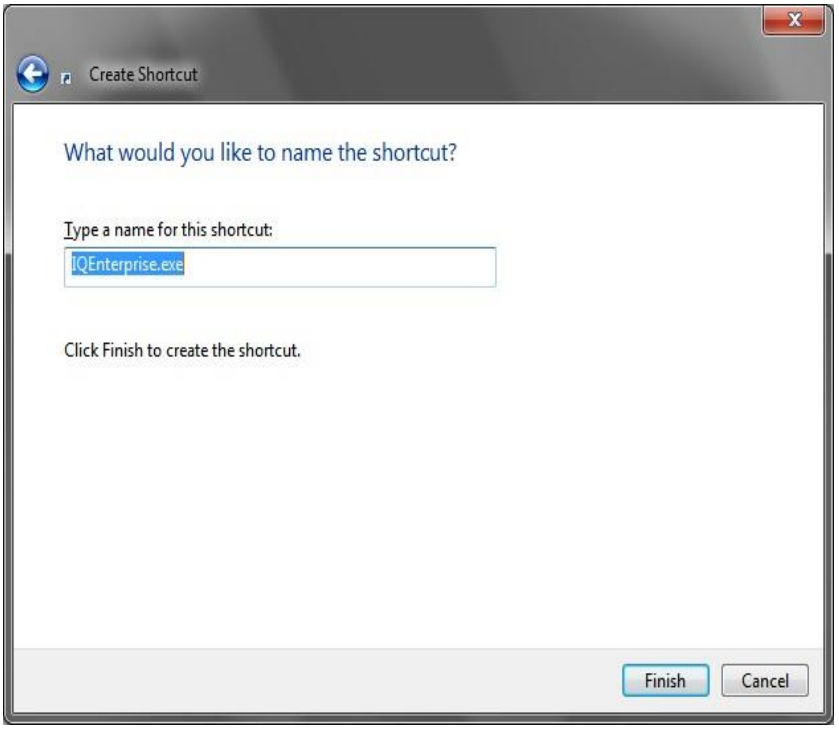
Before continuing, click on the command line field with your left mouse button and type in a **unique numeric** terminal / workstation number, e.g. W:\IQEnterprise\iqenterprise.exe **2**.

The number entered must be in the range from 1 to the number of users permitted by the IQ software, i.e. Should the IQ package be a Network 5 user system then the maximum number of users permitted is 5, allowing a range from 1 to 5 to be entered.

Please make sure that the number that is entered has not been used by another computer.

Please note that user **1** is automatically allocated to the computer where the software was installed on.

Click the Next button to continue or the Cancel button to cancel shortcut setup. The next dialogue box to appear will ask for a descriptive name for the shortcut to be entered.



The shortcut name iqelite.exe will already be displayed in this field. Either the shortcut name can stay this way, or it may be altered to display your own shortcut name, e.g. IQ Enterprise.

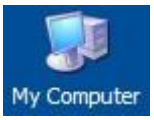
Once the Finish button has been selected, the name together with the IQ Enterprise logo will appear on your desktop. Should this not happen please try the Setup Shortcut procedures again.

3 COMPATIBILITY

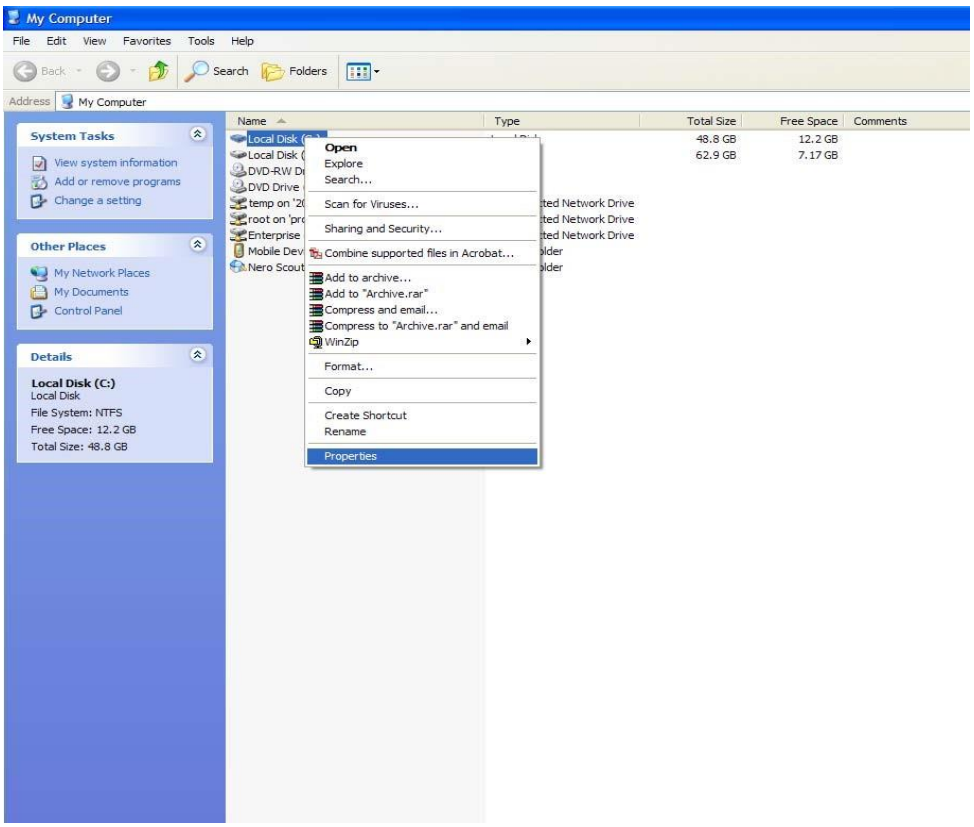
3.1 DISABLE WRITE CACHING ON THE HARD DRIVE

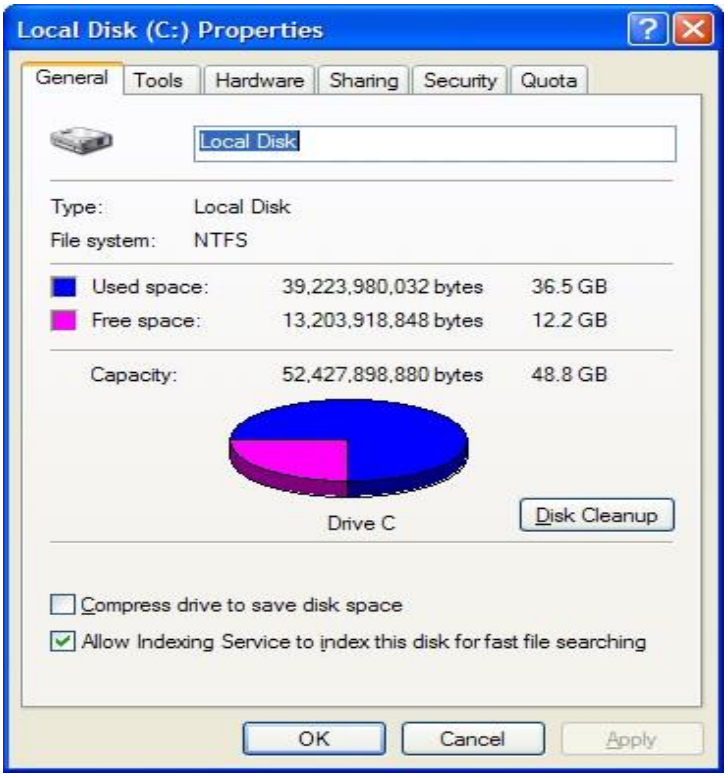
There are a few extra settings that need to be setup before you start using the IQ System.

Please follow these few easy steps.

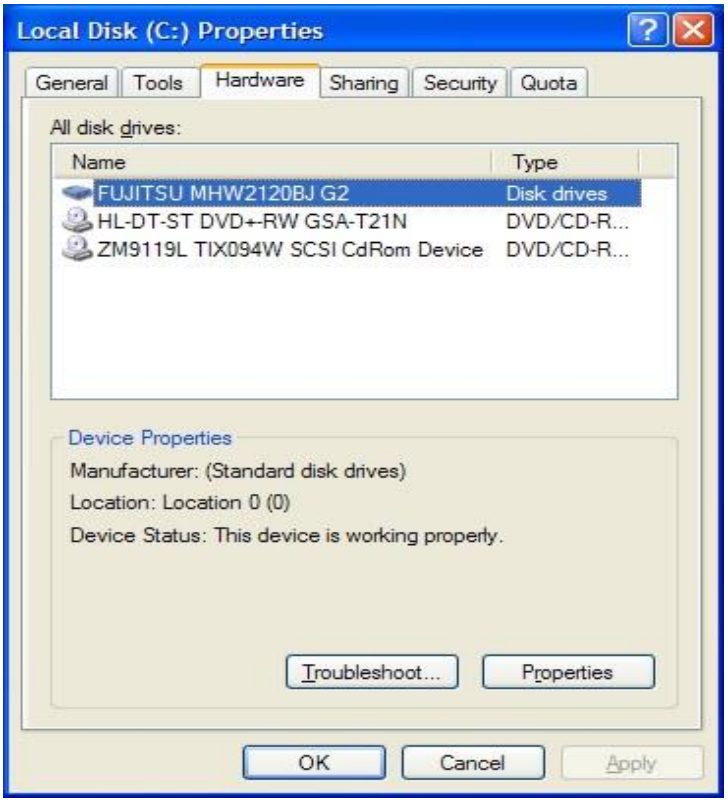
Double click on My Computer. 

Next, right click on the Drive that has any of the IQ Systems installed on it. Now click Properties.

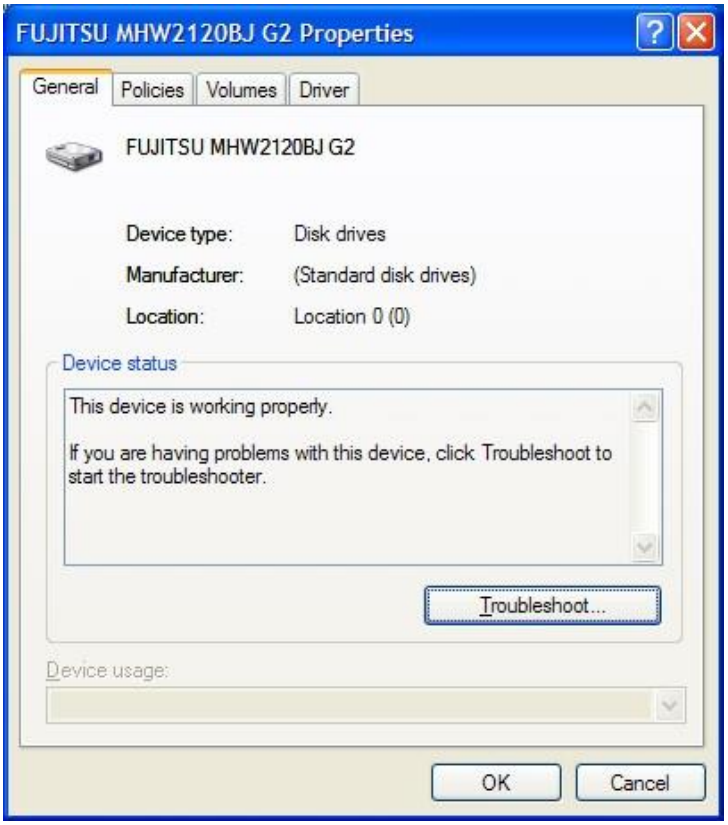




On this Drive Properties screen, please click on the Hardware tab.



Now click on the “Properties” tab.

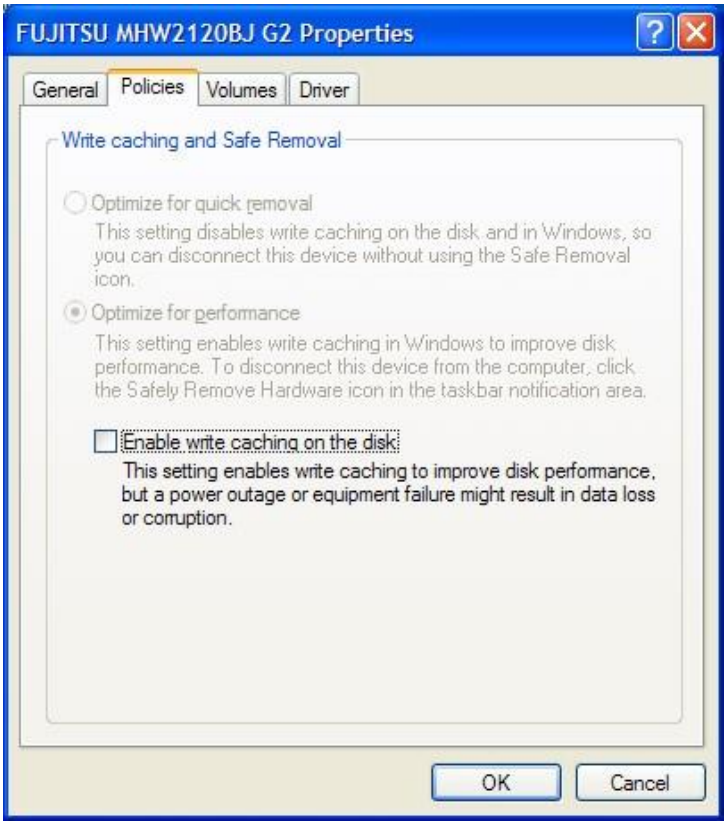


Select the Policies tab.

Now we need to disable the Write Cache on the Hard Drive.

Remove the tick from the “Write cache enabled” box.

Once this has been done, select the OK option.



NOTE: This procedure must be done on every terminal using any of IQRetail (PTY) Ltd's range of products.

3.2 OPPORTUNISTIC LOCKING

The registry of every terminal/computer needs to have this registration key installed. Opportunistic Locking can be done in two ways, automatically or manually. Please download the file from our website (www.iqretail.co.za). Doing this automatically is quite simple, follow the easy steps below.

NOTE: The opportunistic locking option has been incorporated into the IQEnterprise, IQElite, IQPayroll systems. This means that when any of these IQ Systems are installed the opportunistic locking options will be disabled automatically. Ensure that when any of the above-mentioned IQ Systems are installed, that the logged-on user is an Administrator otherwise the opportunistic locking will not be disabled automatically. Below extracts of opportunistic locking successfully disabled in Windows XP and Windows 7 Professional.

NOTE: The opportunistic locking for the IQ2000 and IQRestaurant systems have to be done manually. Remember that the logged-on user when installation is done must be an Administrator.

For the manual disabling of opportunistic locking, follow the steps below.

3.2.1 STEPS TO FOLLOW

This file is located at www.iqretail.co.za Product Downloads --> Other Downloads.

Extract the downloaded “reg1.zip” file into your \IQ2000 or \IQRest folder.

A new file called “reg1.reg” should appear. Double click on the “reg1.reg” file.

This will automatically install the file into your computers registry.

Below are the lines adjusted by the installation of this “reg1.reg” file.

[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\lanman workstation\para meters] "UseOpportunisticLocking"=dword:00000000

[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\lanman server\parameter s] "EnableOplocks"=dword:00000000

NOTE: Doing this manually is not as simple. Only Qualified IT Professionals should do this manually.

Click on Start, open the Run command. In the blank box please type “regedit”. The next step is to find these keys and change them to display as follows;

[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\lanman workstation\para meters] "UseOpportunisticLocking"=dword:00000000

[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\lanman server\parameter s] "EnableOplocks"=dword:00000000

NOTE: The manual procedure must be done by Qualified IT Professionals only!. This procedure must be done on every terminal using any of IQRetail (PTY) Ltd's range of software products.

3.3 NETWORK CARD SETUP

Some of the new network cards allow the computer to switch off this device to save power. This will cause problems in a networking environment.

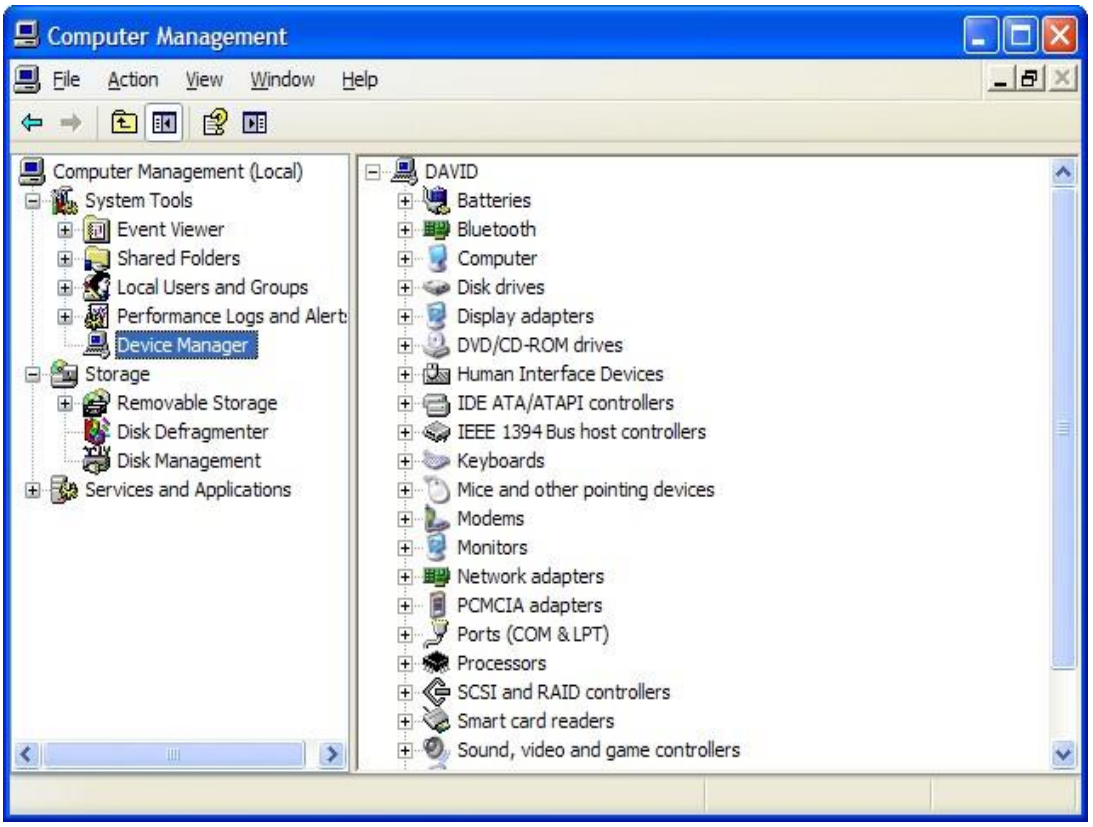
This option needs to be disabled.

Please follow the easy steps below.

Right click on My Computer, and then click Manage.

The Computer Management Screen will open.

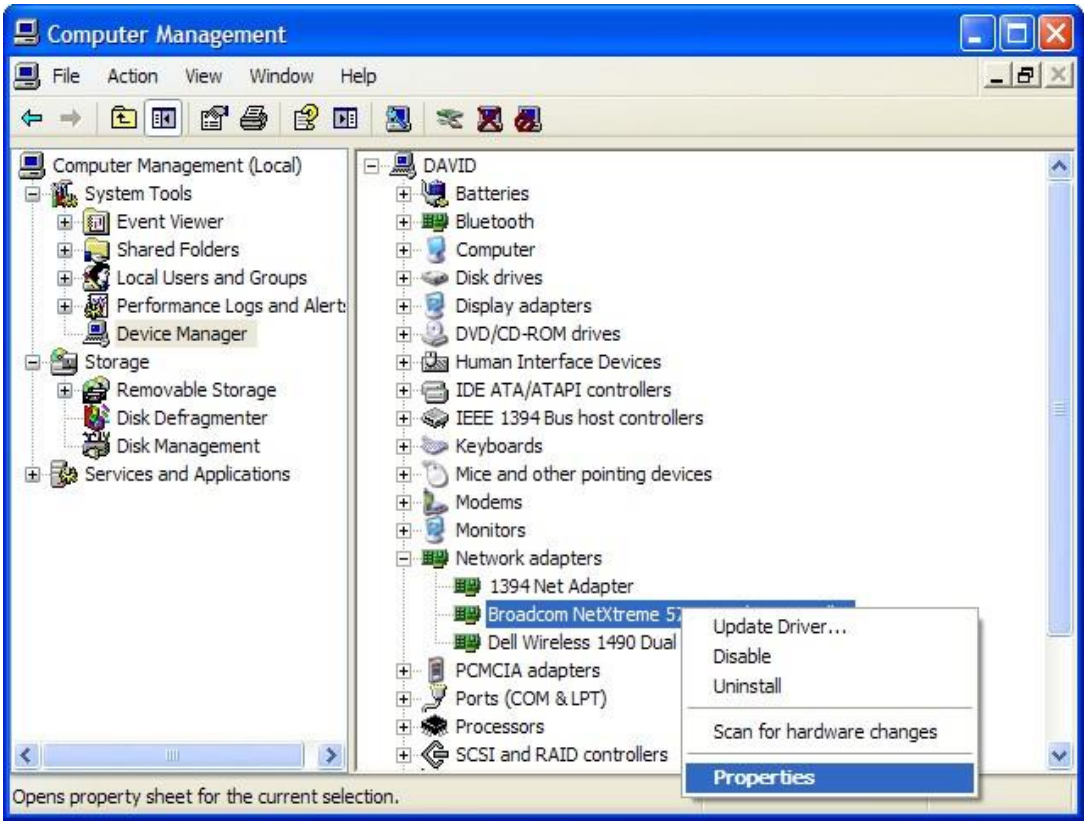
Select Device Manager.



Next step, open your Network Adapter's icon.

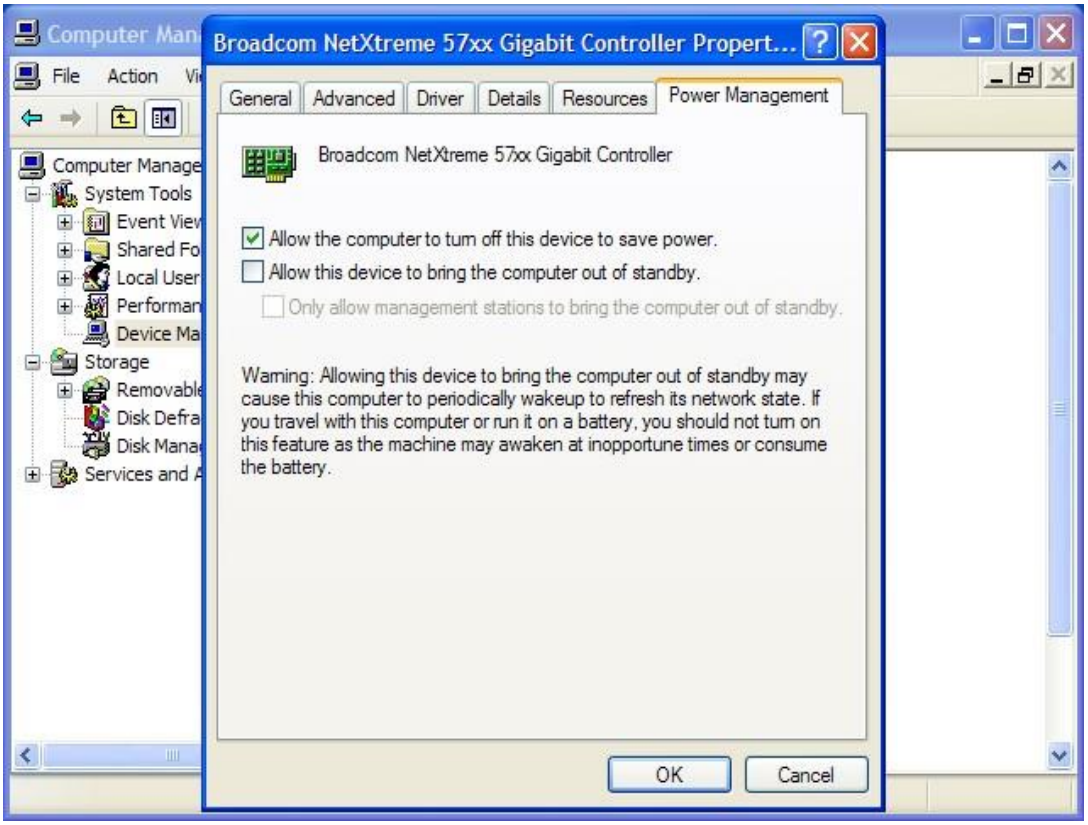
Now right click on your network card.

Left click on Properties.



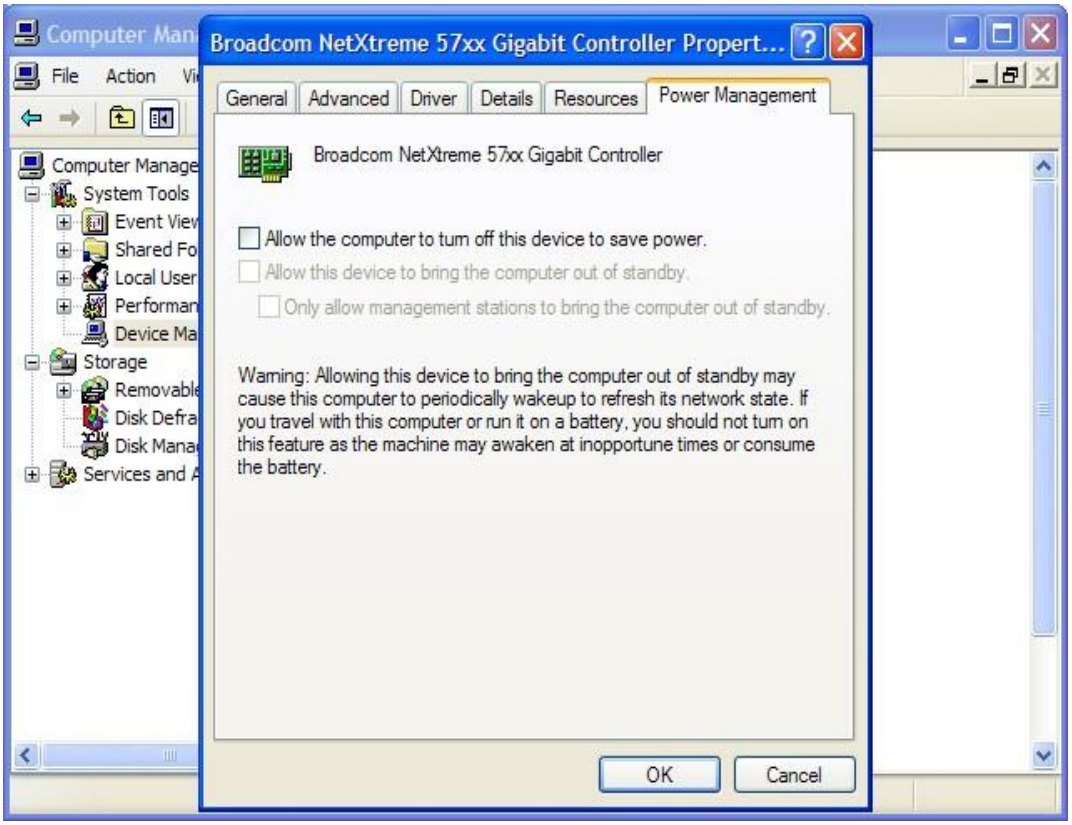
This will open your network card's properties box.

Now click on the Power Management tab.



Now disable the option “Allow the computer to turn off this device to save power”.

The illustration below shows the option disabled.
Now select the OK option.



NOTE: This option has to be disabled on all computers/terminals. This procedure must be done on every terminal using any of IQRetail (PTY) Ltd's range of products.

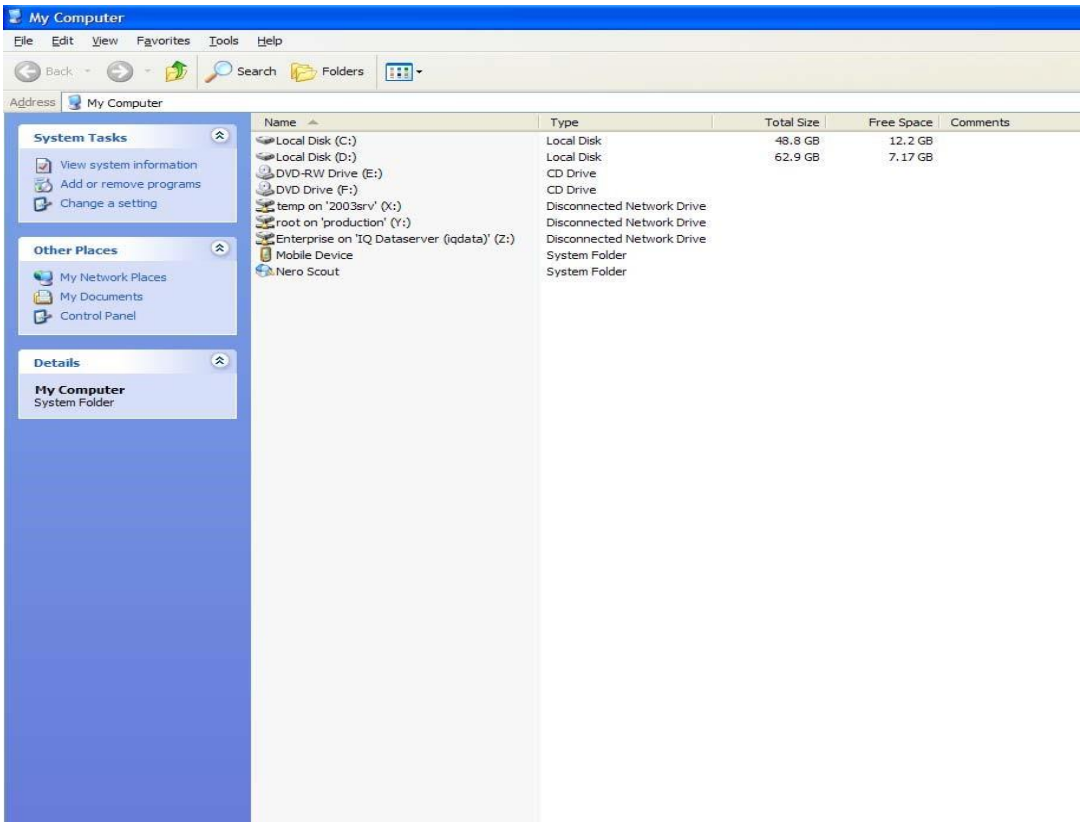
3.4 OFFLINE FILES SETTING

Offline files setting within your Windows Operating System has to be disabled. This causes a problem across a networking system when temporary till files are stored locally and not on the actual server.

3.4.1 DISABLE THIS OPTION WITHIN YOUR WINDOWS OPERATING SYSTEM

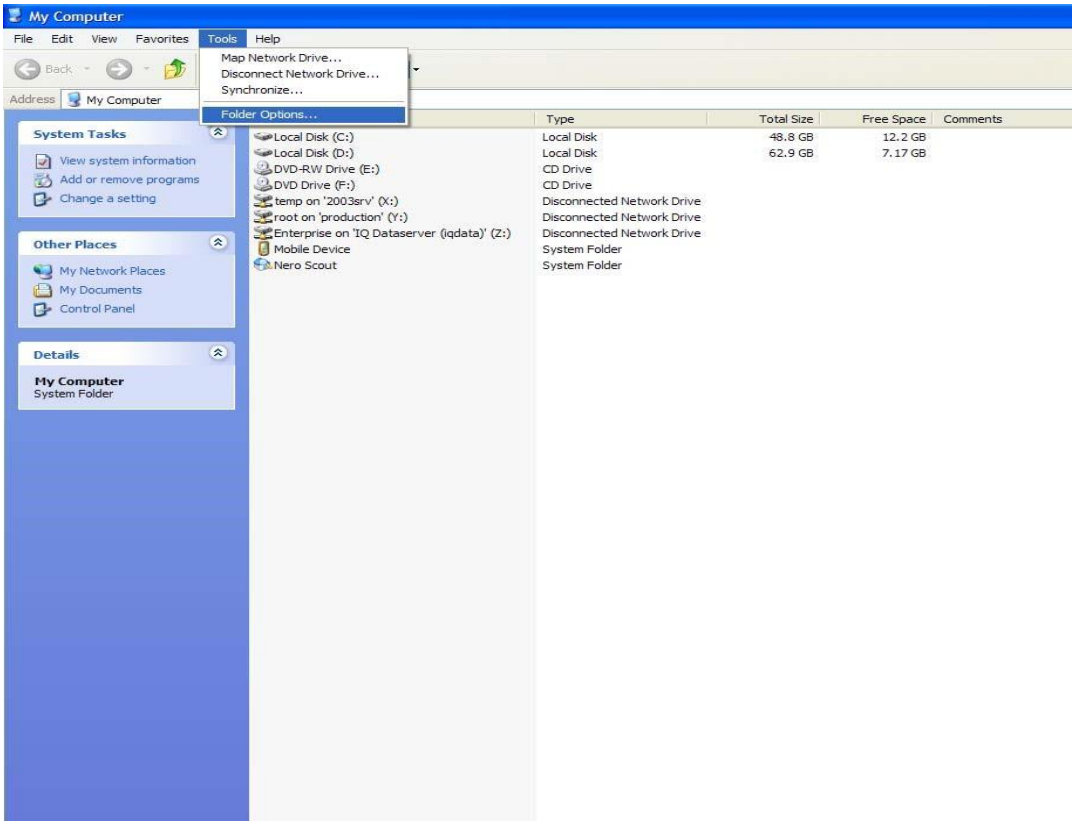
Please follow these few easy steps.

Open my computer (double click).

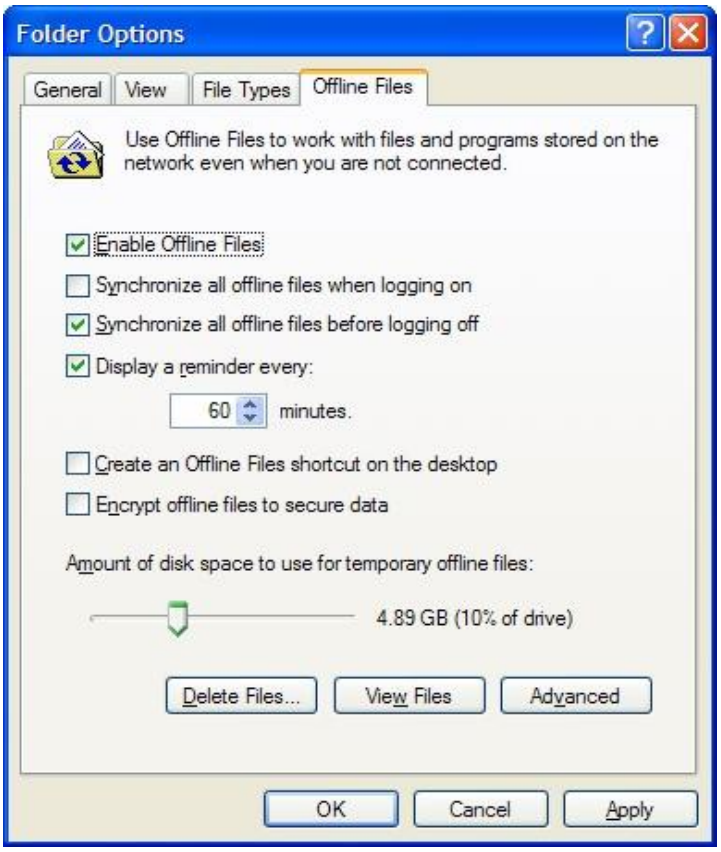


From the menu on top, select the Tools option.

Select the Folder Options menu option.

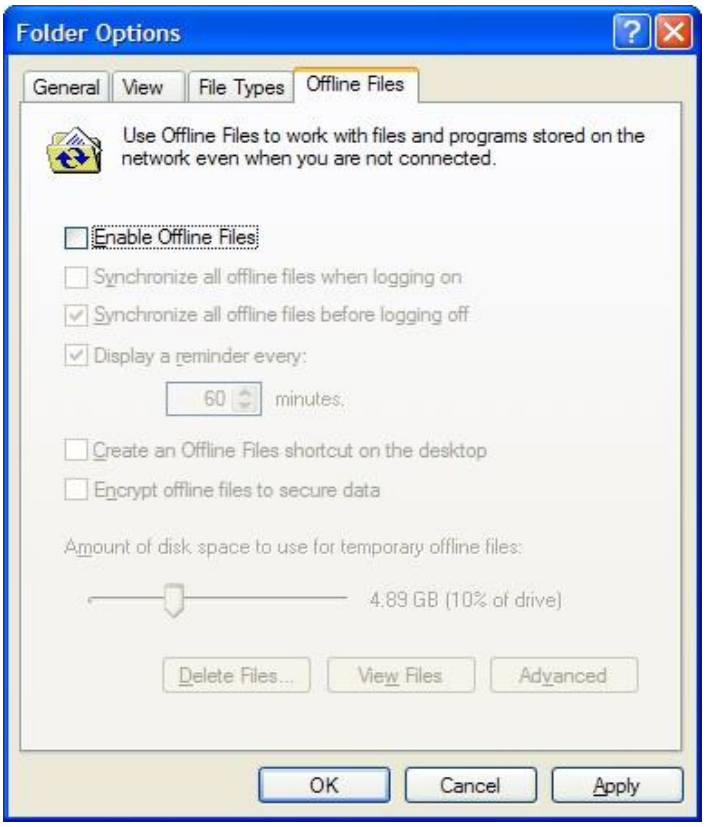


Now click on the “Offline Files” tab at the top.



Disable this option.

Remove the tick mark from the “Enable Offline Files” box.



Now click Apply and Ok.

NOTE: This option has to be disabled on all computers/terminals. This procedure must be done on every terminal using any of IQRetail (PTY) Ltd’s range of products.

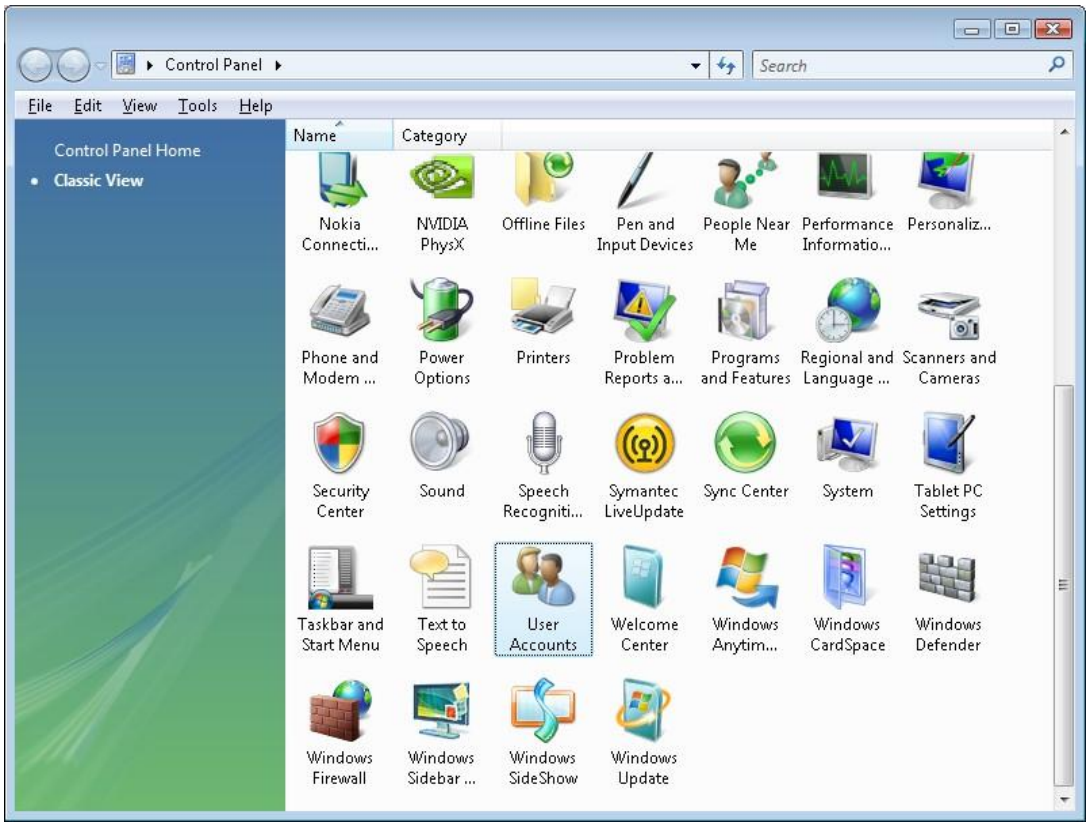
4 WINDOWS 7

4.1 ADDITIONAL WINDOWS SETTINGS

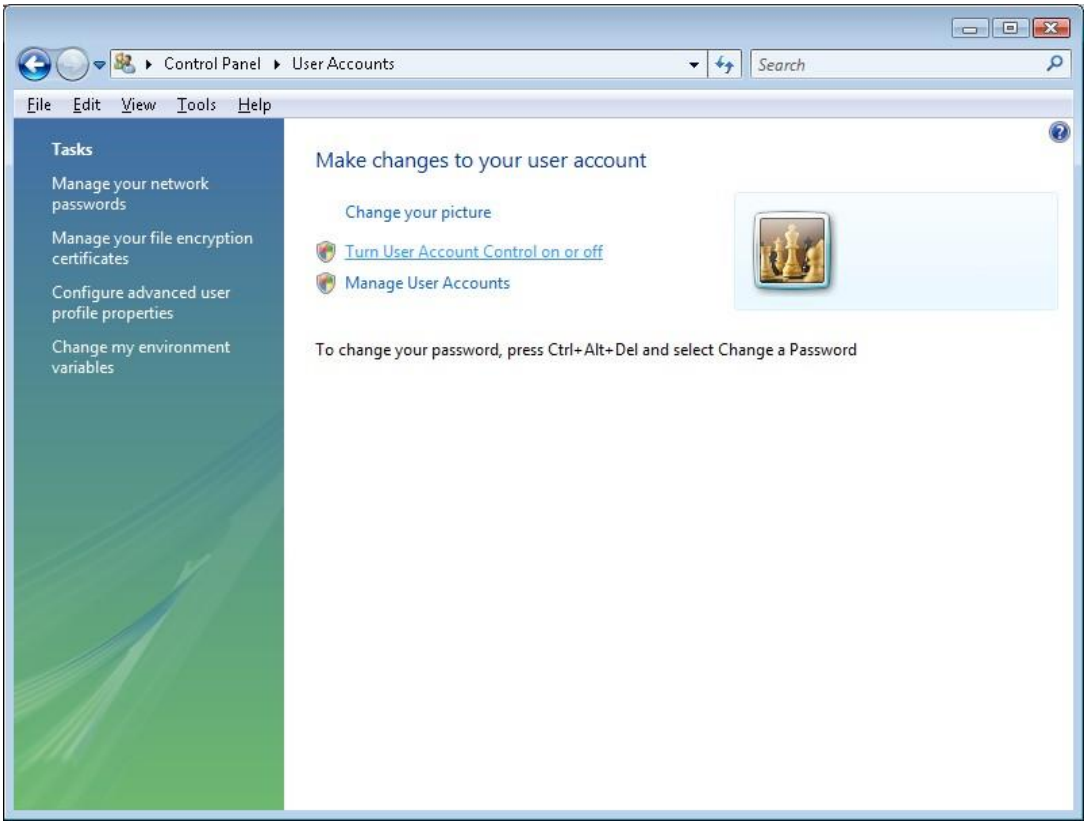
4.1.1 DISABLE USER ACCOUNT CONTROL (UAC)

Select Start and then select the Control Panel option.

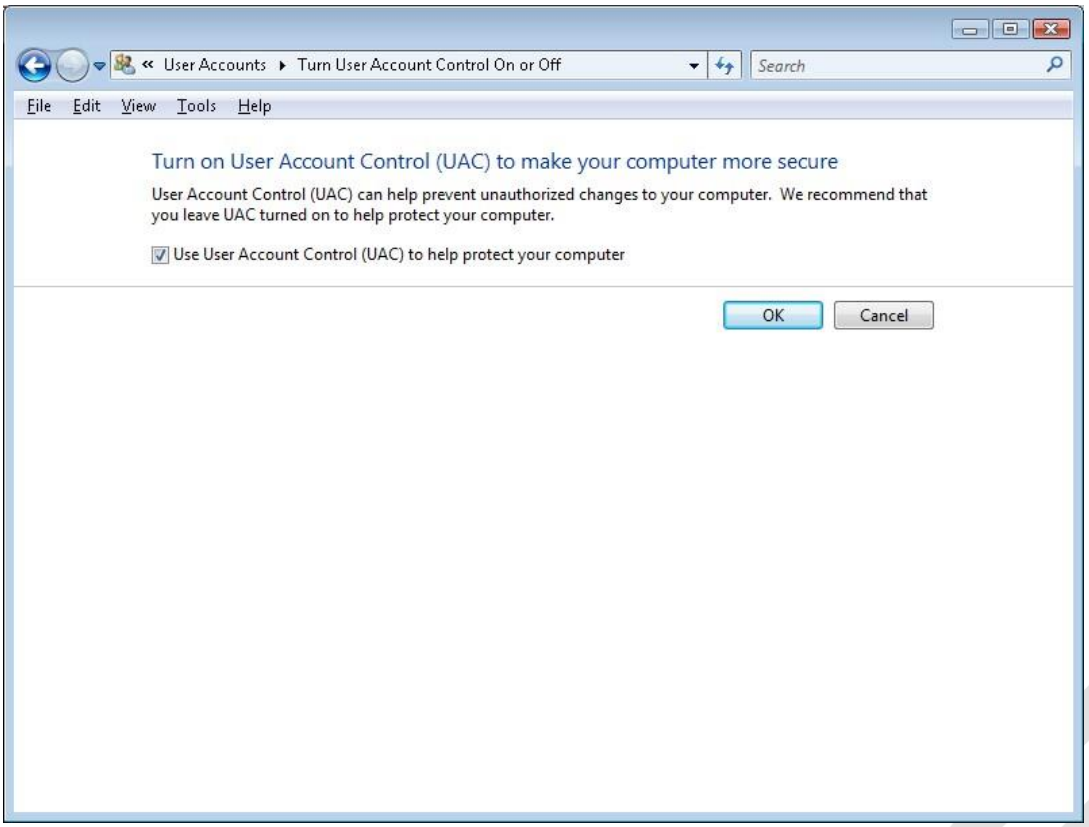
There are two screen options, the default and the classic view. We will be using the classic view which makes it easier to disable the user account control.



In the control panel select the User Accounts option.

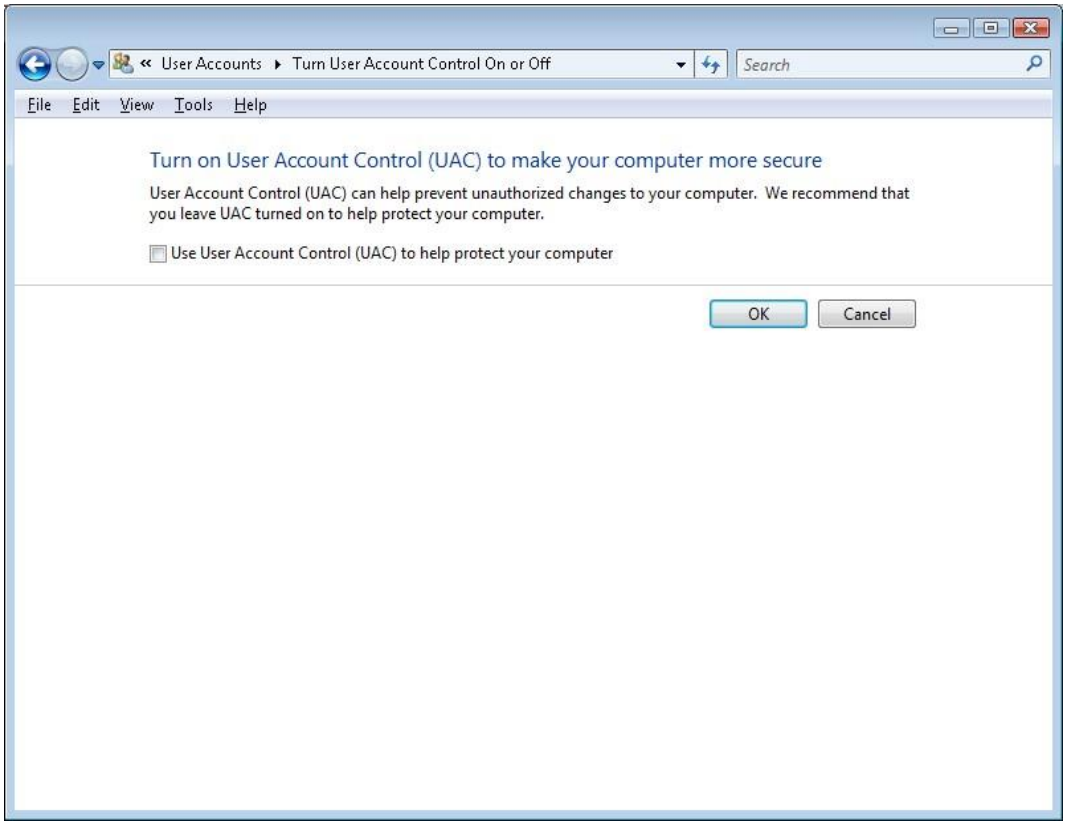


Select the "Turn User Account Control On or Off" option.

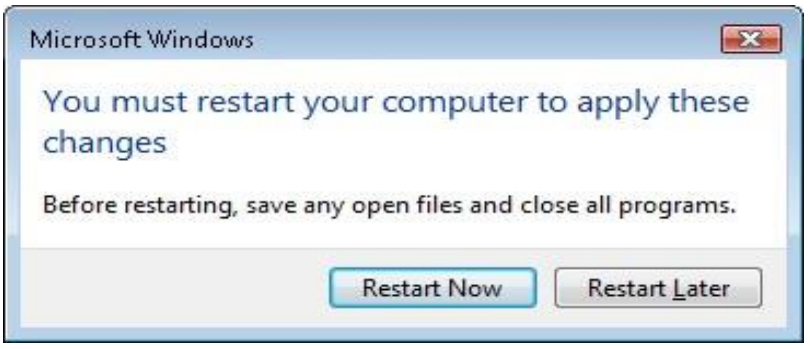


By default, the User Account Control will be enabled. This can be seen by the tick mark in the “Use User Account Control (UAC) to help protect your computer” box.

Remove the tick mark from the “Use User Account Control (UAC) to help protect your computer” box.



Once completed, select the “OK” option.



Windows 7 will now ask to restart the computer. Select the Restart Now option in order for your computer to be restarted and the new settings to take effect.

4.2 REGISTERING THE OCX FILE

4.2.1 OCX FILE

Windows 7 does not allow the copying of the vcf15.ocx file into the C:\Windows directory upon installation of IQ Accounting Systems. This needs to be done manually. This also happens when the

spreadsheet application is installed. Windows 7 does not allow the copying of the vcf15.ocx file into the C:\Windows\System32 directory.

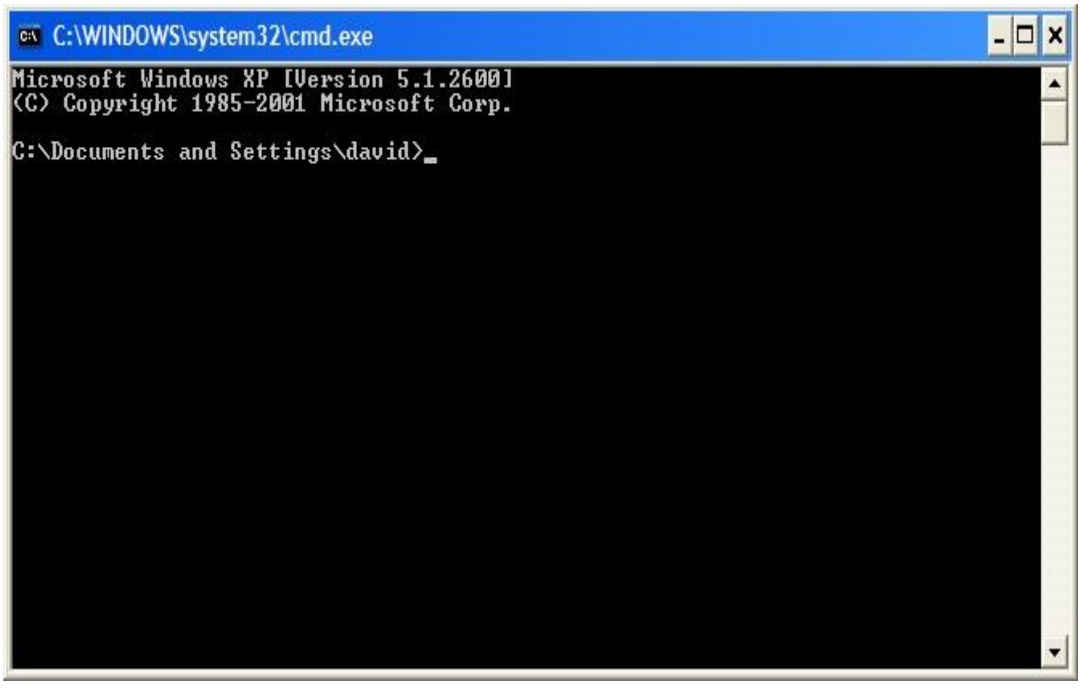
NOTE: Copy the file manually to both directories.

4.2.2 HOW TO REGISTER THE VCF15.OCX FILE IN WINDOWS XP

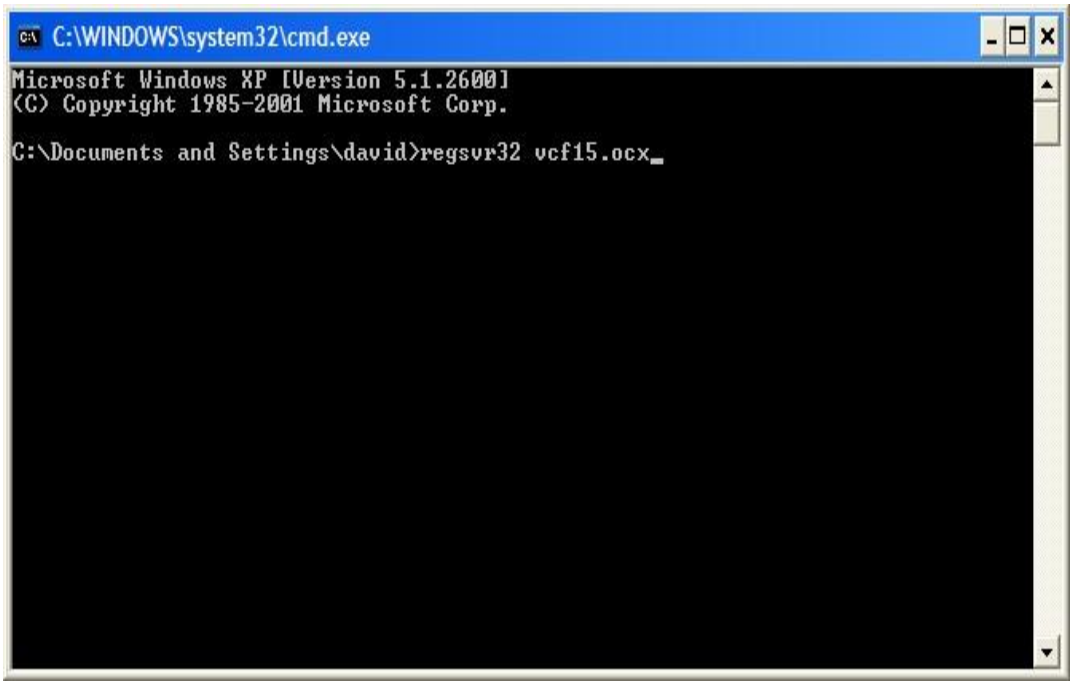
How to register the vcf15.ocx file within Windows XP.

Go to Start -- > Run.

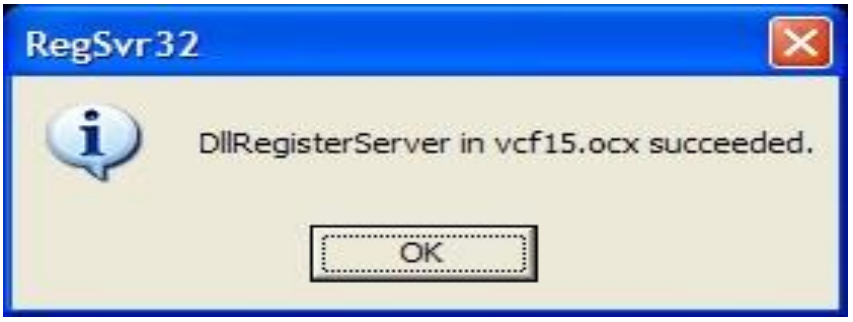
Enter the letters CMD and select the Ok option.



Enter the following: regsvr32 vcf15.ocx



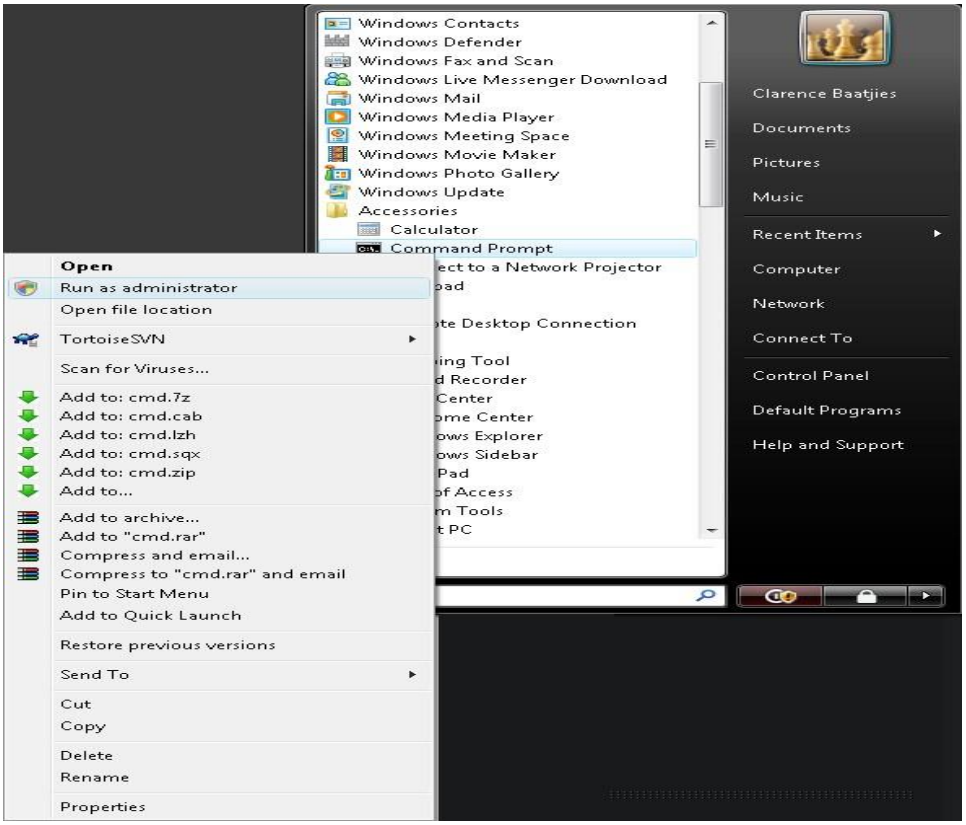
Once completed, a dialogue box will appear stating that the vcf15.ocx file has been successfully registered.



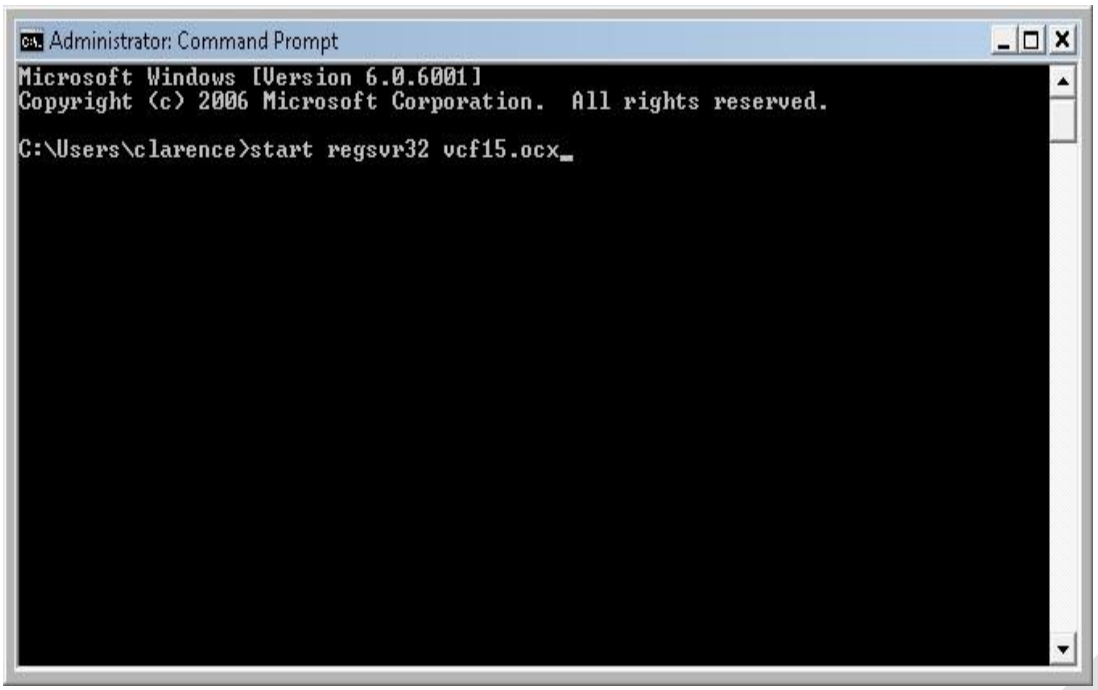
4.2.3 HOW TO REGISTER THE VCF15.OCX FILE IN WINDOWS 7 PROFESSIONAL x32

How to register the vcf15.ocx file within Windows 7.

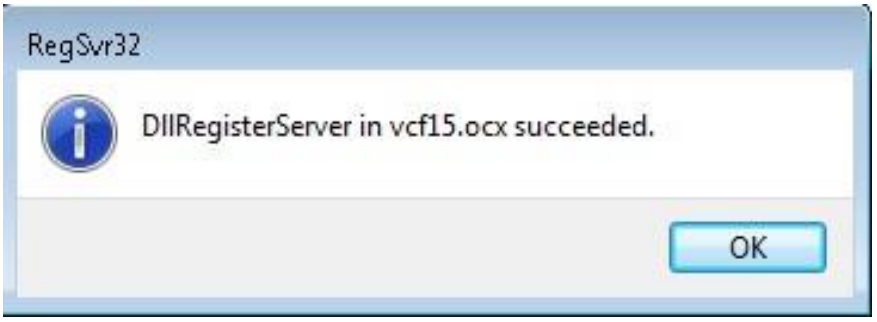
Go to Start -- > All Programs -- > Accessories and then right-click on command prompt and select Run as Administrator.



Once the command prompt appears, enter the following: start regsvr32 vcf15.ocx



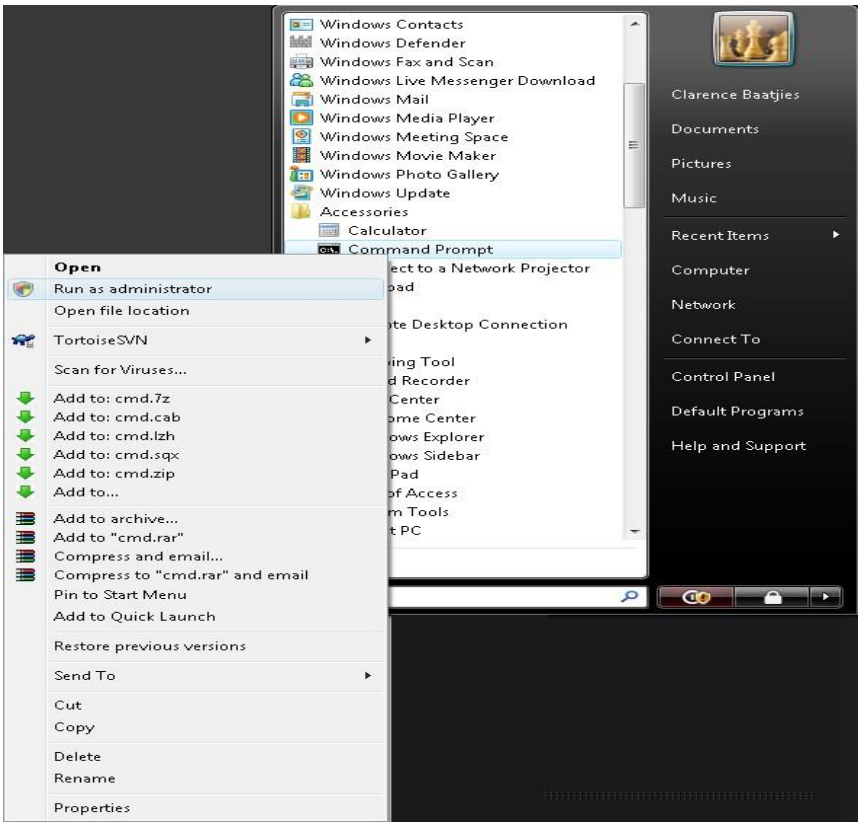
Once completed a dialogue box will appear stating that the vcf15.ocx file has been successfully registered.



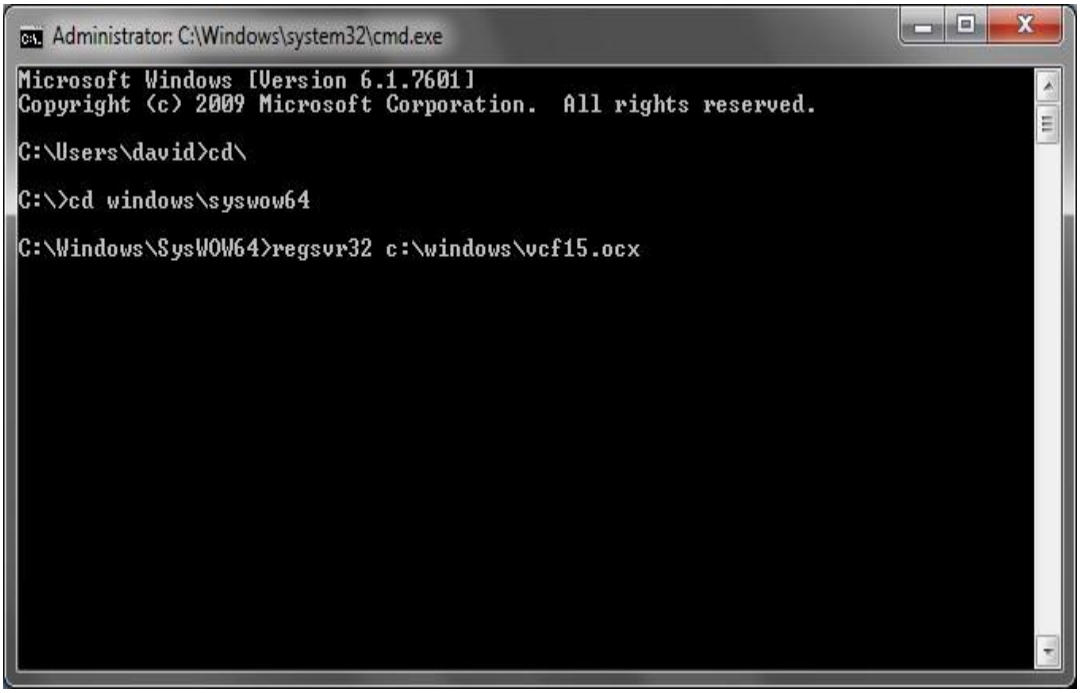
4.2.4 HOW TO REGISTER THE VCF15.OCX FILE IN WINDOWS 7 PROFESSIONAL x64

How to register the vcf15.ocx file within Windows Professional.

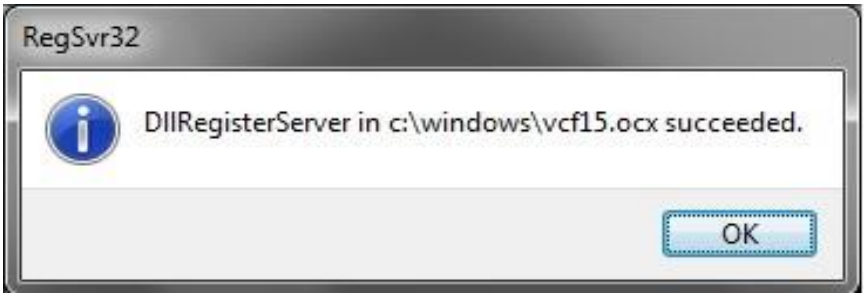
Go to Start -- > All Programs -- > Accessories and then right-click on command prompt and select Run as Administrator.



Once the command prompt appears, change the directory to the following: C:\Windows\SysWOW64>



Once the directory has been changed successfully, enter the following to register the vcf15.ocx file: regsvr32 c:\windows\vcf15.ocx.

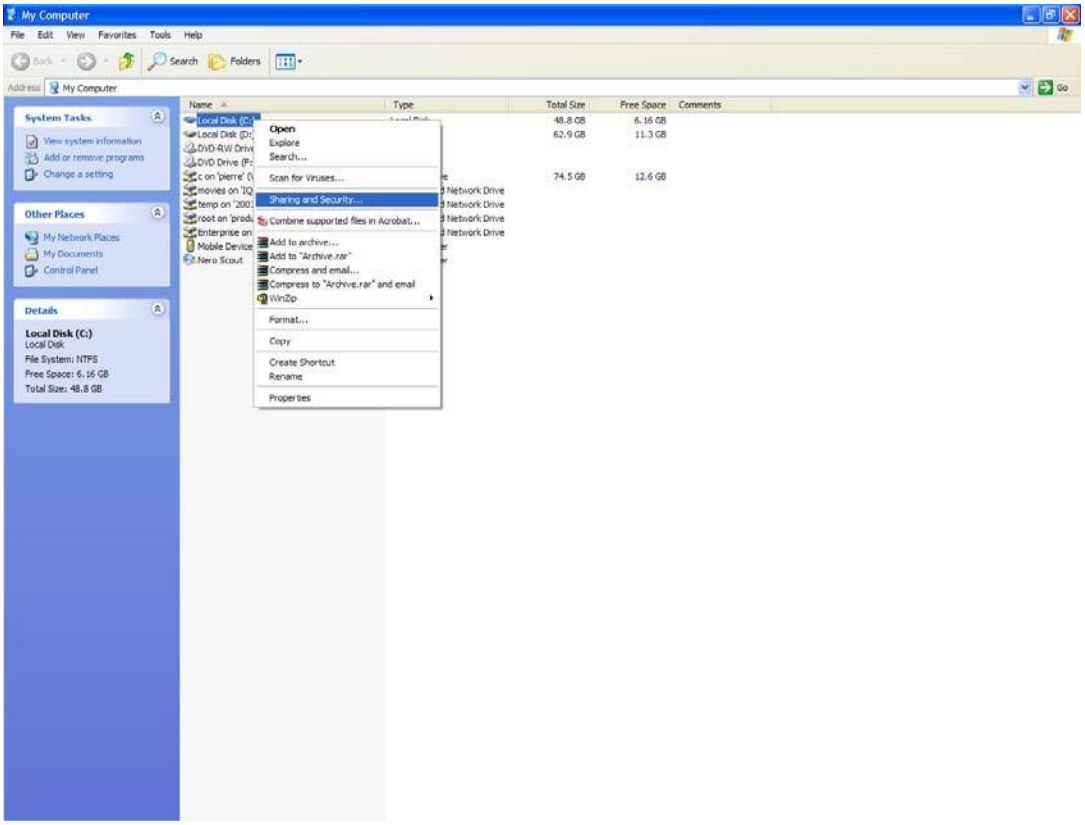


4.3 PREFFERED SECURITY SETTINGS

4.3.1 IQ ACCOUNTING PACKAGES SETUP IN A SERVER ENVIROMENT

The next few steps will show the preferred method of setting up Security within the Windows Operating System for IQ Accounting Software packages in a Server environment. Once the mapped drives are setup, the security on the shared drive should be setup accordingly.

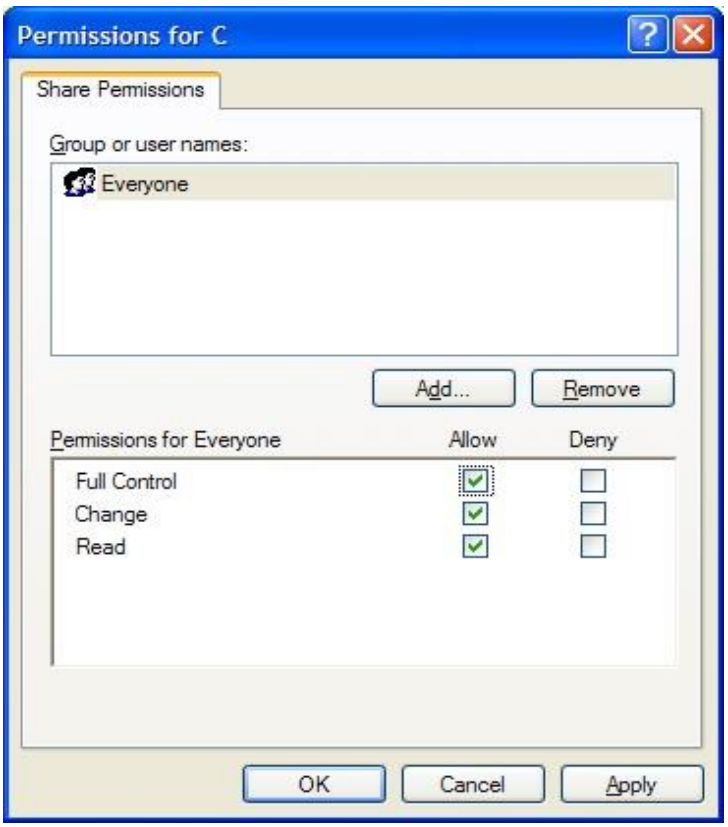
NOTE: If the security is not configured correctly it will result in workstations that won't be able to write to the database and therefore transactions will not be recorded.



Double click my computer. Next choose the Drive that will be shared on the server. Right click on the drive and select the Sharing and Security option.

The sharing options allows one to specify a share name and specify the number of users and allows for setting permissions. All that is required is specifying a share name.

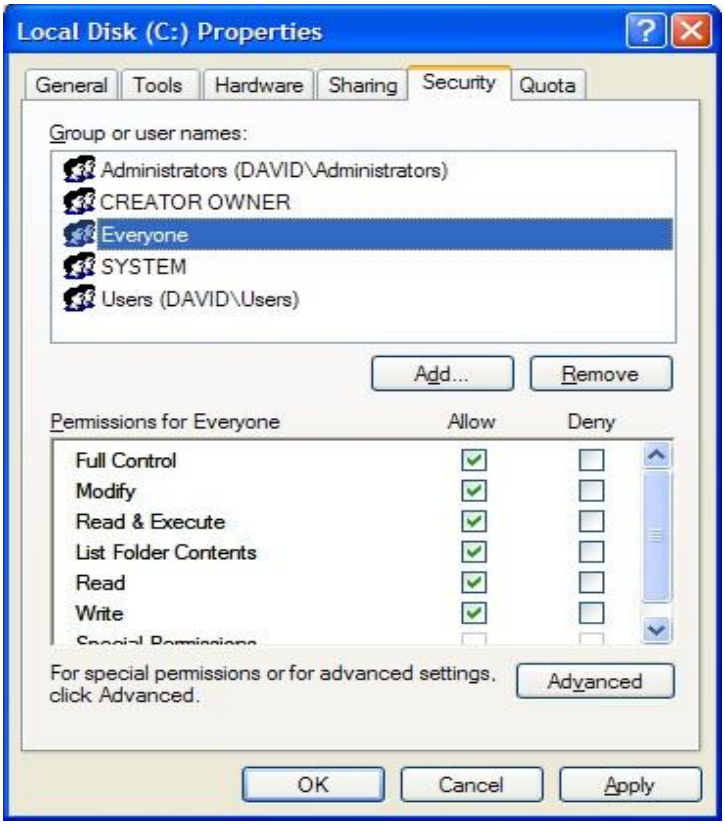
NOTE: The important part here is keep the share name simple and make sure that the users have full read and write access on the shared drive.



Select the permissions option. The share permissions allow one to specify access for the shared drive.

NOTE: The important part here is to make sure that the Full Control, Change and Read options are selected. This means that the users accessing the shared drive will be able to read, write and access the drive. This in turn is required for the IQ System to function correctly.

Once the shared drive permissions have been set, select the apply option.



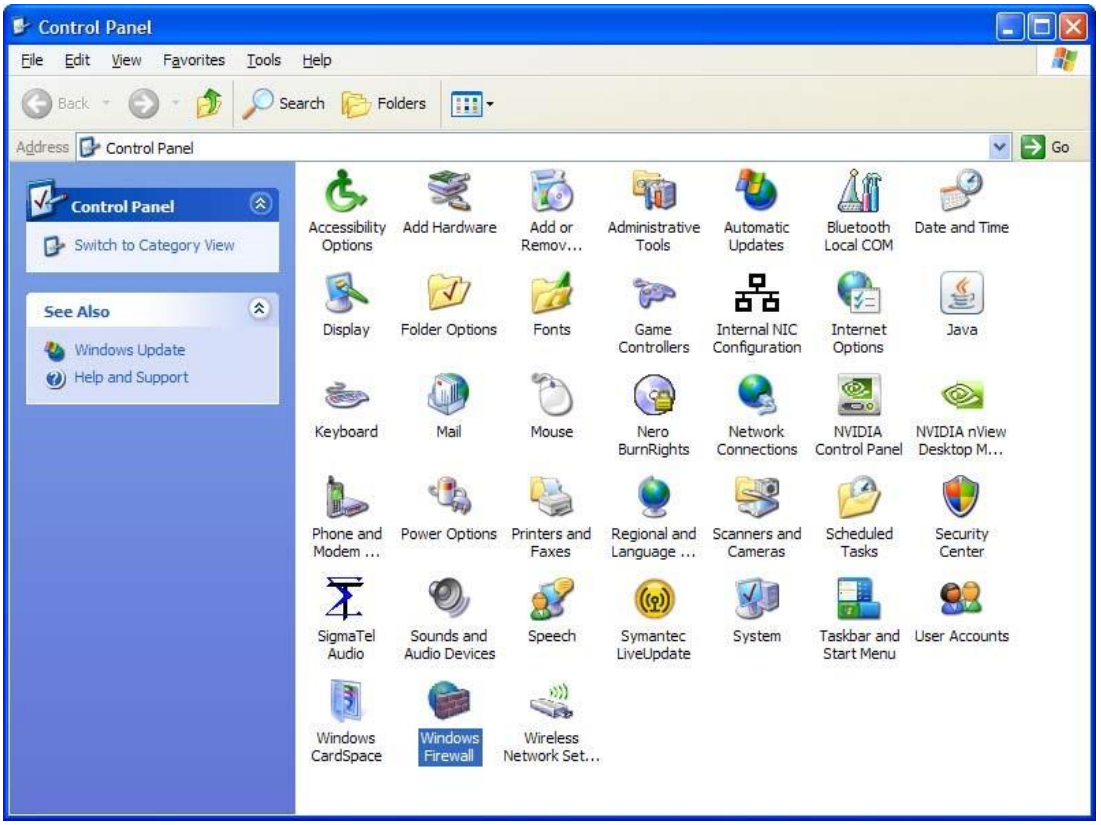
Select the security tab at the top. Here the NTFS permissions need to be set in order for the shared drive permissions to function correctly. Select the “Everyone” users then set the permissions for “Everyone” by selecting all the options under the “Allow” column.

Once complete, select the Apply and Ok options.

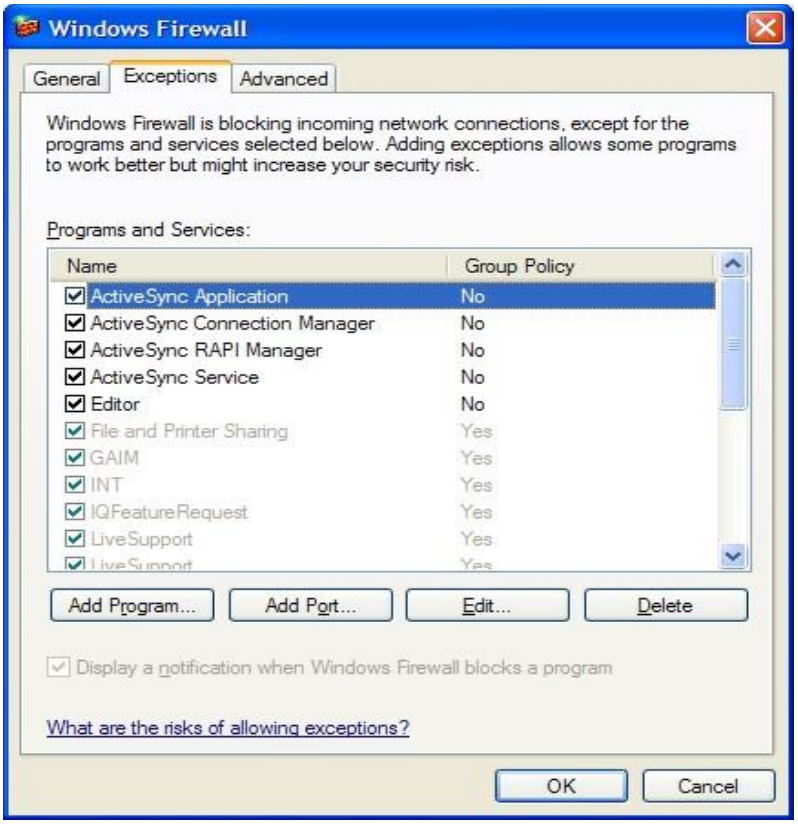
4.4 IQREGISTRATIONSERVICE CONNECTION

The next step in configuring the Windows Operating System is to make sure that the IQRegistrationService is not blocked by the built in Windows Firewall. The IQRegistrationService must be added to the Windows Firewall as an exception so that the firewall does not block any workstation connections.

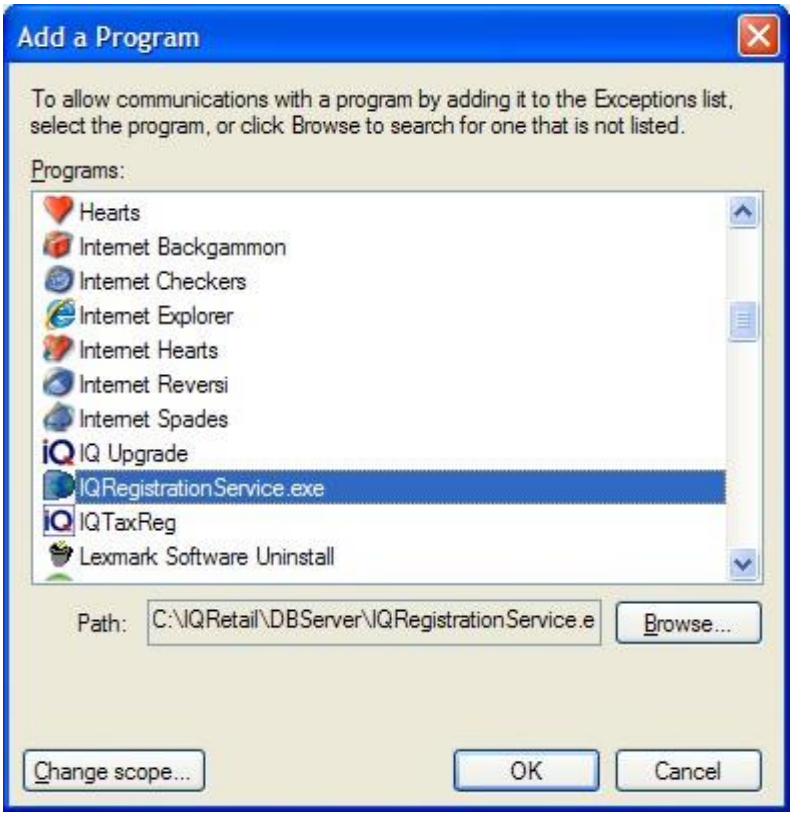
Select Start -- > Settings -- > Control Panel and select the “Windows Firewall” option.



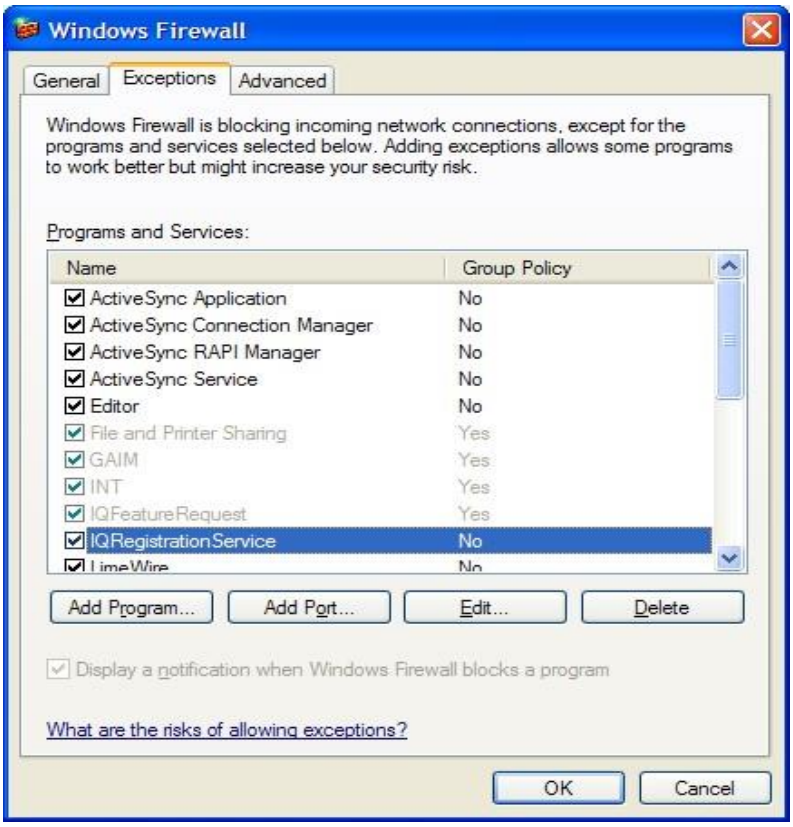
Once selected, from the next screen select the exceptions tab.



The firewall must not block any incoming connections on ports 12007 and 12008. Select the “Add Program…” option.



Once the IQRegistrationService has been located from the list of programs, select it and click the Ok option.



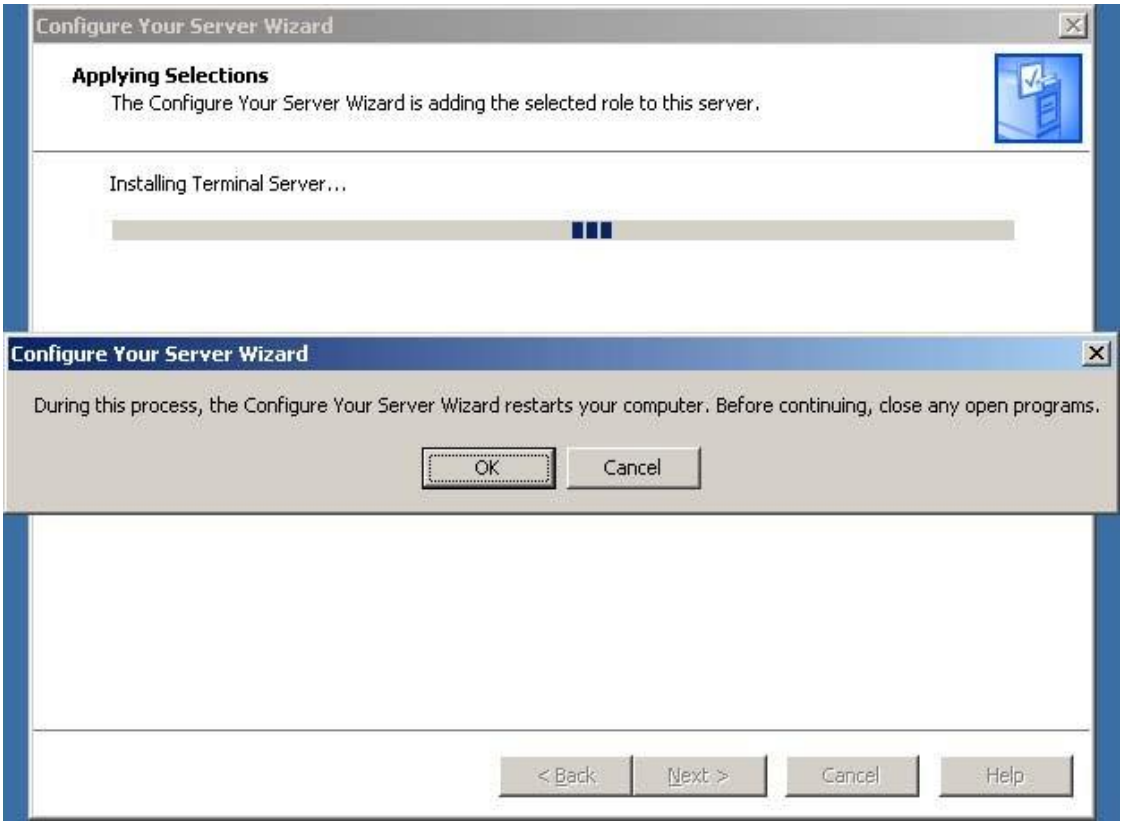
Select the Ok option in order to complete the adding of the IQRegistrationService as an exception to the Windows Firewall.

NOTE: When using mapped drives IQ will attempt to find the IP Address of the server by doing either a NetBIOS broadcast or DNS lookup depending on the network configurations. IQ needs the IP Address to establish a connection to the IQRegistrationService. If IQ can't establish a connection to the IQ Server the application will refuse to start.

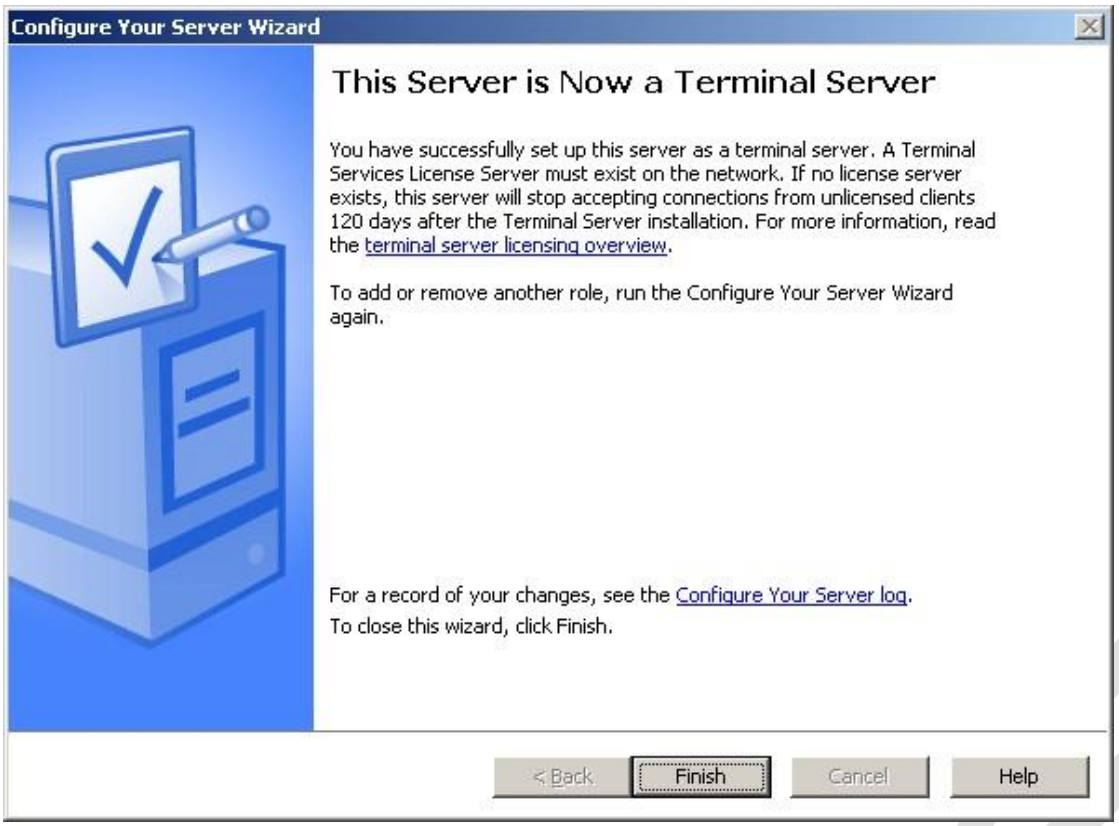
5 SETTING UP WINDOWS 2003 AS A TERMINAL SERVER

5.1 INSTALLATION

Open the 'configure your server' wizard from Administrative Tools and in the select a role section, choose Terminal Server and click Next twice to confirm your actions. The wizard will then start to install the required files and warn you that the machine will have to be restarted during the installation process. Close any open programs and select OK.



NOTE: The installation will continue for a few minutes before the machine is restarted. After the machine has rebooted and the administrator user has logged on, the next screen confirms that the server computer is now a terminal server.

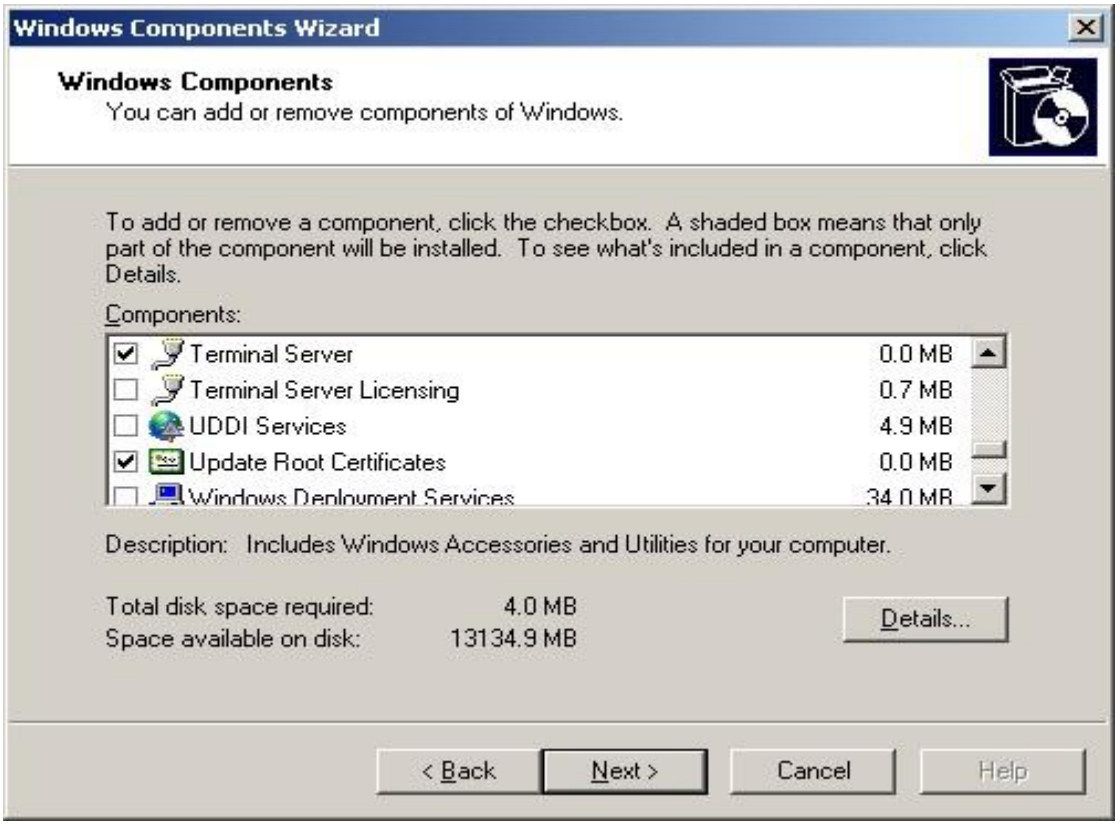


NOTE: It is important to take note that a 120-day evaluation period has been allocated for unlicensed clients. If you do not obtain a license within that period then terminal services clients will no longer be able to initiate a session. Select the finish option to proceed.

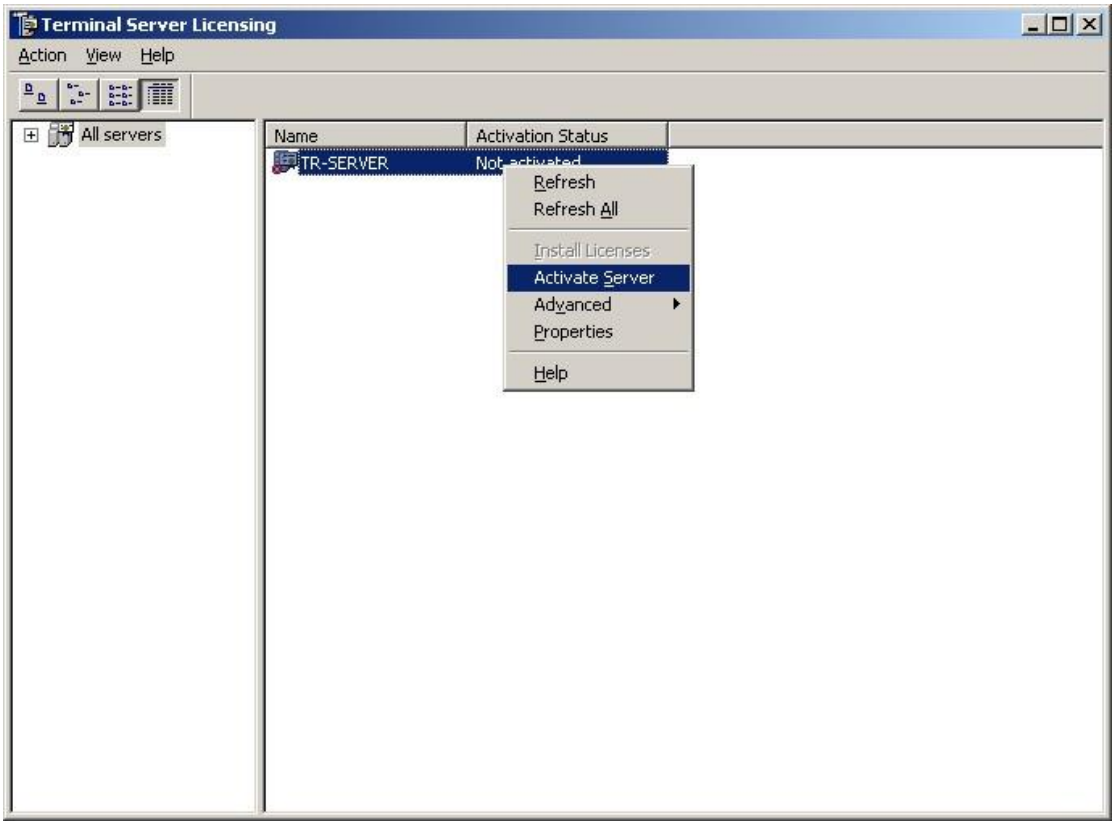
5.2 TERMINAL SERVER LICENSING

This is probably where the most changes have been made. Microsoft has introduced a 'per user' license to add to the already familiar 'per device' method.

To make your machine a terminal server license server you will have to install it separately. This can be done from the windows components wizard section in the add/remove window from the control panel.



Once you have installed this option your server will be listed in the terminal server licensing console. You will have to activate the server before it can start distributing licenses. Activation of the licensing server can be done via a direct connection to the internet, a web browser or over the telephone. The following is a screenshot of the terminal server licensing console demonstrating what you would have to do to start the activation process.



This will bring up a wizard asking you to enter details and select options to suite your needs. Follow the on-screen instructions and press Finish when you are done.

5.3 TERMINAL SERVER CONFIGURATION

The two main applications used to configure the terminal server are:

- Terminal Services Manager (completely re-written in Windows 2003)
- Terminal Services Configuration

(They can both be found in the administrative tools folder in control panel, or on the start menu).

5.3.1 TERMINAL SERVICES MANAGER

When you select the server name you can choose to view and manage the Users, Sessions or Processes tab. The green icons indicate that the server is online. If you had to disconnect it, the icons would be grey.

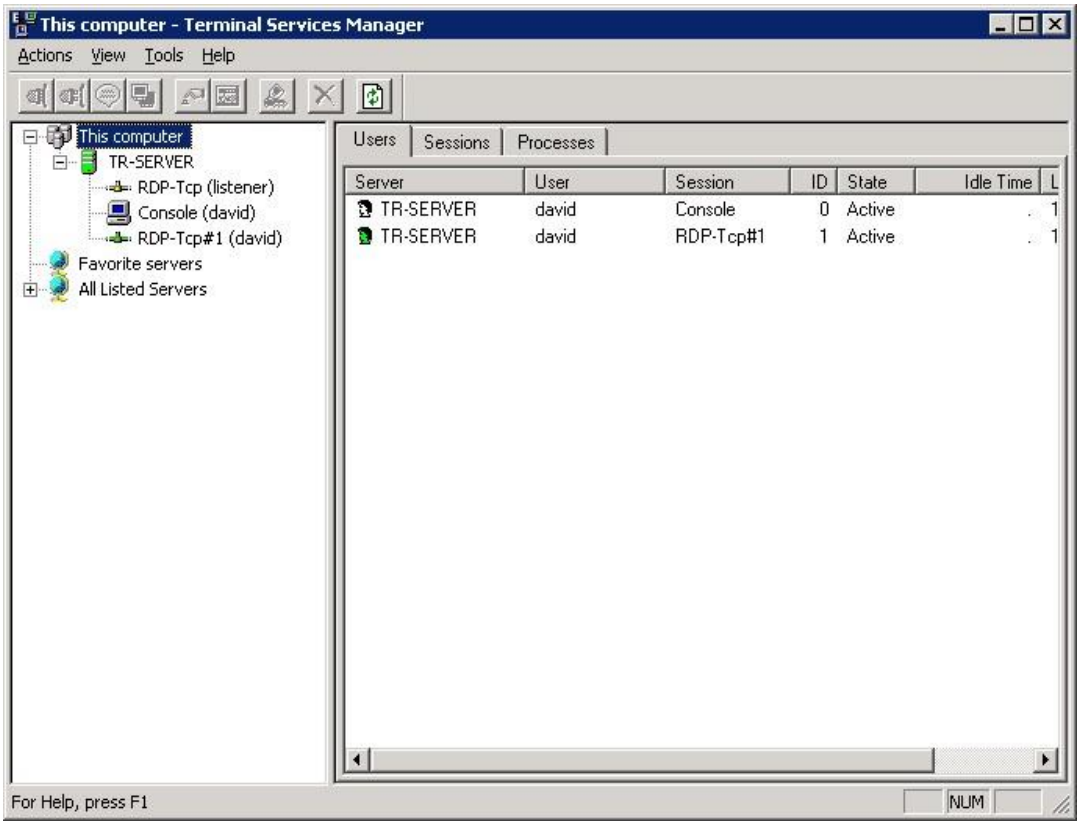
The Users tab allows you to see who is connected, how long they have been connected and the state of their connection. If you select a user and right click you can disconnect or reset the user's session, send a message (which will be displayed as a pop-up message box on the client side), view the status or log the person out of the terminal server session.

The Sessions tab permits the viewing and control of the terminal server sessions. You can right click a session and select the status to see the incoming and outgoing data or reset to reset the session.

The processes tab shows all the processes that are running and which user they belong to (this is a simplified version of the processes tab found on the windows task manager).

Select a user, click the right mouse button and choose 'end process' to kill the process.

The image below shows the Terminal Services Manager with an active connection initiated by a user (David).



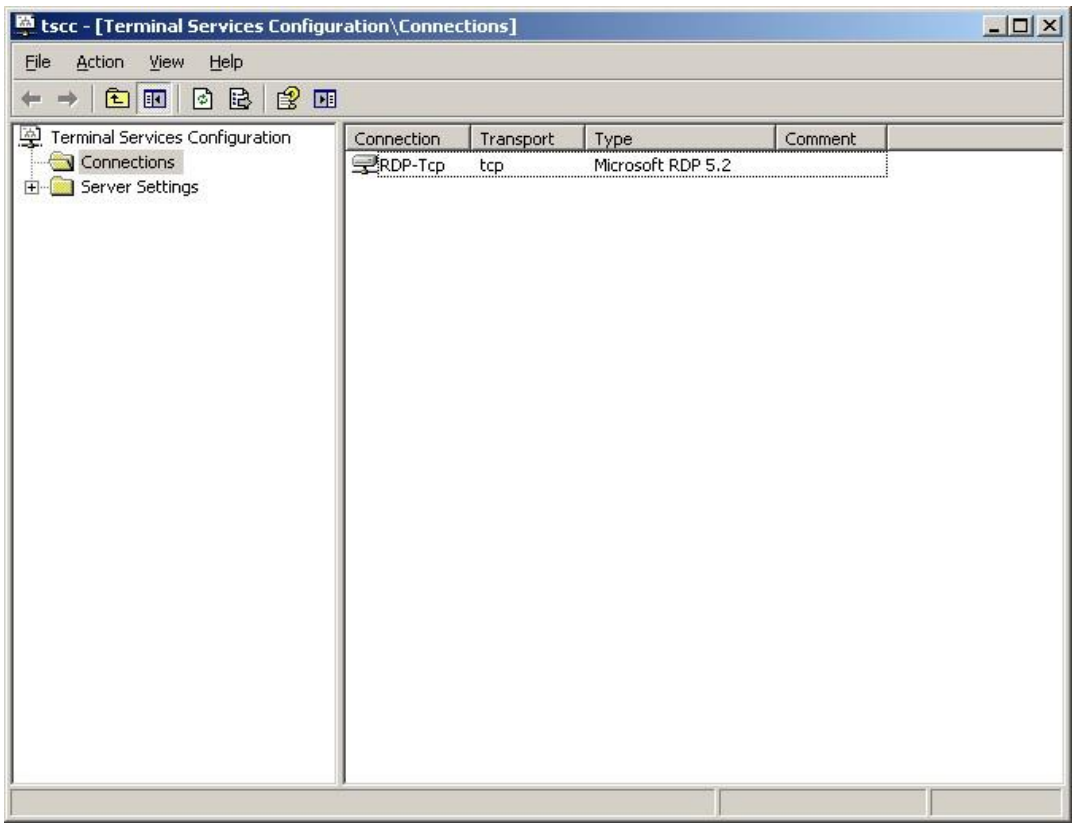
If you select the RDP-Tcp#1 (username) option you can view the processes and session information specific to that user.

NOTE: The number represented next to the RDP-Tcp (#1) number will be different for each session.

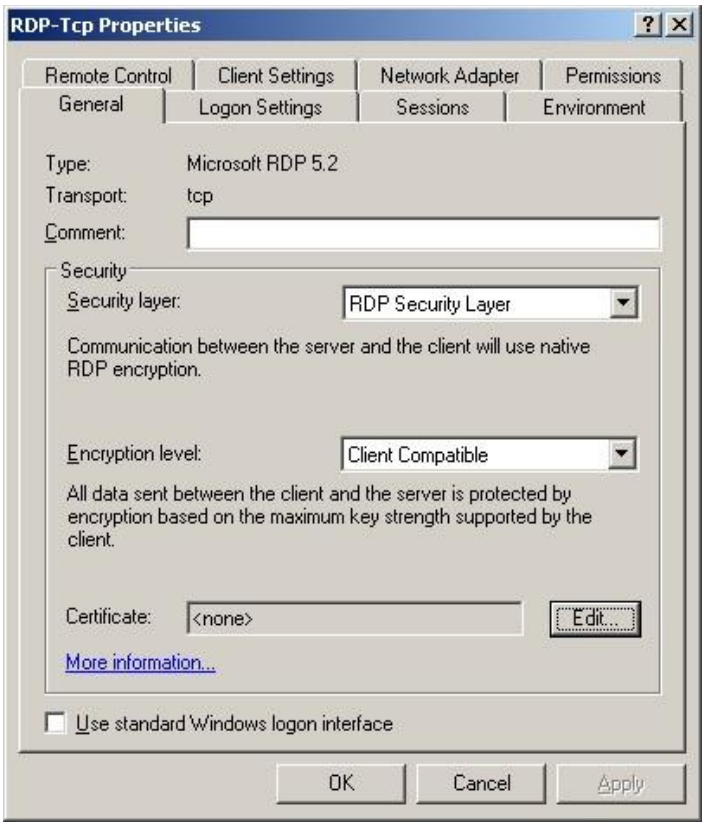
'Favorite servers' will list all the servers that you have added as a favorite – This can be done by right clicking a server and selecting the 'add to favorites' option.

You are able to connect to multiple terminal servers by press Actions > Connect to computer. These will be listed in the 'All Listed Servers' node.

5.3.2 TERMINAL SERVICES CONFIGURATION



Any connections that have been setup will be displayed in the connections part of the console. Double click a connection to open the properties page.



General: Add a comment, change the encryption level, enable standard windows authentication.

Logon Settings: Select whether or not to always use the same credentials for logging on, enable 'always prompt for password'.

Sessions: Select whether to override the user's settings with a set of predefined settings.

Environment: Choose to override settings of a user profile and run a program when the user logs on.

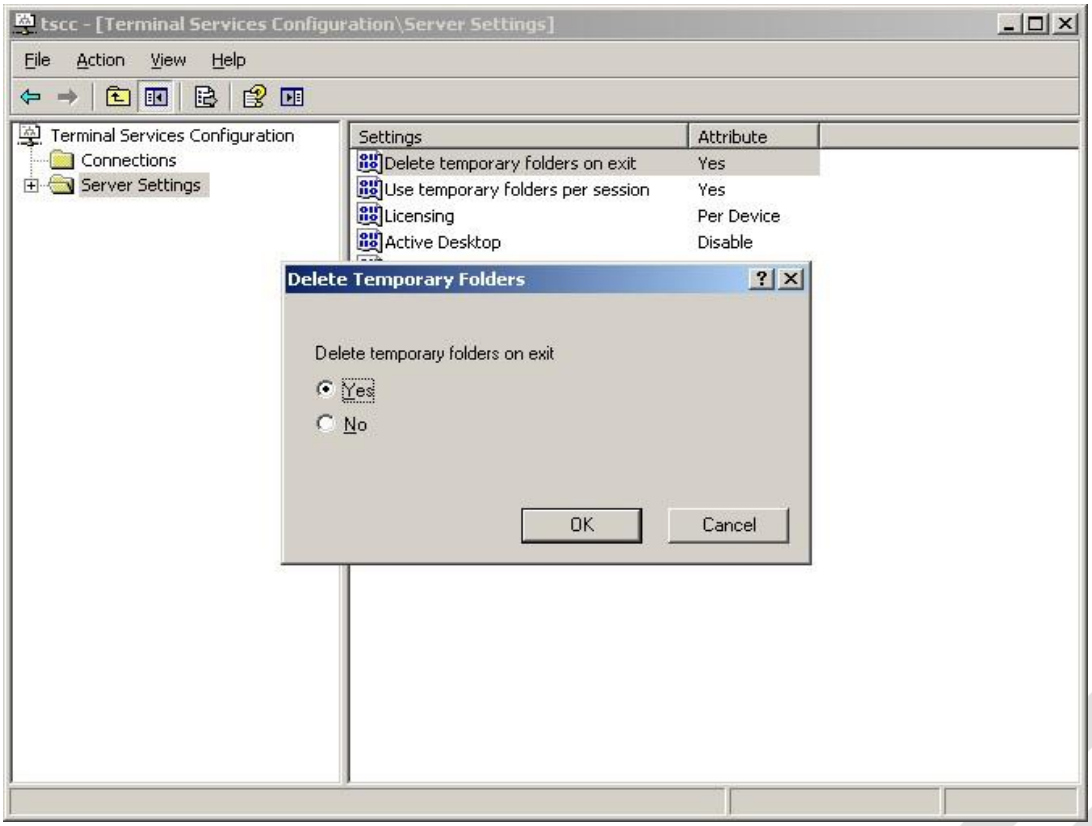
Remote Control: Change the way the remote control facility is used, disable remote control.

Client Settings: Change connection, colour and mappings settings.

Network Adapter: Specify the type of network adapter you want to use and change the connection limit.

Permissions: Specify the user permissions (who has access to the terminal server and who doesn't).

The server settings section enables you to modify the settings of the server. Double click a setting from the list to bring up the appropriate window and be given the option to make a change.



Each setting shown in the above window is self-explanatory. The settings in the list each have an attribute which you can set according to your preferences.

Terminal Services give you the opportunity to provide a secure and reliable tool to employees. Microsoft has built on the success of Terminal Server in Windows 2000 and come up with new solutions to meet user's needs.

Better manageability and user friendliness are just two of the improved features worth mentioning.

5.3.3 REMOTE DESKTOP CONNECTION

Remote Desktop Connection is installed by default on Windows XP but can also be downloaded as a separate application from the Microsoft website. This is used to initiate a terminal services session from the client side. To open it navigate to Accessories -- > Communications -- > Remote Desktop Connection on the Start menu.

The image below shows the general tab of the Remote Desktop Connection window, which was expanded by selecting the "Options" button on the original window.

In this tab you can save your connection settings for future use, specify which computer you want to connect to and supply the logon credentials. The other tabs are used for performance related options like the display size and colour, speed and placement of resources.

Once you have entered the correct logon details press connect to initiate the session. It is likely that you will be asked to re-enter the logon credentials unless the administrator has disabled the option from the terminal server.

5.3.4 TIPS

- If you want to connect to a terminal server via the command prompt you can do so by typing the following: “mstsc -v:servername /F –console”. ‘mstsc’ represents the remote desktop connection executable file, -v specifies which server to connect to, /F is for full screen mode, and – console to indicate that you want to connect to the console.
- If you need to install a terminal services client for the MAC OS you can download it from here. Once it is setup, (given that you have network access and the right permissions) this will allow you to connect to a windows-based operating system running terminal services from a Macintosh computer.
- You can allow users to automatically logon to a session without having to type the username and password each time they initiate a connection. To do this two things have to be done.
- From the server side, open Group Policy Object Editor (gpedit.msc), double click Administrative Templates -- > Windows Components -- > Terminal Services and then choose Encryption and Security. Open the properties box of ‘Always prompt client for password upon connection’ and disable it.
- From the client side, open Remote Desktop Connection, and in the general tab enter the logon credentials in the appropriate boxes.

- The web client can be installed from the Add/Remove windows components. Go to the World Wide Web components section in the IIS 6.0 option. From there you can find and install Remote Desktop Web Administration.
- Available in the Windows 2003 resource kit is a self-extractable file called tsscalling.exe. This contains a set of tools that will aid with the scalability planning of terminal services.
- Each application you run uses up valuable resources, which might be needed by other users so close any programs or windows that you are not actively using.
- If you want to remotely restart a terminal server on the network you can use the tsshutdn command. The syntax is as follows:

tsshutdn wait_time /server: server_name /reboot /powerdown /delay: log_off_time

wait_time is the number of seconds you want to wait before the user is logged off from a session. The default time is 60.

server_name specifies the name of which terminal server you want to shut down.

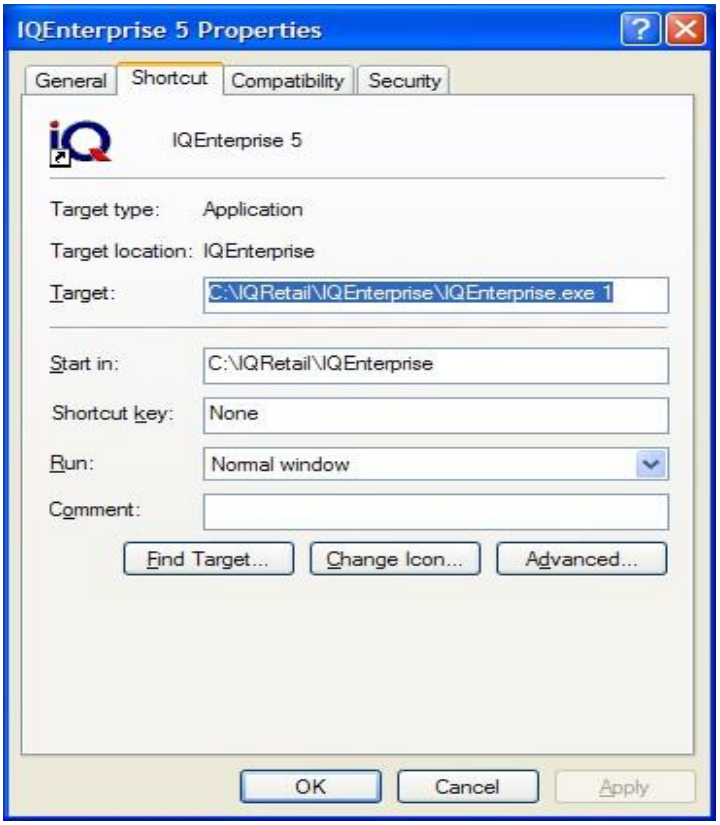
log_off_delay is the amount of time to wait, after users have been logged off from the session, before all processes are ended and the computer is shutdown. The default time is 30 seconds.

- Instead of just disconnecting from a session or closing the remote desktop window, log off – this will free up resources for other users.
- By default, Terminal Services runs on TCP and UDP port 3389. If for some reason you have to change that you can do so by open the registry editor (regedit.exe) and navigating to the HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\TerminalServer\WinStations\RDPTcp key. Look for the DWORD PortNumber and edit that to your needs.
- Run disk defragmenter on the terminal server to keep the disk clean, fast and 'healthy'

The Remote Desktop shortcut must be setup so that the user will connect and login to the IQServer automatically.

Select the “Local Resources” option. Select the Printers option and deselect the Clipboard option. This must be setup so that IQ will know where to print.

A shortcut must be created on the desktop for every terminal user and every shortcut must have a unique terminal number.



NOTE: Only 1 IQ Installation per site or subnet. Meaning that there will only be 1 IQRegistrationService accepting a connection on the network.

NOTE: IQ should only be installed on the IQ server directly. An installation should never be done from a network location i.e. mapped drive or UNC path.

6 UPGRADE (IQENTERPRISE\IQBUSINESS AND PAYROLL (ONLY)

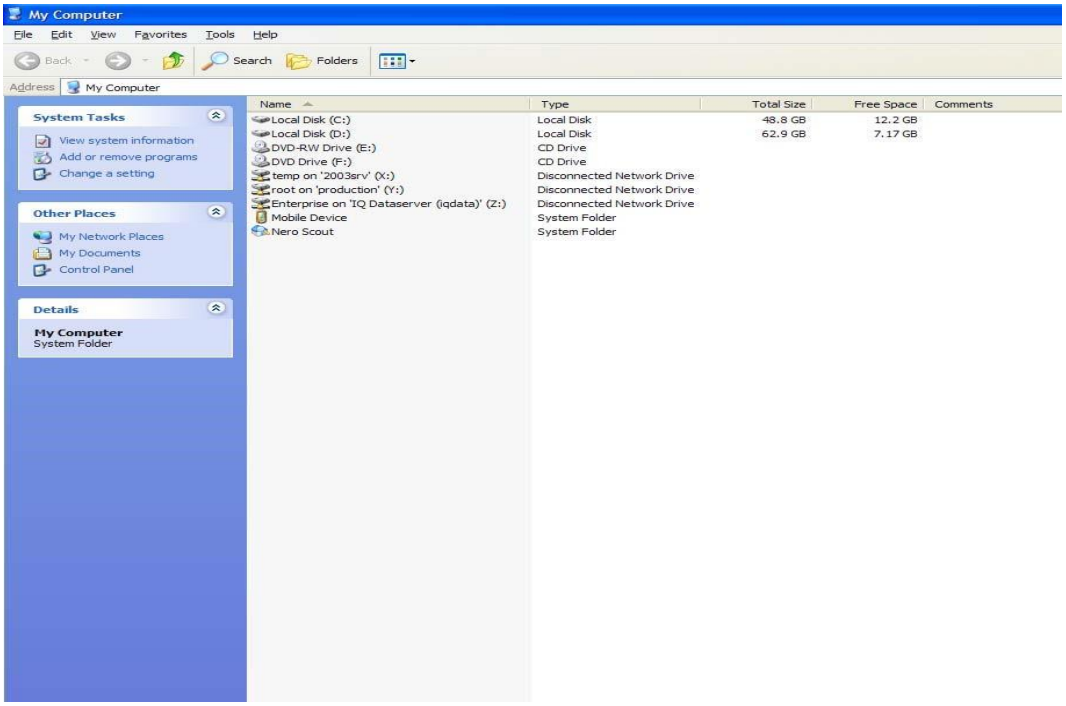
A few easy to follow guidelines on “how to upgrade from a previous version of IQEnterprise to a newer version”

Please follow the easy steps below:

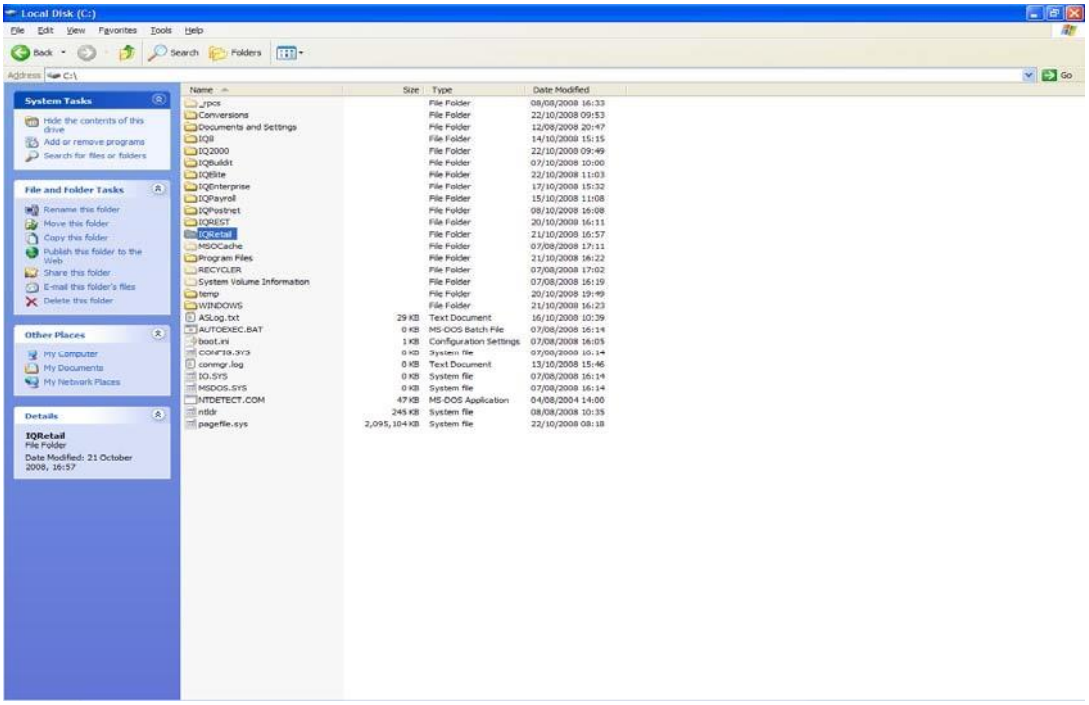
Make sure everybody is logged out of the IQEnterprise system. Install the new IQEnterprise installation file. A table upgrade needs to be done in order for the updates to take effect.

Double click “My Computer” on the desktop.

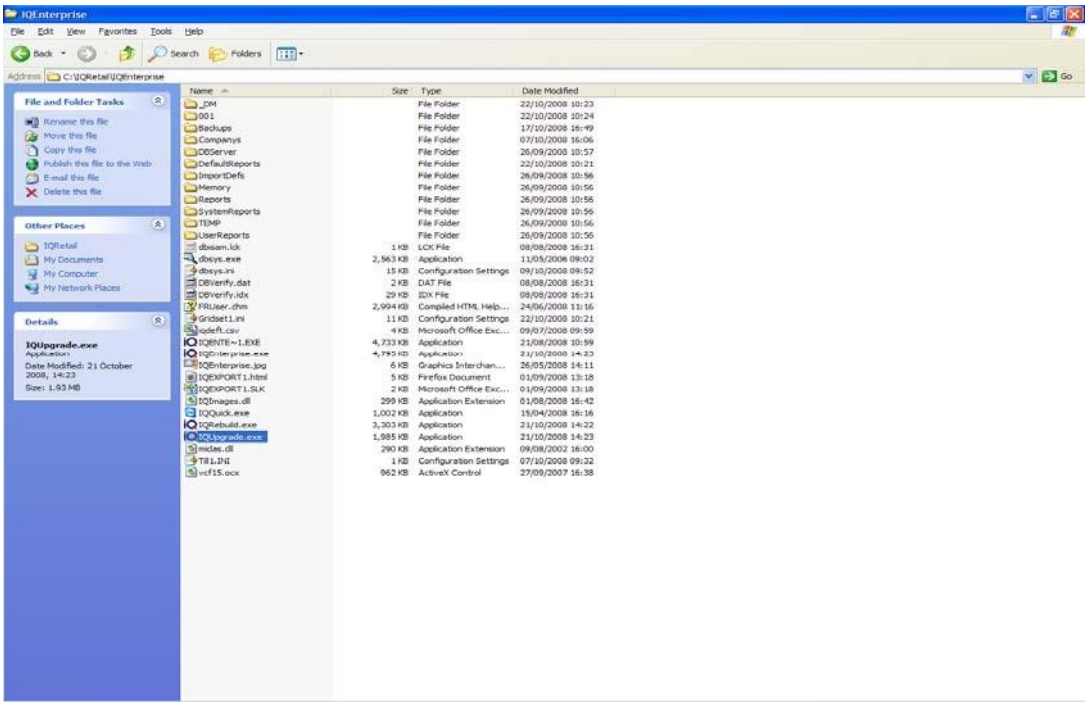
Find the drive where the IQEnterprise program was installed.



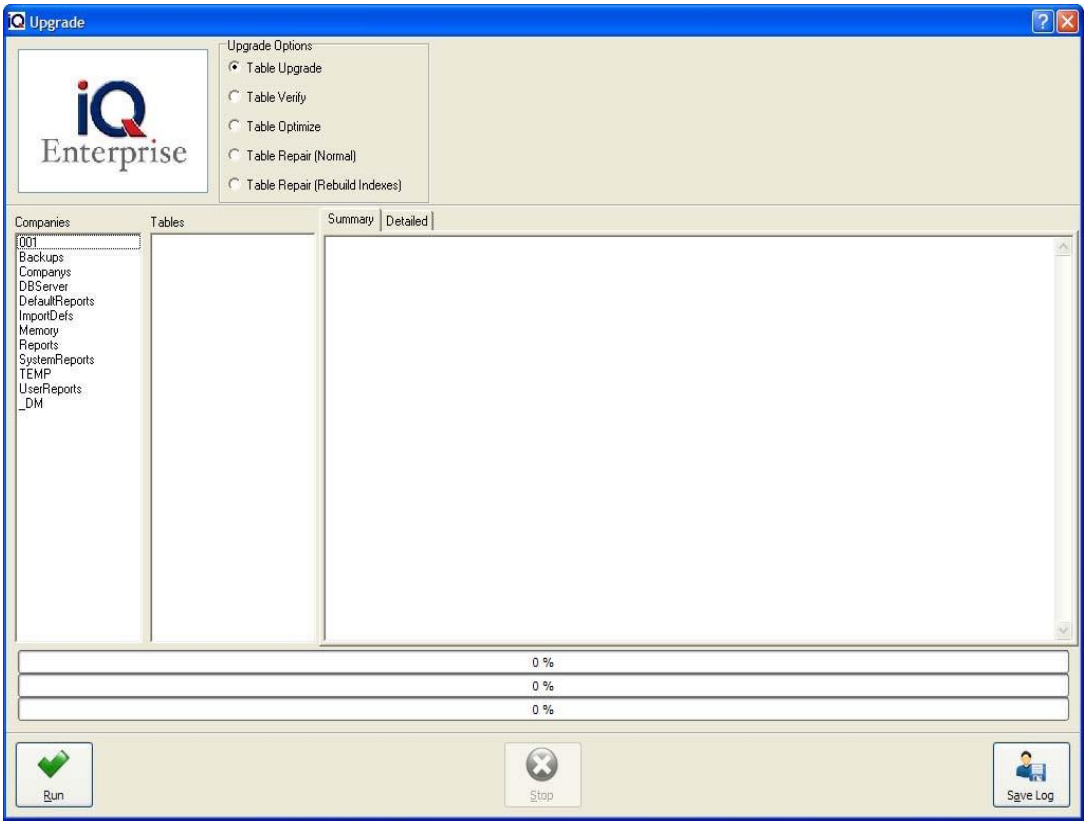
Double click on the drive where the IQEnterprise program was installed.



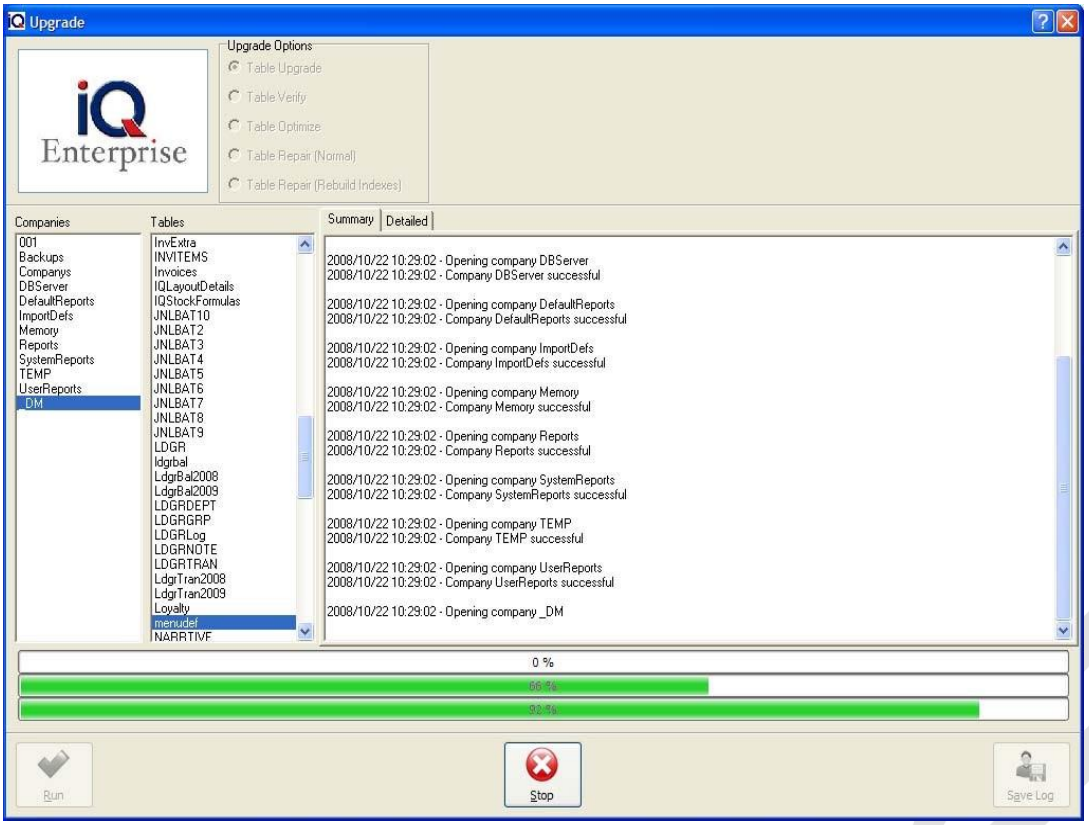
Select the IQRetail folder and then the IQEnterprise folder.



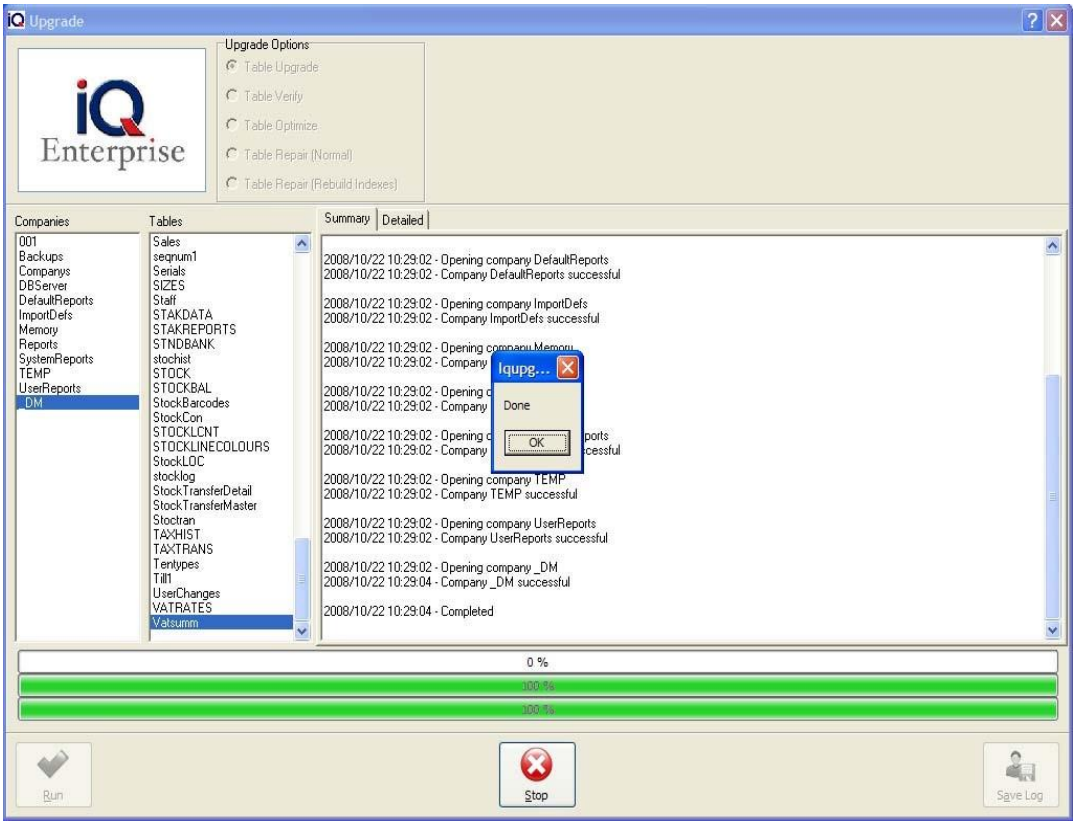
There are three executable (.exe) files in this folder. In order to upgrade, double click on the iqupgrade.exe file.



Now you have opened the IQEnterprise upgrade program. There are a few upgrade options available. The only one we are interested in is the “Table Upgrade”. Make sure that, that option is selected. Then select the “Run” option.



While the table upgrade progress is running, the progress bars at the bottom will indicate how far from completion. When completed, select the done button and close the IQEnterprise table upgrade program.



The table upgrade is now complete. The system has now been updated successfully with the new IQEnterprise version.

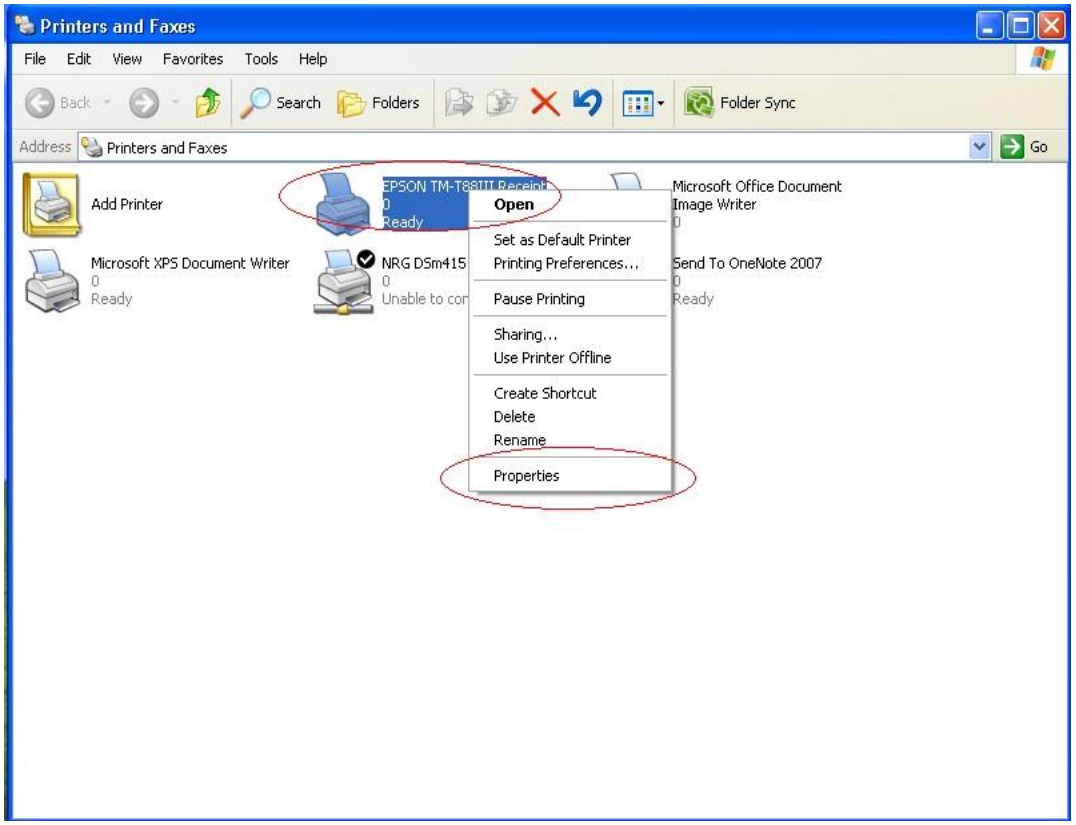
NOTE: When restoring any backup within the IQEnterprise package, make sure that you run the iqupgrade.exe and do a table upgrade. The reason for this is that sometimes the backup that was restored is quite old. It could be from a previous version of IQEnterprise. Therefore you need to run the iqupgrade.exe in order for any new fields that were added to be available on the older data that was restored.

7 HARDWARE CONFIGURATION

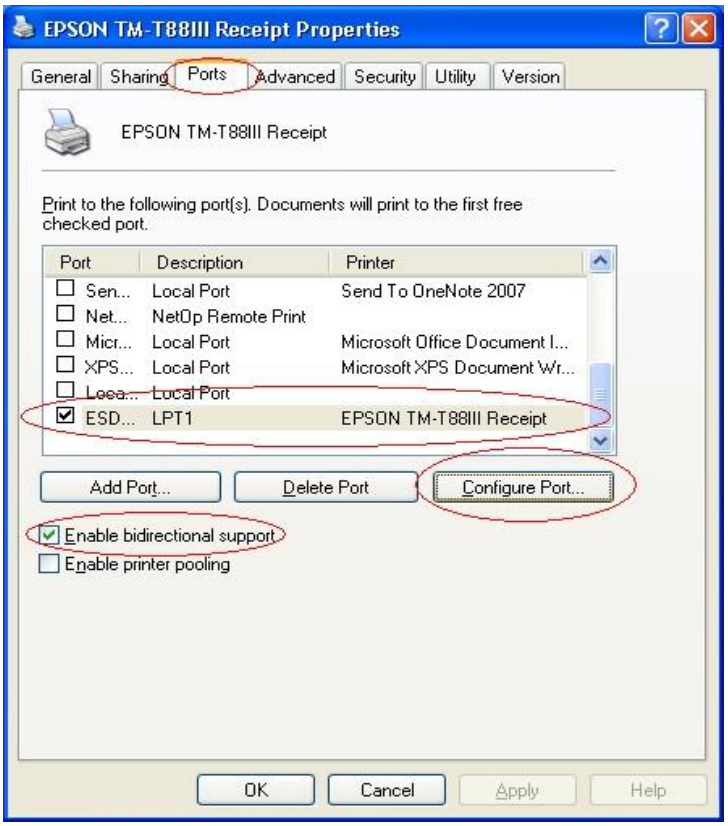
7.1 POS PRINTING PERFORMANCE FOR IQENTERPRISE\IQBUSINESS

Increasing performance of point of sale printers over a network. This example we are going to increase the performance of LPT printers. Select Start -- > Settings -- > Printers and Faxes. Select the printer and right click then select the properties option.

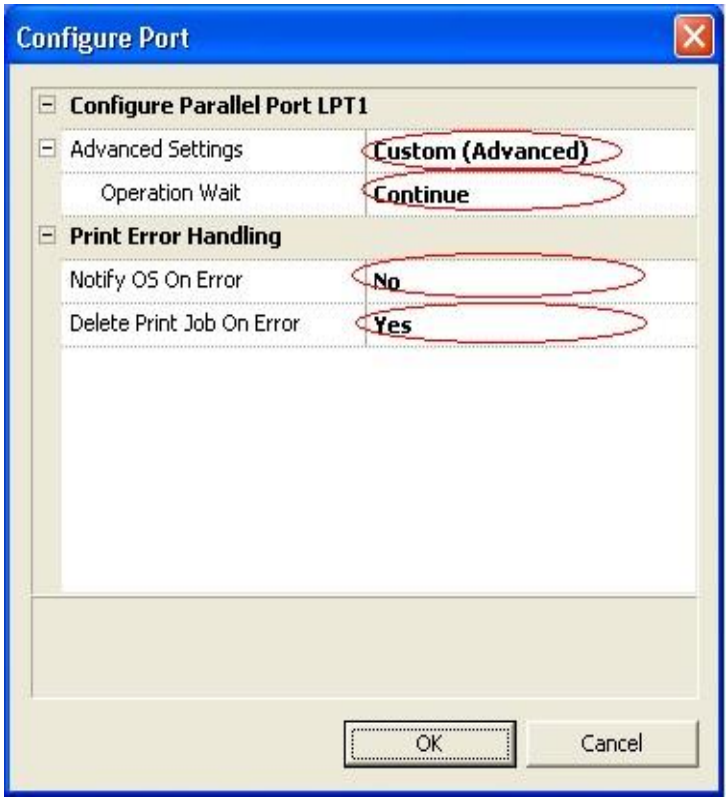
7.1.1 LPT PORT CONFIGURATION



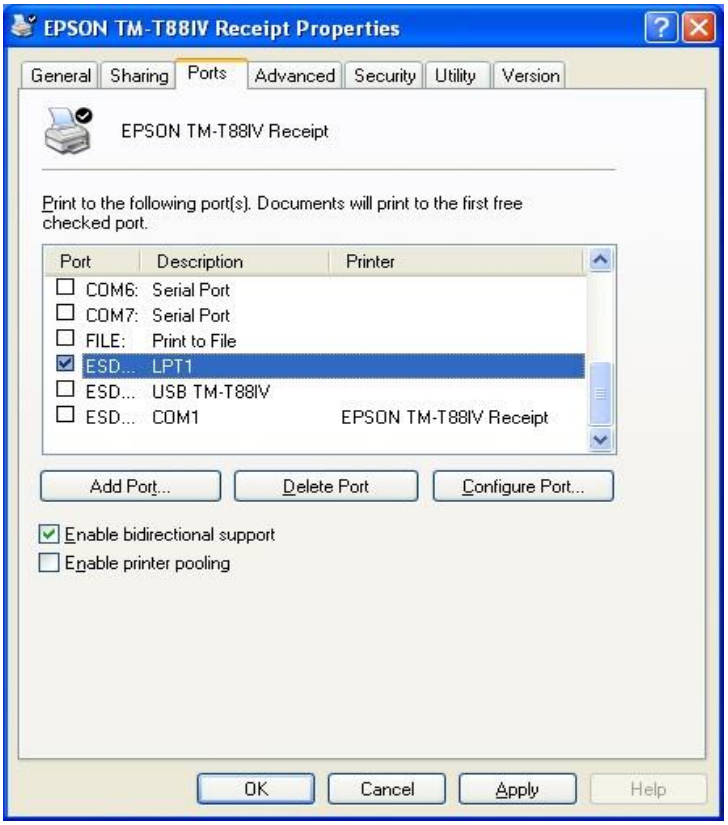
Once properties have been selected, select the Ports tab at the top of the properties box.



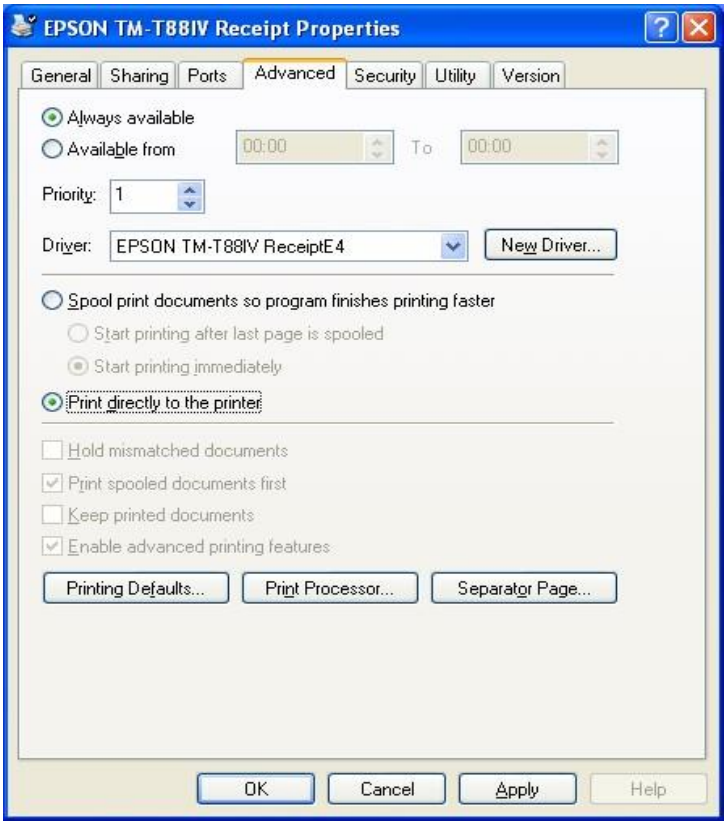
Under the Ports tab, select the printer that is attached to LPT1. Then enable the “Enable bidirectional support” option. Once completed, select the “Configure Port” option.



Change the “Advanced Settings” to Custom (Advanced) and “Operation Wait” to Continue and “Notify OS On Error” to No and lastly change “Delete Print Job On Error” to Yes. Once complete select the Ok option. This will return you to the Ports option.

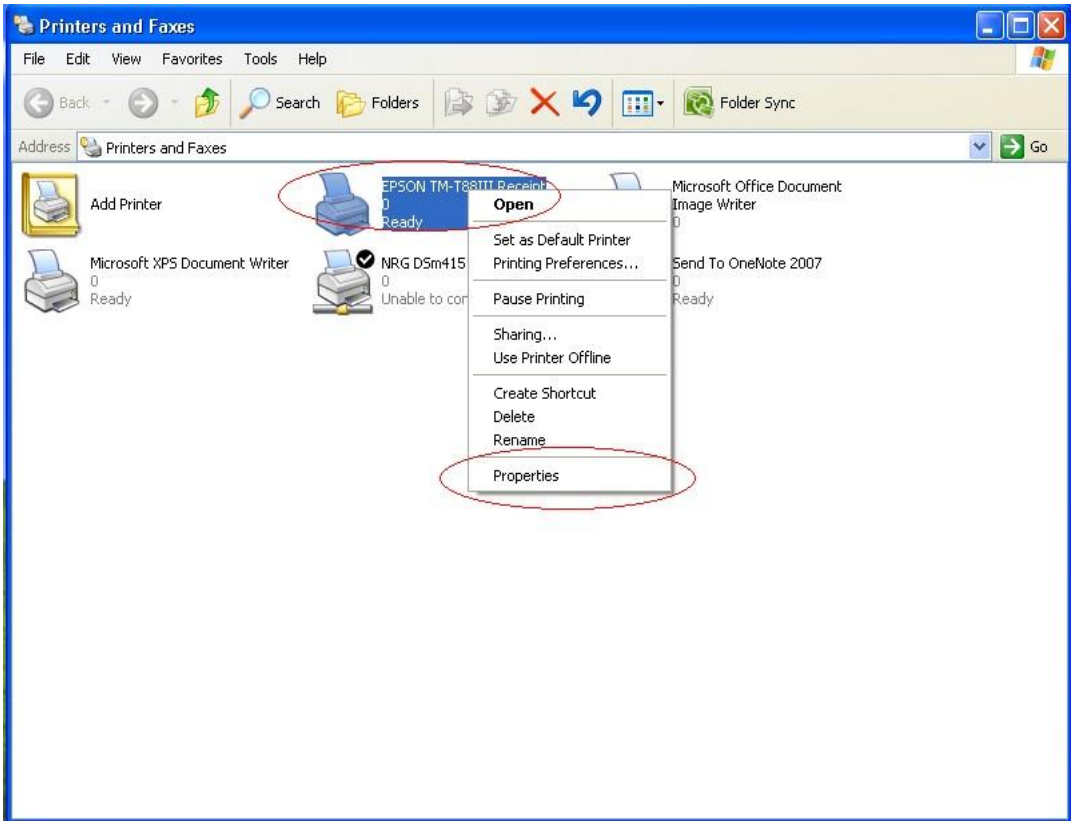


Select the Advanced tab option. Under this option select the “Print directly to the printer” option. This will increase the speed because windows do not spool the print job it is sent directly to the printer.

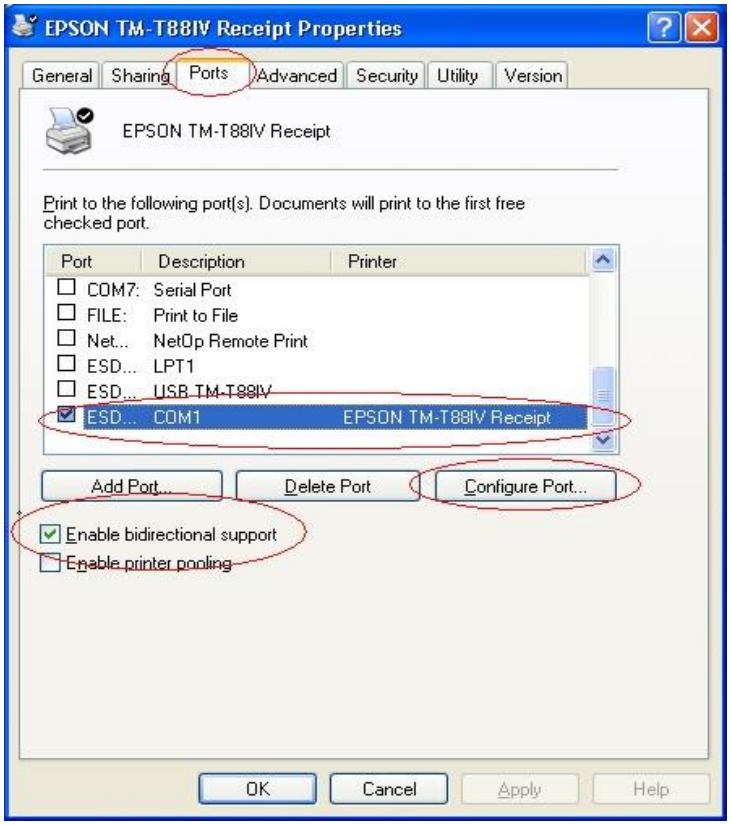


Select the Apply option for all settings to take affect and then select the Ok option.

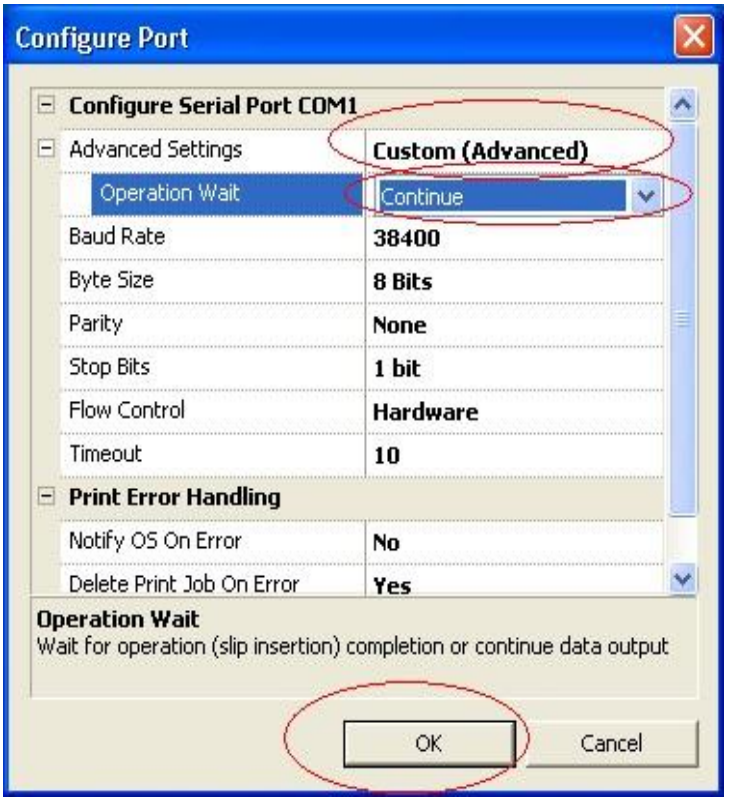
7.1.2 COM PORT CONFIGURATION



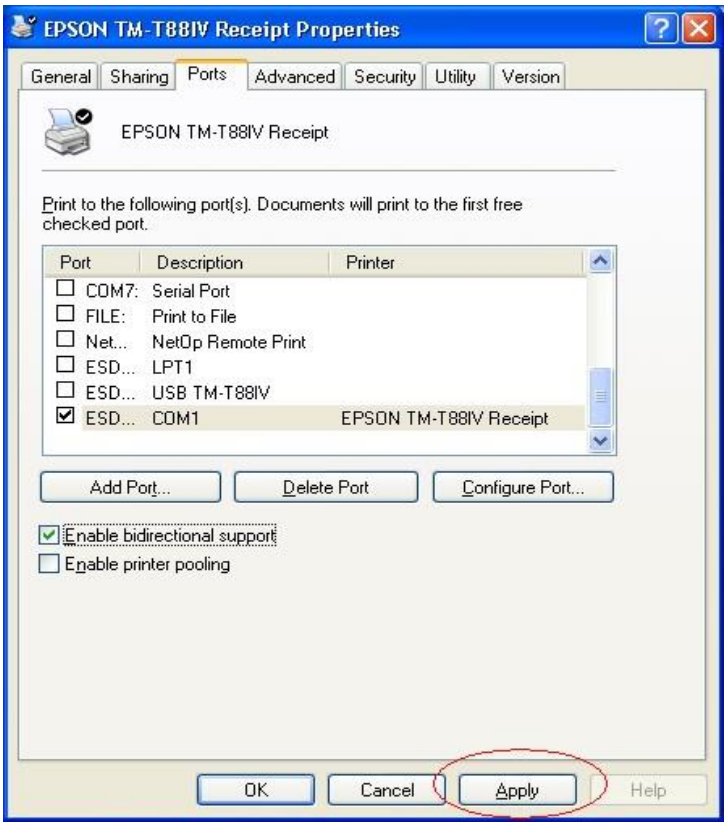
Once properties have been selected, select the Ports tab at the top of the properties box.



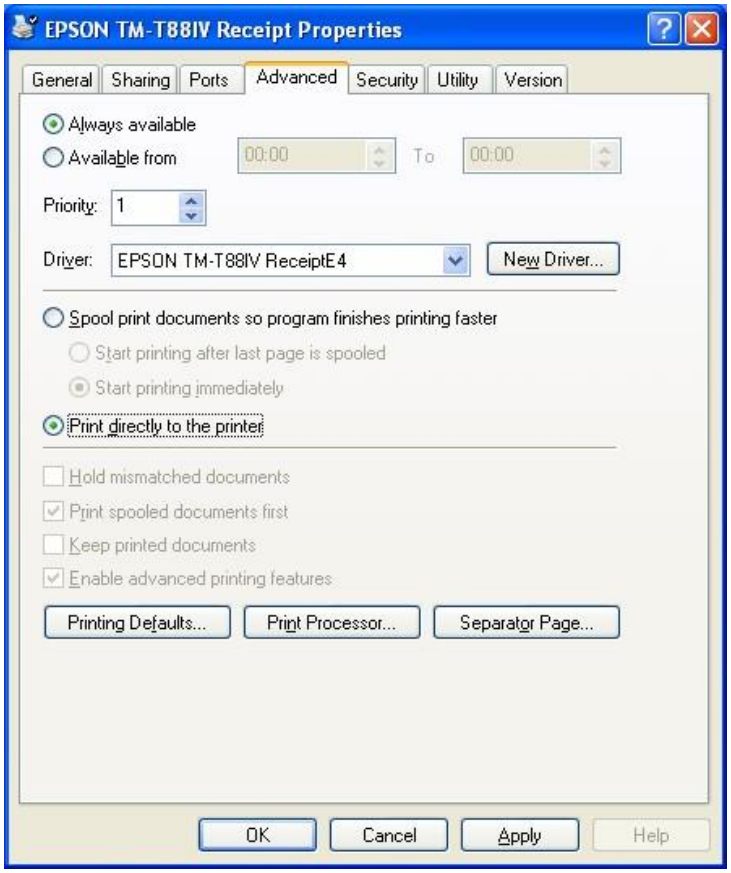
Under the Ports tab, select the printer that is attached to COM1. Then enable the "Enable bidirectional support" option. Once completed, select the "Configure Port" option.



Change the “Advanced Settings” to Custom (Advanced) and “Operation Wait” to Continue. The rest of the settings must be left as is. Once complete select the Ok option. This will return you to the Ports options.



Select the Advanced tab option. Under this option select the “Print directly to the printer” option. This will increase the speed because Windows does not spool the print job, it is sent directly to the printer.



Select the Apply option for all settings to take affect and then select the Ok option.

7.2 HARDWARE SETUP OF IQENTERPRISE AND IQBUSINESS

7.2.1 PRINTERS

Printers is a critical part of the IQ Systems, they have to be setup and configured correctly in order for printing to function correctly. Below a list of troubleshooting tips for Point of Sale specific printers in the IQEnterprise 5 system.

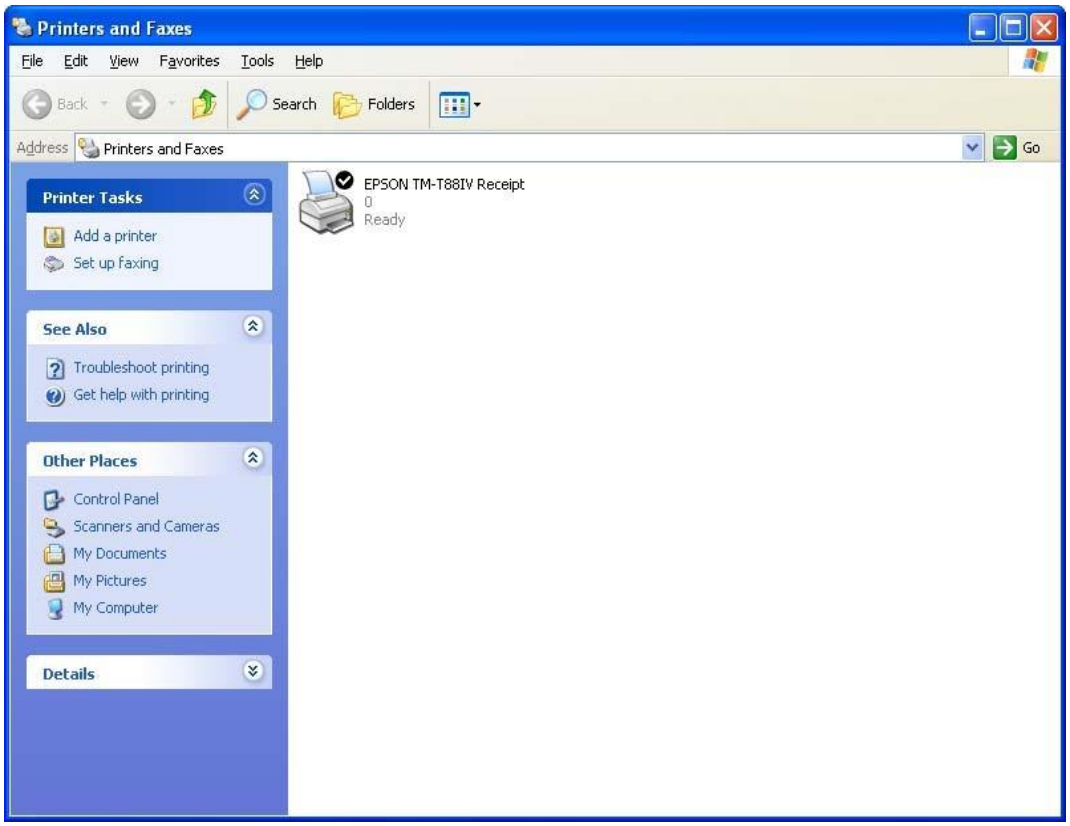
7.2.1.1 EPSON TM-T88IV AND TM-T88III

The Epson TM-T88IV and TM-T88III has a few functions that need be set correctly for the Point Of Sale in IQEnterprise 5 to function and print correctly.

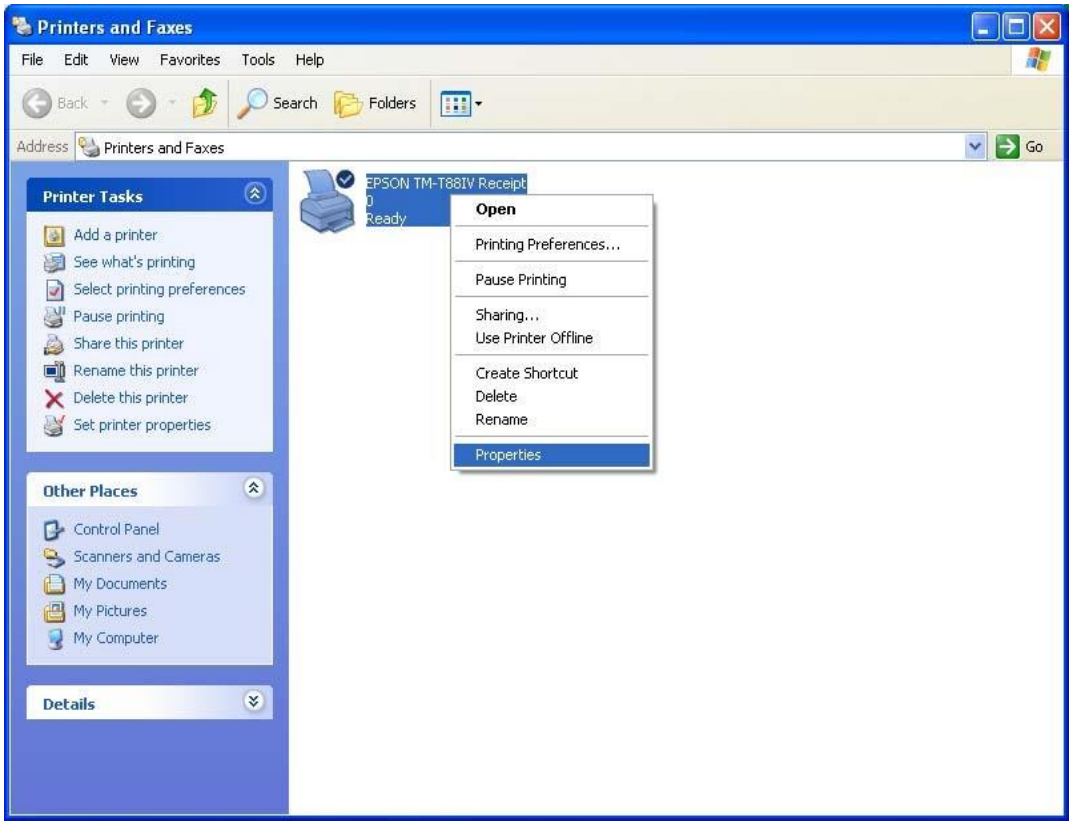
- Make sure the latest printer drivers are installed for specific models.
- Configuration of the driver properties, paper size, document settings and printer settings.

Below a step by step guide to configure the printer driver properties correctly:

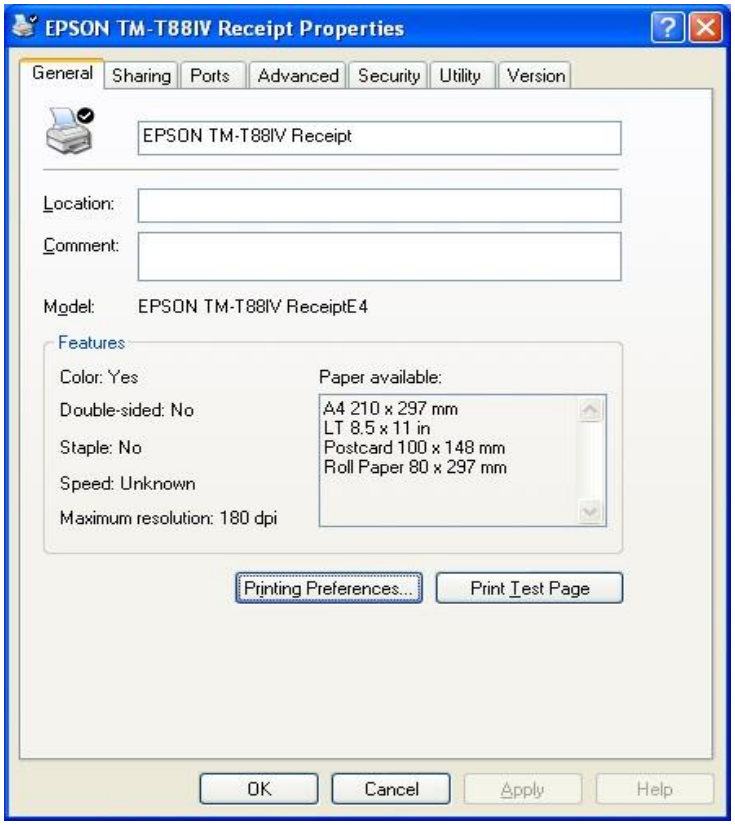
Firstly, select Start -- > Settings -- > Printers and Faxes



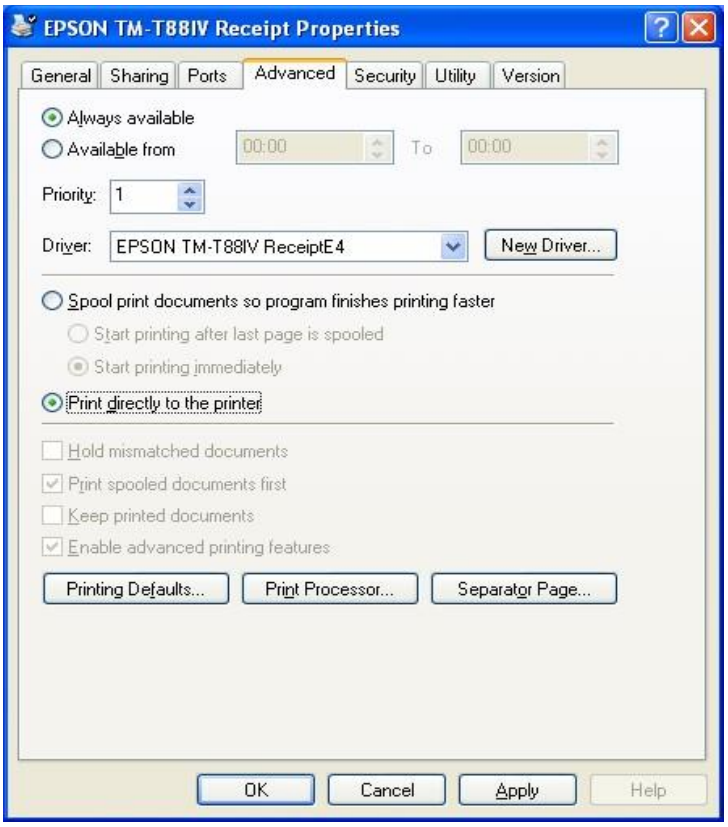
Next step is to configure the printer. Right click on the specific printer and select the properties option.



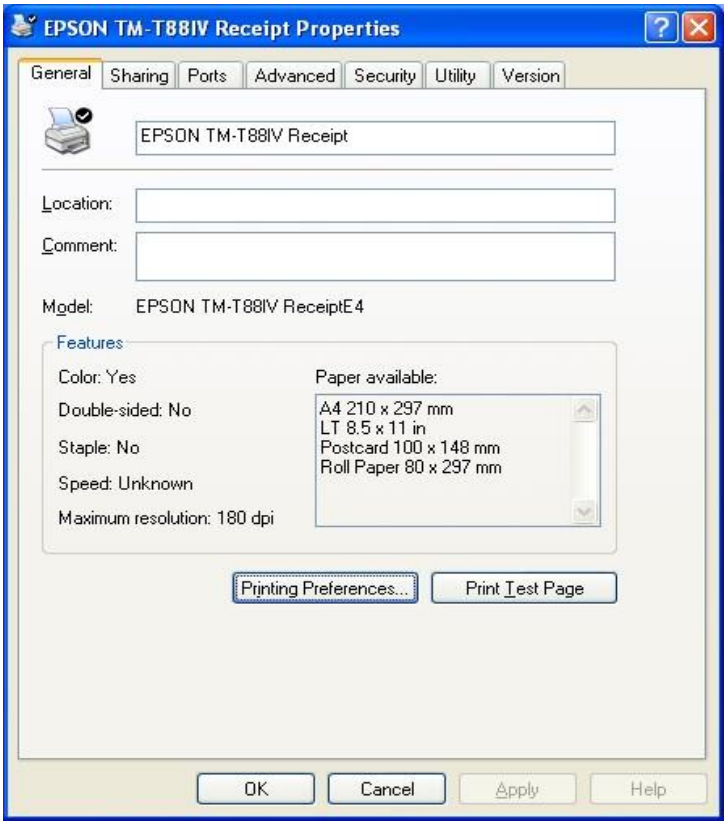
Once the properties option has been selected, the printer properties dialogue box will appear. On this screen select the “Advanced” tab option at the top of the screen.



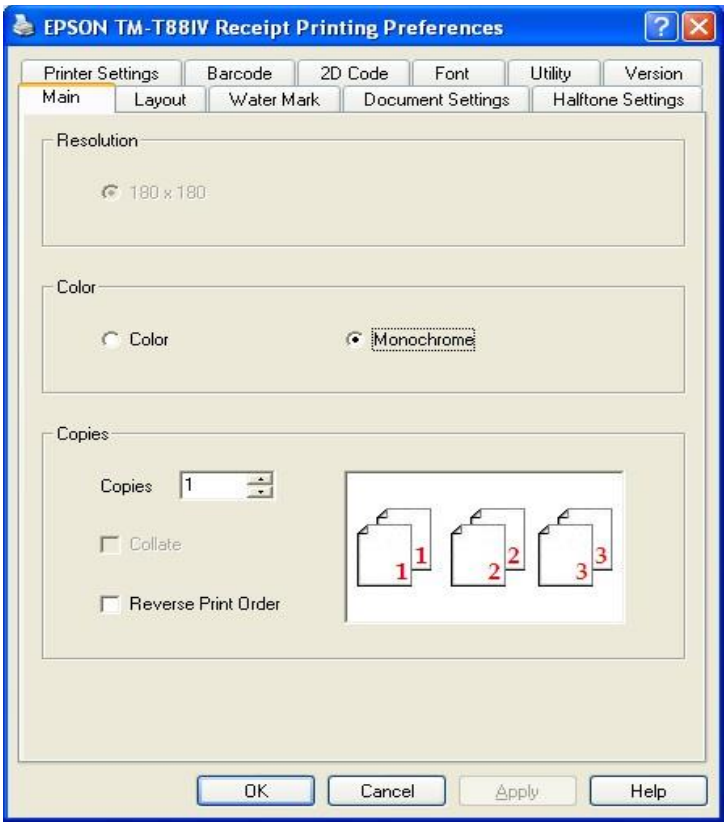
On the Advanced screen, change the existing Print Spooling option to Print directly to the printer.



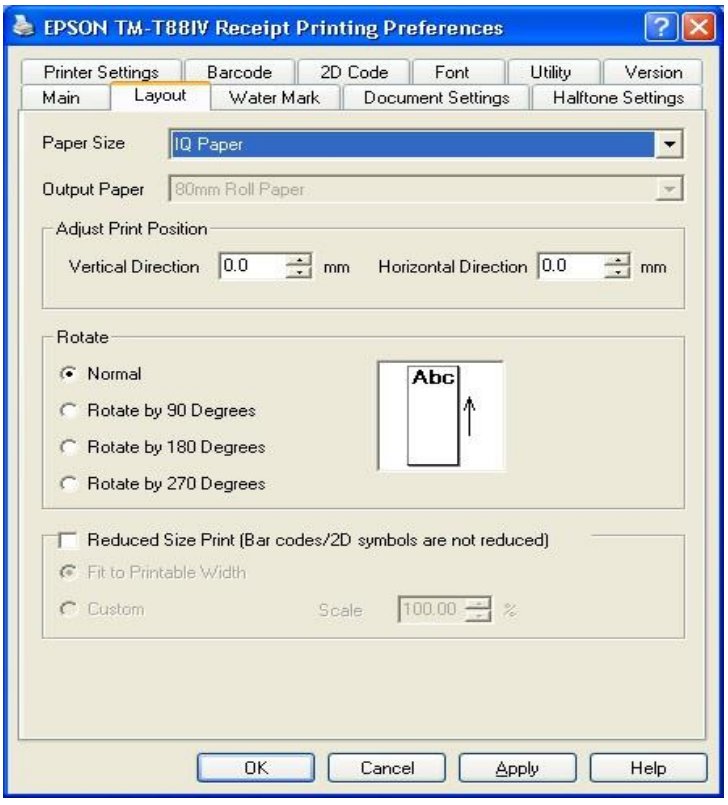
NOTE: The option “print directly to printer” improves the speed of printing. Once completed, select the “General” tab at the top of the screen.



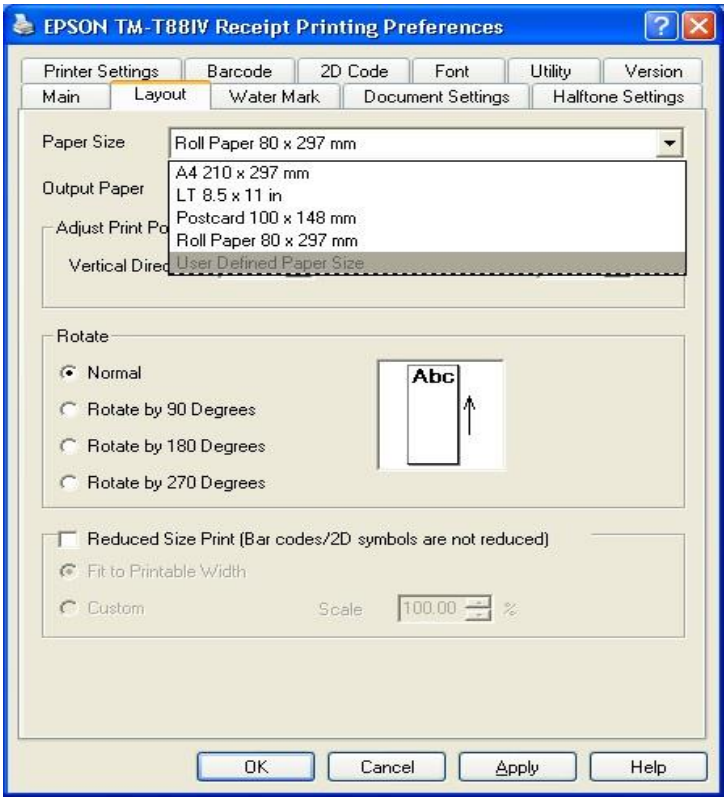
On the general tab screen, select the “Printing Preferences…” option.



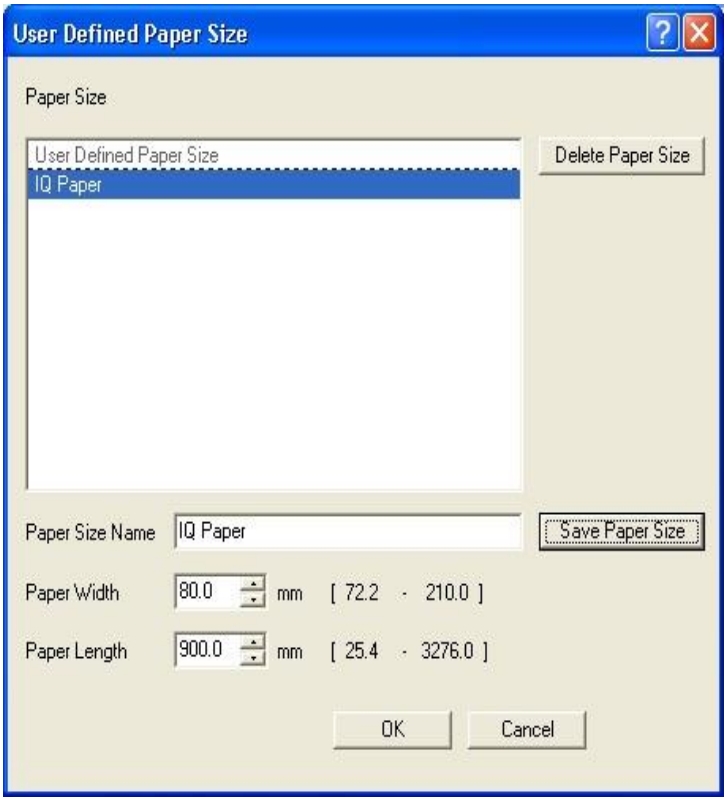
On the main Printing Preference screen, select the Layout option.



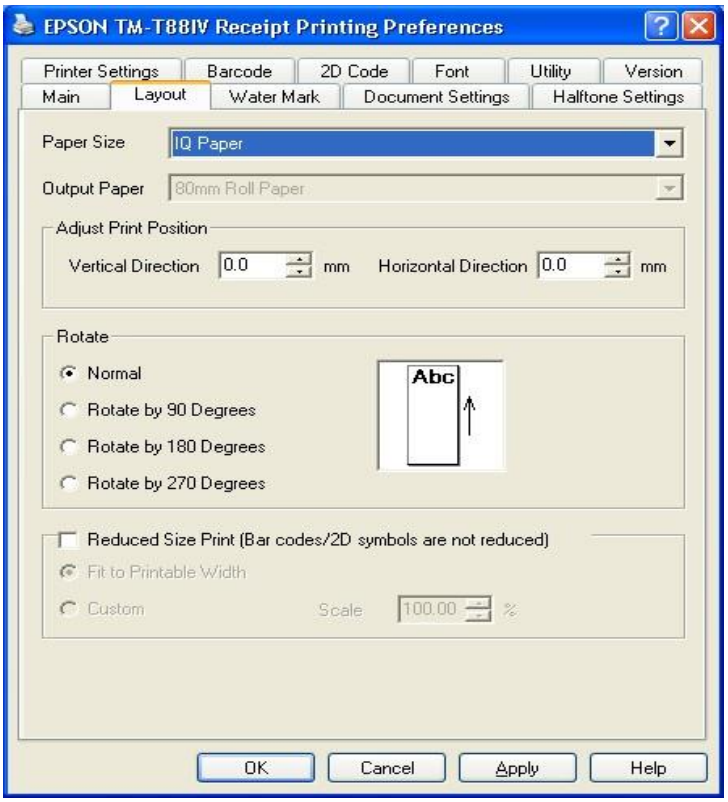
Under the Layout Tab, the Paper Size needs to be set accordingly. From the drop down, select the User Defined Paper Size.



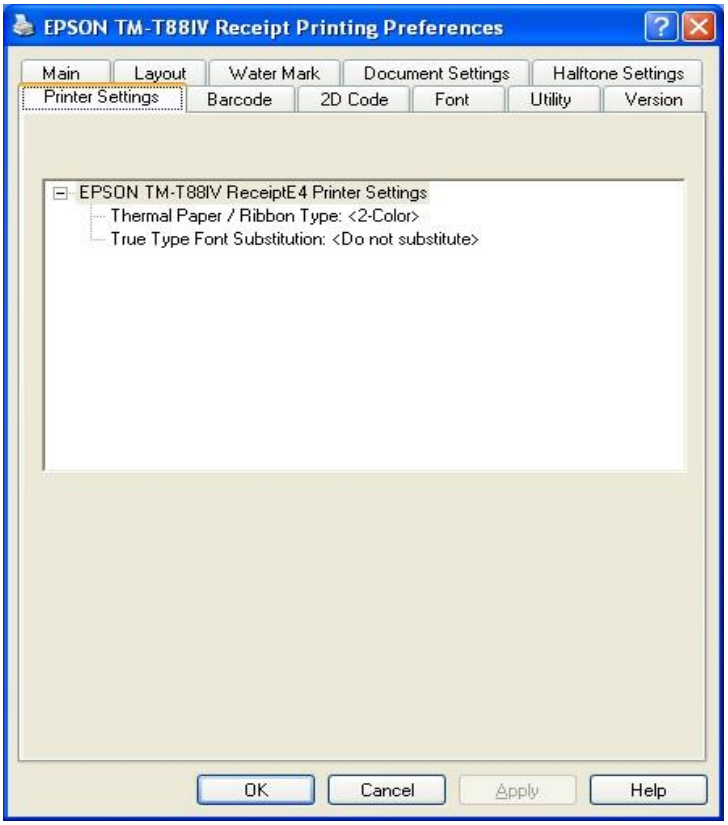
Once the User Defined Paper Size has been selected, change the Paper Size Name to IQ Paper and set the Paper Width to 80.0 mm and the Paper Length to 900.0 mm.



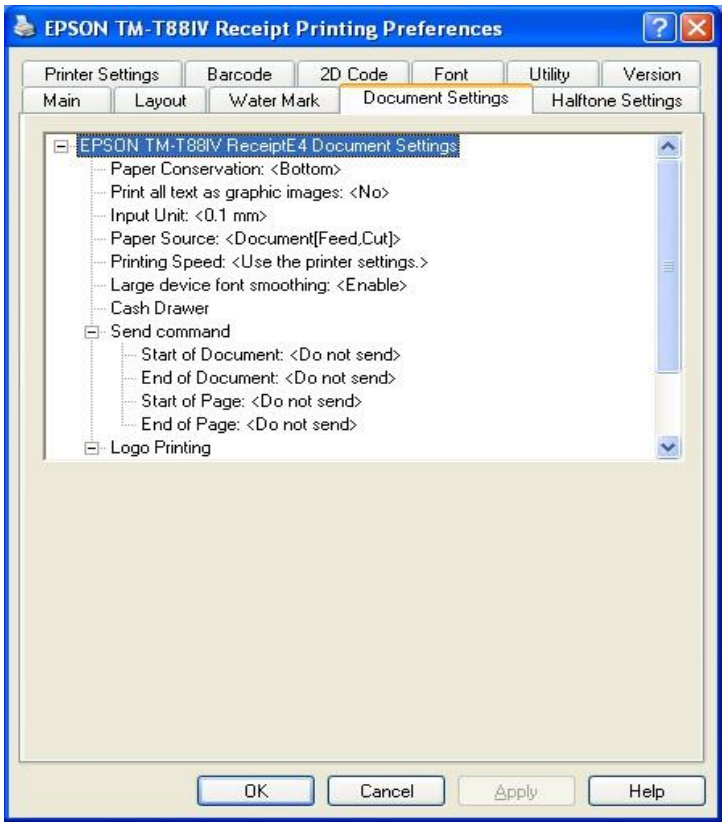
Once the Paper Width and Paper Length have been set, select the Ok option.



After selecting the Ok option the Layout Page will have the newly created IQ Paper set as the new paper size. Select the Printer Settings Tab.



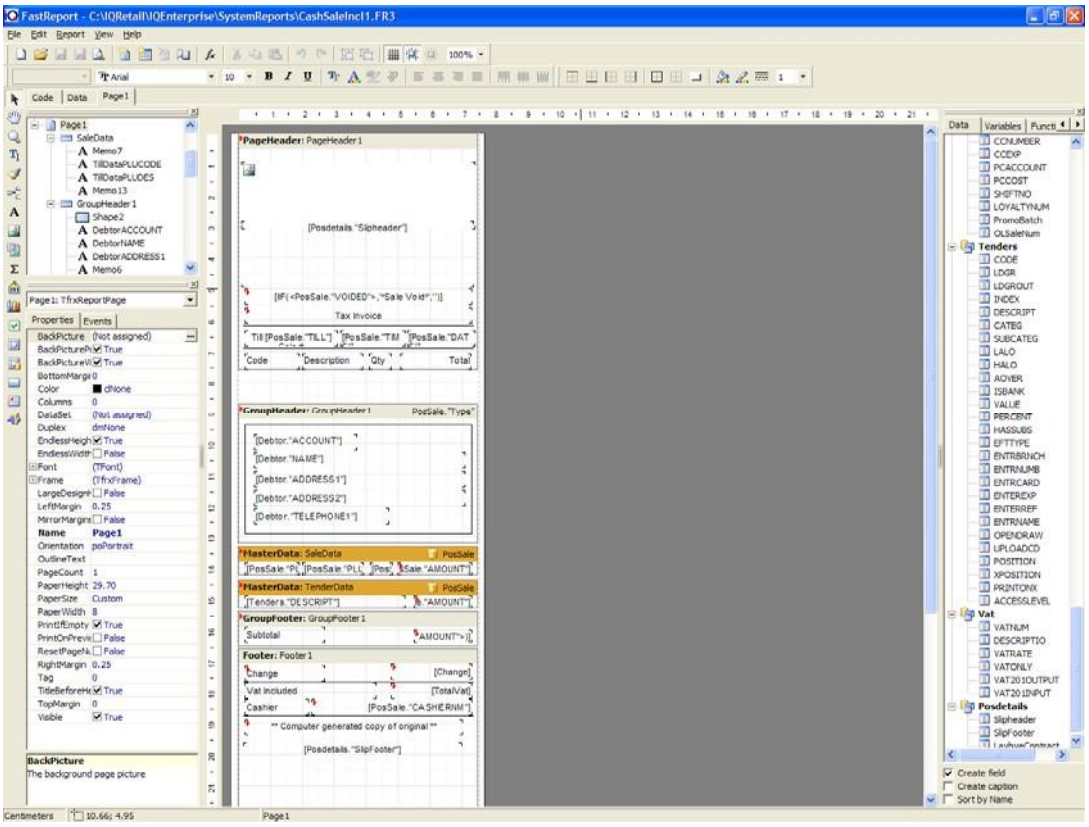
On the Printer Settings option select the correct settings here that are relevant to the specific printer. Once the correct settings have been chosen, select the Document Settings Tab option.



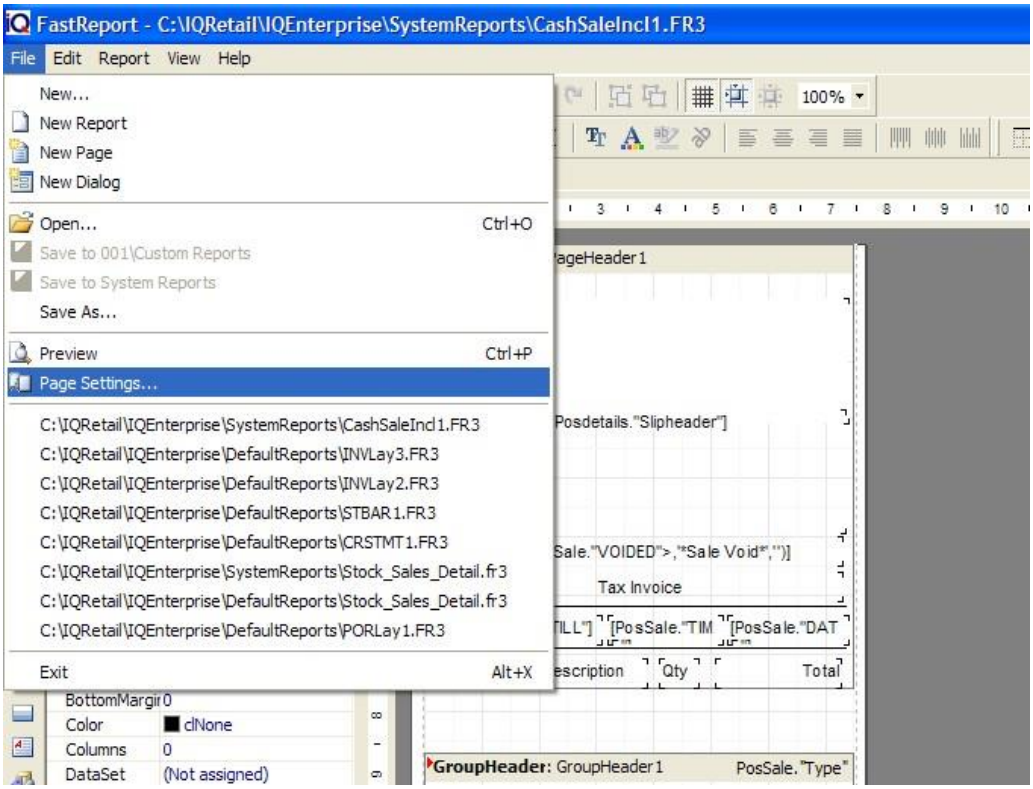
The options under the Document Settings Tab may be left as is. The only one that can or should be adjusted is the Paper Conservation option. This option needs to be set to “Bottom” so that the printing of items in the Point of Sale are printed directly below each other with no spacing in between items.

7.3 IQENTERPRISE\IQBUSINESS RECEIPT LAYOUT DESIGN

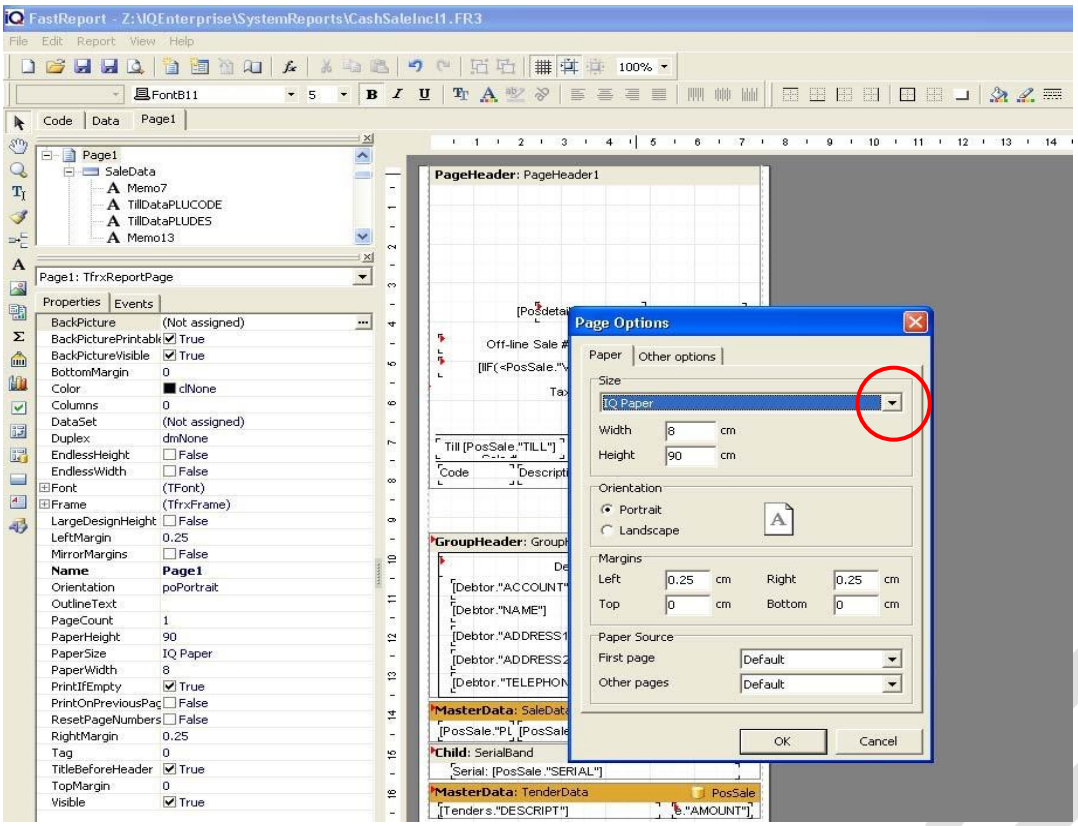
One of the critical parts to ensure that the receipt layout prints correctly is the design of the receipt layout. We need to design the receipt according to the following specifications.



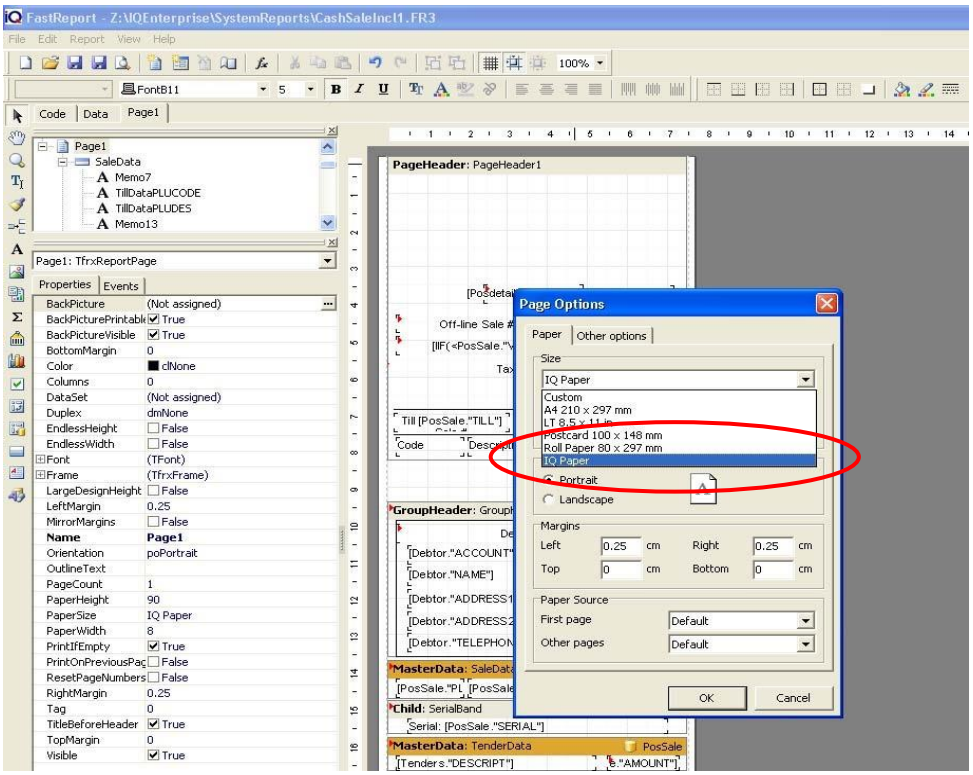
On the receipt/slip layout the following items need to be setup correctly (paper size, font and font size). The first option we will setup is the paper size. Select the File Option located at the top left-hand corner of the Receipt Layout page and select the Page Settings option.



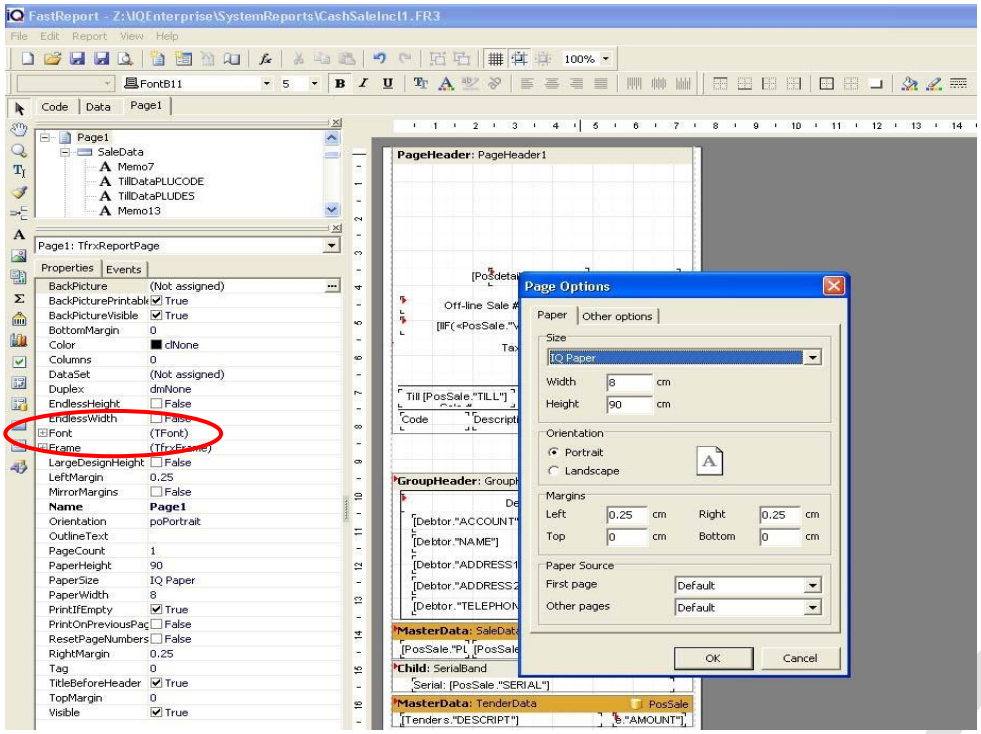
Once the Page Settings option has been selected, the Page Options dialogue box will appear.



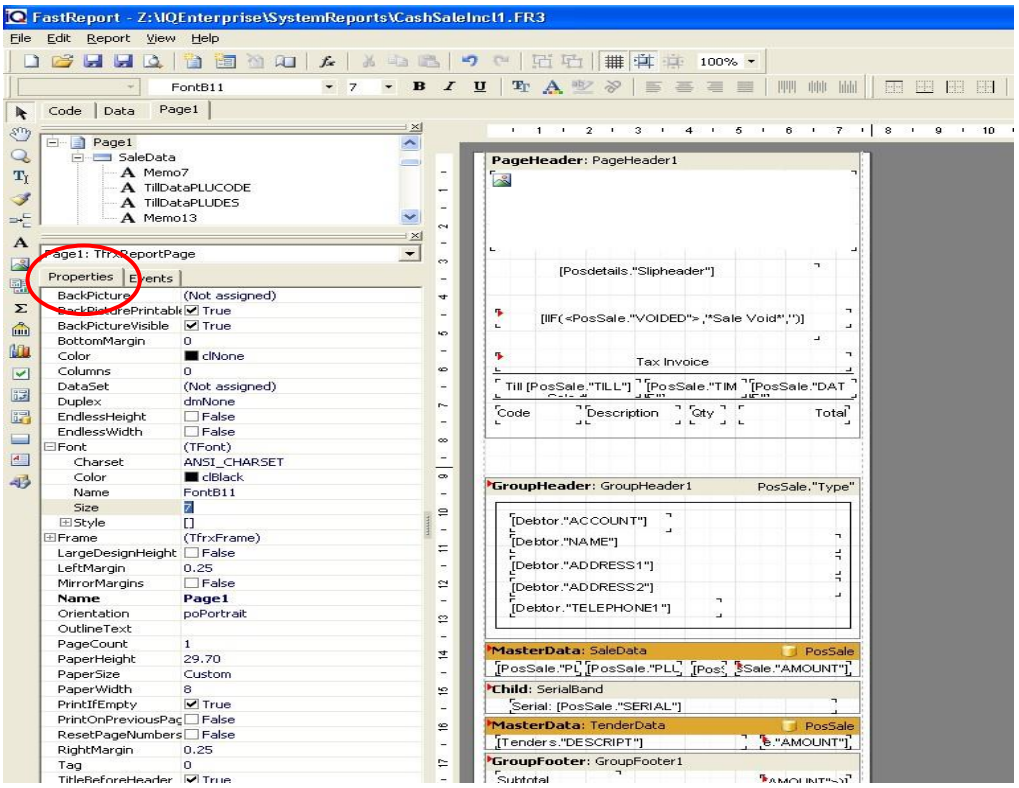
On the Page Options dialogue box select the drop-down arrow under the Size heading and select the IQ Paper page size from the list.



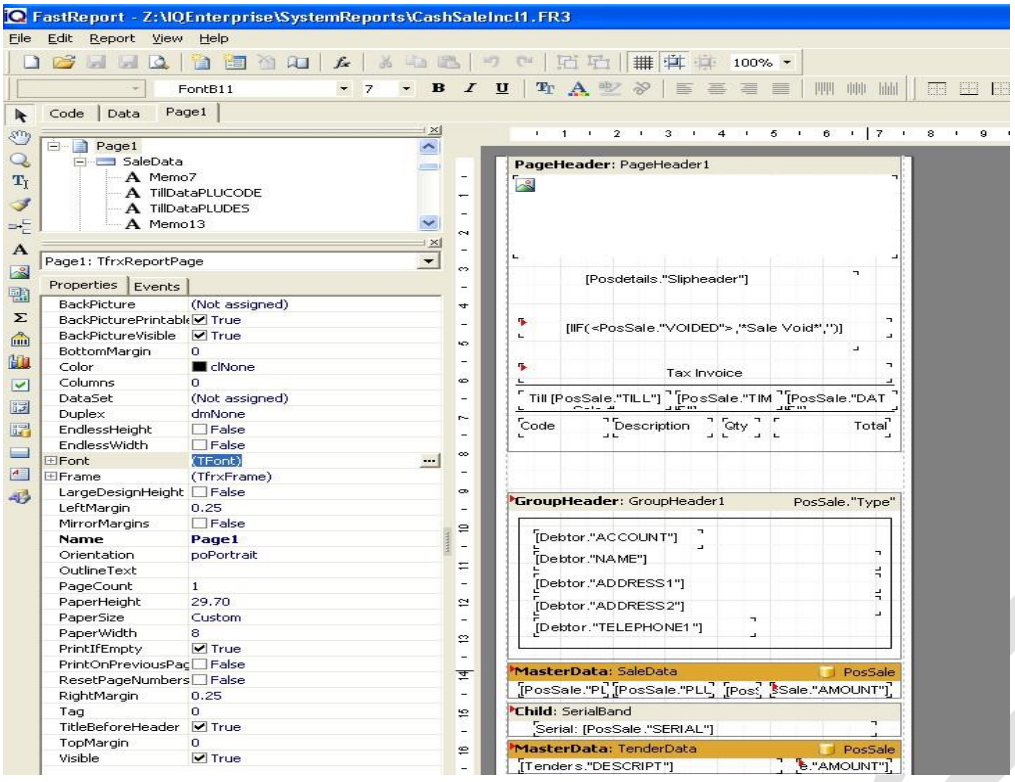
Once the IQ Paper option has been selected then select the Ok option at the bottom of the Page Options dialogue box.



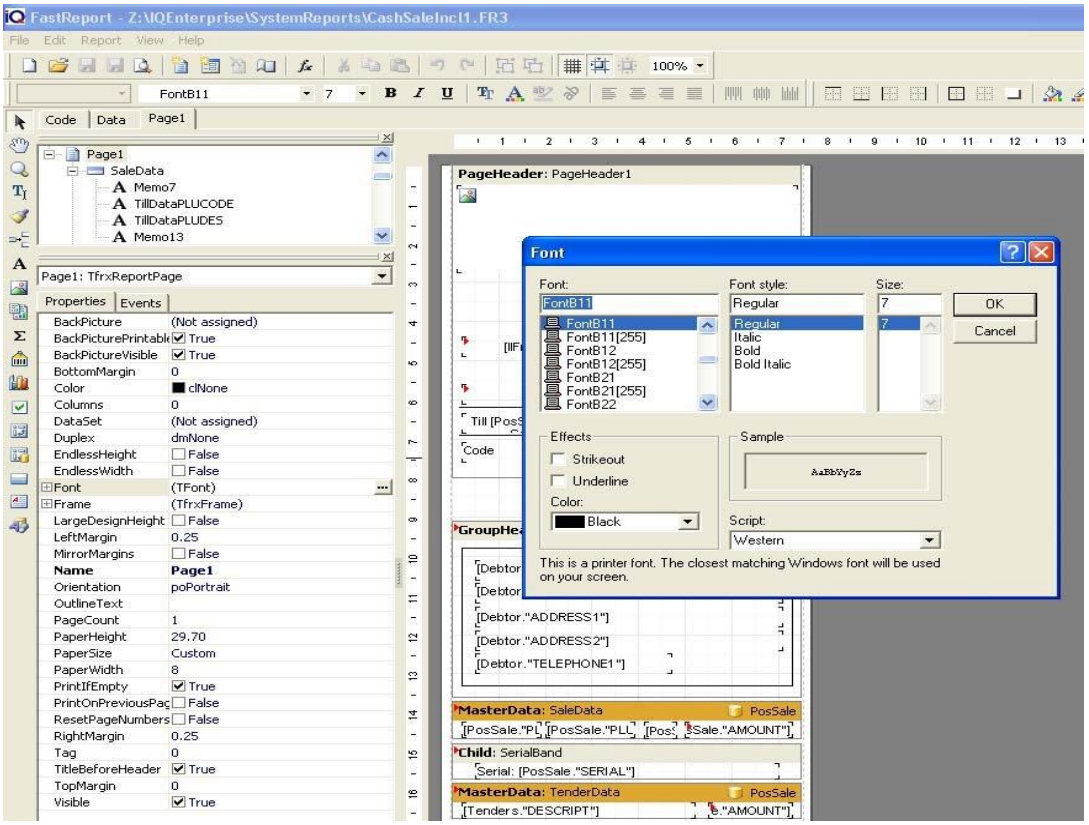
The next part of the receipt/slip layout that needs to be configured correctly is the Font and Font size.



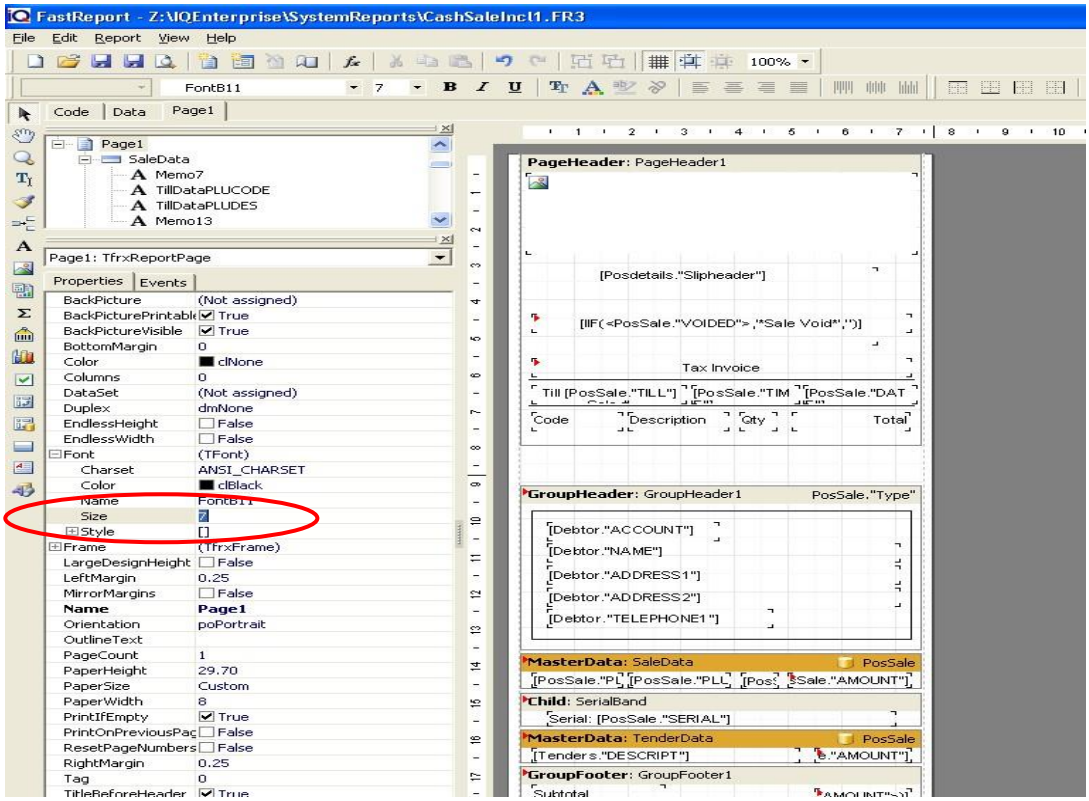
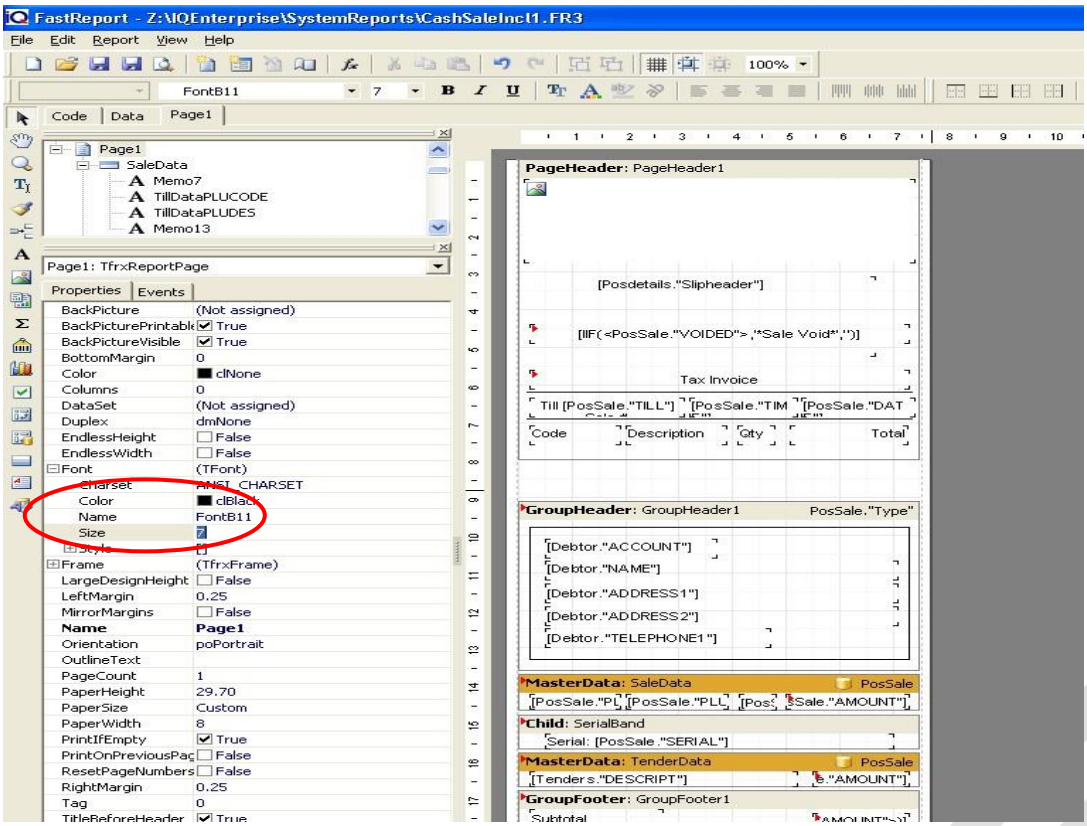
On the receipt/slip layout screen there is a properties section.



On the properties of the receipt layout find the font option and select the 3-dotted button on the right.



On the Font dialogue box, select the FontB11. The Font style must be left as is on t regular. The size will be changed on the properties page. Once completed, select the Ok option.



On the properties of the receipt/slip layout design, select the Font option. Change the size property to 5. This will change the whole receipt document font size to 5.