

Technical Notes - Class *SQL Server or MSDE*



Class for Windows

The following guidelines are intended to help your hardware/systems consultants determine your hardware requirements. Every site has a range of variables that can affect a systems operation, and Infospeed, in producing these notes do so as a guide only, without accepting any liability for the systems performance. Where multiple applications (i.e. other than Class) are in use, this will affect performance and the suggestions given below.

Software:

Class for Windows writes to a Microsoft SQL or MSDE database and has direct links to Word/Excel/Outlook (Office 2000 or above).

MSDE is provided FOC with MS Office but is only suitable for up to 8 users.

SQL Server:

Microsoft SQL Server version 7 or 2000 (Standard, not Enterprise version) is required. Class does not yet support SQL 2005.

The “Standard” edition of MS SQL Server needs to be installed + necessary client licences. These are not provided with Class, and need to be installed by your IT support company/person. (A help sheet is available to assist with settings).

As SQL Server normally has “open” files a special backup agent will be required for backing up the SQL database e.g. Symantec Backup Exec (originally, Veritas). An experienced SQL installer will be familiar with this and any other issues. Complete backups are recommended, not incremental ones.

Connection:

An agreed method of linking to your Class Server is required prior to installation. Connecting to a fixed IP address is the preferred method. (See Remote Connection Options for other options). This gives direct access (subject to passwords and your permission) by our Support team. Class is normally installed across the link by one of our technicians, with assistance from your IT.

A connection must be available prior to installation.

Servers:

Branded high performance Servers are recommended.

A typical specification could be:

12 users

Dual Xeon processor, 2Ghz Server, 2Gb or more of memory

Multiple fast disks with RAID. It is recommended that Class has its own dedicated server.

The client server version of Enterprise Accounts (if installed) should not reside on the same Server as MS SQL.

Workstations:

Windows 2000/XP Professional only

Please ensure the latest service patches are applied to all operating systems.

PC's - Recommended

Pentium 4, 2Ghz (or above) with at least 512mb memory.

PC Performance:

The following test results were achieved by comparing the same tasks using different machines. The results are indicative only, but show the benefits of powerful workstations.

PC	Task	% age improvement
Pentium III – 1Ghz – 256mb	<u>Base Workstation</u> – for comparison	0%
Pentium 4 – 2.6Ghz – 512mb	Invoice Print	+ 55%
	Quick Reports	+ 56%
	Stats	+ 70%
	Ledger – Aged Debts	+ 63%
	Disk copying	+ 12%

Terminal Services

Remote - any RDP (Remote Desktop Protocol) compliant client is suitable.

Printers:

Class and Enterprise are Windows based systems and make use of Laser and Ink Jet printers. The use of dot matrix printers is not recommended or supported.

Network:

If the network is also to be connected to the Internet and used for E-mail, then strategies need to be put into place for Anti-virus and Firewall protection of the system.

Remote Connection Options:

- 1. Remote Desktop via the Internet** (preferred option)
Remote desktop is supplied free with Windows XP or higher.
- 2. Terminal Server via the Internet** (preferred option)
This option is only available if you are already running with Terminal Server technologies.
- 3. PCAnywhere via the Internet**
Requires a copy of PC Anywhere to be purchased and installed on a designated server.

4. PCAnywhere via a Modem

Requires a copy of PC Anywhere and a modem to be purchased and installed on a designated server. A direct phone line is also required.

*** *Note on Internet Connections...***

In order for connections to work via the Internet, you will need to have a fixed IP address and a permanent connection to the Internet. There may also be some configuration of your firewall required to allow the connection from Infospeed to 'go through' and also redirect the connection to a designated server or workstation.

Workstation Connection Options...

Once a connection has been made to a designated server, we can then connect to individual workstations via the following methods...

1. Remote Desktop

Remote desktop is supplied free with Windows XP or higher.

2. PC Anywhere

Requires a copy of PC Anywhere to be purchased and installed on each workstation.

Communications: (Terminal Services or Citrix)

Linking sites via DSL lines (or similar) and Terminal Services requires specialised installation help.

A Multi-processor server(s) is likely to be required (if more than 8 users), + plenty of RAM.

If Citrix/Terminal Server is in use then the **Client/Server version of Enterprise Accounts (if installed)**, is mandatory, and should be run on a separate server.

A Daily/Weekly Secure Backup:

It is the customers' responsibility to ensure that backups are taken. There should be no need to emphasise the mandatory nature of this! Please ensure a minimum of 1 backup (preferably 2) is kept off site at all times.

MSDE:

MSDE (Microsoft Data Engine) is a cut down MS SQL Server, with performance limitations. So, up to 8 users may use MSDE, but after this point full MS SQL Server is recommended.

As MSDE is a cut down version of SQL without a toolkit, conventional SQL backup software will not work. IT has 2 options before starting the backup:

1. Manually stop the MSDE database from running before backup then, restart it afterwards. This typically means stopping MSDE at end of day, restarting at start of day. (Simple process)
2. Automating the stop/start process.

VERY IMPORTANT

It is most important that users are instructed on how to check that a backup has been successful and it is highly recommended that IT periodically check a restore (to a spare area) of your data.

SQL Server:

Class for Windows SQL will require backup software, which is able to backup Microsoft SQL databases. This will require a 'SQL Server agent'. This "agent" will allow the working databases to be backed up without having to shutdown the SQL server. Without this "agent", it is not possible to backup open databases.

When backing up Class for Windows, there are three sections of data that must be backed up and restored together. These are: -

1. Class for Windows SQL databases

The backup software client as described above can back up the databases.

2. Class for Windows SQL Shared Area (server machine)

The shared area (usually called CFWSQL and mapped as I:) contains the user defined documents and reports. When the backup takes place, there must be no users logged into Class for Windows SQL.

3. Enterprise Accounts (if installed)

If Enterprise is installed, this directory must be backed up. Often, this is installed in the shared area (as 2). If this is the case, it will be backed up with Class. Alternatively, it must be ensured that the backups include this data. When the backup takes place, Enterprise must not be in use by any users as it cannot be backed up when there are open files, unless an open file manager is installed.

All three of these sections must be backed up and restored at the same time. It is not possible to restore one without restoring the others. Doing so will lead to corruptions and systems failures.

Technical Notes (Email/Fax)

The system uses Microsoft Outlook to Email.
Outlook is part of MS Office 2000/XP.

Your E-mail system

The two most common E-mail systems within small/medium businesses are as follows :-

1. MS-Outlook or POP client connected to a POP3 server such as FT-Gate or Exchange 5.5.
2. MS-Outlook/MAPI Client connected to an Exchange 5.5/2000/2003 server via SMTP.

Setting up corporate/business E-mail systems is a specialised area and should be entrusted to a specialist in this field, as most fax systems will integrate into this system, this is something to consider at the E-mail planning stage.

Before the Email can be used Outlook requires setting up to point to your E-mail server.

This can be done by yourselves, your computer dealer, or Infospeed at additional cost. See Technical Notes below, which relate to both email and Fax.

Systems known to be Outlook Email/Fax Compliant:

E-Mail Compliant Products

- Microsoft Outlook 2000/XP(2002)
- Microsoft Exchange Server 5.5/2000/2003

Fax Compliant Products

- Microsoft Outlook 2000/XP(2002)
- Microsoft Exchange Server 5.5/2000/2003
- Microsoft Fax
- GFI Faxmaker for 2000 Exchange

Use of Fax:

Class for Windows incorporates facilities to provide document e-mail and fax support. On the market today there are a number of third party products, which provide these types of service. Functionality is provided by the Microsoft Collaboration Data Objects library.

Microsoft Fax can be used if only 1 client on the network requires faxing capability, as it requires one modem/phone line, per client.

Infospeed have tested and installed (June 2003) GFI's Faxmaker product. This can integrate through Microsoft Exchange Server and provide faxing from Outlook to all clients through one modem connected to the E-mail server.

However due to the fact that GFI and Microsoft are independent companies, we cannot guarantee that these products will always function correctly with CLASS.

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