

This document updated: 2nd December 2004 for the year 2005

This is the recommended minimum hardware for running your SIMS system effectively. We believe that schools should budget to replace hardware on a three year cycle and this specification for network workstations will easily be exceeded by a PC purchased within the last three years, except for memory which can easily be upgraded if required.

The details given are to assist schools who may be intending to implement SIMS on existing equipment. Some of the processor speeds listed below are considerably older than three years and corresponding performance will be slower than one might wish in some areas.

It is our intention to keep minimum specifications for workstations in line with operating system requirements. This becomes possible as we move to supporting Windows® 2000, XP and 2003 and dropping support for older operating systems. Minimum memory is the most likely barrier to using SIMS; a SIMS Workstation with less than 256MB is likely to lead to user frustration. Screen resolutions of less than 1024 by 768 are no longer supportable.

Specifications for Servers and Standalone Systems take in to account the latest Microsoft advice and customer feedback.

Component	Workstation	Standalone/Peer to Peer Teacher's Desktop with Local Database	Server	Document Server
Processor	400MHz	1GHz	1.5 GHz	400MHz
Memory MB (Recommended Minimum)	128 (256)	256 (512)	512	128MB
CD/CD-RW/DVD/DVD R/RW	Yes	Yes	Yes	Yes
Backup of whole system required	Useful	Yes	Yes	Yes

- Tablet PCs are recommended to use Pentium processors and have keyboards available.
- CDs are required for software installation. CD-RW and Writable DVDs are useful backup devices. Formats are unimportant as long as they can be read back when needed. Care should be taken with the various RW formats for DVD which are not readable on some DVD ROM drives.
- Internet access is required for all machines. SOLUS requires access to the http protocol on www.capitasolus.co.uk and all sub-folders thereon.
- We would not recommend that servers are used 'normally' as workstations except in small schools. Non dedicated servers are unlikely to be suitable with more than five concurrent users of SIMS.

- Capita Education Services recommends the purchase of a dedicated Database Server where there are twenty or more concurrent users, or where the network server is of low specification. A whole school network will almost certainly require a dedicated Database Server. The use of Lesson Monitor and/or Assessment Manager in each classroom will usually mean that a dedicated Database Server is required.
- On RM CC3 networks, RM recommend that schools have a separate member server for SIMS and that admin systems are not installed on the Domain Controller.
- On Netware, Capita Education Services recommends that SIMS be hosted on a member server running an operating system as above.
- Monitors/graphics cards on Servers used only for that purpose should be as cheap as possible.

The changes above are based on feedback from customers in terms of what is usable. Workstations of minimum specification would be recommended for occasional use and are likely to be less able to deal with multiple open applications. Staff who spend significant amounts of time using SIMS are strongly recommended to use equipment bought within the last three years. Similarly, minimum specification SQL Servers, may not be adequate in larger schools; in many ways the server suitability is more important because a poor performing SQL Server will give all users a poor experience of the software.

SIMS already provides an upgrade and patch service on the Internet called SOLUS (SIMS Online Upgrade Service). We will also be adding further enhancements that make use of the internet such as address validation. All SIMS workstations require internet access.

Free Disk Space for Workstations (see detailed hardware advice for justifications)

Workstation without local data will need 1.5GB free including 500MB on system partition for third party components in the Windows directory. Additionally, where local data is stored allow a further 3GB, this figure is much dependent on the size of the school's main database. Workstations using FMS should allow for an additional 150MB.

File Server Disk Space

2GB for applications plus 1GB (<1500 pupils) or plus 2GB (>1500 pupils) for dBase data.

Disk Space Guidance for MS SQL Server (MSDE) Machine (see detailed hardware advice for justifications)

Overhead space - 1GB working space + 1/4GB for MSDE. Best simple guidance is that customers should allow 5MB per pupil. For example, a 1000 pupil school would be advised to have at least 5GB free for SIMS.

Disk Space Guidance for FMS SQL Anywhere Server

Sybase SQL Anywhere Server should have 1GB free for Sybase SQL Anywhere and FMS.

Disk Space Guidance for SIMS Document Server

Customers should initially have at least 10GB free on their document server; this disk space should be dedicated to the document server. Disk space on the document server needs to be monitored and there can be no guarantee that 10GB is sufficient because it is solely based on customer usage. The document server must have reliable hard disk storage and it is critical that this machine is included in the system back up scheme. At present there is only support for a single document server hence the storage space required needs to be sufficient to store documents for all SIMS applications.

Profiles would usually be the largest user of disk space on the document server. It is difficult to give accurate advice, but the production of three profiles per year for 1000 students, each of say 100Kb (8 page word document without graphics) would give rise to 300MB per year. The largest profiling session that we have heard of generated 12GB of word documents for 2400 students, this would compress to about 3GB on the document server. Other SIMS applications will also make use of the document server.

Operating System Supported Versions/Minimum Service Packs

Operating System	Minimum Requirement
Windows® 2000 (Pro # and Server)	SP2 and above
Windows® XP Pro #	Rtm and above
Windows® XP Tablet Edition #	Rtm and above
Windows Server™ 2003	Rtm and above

Rtm = release to manufacture - no service pack.

Please note that minimum service packs may not support critical patches to prevent viral infection.

Non server operating systems have a maximum of 10 user licences in their licence agreements - seek confirmation from Microsoft before purchasing based on this advice. Please note that you may require a server operating system for both the SQL Server and Document Server machines if they are separate computers.

In addition Windows NT4™ Server will be supported until Autumn 05 when used as a document server or a SQL server. We do not test on Windows NT4® Server.

Windows® 98 and Windows NT4™ Workstation are no longer supported.

We will support operating systems, where possible, for the same period as they are supported by Microsoft. We will publish any explicit exceptions like the one above. Please note that Windows® 2000 exits Microsoft's mainstream support on 31 March 2005. It will receive extended support until 2010 from Microsoft according to current information. We would recommend that schools plan to have migrated away from Windows® 2000 by 31 March 2008.

Customers are generally advised to use the latest service pack for their operating system, although schools might sensibly delay an installation of a service pack so that their support units can confirm that it should not cause them major issues. For example Windows® XP SP2 raised a number of issues for Anti-Virus Providers and from a school's perspective; it would be a good idea to let others see if there are problems and delay the implementation for a sensible period until any teething problems are ironed out.

Additional Requirements for Mentor Users

In addition to similar hardware requirements above, a 56K modem is required on the 'Server' for remote support with a copy of PC Anywhere. HP Laserjet 4100 printers are recommended. Dot Matrix printers will shortly not be supported and pre-printed stationery should be suitable for laser printing.

Additional Requirements for Accpac Users

Accpac software has much tighter compatibility requirements; these are often now incompatible with SIMS requirements. Accpac is supported until Summer 05 and customers would be advised to run Accpac on one or more older machines whilst Accpac is needed. On Accpac machines, users should review requirements on the link www.sims.co.uk/accpac before upgrading the operating system or Microsoft® Office.

Hardware Support

If any key part of the school's network is down, it may have a significant impact on the day to day running of the school. Schools should consider a hardware support agreement. More information follows later in the document when new equipment is purchased.

Backup

You are reminded that it is critical that backups are moved to an alternative media on a daily basis, i.e. one that is kept in a physically separate place to the server that is backed up. Customers need to ensure that they have a disaster recovery plan (DRP). This includes where they will source a replacement server and what they will do whilst the system is down. The DRP is only worthwhile if on a termly basis, the backups are restored to another machine and proven to work. Users often believe falsely that possession of a tape/DVD with a label on guarantees that their system can be restored, we have even had tapes with correct file names, sensible size and even restored physically but had no usable data therein. It is difficult to over-emphasize the importance of having a DRP and of testing any DRP that you make.