



<b>Topic:</b>	<b>SOS System Recommendations</b>
<b>Document:</b>	<b>#402</b>
<b>Product:</b>	<b>SOS Suite</b>
<b>Revision Date:</b>	<b>07/19/10</b>
<b>Author:</b>	<b>Seth Krieger</b>

The following recommendations should deliver *adequate* performance in each indicated category. If your implementation is particularly demanding, you want better than just “adequate” performance, or your database is large, you should increase both RAM and processor speed to compensate. Simultaneous usage of resource-hungry applications such as Microsoft Office also demand more RAM.

## **Windows 32 bit Software**

**(Compatible with Windows 64)**

At present, SOS is distributed as 32 bit software. It will, however, install and run in a Windows 64 environment. Windows XP (SP2) and later are supported.

## **Standalone Computer or Network Workstation**

- A 600 MHz Pentium or faster computer (or comparable AMD-based system) with at least 1 GB of RAM, running Windows XP, Windows Vista, or Windows 7. For satisfactory performance SOS recommends a 1.5 GHz or faster computer with 1 GB of RAM or more for Windows XP. Those running Windows Vista or Windows 7 should have at least 2 GB of RAM.
- A faster, multi-core processor and more RAM is even better, especially if you will be running two or more applications at the same time, or if your SOS database will be large.
- A minimum of 1 GB of free hard disk space for a small practice; much more for large groups and agencies.
- A CD-ROM or DVD drive. The CD or DVD drive is used only for installation. On networks a shared drive may be used.
- 17” or larger CRT or 15” or larger flat panel display, running 1024 x 768 resolution or higher.
- TWAIN compatible scanner to scan documents from within SOS applications. WIA compatible scanners can be used, but do not provide either multipage or duplex capabilities. Scanners used by SOS customers include: Docketport 687 card scanner, Canon N670, Xerox Documate 252, and Fujitsu FI-6130. TWAIN is

the industry standard scanner interface, so most scanner manufacturers, including Microtek, Umax, VistaScan, HP, Fujitsu have TWAIN models. Note, however, that certain scanner models, even from these manufacturers, do not support the TWAIN standard. For example, HP's Officejet multi-function printers support WIA, but not TWAIN. Likewise, the popular Fujitsu ScanSnap 510 uses a proprietary interface and software package and supports neither WIA or TWAIN. If purchasing a new scanner, confirm that TWAIN drivers are included or are available for the desired model and the version of Windows that you are using.

Files created by scanning documents using non-SOS software still can be stored within the SOS database if your scanner is not compatible with the SOS scanner interface.

- Windows XP (SP2), Windows Vista, or Windows 7. Server operating systems: Windows Server 2003 or 2008.
- Tape backup or a similar robust backup system that permits easy media rotation and off-site storage of archival backups. Depending on the amount of data to be backed up, some installations will be able to use writable CD or DVD. Supplemental internet based backups are strongly encouraged for redundancy and disaster-recovery purposes.

## Network Server

- A server running **Windows Server 2008, Windows Server 2003, Windows XP, Windows Vista or Windows 7**. Installation of the database on a Novell server or on older versions of Windows is no longer supported. *For best performance and data security, SOS recommends that the designated server computer not be used simultaneously as a workstation and as a server.* Performance, database security and integrity are compromised when the server doubles as a workstation.
- Virtual server environments such as VMWare and Microsoft Virtual Server are not supported. If you install on a virtual server and unusual issues should arise, SOS may require that the installation be moved to a traditional server before providing additional assistance.
- **Servers should have no less than 1.5 to 2 GB of RAM.** In general, additional memory is more important than a faster processor, but processor speed is important, particularly in larger networks. The amount of RAM recommended is directly proportional to the expected size of your database. Large transaction volume organizations should think in terms of *at least* 3 GB. The included database engine will use multiple processors to improve performance, if present. The basic server license permits installation on servers with up to four processor cores. For larger servers, contact SOS for licensing details.
- Hard drive space proportional to the size of the organization. Assuming that an average patient account includes about 20 journal entries (charges and credits), you should estimate *at least* 35K - 70K per patient, or 35 MB - 70 MB per 1,000 patient accounts, plus up to 400 megabytes for the program files. SOS would

recommend that you double this figure to allow ample space for temporary tables, transaction logs, and other needs. Use of both SOS OM (receivables and billing) and CM (clinical records) will increase the amount of drive space required.

Performance and data safety can be enhanced on an active system through the use of multiple hard drives, with the transaction log stored on a second drive in the same server and perhaps the index files on a third drive. Moving the transaction log to a different drive is straightforward (instructions can be found in the technical reference, SOSTECH.PDF, located in the SOS folder and in the document library at [http://www.sosoft.com/html/document\\_library.php](http://www.sosoft.com/html/document_library.php)) but relocating the index files requires unloading and reloading the database with a custom reload script. If you would like to implement a more complex installation of this sort, call SOS to discuss whether such a modification would be worthwhile. By default, all program and data and transaction log files will be installed on the same drive.

- 1 GHz processor or higher. The database will take advantage of multiple processors or multi-core processors, if present. Larger databases will require faster processors. The more users you will have on your system, the more important it is to have multiple CPU's or multi-core CPU(s).

SOS's standard network license permits use of up to four processor cores in a database server. If you have a larger server and want to use more than four processor cores to run the database, contact SOS to extend your license at very reasonable cost.

- One or more high performance hard disks. Ideally, the database files should be located on a separate, dedicated partition on a drive other than the primary system drive. See document #435 in the SOS Document Library for specifics ([http://www.sosoft.com/html/document\\_library.php](http://www.sosoft.com/html/document_library.php)).

If setting up a dedicated database server that will not also be used for file or printer sharing, you may use Windows XP Pro, Windows Vista Business, or Windows 7 Pro system to host the database. That is also a possibility if setting up a small "peer" network with 10 or fewer users. It is neither required nor recommended (for security reasons) to configure a network share for the database. All communication between the workstations and the database is done through IP messaging, without any need for users to log into the database server computer. As a result, the Windows XP, Vista, and 7 limit of ten connected users does not apply for SOS database access.

- CD-ROM, CD-RW, DVD or DVD-RW drive.
- Tape backup or a similar robust backup system that permits easy media rotation and off-site storage of archival backups. Depending on the amount of data to be backed up, some installations will be able to use writable CD or DVD. Depending on the amount of data to be backed up, some installations will be able to use writable CD or DVD. Supplemental internet based backups are strongly encouraged for redundancy and disaster-recovery purposes.

