

Information On Keeping Your Computer Healthy And “Switched On Schoolhouse” Applications Happy

This document was created in order that we might give you information that will enhance your success with “Switched in Schoolhouse” (SOS) Distance Learning applications (Remote Access or Synchronization). Below will be information on general recommendations:

1. For computer “health”
2. SOS computer system requirements
3. SOS Distance Learning (homework) application information

Computer Health:

In today’s world of computer hacking, viruses and adware/spyware, it is vitally important that proper precautions are in place in order to protect your computer from these harmful programs. It is also important that general and regular maintenance is done on a regular basis (once a week). If the warnings and recommendations below are heeded you will go a long way in protecting your computer and maintaining optimal performance.

1. General maintenance:

1. Windows XP, XP Pro and Vista need to keep up on system updates. Be sure to have your computer configured for automatic updates from Microsoft.
2. It is absolutely necessary to protect your computer from electrical surges, spikes and filtered from electrical noise by using a good quality surge protector. Electrical spikes and surges will kill computers and unfiltered nine will shorten the life of computer power supplies.!
3. As you use your computer and install and uninstall programs as well as create files and documents your hard drive, the drive will become fragmented. This fragmentation of files will slow your computer down and eventually cause some of your programs or files to simply not work. Severe fragmentation will also shorten the life of your hard drive and result in hard drive failure. We recommend that you check your hard drives and all partitions regularly and “defrag” when it is recommended by your computer.
4. If you use the Internet at all it is **vitally** important that you:
 - a. Install antivirus software that protect from viruses, malware and spyware and keep your subscription current and keep your antivirus software updated at least once a week. You should scan your computer and its hard drives and any partitions at the very least, once a week.
 - b. If your antivirus software has a firewall, do not enable it unless you are very familiar with it and can get the firewall to give permission for SOS to upload and download information to and from your computer. Windows has a built-in firewall.

- c. While SOS will work with most antivirus software it can have problems with Norton Security or Antivirus software and other that demand heavy use of your computer's memory resources.. We recommend that you uninstall Norton and ALL its components and install Grisoft's AVG Internet Security 8.5 edition. This antivirus software is very good and the basic package can be downloaded from <http://free.avg.com/> for FREE! AVG Internet Security will automatically update virus patterns hourly! VVCS is using the commercial network version to protect our church/school system. "AVG Internet Security 8.5" is a complete security solution for viruses, spyware, spam and firewall. Check it out at: <http://www.avg.com> .
 - d. Be sure to enable Windows Popup blocker (A Service Pack 2 addition in XP). Many spyware and viruses are transmitted through these popup windows.
 - e. If you have had an e-mail account for very long, no doubt you have been annoyed by e-mail advertisements (SPAM) that have found their way to your computer. Your e-mail is also a great conduit for viruses, especially worm viruses. Your antivirus software is capable of catching the majority of these viruses but occasionally a virus may get past your antivirus software. If you download an e-mail to your computer with a virus and you have a preview activated in your e-mail software, it is already too late. Viruses that are part of the e-mail can be activated the second they arrive on your computer, even though you have not opened the e-mail. A safe guard is to close any e-mail preview windows. A great program that we run here at VVCS **before** we download any e-mail is called "Mailwasher Pro." This program allows you to view your email at your ISP before it is downloaded to your computer. You have the option at that time to either bounce it back to the sender as well as blacklisting (spoofing the sender into thinking your e-mail address does not exist and thereby prompting the sending computer to delete you from their e-mail list), delete the e-mail, or accept the e-mail. "Mailwasher" becomes your first line of defense against harmful e-mail. Using this program, our policy has been to either bounce or delete any e-mail from a sender **we do not know**, especially e-mail with attachments or HTML e-mail graphics within the email text box) **from senders we do not know**. A copy of "Mailwasher Pro" can be downloaded at: www.firetrust.com.
5. We also recommend that in Internet Explorer or if you are using Mozilla Firefox you delete your temporary files and cookies once a week. Failure to do this can cause Internet Explorer to slow down and eventually quit working. It is also best to set your "history folder" to no more than 7 days.

BACKUP...BACKUP...BACKUP!

There is no substitute for computer security, integrity, and piece of mind than a solid backup regime. If your computer has only one hard drive (which is the norm) you will want to backup the whole drive. There are two ways to do this:

1. Make an image of the whole drive and then backup your Documents.
 2. Partition the drive and image the first partition (typically called the C: Drive) and backup the second partition (typically called D: Drive) which will have your documents on it.
1. Make an image of your complete Drive and then backup your Documents folder.
 - a. Most computers come from the manufacturer with one drive with one partition called the C: Drive. The Windows operating system (XP, XP Pro, Vista Home Premium, and soon Windows 7) are preinstalled on the drive. Once you have configured the computer to your personal settings and have installed any other programs you will be using we recommend that you make an “image” of the drive to an external hard drive. An “image” is a special backup that records the boot sector and system files in such a way that upon a “restore” you end up with your operating system functioning with your personal settings in tact. This kind of backup will record everything on a drive that has only a single partition. This means that all data is backed up inside the “image”. This is different than the restore disk(s) that comes with your computer. The restore disk(s) will restore your computer back to its factory settings, meaning, your personal settings, and all other programs you have installed will be lost. Your data files on the hard drive in your Documents folder will also be lost unless you have backed it up before the restore.
 - b. A soon as you have your computer configured the way you want it make an “image” backup. Norton Ghost or Acronis True Image do great jobs of making “image” backups of your computer. We recommend Acronis “True Image Home 2010 ” for Windows XP, XP Professional, Vista, and Windows 7, because of the ease of use and it costs far less than Norton Ghost. Acronis True Image Home 2010 can be purchased from <http://www.acronis.com> . Here are the basic backup (image) steps:
 1. Either install Acronis True Image Home 2010 on your computer or boot from the Acronis disk.
 2. Select “Backup and Restore, then select Backup.
 3. Follow the backup instructions and backup (image) your drive to an external drive.
 4. Once this is completed you will also want to setup a backup file of your “My Documents” folder (XP) or “Documents” folder (Vista, Windows 7) using backup software such as Windows backup, which can be found at the start button, all programs>accessories>system tools>backup. There are other good backup programs that will encrypt, compress and have easy to use interfaces that will work for you as well, some are free. Make a backup of your “My Documents” folder (XP) or “Documents” folder (Vista, Windows 7) on your external drive. From this point on you should make regular incremental backups of these files.

2. Partition the drive and image the first partition (typically called the C: Drive) and backup the second partition (typically called D: Drive) which will have your documents on it.
 - a. Some computers will come from the factory configured with one drive and two visible partitions (C: and D:), but most as I mentioned above, come only with the C:\ drive with one partition. The advantage of two partitions on the drive is that it allows the system files and program files to be stored on the first partition (C: drive) and the second partition (D: drive) to store all your documents, videos, pictures, etc. This configuration will allow for a smaller file size of your backup “image” and facilitate a faster restore. It also allows for a smaller backup file of your documents as well using you normal backup software and makes it easier for you to schedule incremental backups of those files.
 - b. The point of an “image” backup is to have an image of your Windows system files and program files that also have a smaller registry file. The registry file of your computer grows with the addition and deletion of programs as well as just the general use of the computer. This will eventually slow down the performance of your computer over time. The early backed up “image” of your computer represents the best optimal performance.
 - c. If you computer has only one partition on the C:\ drive you can add a partition using non-destructive partitioning software such as Acronis Disk Director. Before you attempt to repartition your drive, backup all your data to an external drive and note that this is NOT for the “faint of heart.”. **Unless you are experienced in this procedure I would recommend you have a professional do this for you.**
 - d. Once your computer is partitioned into two or more partitions with the Windows system files and programs on the C:\ partition and your “My Documents” folder and subfolders on the D:\ drive, you are now ready to “image” the C:\ partition and backup the D:\ partition. Here are the steps:
 1. Either install Acronis True Image Home 2010 on your computer or boot from the Acronis disk.
 2. Select “Backup and Restore, then select Backup.
 3. Follow the backup instructions and backup (image) your drive C:\ drive to an external drive.
 4. Once this is completed you will also want to setup a backup file of your “My Documents” folder (XP) or “Documents” folder (Vista, Windows 7) on your D:\ drive using backup software such as Windows backup, which can be found at the start button, All programs>accessories>system tools>backup. There are other good backup programs that will encrypt, compress and have easy to interfaces that will work for you as well, some are free. Make a backup of your “My Documents” folder (XP) or “Documents” folder (Vista, Windows 7) from your D: drive on your

external drive. From this point on you should make regular incremental backups of these files.

- e. With this configuration we also recommend that you do a “clean” reinstall or “re-image” of your operating system once a year. The reason for this is that the operating system registry will grow to such an extent that the performance of your computer will be compromised.

EXTRA CREDIT IN BACKING UP:

We also recommend that you backup your “My Documents” folder (XP) or “Documents” folder (Vista, Windows 7) and all associated subfolders “off site.” This can be done with a subscription to “Carbonite” at <http://www.carbonite.com>. The only drawback to Carbonite is that they will not backup you system files, program files or attached drives or network drives. But the point of “off site” backup is to further protect you personal data and Carbonite does this well. Another program out there is called CrashPlan (<http://www.crashplan.com>). This program will allow you to backup to a friend’s computer and with a subscription, backup to their server as well. There are no file limits with CrashPlan and that allows backups from external and network drives. Here at VVCS we use CrashPlan to backup our valuable data “off site” locally as well as through their subscription plan called CrashPlan+.

Wow! You say! Well, remember these recommendations will stop you from looking for a second story window to affect computer repairs or an emotional collapse at the loss of valuable personal data!

SOS Computer System Requirements:

We recommend:

- Pentium IV 1.8 mhz or comparable AMD processor
- 512meg RAM or higher
- Windows XP, XP Pro, Vista Home Premium, Windows 7
- A minimum of 7gig of free hard drive space per student
- SVGA or higher
- Dialup Internet for Synchronization
- Broadband (DSL or Cable) for Remote Access (**Our preferred method for Homework and Distance Learning**)

SOS Distance Learning (Homework) Application Information

SOS Synchronization (Not used here at VVCS unless absolutely necessary)

1. SOS synchronization is designed for those who have dialup access to the Internet only. It allows users to work offline with a local copy of their data and then synchronize their changes periodically with the school over the Internet. The advantage of synchronization is that it does not require a connection to the Internet while doing the work.

2. Although synchronization does not affect how the SOS applications run, it does affect what students, and parents can do while running SOS. The only indication that synchronization is possible in the SOS student and DL Parent applications is the presence of the Synchronization option found on the Application button.
3. It has two applications:
 - a. SOS DL Parent
 - b. SOS DL Student

SOS Remote Access (VVCS's preferred method)

1. Remote Access provides real-time remote access to the data of SOS and is used by remote users who are online while they work in the application. Due to the nature of remote access, the student must actually be connected to the school over the Internet to use this feature.
2. The main advantage to using the remote access is that the student works directly with the school data in the same manner that they would if they were physically at the school. This offers instant feedback for the student. Remote access offers the most flexibility for allowing the student to work at the school as well as for students to complete homework remotely.
3. It has two applications:
 - a. SOS DL Parent (not available at this time here at VVCS due to data security issues)
 - b. SOS DL Student

NOTE: If your computer has a previous installation of SOS on it, please uninstall it and delete any curriculum as well. If you are bring in a desktop computer we only need the box with no electrical cords. If you are bringing in a laptop computer we will need the power supply. If you computer is requires a password for us to access Windows, we will also need the password.