

Protecting Against Viruses

Application Note #216, 12/18/2002

Below are several comments on how to protect yourself from Viruses.

- * The affects of a virus may vary from very little to wiping your hard disk and network shared disks clean. The wiping thing justifies your taking action to protect yourself on a continual basis. This means having an automated backup system that backs up at least once a week.

- * The two top anti-virus (AV) software programs are Norton Antivirus (<http://www.norton.com/>) and McAfee VirusScan (www.mcafee.com). These scan your incoming and outgoing email, and files loaded by your web browser. For an article comparing these, see <http://www.cnet.com/software/0-806174-8-20096702-1.html>. We favor Norton due to its simple user interface.

- * Some of the newer viruses are immune to antivirus software (they are designed in particular to do just this) that has yet been updated to deal with them. Therefore, setting up your AV software to periodically (e.g. once a week) update itself via the Internet is Very important.

- * In some cases, a virus is so new, it will defeat updated AV software. Subsequently backups become EXTREMELY important. Some Windows computers include back up software (start menu, programs, accessories, backup). The #1 third party back up software is "Backup MyPc" by Viritas, Inc. Microsoft typically uses Viritas when they ship a 3rd party back up products under their own label. There are 2 kinds of backups: Data Only, or Full Recovery. Full Recovery backs up the entire hard disk, including your programs. Data Only backs up your data files and some settings (e.g. MS Outlook addresses and email). Full Recovery would require approx 10GB of free space (e.g. external hard disk, tape, cd, etc) if your hard disk had 10GB of files. An external hard disk is Cheap (e.g. < \$200 for >60GB USB 2.0 or Firewire external hard disk), and is well worth the money since recovering from a serious hard disk failure w/o this is Very costly. If you have many programs installed on your computer, we Strongly recommend Full Recovery, since it typically takes several days to build up a heavily loaded PC from scratch, and this costs much more than a \$200 HD.

- * Some Viruses will wipe clean all local hard disks (internal and external) and all shared disks on the network that are not password protected; therefore, turning off your external back up hard disk when not in use (or password protecting it), and password protecting all shared volumes on your network is EXTREMELY important.

- * To provide security against fire, theft, or a virus that wipes the back up medium clean; one can occasionally back up to a CD, or use an Internet based back up service that backs up data files to an external web site.

- * Microsoft provides updates to the Windows operating system and to Microsoft Office products (see <http://support.microsoft.com/> and click Download). These are EXTREMELY helpful since they provide defenses against viruses. Older versions of Internet Explorer and MS Outlook are Very vulnerable and the prevalent viruses are the ones that exploit these vulnerabilities.

- * Microsoft Outlook lists mail in a window upper right region and then shows the first part of a selected email in the lower right region (called the "preview" pane). This means that junk email is opened and read by the computer when selected. If you get much junk email (and probably many viruses), it is Strongly recommended that you turn Preview off (select a folder (e.g. "Inbox"), and then select "Preview Pane" under "View" to toggle it on/off, and delete obvious junk mail w/o "previewing" it. Why give a virus a chance to defeat your defenses?

- * If you get lots of junk mail, one can Add a Rule in Microsoft Outlook that looks for keywords in SUBJECT and BODY (you may need to update your Outlook via <http://support.microsoft.com/> to get the scan Body feature to work). For a list of possible terms to search for, search for file "filter.txt" on your computer and open it with NotePad. The "automatically move junk and adult mail to a specified folder" feature in some versions of Outlook is broken.