



SPRING 2004 NEWSLETTER

REMOVING ADWARE/SPYWARE – It is becoming very common for computers to be infected with programs known as adware, spyware or malware. Common examples are Bonzi Buddy, Gator and eZula TopText. These programs are typically installed along with a free utility that you downloaded from a website, or you may have clicked on an innocent-looking button without realizing that you were downloading and installing software. Anti-virus software will typically not detect adware and spyware, which look like programs you intentionally installed. Symptoms include changed homepage, pop-ups, redirection of links or webpages, and slow computer performance. The most popular adware removal tools are Spybot (www.safer-networking.org or www.tucows.com/preview/310138.html) and AdAware (www.lavasoftusa.com or www.tucows.com/preview/236049.html).

NETSCAPE 7 FOR MAC OS9 – Can't find where to download Netscape 7.1 for Mac OS9? That's because AOL/Netscape only released an OSX version. You can still download version 7.0 for OS9 from wp.netscape.com/download/archive/client_archive70x.html.

HIGH-SPEED DIALUP – Many ISPs resel dialup accelerators from Propel or Slipstream claiming 5X speed increases, through a combination of compression and caching. Accelerators will speed up graphics if you are willing to accept some loss of quality. They will not speed up secure sites, software downloads, videos, MP3s, or transfers using an ftp program. You must load the accelerator software on your computer, and there is currently no Macintosh version. If you want to accelerate your KWOM dialup, we recommend you subscribe directly with Propel at www.propel.com.

POP-UP BLOCKER – If you want to block scripts in a web browser window from opening additional "pop-up" or "pop-under" windows, the best pop-up blocker software is available free with the Google toolbar at toolbar.google.com.

PARENTAL CONTROLS – If you want to control what websites your children or employees can visit, we recommend CyberPatrol which is available for \$39/year from www.cyberpatrol.com. It also addresses web-based email, newsgroups, software downloads, chatrooms and instant-messaging.

OUTLOOK EXPRESS BACKUP AND REPAIR – If you want to backup your Outlook Express files, check out OEBackup at www.oehelp.com/oebbackup. In the rare case that you have a damaged Outlook Express mailbox file and want to recover the readable messages, check out Advanced Outlook Express Repair at www.outlook-express-repair.com.

WINDOWS STARTUP PROGRAMS – Windows launches certain programs at startup. Some of these are necessary, some are optional (e.g. the Office toolbar), others may be undesirable (e.g. spyware). In Windows 98/ME/XP you can view and modify the startup program list by clicking on Start, then Run, type "msconfig" in the box and click OK, then go to the Startup tab. Windows 2000 did not include msconfig but you can download it from www.thetechguide.com/downloads.html. You can find a partial listing of necessary, useless and dangerous startup programs at www.greatis.com/regrun3appdatabase.htm.

WHAT'S INSTALLED ON MY COMPUTER? – Apple provides the Apple System Profiler which scans your Mac and displays tons of information about the installed hardware and software. A similar tool, the Belarc Advisor, is available for Windows at www.belarc.com/free_download.html.

SEARCH ENGINES – Google (www.google.com) is the dominant search engine, followed by Overture (www.alltheweb.com) and AskJeeves (www.teoma.com). There are still some category-based sites like Yahoo (www.yahoo.com) and Internet Public Library (www.ipl.org). While it was once important to submit your site to hundreds of search engines, today it is more important to focus on your Google relevance rating. Google likes to see keywords in proximity to each other in the text on your homepage (remember that graphics are invisible to search engines). Google also looks for links to your site from keywords on other webpages and weblogs, so get your friends to link to you. People have used this for amusement and mischief. Try a Google search on "miserable failure" or "French military victories".

MODEM TUTORIAL – Dialup modems have evolved over the past decade from 300 bps to "56K" modems (which actually have maximum speeds of 53.3 kbps download, and 33.6 or 48 kbps upload). The typical modems seen today follow the v.90 and v.92 standard, with some older v.34 modems still in

use. Each standard is backward-compatible with the previous ones, so when buying a new modem you can safely buy a v.92 modem even though you may not use all the latest features.

All modems up to v.34 used variations of QAM modulation to achieve rates of up to 33.6 kbps, with automatic fallback to lower speeds on longer or noisier phonelines. The v.90 standard added PCM modulation which is very simple but can boost download speeds as high as 53.3 kbps under the right conditions. The phoneline from the modem to the local telephone office must be relatively short and in good condition, and there must be just a single analog/digital conversion at the telephone office. If your phoneline is “pairgained” by the phone company, or is connected to certain types of remote switching equipment, your maximum speed will still be around 28.8K no matter what type of modem you have.

The recent v.92 standard added some relatively minor features to v.90 including 48K upload, v.44 compression, quick-connect, and modem-on-hold. The only v.92 feature to gain much interest from users is modem-on-hold, and most ISPs support at most a subset of v.92 features, but if you buy a v.92 modem the worst that will happen is that it will work like a v.90 modem.

Most modems today are internal to the computer (e.g. a PCI card), but older computers may require an external modem. As USB ports have replaced serial (COM) ports on new computers, external modems have also migrated from serial to USB. If you need a modem for a laptop computer, your choice is usually a PCMCIA card modem or an external USB modem.

You may wonder why modem prices vary from \$20 to \$100. There are 3 types of modem design – softmodems (\$15–\$30), controllerless modems (\$30–\$70), and controller-based modems (\$90–\$100). A softmodem has no processor chips, just the analog/digital circuitry to interface to the phoneline. All the control and signal processing software runs on your system processor. We do not recommend softmodems.

A controllerless modem runs the controller firmware on the system processor, but has its own signal processor (DSP) chip. Controllerless modems can be easier to upgrade since the controller firmware is on your hard disk and does not need to be written into a flash memory chip on the modem board. The most common controllerless modems are based on the “Lucent WinModem” chipset (now made by Agere). Conexant (formerly Rockwell) also makes a controllerless modem chipset. We have seen disconnect problems with WinModems on certain phonelines, not because of hardware problems, but because some versions of the WinModem firmware are too aggressive about initial connect speed, and the least bit of noise on the phoneline throws them out of sync.

Controller-based modems (typically external) contain both a controller chip and a DSP chip. Macintosh and Linux computers will typically require a controller-based modem because WinModem software only runs on Windows computers. Examples of complete controller-based external modems are US Robotics 5686 (serial), Zoom 2985 (USB/PC) and Zoom 2986 (USB/Mac).

When modems connect, they measure the quality of the phoneline and decide what speed to connect at. Your modem decides the download speed since it is the receiver in that direction. The analog portion of the phone connection is from your modem to your local telephone office, everything from that point to us is digital and does not affect the connection speed or stability. The connection speed is determined by the length and condition of your local phoneline, not which KWOM access number you call or how far away it is. The only consideration in selecting an access number is whether it will be a local call for phone company billing purposes.

Most computers display the initial connection speed in the download direction. They don't display the upload speed (which is usually no faster than 26K), and they don't update the display if your modem adjusts its connection speed because noise on the line is causing too many errors. Some people disconnect and reconnect trying to get a higher connect speed. This is not a good idea, because higher speeds are less stable, and the modem is probably dropping its speed after the initial connection anyway.

The most common causes of unintentional disconnects are call waiting, phoneline noise, and modem firmware. If your phoneline has call waiting, be sure to program the disable code (typically “*70,”) at the beginning of the phone number your modem dials. If you suspect phoneline noise, try unplugging the phone cable from your modem and plugging it into a regular phone. If you hear noise or static, first eliminate your inside wiring, then call the phone company. If modem firmware is the problem, in most cases it is easier to replace the modem than to upgrade the firmware. For older Apple computers, run the Apple Modem Updater program (docs.info.apple.com/article.html?artnum=85018), or try selecting the v.34 modem script which will limit connect speed to 33.6K but may give a more stable connection.