REVIEW OF WINDOWS XP

Part 2 The Decision

by Warren Ganter

Holding the winning ticket in the Rochester Computer Society's door prize drawing for Microsoft Windows XP requires the lucky recipient to write a review of the product. To recap, let me say that my main concern during the writing of Part 1 of this review, was whether to upgrade my present system or to treat myself to a new machine.

My current computer runs at 400MHz and performs very well (if you neglect the occasional crashes.) Because the operating system is Windows 95, I am unable to take advantage of the benefits of using equipment with a USB interface. Windows 95 can not be upgraded with XP. A new install is required.

Since writing Part 1 of this review I have asked questions of several people who have Windows XP including sales people in two computer stores. Some said yes, others said no to my questions. One user said some of his software was no longer supported, and that his CD burner would no longer work.

I can not afford to be without my computer for more than a day or two because I need to communicate almost daily by email with a person in Rome, Italy about a business proposition concerning my personal web site - but that is another story.   In mid-February. I made the decision to go for new. Now I can keep my present machine running while I immerse myself in the intricacies of building my own computer. So before you are able to read my findings about Windows XP, you will have to bear with me through this never-before-attempted job.

I ordered a bare bones system consisting of a motherboard, Pentium 4, 1.6MHz processor, 128 meg RAM (I would have ordered another 128 but the price was up. I will add more later), CPU fan, and case with power supply. That summarizes the barebones kit. I also ordered a 32 MB video card and a 20 gig WD hard drive. I have the rest of the equipment I need to produce a complete startup system.

The Construction

From this point on, I intend to present information in what I call a diary format. Keep in mind that building a computer from scratch is totally new to me. I have installed drives and modems, but that is the extent of my tinkering inside the box.

February 21, 2002: Computer case with 300 watt power supply and FIC VC11 P4 motherboard (MB) arrived only two days after ordering by 'phone. The VC11 Users Manual is very detailed and has step-by-step instructions for mounting and setting up all items that plug into the MB. The manual states the MB is compatible with Windows 98, 98/SE, ME, NT, 2000 and OS2. No mention of XP! Email addresses and telephone numbers for technical support were given.

February 22: Another package delivered by UPS. This one contained the hard drive in its protective plastic package, but no instructions, installation guide, warranty/registration card, or installation software. This is truly Bare Bones stuff.

Also received CPU cooling fan, SDRAM, video card for AGP socket with drivers for everything except Windows XP. No CPU! It is back-ordered.

I haven't even started to assemble anything yet, and already I am beginning to feel apprehensive.

February 23: Called the video card manufacturer and obtained the web site for downloading the XP driver. Then proceeded to download the driver for XP Also called FICA, the motherboard manufacturer. Nobody answered the 'phone. Later I reached an answering machine which gave instructions partly in Chinese. So much for that!

The manual for the MB states a video card plugged into the AGP socket must be 1.5 volts, AGP- 4X "Other type cards may damage card and mainboard". The manual for the card does not give any voltage rating. More fun!

February 24: CPU arrived with warning labels all over it. I think I better get a anti-static wrist strap.

February 25: E-mailed FICA (First International Computers, America), maker of the MB and asked if MB is compatible with XP.

February 26: E-mail from FICA. Yes, the MB is compatible with XP. Great!

Went to Pine Technologies (video card) web site and e-mailed them asking if the video card is 1.5 volts. I know it is AGP 4X. The manual says so. Maybe all AGP video cards are 1.5 volts. Lots to learn!

Went to Motherboard Express web site and reviewed and copied some of the information on how to build a computer.

Step-by-step information with many illustrations! When installing the CPU it is necessary to spread a layer of thermal compound on the CPU before the CPU fan is installed. This provides an air-free junction of the CPU and fan, and increases thermal conductivity.

February 27: Went to Comp USA and bought a one-application dose of thermal grease for the CPU. Looked at the anti-static wrist straps at $6.99 + tax and decided to cobble up my own.

February 28: Started assembly today. Made two anti-static devices each consisting of a length of braided wire with alligator clips at each end. One was attached between the computer case and a nearby metal surface mounted electrical receptacle box which was grounded. The other wire was clipped to the metal band of my wristwatch and to the case. Everything grounded!

Next I carefully opened the CPU package. Number one pin was identified on the MB, and so it was on the CPU. What a small little thing it is! I handled it by its edges, raised the lever on the socket and dropped the CPU into place. It went in nicely.

I removed the protective paper cover from the mating surface of the CPU fan and found some of that gummy stuff that is being used to stick paper together. I tried to clean it with a tissue dampened with mineral spirits. The surface is about 3 inches square. In the center there was a one inch black square equal to the size of the CPU. It smeared when I cleaned the gummy stuff away. It appeared to be grease, but there was no indiction of that in the fan package. To be completely safe, I applied the thermal grease that I purchased, set the fan in place and depressed the mounting clips. They clicked into place perfectly.

Things were going so well that I decided to install the SDRAM. Again, with the anti-static wires in place I carefully opened the package. Using both hands I pressed the unit into the number one socket. It took more downward pressure than I expected to fully seat it until the locking tabs snapped into place. So far, so good!

March 1: This is the due date I was given for completion of the review of Windows XP. As you can see, I missed the date. My apologies to anyone concerned. (To be continued)

The Plain Truth about Casual Software Piracy

by Matt Slot
Ambrosia Software

It's a rare day when a shareware programmer gets firm statistics on the extent of software piracy, but just recently, I got that chance.

You see, the company I work for — Ambrosia Software — writes and publishes shareware — software that encourages users to make lots of copies and share them with friends. It works like this: we write a game or utility and make it available for download and on low-cost CD, so you can install it and try it out for a while — kick the tires and drive it around the block a few times, so to speak. If you like it, you can buy the product; if not, just delete it or pass the CD on to someone else. http://www .ambrosiasw.com

We make money, and stay in business, by selling software that competes with commercial products for quality and entertainment value, while remaining priced so that it doesn't stretch the pizza-and-beer budget of the average college student. There's no bait-and-switch going on: you get a fair chance to try out the product and decide if your $25 could be better spent elsewhere. We think our software is competitive — $25 will cover a burger run and movie ticket for about three hours entertainment, but a good game can entertain you for days or weeks — and we won't make you watch Jar Jar Binks.

A few years back, Ambrosia's software was distributed on the honor system. You could download the software and use it forever, scot- free except for the friendly reminders that you had the software for 1,500 days and still hadn't beaten level 6. This was obviously a big leap of faith on our part, but it built up an almost cult following among Mac users. What we lost in sales, we made up in good will. As a business model, the honor system wasn't ideal, but it certainly was idealistic, and it helped put Ambrosia's founder, Andrew Welch, through college and kept Ambrosia's employees supplied with pizza and beer. (I think there's a law of conservation at work there.)

This was all fine and good — except that eventually Andrew graduated and everyone else got sick of pizza and beer. Ambrosia grew from an interesting sideline into a full time place of employment. The company became an entity with its own purpose, its own office space, and its own gravitational pull. It also developed an insatiable appetite for cash, because as any MBA will tell you, the lifeblood of business is green.

This period of growth and rampant consumption was constrained only by the limited diet afforded by the generosity and honesty of others. Basically, money was tight. One way we encouraged users to pay for the game Escape Velocity was to introduce the character of Captain Hector, who would remind (and eventually harass) players who were still unregistered after an extended period of play. When we compared sales of Escape Velocity to those our previous products, it became apparent that either pizza and beer had become a lot more expensive or that some people needed an extra nudge — such as from Captain Hector — to do the right thing and pay up.

Locking the Front Door

Shortly after I joined the Ambrosia team, Andrew forwarded me an article that illus-

trated the benefits of crippling software. In short, the author of a shareware program found that people were five times more likely to register and unlock a crippled version of his software than they were to register software that came fully functional from the outset. It was the final straw in our camel-breaking, decision-making process. We would still make shareware, but we would no longer stand there waiting for handouts on the street — we'd charge admission. http://hackvan.com/pub/stig/articles/why-do-people-register-shareware.html

Let me tell you, we heard about it. Many who had praised us for our idealism were now calling us sellouts. It didn't matter that little changed for our paying customers — they still got their codes quickly, and had unlimited access to the game — it was the principle of the thing. Okay, it was a little inconvenient if you'd lost your code or wanted to install it on your new Power Mac 7500, but we could resolve that quickly in response to a phone call or an email.

I mean, we like being cool and fair, but even a cult following can get tiresome (cultists don't shower, they track in mud, and they leave you to pick up the check). Besides, the mantra kept repeating in our heads: five times as many registrations, five times, five times. I don't think it ever was quite that good for us, but we definitely saw an increase in sales that helped Ambrosia weather some tough times. (No, we never actually ran out of pizza, but there were times when we had to mop up spilled beer with borrowed rolls of toilet paper.) It was a hard decision, but it was a business decision, and it turned out to be the right one.

Time passed. Our staff continued to grow and evolve, and my wife and I begat our son

Luke. Nothing brings home how untenable your professional and financial situation is like having a family. When it was just my wife and I, we could fool ourselves into thinking that we were just coed roommates living on a college budget — but no more. Pizza and beer had given way to diapers and life insurance.

Diapers and Life Insurance

So I'm working for this shareware company, and I want to make sure that my job is secure. You have to understand that even a 10 percent variance in Ambrosia's registrations means that someone may need to start checking the employment classifieds. At the same time, it's becoming more evident that people aren't just not paying for our software — they're actually going out of their way to share license codes with others over the Internet. Some ingenious folks have even reverse-engineered our software and figured out how to generate their own license codes.

We don't live with our heads in the sand. We knew what was happening. The Internet was the great facilitator of homework assignments and world peace, but it had also become a way for people to get registration codes for any software they wanted. We felt action was required, but we remembered the trauma of our last change in policy when we required people to register the software instead of just asking nicely.

So over the course of numerous lunches (many of which didn't include pizza or beer, but did involve some yummy sandwiches from Arby's), we discussed various ways for improving the whole registration system from our standpoint without making the process onerous for our loyal customers. Simplicity was the keyword. The final piece of the technical puzzle fell into place one weekend as I drove through Canada, when I recalled a bit

of algebra that would make our license code algorithm quite secure without violating any treaties or munitions bans.

When I finally contacted Andrew, I said to him one word: polynomials. The blank look on his face continued for a long time as I explained how we could factor the serial numbers, secure our products, and even distribute codes that would expire and stop working when exposed to prolonged sunlight. With his grudging consent, we sketched out and implemented the first pass at the "new Ambrosia registration system."

The fundamental change we made was to build the current date into the license code itself. That timestamp is then used at just one point in the process: it forces the user to activate the product within 30 days, or the code expires and won't activate anything, Now, and this is important, the timestamp has absolutely no effect on the operation of the software after the code has been entered. Once personalized for the user's computer, it remains fully functional forever (unless someone wipes the system clean).

Snapz Pro X

The first product to use the new registration system was the latest version of our flagship utility, Snapz Pro X, which started shipping in June of 2001. Over the course of the summer, the system silently and steadfastly worked as intended. Most people didn't care that the license codes were now 12 digits instead of 8, and registrations continued apace. It wasn't until September that we received any negative feedback. http://www.snapzpro.com

You see, in September Apple upgraded Mac OS X to version 10.1, and many people were paranoid enough to reformat and perform a clean install. That meant the data file

containing the software registration was lost, forcing most people to reenter their license codes. It also meant that anyone whose serial number was generated before August needed to contact us by phone or email to get an updated code. Of course, these people had paid already, so we renewed their codes quickly and free of charge.

It's been our experience that people are often too busy or forgetful to store their license codes in a safe place, so it's inevitable that every major system release is followed by a barrage of requests for missing codes. To handle the tremendous load of people who had misplaced their codes (as well as those who saved them only to find they had expired), we created an email address — lostcodes @ambrosiasw.com — dedicated to generating new codes. When Joe User entered the expired code, he was prompted to send us an email (it required only a click), and someone would respond to the request as soon as possible. Yet we were constrained by the laws of time, space, and the New York State Department of Labor, so our staff was available to answer requests only during regular business hours.

After several customer complaints, we decided to remedy this problem by automating the process of renewing an expired code. When an expired code is entered for Snapz Pro X, the user is encouraged to request a new license code from our automated server--right then and there! Renewing the code takes only two extra clicks, maybe an extra 30 seconds overall, but it puts the power back in the hands of the user. He can decide when to update his system, install software, and renew his license code at his leisure. Even at midnight just before a four-day weekend.

So you are probably curious about the benefits of expiring codes — why would any-

one want this hassle? Let's look at the three categories. For paying customers with an Internet connection, the extra work is minimal: an email sent to Ambrosia that's answered within one business day. For those organized enough to save their original codes, there isn't even a wait: they get the code on the spot. The only inconvenience comes to those people trying to enter a pirated code.

Which brings us back to the question, "How many people are using pirated codes?" The plain fact is that most people are honest unless given a chance to be dishonest. If they stumble across a working license code for software, or do a quick Internet search, then they can quickly enter the code and cover their self-loathing with the adrenaline rush of blasting aliens and squishing fish. Only the most hard-core computer user will try to reverse-engineer the software and crack the copy protection — and I'll be honest, there's isn't much we could do to stop them. Crackers enjoy the challenge itself—the tougher the better — so if they want it badly enough, they'll find a way.

Historically it's been difficult to measure software piracy, but our experience is that the vast majority of users lack the time or inclination to modify software to bypass license checks. Here's the rub: these users might actually buy the software if it weren't so easy to find pirated codes. Thus, expiring codes are a good way to defeat (or at least hamper) this kind of casual piracy — the serial numbers stored in databases and posted to the Internet are viable only for a short while before they must be renewed.

Ironically, it's these casual pirates who are helping me measure the impact of piracy on our sales.

You see, to renew a stolen code, Joe User must contact a computer in our office. There's nothing nefarious about it—he sends us the user name and expired code and gets back a new license code or a suitable error message. We don't encrypt the data, we don't grab any personal information, and we don't even open a connection without explicit permission. But when Joe User clicks that bright shiny Renew button, our server records the product, user name, and the Internet address he came from.

For the first two days after we posted the latest update to Snapz Pro X, our server was busy. Of the 194 different hosts that tried to renew a license code, 107 of them sent in pirated codes (click the URL below to view a screenshot of an actual server log file; the entries highlighted in red are attempts to authenticate pirated license codes). Incredibly, more than 50 percent of the people installing the update entered one or both of the pirated codes we've known about for months.

Some of these people even tried several different variants on the names when the server refused them access ("maybe I misspelled it"), and one guy got so frustrated he pounded the Renew button over and over every four seconds ("WHY _click_ IS _click_ THIS _click_ NOT _click_ WORKING???") until our server blacklisted him for flooding. http://www.tidbits.com/resources/620/pirate_log_red.gif

You don't have to remind us that the sample isn't statistically valid. Nevertheless we think it's a reasonable approximation of reality — if not a little conservative. It certainly reinforces our perception that casual piracy is both significant and widespread.

Hopes for the Future

Maybe I didn't look these people in the eye, but they know I'm watching them. They indicated a real interest in our software when they thought they could use it for free, and this gives me hope that some may yet decide that registering is easier and more satisfying than stealing our hard work. If not, then either they were forced to stop using the software or they'll likely encounter me again, somewhere down the road. Next time, I'll bring Captain Hector.

I also hope this article explains to our customers (and other computer users out there) the impact that piracy has on small software firms like ours. I hope they can appreciate our decisions regarding the registration system and agree that the extra 30 seconds and two clicks are a minor inconvenience. If everyone pays for the products they like and use, companies like Ambrosia can stay in business and continue making cool products for everyone to enjoy.

Finally, I hope that these changes give me a little more job security, so I can continue doing what I love with some of the coolest folks I've ever met. Because I plan on working here as long as I possibly can, making great software and saving enough money so my kids can eventually go to college, where they can enjoy their share of beer and pizza.

Reprinted with permission of the author. Matt Slot has worked for Ambrosia for nearly five years, but life isn't just fun and games for the Bitwise Operator. When he's not calculating polynomials and fighting off pirates, Matt enjoys reading a good book (Terry Pratchett), watching a little television (24), and playing with his two kids (Luke and Kaleigh). You can reach Matt at fprefect@ambrosiasw.com or visit the Ambrosia Software site at www.AmbrosiaSW.com. This article originally appeared in *TidBits*, a Mac newsletter. (www.tidbits.com/tb-issues)

Microsoft Delivers Serious XP Flaws
by Beverly Rosenbaum

Windows XP should be patched immediately!

Microsoft's newest version of Windows, billed as "the most secure ever," contains several serious embedded vulnerabilities – one in the Internet Explorer 6 browser, and the other affecting the new Universal Plug and Play service.

A Microsoft official acknowledged that the risk to consumers was unprecedented because the glitches allow hackers to seize control of all Windows XP operating system software without requiring a computer user to do anything except connect to the Internet. The company has released a free fix.

Consumers and corporations using Windows XP software are even being warned by the FBI to take steps to protect themselves against hackers who might try to take advantage of these major flaws. The bureau's National Infrastructure Protection Center (NIPC) encouraged Windows XP users to apply the patch and disable the product's "Universal Plug and Play" (UPnP) features.

During a private conference call organized by the NIPC, Microsoft's experts assured federal officials and industry experts that its fix (if installed by consumers) will resolve the issues. However, Microsoft also indicated it would not send e-mail messages to Windows XP customers to remind them of the importance of installing the patch, depending instead on a new feature of Windows XP that can automatically download the free fix, and prompt consumers to install it.

Several experts, including researchers at eEye Digital Security Inc., described the flaws as "the worst default security vulnerability in Windows ever," and said they had already managed to duplicate within their research labs the "denial-of-service" attacks made possible by the Windows XP flaws. Such attacks can overwhelm web sites and prevent their use by legitimate visitors. According to their advisory, posted at www.eeye.com/html /Research/Advisories/AD20011220.html, an attacker could gain complete control of an entire network of vulnerable machines with a single anonymous UDP session (short for User Datagram Protocol, a connectionless IP protocol). The attacker would then have full access to any data or applications stored on compromised machines as well as the capacity to record keystrokes, install new files or applications, and monitor passing network traffic. In fact, a single compromised machine could serve as a stepping-stone, allowing attackers to completely bypass network security tools to further infiltrate the target network.

The flaws are particularly embarrassing to Microsoft because of the company's commercial emphasis on improved security in Windows XP. The company boasted as one of 10 reasons for technology experts to buy Windows XP the promise of a "safe, secure and private computing experience."

The buffer overflow is a relatively common flaw that arises from sloppy code-writing practices, and has been a primary source of serious security vulnerabilities for Microsoft products in the past. Microsoft's corporate security officer, Howard Schmidt, publicly expressed frustration about continuing threats from buffer overflows. Schmidt is expected to resign from Microsoft to work in

the NIPC for President Bush's top computer security adviser.

Microsoft's security bulletin, with a severity rating of "critical," is posted at www .microsoft.com/technet/security/bulletin/MS 01-059.asp and includes the following links for downloading the patch. Direct links for specific Windows versions are Microsoft Windows 98/98SE — www.microsoft.com /Downloads/Release.asp?ReleaseID= 34991, Microsoft Windows Me — download.microsoft .com/download/winme/Update/22940 /WinMe/EN-US/314757USAM.EXE, and Microsoft Windows XP — www.microsoft .com/Downloads/Release.asp?ReleaseID= 34 951.

UPnP is Microsoft's vision of allowing computers, printers and other peripherals to automatically find one another and communicate without consumers having to configure the computers. More information on this subject can be seen at www.microsoft.com /technet/prodtechnol/winxppro/evaluate /upnpxp.asp. UPnP is most easily understood by comparison to the plug-and-play (PnP) capability with which most Windows users are already familiar. PnP allows the operating system to detect new hardware when you install it on a system. For instance, if you install a new mouse on your computer, PnP allows Windows to detect it, load the needed drivers, and begin using it. UPnP extends this concept to devices on a network, rather than just on the local system itself. UPnP lets computers "learn" about other devices on the network, and determine how to use them. For instance, a computer could use UPnP to detect whether there are printers on the network that it can use and "learn" how to use them. With everything connected, people in the house could videoconference or play

multiplayer video games, for example. However, cable modem users can be at risk of attack from someone on the single wire that feeds an entire neighborhood, if they are not running any firewall protection. The attacker could take control of the victim's PC and have access to all the files as if they are sitting in front of the keyboard.

Corporate networks can be protected against Internet-based attacks by following standard firewalling practices (specifically, blocking ports 1900 and 5000).

Home networks that use Internet Connection Sharing would be protected against Internet-based attacks, because the Internet Gateway would not forward the packets. Only the gateway machine would be at risk.

Windows 98 and 98SE machines that have installed the Internet Connection Sharing client from a Windows XP system that has already applied this patch are not vulnerable. For more information on the operation of ICF and the conditions under which it's enabled by default, see "Internet Connection Firewall Feature Overview" at www.microsoft.com /windowsxp/pro/techinfo/planning /firewall/default.asp.

You Need the Patch

There are two problems with the way the unpatched UPnP subsystem handles device descriptions. First, the subsystem doesn't limit the size of the device descriptions it downloads, nor does it check to see whether the data that's purportedly a device description is actually valid. Second, the subsystem doesn't take proper steps to ensure that the machine it's been directed to is actually a download site for device descriptions.

The patch prevents the first problem by limiting the data that will be accepted as a device description. The patch establishes a

maximum size of device descriptions; if a device description exceeds that size, the UPnP subsystem "stops the download. It also causes the subsystem to check the data as it's arriving, and stop the download if the data isn't valid for a device description.

The patch eliminates the second problem by limiting where the UPnP subsystem will search for device descriptions. The patch causes it to check the location provided within a NOTIFY message for a device description, and to only proceed with the download if that location passes several tests.

The UPnP subsystem checks the download location before trying to download a device description. By default, a patched system will only download a device description that's located on a computer in the same subnet or private address range.

If you're running Windows XP, you need the patch. All Windows XP systems are vulnerable in their default configurations.

The patch eliminates the vulnerability by instituting proper buffer handling in the UPnP implementations of Windows XP, Windows ME, Windows 98 and Windows 98SE.

If you do not install the patch, you can disable the UPnP capability in Windows XP by following these instructions:

Log on using an account that has administrative privileges.

Click Start, then right-click on My Computer and select Manage.

In the left-hand pane, click the "+" next to Services and Applications, then click on Services.

In the right-hand pane, right-click on SSDP Discovery Service and select Properties.

In the pull-down list titled Startup Type, select Disabled.

In the Service Status section of the dialogue, click on Stop.

Click OK to exit the dialogue, and then close the Computer Management window.

To disable UPnP in Windows ME:

Click Start, then select Control Panel.

Select Settings, then select Add/Remove Programs.

Select the tab titled Windows Set-up.

In the Components field, select Communications.

Scroll down and uncheck the box to the left of Universal Plug and Play.

Click OK to exit the dialogue, then close the Windows Set-up dialogue.

Reboot the machine.

In Windows 98 or 98SE:

Click Start, then select Control Panel.

Select Settings, then select Add/Remove Programs.

Select the tab titled Windows Set-up.

In the Components field, select Communications.

Scroll down and uncheck the box to the left of Universal Plug and Play.

Click OK to exit the dialogue, then close the Windows Set-up dialogue.

Reboot the machine.

No future service packs are planned for Windows 98, 98SE or ME, but the fix for this issue will be included in Windows XP Service Pack 1.

The information in this column is cited from Frequently Asked Questions posted on the Microsoft web site. Technical support is available from Microsoft Product Support Services (support.microsoft.com /directory/question.asp?sd=gn&fr=0). There is no charge for support calls associated with security patches.

Beverly Rosenbaum, a HAL-PC member, is a 1999 and 2000 Houston Press Club "Excellence in Journalism" award winner. She can be reached at brosen@hal-pc.org.

Computer Problem Prevention/Solution

by Bill Beverly
Alamo PC Organization

Procedural tips and tricks to prevent and solve many computer problems are outlined in this article. Windows has numerous diagnostic tools that measure and display many of the features and functions of your computer's hardware and software. Preventative maintenance is a must for computer users who want to have problem-free operations.

Automatic Tune-ups

With all the utilities in Win 98 to tune-up your system, you'll want to take advantage of the Windows Maintenance Wizard to automate the task. To open this Wizard, choose Start, Programs, Accessories, System Tools, and Windows Maintenance. To let the wizard walk though the steps to customize the tune-up, you should choose "Change my tune-up settings or schedule." In the resulting dialog, you must select either the Express or Custom setup option. Unless you're in a big hurry, Custom is the better choice because it gives the user much more control over the details. Choose Express if you want the system to pick the most common choices. The following steps apply to the Custom feature. Click Next and select the desired tasks and then Next again. At this point choose whether or not you want the programs listed on the next screen to be run at startup. Click Next and choose whether or not you want the Start menu cleaned followed by Next. Using this same procedure, determine whether or not

you want the drive defragmented, the hard disk scanned for errors, and unneeded files deleted. In each instance click on Next and conclude all of these steps with Finish. In addition to scheduling tune-ups for your system, you can use the Windows Maintenance Wizard to force an immediate tune-up by choosing Start, Programs, Accessories, System Tools, Windows Maintenance, selecting "Tune-up my computer now," and clicking OK.

Backup Files

In addition to backing up your working files, you should also do the same task for your Configuration and Initialization files. If these files are lost in a crash, virus, etc., you may not be able to get your computer back "on line." Therefore, if you have not already done so, back up the CONFIG.SYS, AUTOEXEC.BAT, WIN.INI, and SYSTEM .INI files as a contingency recovery plan.

Clean Boot

Clean Boot is a WinMe feature that allows you to identify and rectify system crashes or slow operations in your Windows startup. Clean Boot allows you to selectively choose or eliminate functions in Windows to isolate the troubling element. To do a Clean Boot, click on Start, Run. Now type MSCONFIG and click OK. The MSConfig screen will come up with numerous options. In the General tab, choose Selective Startup. On the same screen, click each one of the checked boxes to clear them, click the Startup tab, and select the Statemgr check box. Click OK and allow your computer to reboot when prompted. Go back into MSCONFIG using the same aforementioned method. Make sure that all of the formerly unchecked boxes are still unchecked. Sometimes, third-party products will automatically refill this value. If that happens,

you'll need to contact the vendor. One at a time, check a box, then reboot. When your system slows down again after a reboot, you'll know the location of the problem. To undo your Clean Boot procedure, in the MSConfig General tab, select Normal Boot and you're back to your regular system.

Computer Analysis

Microsoft (MS) Win 9x, Me, 2000 and XP all include the free System Information tool. You can access it by selecting Start, Programs, Accessories, System Tools, System Information. This user interface is an Explorer-like tree of folders including System Information, Hardware Resources, Components, Software Environment, Internet Explorer 5, and Applications. For an analysis of your computer's hardware, it's under Hardware Resources. If you're curious to see a list of all running programs, including their version numbers, manufacturer, description, path, type, and "part of" description, try Software Environment. Many panes allow you to switch from Basic to Advanced view. In Win2000, select View then choose the desired mode.

Disk Cleanup

In Win98, Me, XP you will find a Disk Cleanup utility. Using it you can remove unnecessary temporary, Internet cache, and program files. To run Disk Cleanup, click Start, Programs, Accessories, System Tools, and Disk Cleanup. If there is more than one drive on your computer, select the one you want to clean from the drop-down list and click OK. Disk Cleanup will display how much disk space can be recovered and from what areas files will be removed. If you do not want the files removed, uncheck the box, click OK and Yes when you see the confirmation message.

Dr. Watson

Dr. Watson is a MS program that gathers information about your computer when a problem occurs with an application. Once activated, Dr. Watson studies your computer and takes notes on the system. If an application develops a problem, it'll take a system picture called a snapshot and post findings and recommendations to solve the error. Win98/98SE and Me disable Dr. Watson by default. To access it, click Start, Programs, Accessories, System Tools, and System Information. Windows will open a MS Help And Support window where you can select Dr. Watson from the Tools menu. If your system is prone to application crashes, consider automatically running Dr. Watson each time you boot Windows by adding the program to Windows' Startup folder.

Modem Diagnostics

Win95 can inspect your modem connection to see if there are any bugs with it. To find and fix some potential problems, choose Start, Settings, and Control Panel. Double-click the Modems icon and then click respectively the Diagnostics tab, the port for your modem, and the More Info button. Any errors will appear in an explanation dialog box. After viewing them, click OK and close the Control Panel.

Performance Enhancement

To increase the performance/speed of Win98, you can right-click My Computer and select Properties. Next click the Performance tab and then the File System. If the entry blank next to Typical Role Of This Computer reads Desktop Computer or Mobile Or Docking System, click the down arrow and choose Network Server. Now, click the slider bar next to Read-Ahead Optimization and drag it

all the way to the right. Finally, click Apply, OK, Close, and Yes to restart your PC.

Power Management

Win98's power management settings can help you conserve power. If your PC is a typical home or office desktop unit or a laptop, Windows turns off the monitor after 15 minutes of nonuse and shuts down the hard drives after 30 minutes. If your computer is configured as Always On, those times are then doubled. To adjust your power management settings, click Start, Settings, Control Panel and then double-click the Power Management icon. Now select a different power scheme from the drop-down list. These same power management settings can also disrupt processes such as recording a CD, running a compiler, or downloading a file. However, you can place a Power Management icon on the system tray to temporarily disable power management by clicking Start, Settings, and Control Panel. Double-click the Power Management icon, and then click the Advanced tab. Next place a check mark next to Always Show Icon on Taskbar and click OK. You can right-click the Power Management icon whenever you need to adjust the power settings.

Proper Shut down

The proper way to shutdown Windows is to quit each program, click Start, Shut Down. In the Shut Down Windows dialog box, click the Shut Down radio button and OK. You can easily shutdown each of your running programs from the taskbar located next to your clock on the lower, right hand side of your screen. Right-click those icons and choose Exit or Close from the options lists. If you do not follow this procedure so Windows can neatly put away all settings, your computer could lose data from not exiting individual

programs and ruin configuration files. Win 98 and SE have a glitch that often requires an excessive amount of time to shut down. You can overcome this problem by shutting down the aforementioned "running" programs first and then the computer. If you continue to experience this shut down problem, go to Accessories, System Tools, System Information and then to the Tools menu there. Now click System Configuration utility. On the General tab, click Advanced followed by the Disable Fast Shutdown check box to clear it and finally OK. Now restart your computer. Hopefully you will no longer have this problem.

Restart without Rebooting

You can restart your computer without rebooting by clicking Start, Shut Down. Next choose the Restart button in the dialog box. Now hold down the Shift key, click OK, and keep holding the Shift key until you see the Restarting Windows 95 message.

Safe Mode

If your computer system crashes because of a newly loaded video card, a Web site that caused your system to become sick, or, the system works, but there is no way to undo the changes, there is a possible solution. To solve these problems, you can force your computer into Safe Mode by holding down the Ctrl key while the system is booting. A menu will appear. Choose the Safe Mode option. Now your system will reboot with bare bones Windows and you can undo your change.

Suspend Bug

This is a little known bug in Win98 that causes the computer to hang when it is in suspend mode. You get this bug when a drive letter is lower case in the SYSTEM.INI. You can fix this by clicking on Start, Run, typing msconfig in the Open box, then pressing OK.

Next select the System.ini tab and click the + sign next to the [386Enh] section to expand it. Now select the line PagingFile= and click Edit. Finally, change the lowercase drive letter to uppercase, click Apply, OK. When prompted, restart your computer.

System File Checker

Win98 provides many tools to keep the system running smoothly. Among them is the System File Checker, a utility that can search out files that are corrupted or versions that predate the ones on the computer. To access the repair utility, click Start, Programs, Accessories, System Tools, System Information, Tools, System File Checker. To prevent unexpected hang-ups, run System File Checker after you install new applications and every other month as a matter of maintenance.

Windows Update From The Web

If you want to have the latest MS updates, close down all of your applications, connect to the Internet and go to WINDOWSUPDATE .MICROSOFT.COM. From there, Explorer will receive a file that will compare what Microsoft has out there as the latest update, and what you have on your PC. Then it will inform you of what you can download. If any of the downloads are labeled Critical, download those first. You may be required to reboot your PC. Before doing updates, save your work.

Summary

There are several warning signs that your computer software has problems.

* Your system slows upon launch and thereafter performs in a sluggish manner.

* Menu choices are grayed out and/or unavailable for use.

* Application features that used to work well now don't launch. They also crash, cease

to function, run simultaneously with other ones, or cause the dreaded Blue Screen of Death when performing an operation or activity.

If experiencing these problems, you might want to perform a clean "operating system" installation.

Reprinted from the January, 2002 issue of the *PCAlamode*, newsletter of the Alamo PC Organization of San Antonio TX. Bill Beverley is a retired U.S. Army Colonel and intermediate computer enthusiast. Early in his military career he was on the ground floor in the development of the U.S. Army's Field Artillery Tactical Fire Direction System (TACFIRE), a forerunner of subsequent digital computers / communications within the army.

Media Notes
by Bill Petitt
Southeast Virginia Computer Group

The Price of Free E-Mail Rises

Will you pay to hang on to your Web e-mail address? Hotmail, Yahoo, and others apparently aim to find out.

An Internet Age update to the truism "there is no such thing as a free lunch" might be that there is no (longer) such a thing as a free e-mail account.

The cost of a free e-mail account is on the rise. Two of the Internet's largest free Web e-mail providers, Yahoo and Microsoft's Hotmail, have quietly added fee services to their e-mail offerings. At the same time, both companies have also cut back the number of free Web e-mail perks. They are not alone. Mail.com, recently bought by Net2Phone, is pushing a number of "premium services" to its 3 million users. For example, you can get POP3 access to your e-mail from a software client such as Outlook for $3.95 monthly, and e-mail forwarding for $2.95 per month. Net2Phone won't say whether its free services

are losing money. Last August, free Web mail provider USA.net simply gave its 7 million free e-mail customers an ultimatum: Pay $50 a year or kiss your account goodbye.

Free Web e-mail isn't likely to disappear entirely, but increasingly services are charging for popular features such as e-mail forwarding and extra storage. The problem, says David Ferris, president of Ferris Research, is that "these services simply aren't paying for themselves." The challenge for Hotmail, Yahoo, and many others is to wean customers off free services and turn them into paying customers, Ferris says. Potentially affected are Internet users who depend on some 150 million free Web-based e-mail accounts, as estimated by market researchers at IDC.

Online Survivor

It's another example of the new Net economy, as dot coms seek new sources of revenue. Online advertising and targeted junk e-mail don't cover the monthly server and administrative costs. Each free Web e-mail account costs about $1 per month, says a representative of one service provider, who asked not to be identified. "The trick is to make your e-mail product barely functional enough to use and then pile on a bunch of low-cost premium services to get [the user] to upgrade," Ferris says.

Microsoft appears to be the most aggressive marketer of premium services. If you're a Hotmail user who hasn't checked your Hotmail e-mail in the past month, you've likely lost your account. If more than 2MB of e-mail is languishing in your in-box, your account is "temporarily disabled" until you delete some messages. And until you clean house, Hotmail bounces messages sent to your address with the reply: "Requested mail action aborted: exceeded storage allocation."

Of course, Microsoft offers an option: Pay $19.95 a year for MSN Extra Storage, which includes 10MB of storage for e-mail and 27MB of Web space on MSN Communities sites, and your Hotmail address and account won't expire after 30 days of inactivity.

Give and Take

Yahoo recently rolled back its e-mail storage limit from 6MB down to 4MB. Then it began offering upgrades to its e-mail service starting at $9.99 a year for 10MB of storage. Last fall, Yahoo introduced a business e-mail service, with extras like storage and multiple accounts for a $9.95 monthly fee and a $25 start-up charge. It has also launched a $4.95-per-month service called Yahoo by Phone, which lets you access your e-mail over the phone.

When introduced in late 2000, Yahoo by Phone was free; the charge kicked in last summer. Yahoo still offers a host of free features, including virus checking, e-mail forwarding, and spam filters. To use services like forwarding, you must allow Yahoo to e-mail you advertisements at least once a week. But you'd better check your mail at least once every three months; after three months of inactivity, you'll have to reenter your registration information to reactivate your account. Fees are still the exception, not the rule, among Web e-mail proprietors. Free Web e-mail accounts are far from scarce. But vendors and analysts see continuing trends of more consolidation among services, and imposition of fees for customers using anything more than a bare-bones e-mail account.

"A lot of companies are watching us closely," says Danette Lopez, a USA.net spokesperson. She won't say how many of USA.net's former free Web mail customers now pay $50 yearly. But she claims 200 people

sign up each month for its for-pay e-mail service.

Many Internet companies instituted Web e-mail as a loss leader, to draw customers to the site. Companies offered free e-mail as a way to grow a base of loyal customers, and planned to make money by selling banner ads and sending customers targeted e-mail messages. But meaningful revenues from banner ads and spam have yet to materialize. Companies are being forced to cut freebies and start charging.

Fee for Consistency

For cheapskates, paying for e-mail may never be an acceptable option. The good news is that free basic e-mail services are still available at no charge from the likes of AOL subsidiary Netscape and IWon's Excite.com. Excite.com even offers free features like e-mail auto-reply and forwarding (for which Mail.com charges). The downside is that you may have little recourse if something goes wrong with the forwarding, or if your provider goes out of business.

For example, Excite.com's free e-mail service still seems to be suffering problems related to the ownership transition from Excite@Home to IWon's network. Some users complain that they cannot access their Excite.com e-mail. Worse, a test e-mail we sent to a theoretically valid Excite.com e-mail account was returned "user unknown." Paying a small fee for a reliable e-mail service might be worthwhile if you're tired of sending your friends and colleagues a change of e-mail addresses every time you switch jobs or your ISP changes.

Consider the number of recent ISP flameouts and mergers. Millions of Excite@Home users faced an e-mail address change after their provider faltered and then

was acquired by AT&T. Qwest's broadband customers in the Pacific Northwest, some of which switched earlier from a uswest.com address, are now being switched to MSN service through a deal between the companies. And in this climate of layoffs and dot-com bombs, your work e-mail may not be longstanding, either. Consider the piles of personal e-mail that Enron employees are no longer receiving at their workplace.

"No one ever wants to switch their e-mail address," says Tim Dolan, spokesperson for ReturnPath, a service that helps streamline change of e-mail addresses for businesses and consumers. But every year 32 percent of e-mail users change their e-mail address, according to a NFO Research Group study commissioned by ReturnPath. The top three reasons? A change of ISP, a new job, or a desperate attempt to reduce spam. On that note, the good news is that e-mail spam filters at Yahoo and Hotmail are still free--for now.

Subscription Snafu Angers Norton Users - Symantec acknowledges that renewing its antivirus protection is unusually tough, but a fix is in the works.

It's a rare company that turns away customers, but Symantec's subscription renewal service for Norton AntiVirus appears to be doing just that to some users--albeit unintentionally. "It seems that Symantec no longer needs customers or their money," says Bob Hampel, of San Antonio, Texas. "I've been trying for three days now to give them money for a subscription update, but I can't give it away." Worse, some customers charge that Symantec is nixing their attempts to renew virus definition subscriptions in order to force them to buy a new, complete copy of the software instead. Symantec executives say they're neither turning away customers nor

forcing them to upgrade. They cite a surge in subscriptions and a resulting network upgrade as the source of the problems--and say the situation will be corrected soon.

Subscription Friction

Antivirus software requires regular updates of virus definition to work correctly; major vendors like Symantec generally include a year of upgrades via the Internet. After that, Symantec charges owners of the full version of its software $10 for each additional year (users of bundled trial-versions of the software pay $20 for each additional year). When Symantec raised the yearly rate from $4 to its current level, some long-time users cried foul. But now a growing number of customers who are willing to pay to renew their subscription are crying foul, too. Some paid, only to experience truncated subscriptions. Others can't seem to renew at all, either through Symantec's Web site or through the company's tech support, prompting some of them to charge that the company is trying to strong-arm them into paying for a software upgrade. The real cause of the problems, says a Symantec executive, is far less insidious: success.

Network Traffic Jam
(Haven't we heard this before)

In the last quarter of 2001, Norton Antivirus subscribers grew 57 percent over the previous quarter, says Lyn Tran, product manager for client and consumer product delivery. That's a 280 percent jump from the same quarter the year before, she says.

With its subscriber base growing fast, Symantec has been updating its network infrastructure for the past six months--and expects to be done in March, she says. The downside: the work causes problems for some users trying to renew their subscriptions. The

company has tried to stagger network downtime so the problem doesn't repeatedly affect the same customers, she says. But she admits there's a chance that customers may encounter repeated problems. And is Symantec really trying to force customers to upgrade their software? That just doesn't fly, Tran says. "Customer retention is very important to us," she says. "We've been successful because of our loyal customer base. If they are having problems we want to resolve that. That is part of the reason we're upgrading the infrastructure."

One Customer Lost

After expiration of the trial subscription to Norton AntiVirus, bundled with his new Dell desktop, Bernie P. Davis of Scottsdale, Arizona decided it was worth the $20 fee to renew his subscription for a year. A few months after successfully completing his one-year renewal application, however, he noticed that he had just 54 days worth of downloads remaining.

After repeated visits to the Web site and numerous e-mails and phone calls to Symantec's customer service, Davis says, support staffers promised to fix the subscription error and to send the patches needed to correct software problems on his end.

But he never got the software patches, despite receiving repeated e-mail apologies. Davis says Symantec ultimately failed to solve his problems. And he never got a promised refund. His solution: "I uninstalled Norton and installed McAfee antivirus [software]," he says. Symantec's Tran says its difficult to say exactly what caused Davis's problems. She suggests that he may have needed to download the free application upgrades before trying to renew his subscription. Even if your subscription ends, you can still download the

latest patches, Tran explains. When you run LiveUpdate to get those patches, it tells you that the virus definitions have expired. But you can request only the program patches, she says. LiveUpdate will deliver the latest version of the program. Then, the next time you run LiveUpdate, you should be able to renew your subscription.

Short Lifespan

Though you can update older software so it will run current virus definitions, Tran notes, Symantec supports only the latest two releases of Norton Antivirus: 2001 (version 7) and 2002 (version 8). This policy angers some customers who resist buying a new product every few years, but Tran says it is necessary to keep up with virus writers.

"We have within our products the core engines for virus detection and protection. Our technology is based on the most current engine to protect against the latest threats," she says. Older Norton AntiVirus programs still work, she says. For example, Norton AntiVirus 2000 still works if you have a valid subscription and you can download new definitions. But because it contains an older virus engine, it can't protect the same way and against the same types of threats, she says. Rich Knapp of Altus, Oklahoma, says that he likes Norton Antivirus 2002 but he didn't plan to upgrade the 2001 release he purchased last February so soon. Nevertheless, after repeated problems while trying to renew his subscription, he decided to buy the new version. He's a longtime user and credits Norton AntiVirus with protecting his PC from several viruses, but he says his problems make him suspicious of Symantec. "If it was an honest problem, that's one thing. But if they slipped programming code that made

this thing do it on its own, that would make me upset," he says.

Tran insists that Symantec isn't playing games. In addition to seeking help online, frustrated customers can contact technical support by e-mail or phone, she says. That's what Bob Hampel — the user who felt as though Symantec was spurning his money — finally did. After repeated failed attempts to update his subscription, and after considering switching to a competitor, he finally reached a Symantec customer service person who fixed his problem and overcame his frustration. "Norton made me whole by giving me the year's subscription for free," he says.

Lots Happening in the Burner World

by Dale Swafford
Alamo PC Organization

What a great time to be involved with burning CDs. The stores are full of fast new burners with coaster prevention at unbelievably low prices. The technology is mature, and the computer and software architects have finally decided to make the drivers and interfaces faster and more user friendly. The fly-by-nighters have been shook-out by the slim margins. Blank CD quality is up, and prices are reasonable (though not as cheap as last year). I find it strange that a quality standard for blank CDs has not emerged yet. Burner designers are finally addressing the real problems like buffer underrun, jitter, vibration, control of drive speed, diodes, laser calibration, connection interfaces, and block error reads. But, don't expect this great buyers market to continue too much longer, the profit margins are razor thin due to the current market and intense competition.

Most burner makers are already gearing up for DVD. The only thing holding them back is the industry (and users) can't decide which of the five flavors of DVD should become the standard. The only thing for certain, for the time being anyway, is the DVD recorders will also include CD-RW capability. Kinda' reminds you of what's going on with HDTV and digital video recorders, doesn't it? A new DVD recorder just came out that records a pretty good digital video, but records the audio in analog stereo. Whatdaya' think, the movie and music industries can't decide which copy protection to implement? The Cactus Data Shield (that I talked about last month) was used on a music CD released in Europe last month. A recall has been announced for all those CDs this month.

The latest assault on computer users came from an unlikely source. Senators Fritz Hollings (D-SC) and Ted Stevens (R-AK) have drafted a bill, the Security Systems Standards and Certification Act, that would require all "interactive digital devices" (which includes most electronic products today) that are manufactured or imported into the U.S. to incorporate technology for protecting copyrighted digital material in any format. This means your ability to view, listen to, record, or play music or video material on your computer, TV, radio, VCR, CD, or DVD player would be subject to the whims of the copyright holder. Your ability to time-shift TV programs would be limited to non-premium channels. There is no provision for "fair use" of copyrighted material, nor any requirement that equipment covered by the bill be compatible with older, legally acquired media. Take a look at the draft bill and see how your senator feels about it (before it's too late). Thanks to December Sound & Vision for the heads-up.

What can we expect in the next year?

Burn speeds of 32x and 40x for internal IDE CD-RW burners start the year with a bang, and around the end of summer 2002, 48x and 52x CD-RWs should be available or announced. Seems like burn speeds are doubling every year. I really don't understand it. At 12x, it takes a little over six minutes to burn an 80 minute music CD from a good 7200 RPM hard drive. It still takes about 30 minutes to copy the wav files to the HD, set the file properties, rename, and run filters and normalize. A 32x burner is supposed to take about four minutes to burn the same CD from the hard drive, unless your computer rig can't keep up, and BURNProof keeps stopping and starting the burn. This will take longer than if you set the burn speed at 12x to start with. Fortunately, some of the new machines have new doo-dads to compensate for some of the problems caused by higher disc speeds. Don'tcha just love technical speak?

MultiLayer CD recording technology should blossom in 2002. TDK (using Calimetrics technology) should have their new MLCDRW1000 machine on store shelves in the near future. It is supposed to store 2 GB on a ML CD-R or RW. Not too shabby! Other major makers won't be far behind. No, MLCDs won't play in your favorite CD player.

Matsushita, parent of Panasonic brand, has announced a new recordable DVD that stores 50 GBs of data per side using a blue-laser light and a semi-transparent material that permits recording of data on two separate layers. That should hold more than four hours of digital high definition motion pictures on one side of the disc.

The new USB 2.0 interface is going to have a real impact on CD-RWs. The current standard will handle recording speeds up to 32x, with as close to plug and play setup as you're ever going to get. External recorders just might be the wave of the future. By-the-way, Adaptec has the USB2 driver for download.

In the Whatz it? category, have you seen the Imation RipGo!. It works with Windows XP and uses the 3" CD discs. As I understand it, for $400.00 you can record and play 6 hours of WMA or 3 hours of MP3 music files per 3 inch CD. It's billed as the smallest recording device for compressed music (not counting mini-disc which uses a 5 to 1 compression), a mini portable CD-R burner and digital audio player.

Want to see a really excellent test of CD-RWs? Surf on over to Digit-Life . Pan down to IDE CD-RW drives roundup (part XII) by Alexander Vorobiev and read a real test of the Plextor PX-W2410TA and AOpen CRW2040 including a comparison of how they stack up with other new, fast machines. Most all reviewers do a timed write test. These folks do that and then check BLER (BLock Error Rates) to see how accurately the data was recorded, and then check the burn on different brands of blank discs. If you really want to see how experts shake out the newest burners and derive a meaningful evaluation, don't miss this. If you are the kind that goes right to the conclusions and recommendations paragraph of a burner comparison article, this article may not be for you. But, if you want to understand the workings and capabilities of your burner, don't miss this test article — It's exceptional!

Want to know if that CD you want to make an archive copy of is protected? Surf on over to Fat Chuck's, he's building a list and checking it twice.

Want to make sure your computer is spitting out those bits as fast as it can during a burn? Surf on over to the Microsoft knowledge base. Search for Q141497 to determine if DMA (Direct Memory Access) is enabled on your computer. Then, enter Q258757 and follow the instructions to make sure DMA also known as bus mastering, is functioning. It's a technique that some components and devices use to transfer data directly to and from memory without passing through the CPU (Central Processing Unit). DMA reduces CPU overhead by providing a mechanism for data transfers that do not require monitoring by the CPU. The number associated with DMA indicates the direct memory access channel that the component or device uses to transfer data to and from memory. In other words, it's the shortest and quickest route to your hard drive and burner if they support DMA. Check it out.

Burning Tip of the Month

If you have a burner, ECDC5 platinum or Nero, and a computer with a BIOS that will boot from a CD, you have one of the sweetest back up and recovery systems going. All of us from time to time need to use the Windows start-up disc or Norton rescue disc to recover from a really bad crash. Usually, we have to reformat and reload Windows plus all of the programs we use. We also lose all of our Internet Explorer settings and favorites. In the past, no matter how hard I tried, I could never duplicate my original setup. Now, we have the capability, if we keep it up to date, to recover with a minimum of effort.

Lincoln Spector wrote an informative article in the January 2002 *PCWorld* magazine titled "Answer Line: Combine your Rescue Disks on a Single CD" and available for download or printing. It also gives explicit

instructions on how to move Outlook Express settings to the new setup or a new computer. This is great stuff.

I also make a backup copy of my existing Windows folder to the CD. That way I can start the computer, boot to DOS on the CD, xcopy the backup copy of the windows folder over the existing Windows folder. Most times this will correct the problem without having to reformat and reload a clean Windows. If not, You haven't lost anything, but a little time. After you are running in Windows again, you can experiment with copying the backup copy to restore your original settings. Maybe it's just that warm fuzzy feeling of knowing I have a backup CD on the shelf just in case. Now if I would just take the time to update it once in awhile.

From the January 2002 issue of *PCAlamode*, the newsletter of the of San Antonio TX. Dale is the local CD recorder expert and SIG leader, and has written several articles for *PC Alamode* about creating CDs. He has also built 4 computers from scratch. Dale spent over 30 years in the Army as a helicopter pilot. He enjoyed the challenge of Army life, the variety of living places, and the foods of other cultures. He retired from the Army 14 years ago.

The DealsGuy

by Bob Click
Greater Orlando Computer Users Group

Any Takers?

I have been writing this column for better than seven years and enjoyed it throughout. Because of declining health conditions, I would like to "pass the pen" to a new writer. It needs new blood anyway, with fresh ideas, not to mention more energy. If anybody is interested in buying the "Deals Column," please let me know. You would get the domain name as well, although the new person would probably want to develop his or her own Web

site, but mine is available if you wish. After all my work building it to the widespread extent it has attained, I do not want to just give it away. I do hope there is somebody interested in keeping it alive and selling it should attract only a serious individual.

It is possible to make money with the column's Web site, but I have never tried that. So far, I have always borne the expense of writing it myself. I have no doubt spent several hundred dollars over the years, but I do not regret the investment considering all the friends I made along the way. If I have no takers, I will probably still do it for a short time, but I need to spend more quality time with my wife instead of sitting in my computer room. We purchased a beach condo in Daytona Beach (second home) and hope to occasionally try watching the surf roll in when we have the time. Maybe I can start a new user group there since many of the residents have computers. Want to attend a user group meeting "on the beach?" No sharks please!

Still Good

The 10% discount coupon for Inksell.com is good through April 30, 2002. Simply visit their site, [http://www.inksell.com], place your order and continue to check out where there will be a blank to enter the discount coupon code (D0302). The discount will be automatically calculated. Phone customer service at 1-800-255-0483, or send e-mail to [help@inksell.com] if necessary.

Latest From Gene & Linda Barlow

Linda Barlow sent me this updated list of special prices on PowerQuest and AccessData products for user group people. Partition-Magic V7 $35 (list $69.95), Drive Image V5 $35 (list $69.95), DriveCopy V4 $25 (list

$49.95), SecureClean $25 (list 49.95), CleanDrive $20 (list $39.95)

Gene has developed an educational CD called "Discovering Your Hard Drive" which includes four hours of information (Gene's description) about how to organize, upgrade, migrate to XP, backup and secure your hard drive. There are even product demonstrations on the CD. Having seen Gene's hard drive presentation a couple of times, I have to think his "Discovering Your Hard Drive" CD would be very useful. The price is $20.00 (List $39.95).

Shipping and handling is only $5.00 on each order. To order, go to [http://www.ugr .com/order/]. Use the code UGDEALS02.

Just In, A Deal For A Great Database That's Been Around Awhile

I asked Richard Rabins of Alpha Software about a special and he responded with the following offer. Alpha Five (for Windows) is regularly $149.00, but for a limited time, he will offer it to user group members for just $129.00 + $8.00 shipping. Not only that but he will include this neat little Zip Code finder for no extra cost in that deal (normally $24.95). Just type in the zip code and it automatically fills in the city and state. To order, call 1-800-451-1018 and mention "code 77." Tell them you belong to a user group. Visit [http://www.alphasoftware.com] for a better description of the product.

I use Alpha Four occasionally, but have never upgraded. Alpha is a relational database that works well. I especially liked it when they had people on Prodigy that helped you with your problems. That ended long ago. I have not tried their tech support lately. In fact, I still have the DOS version. (I can hear everybody already on that one.) They still offer a DOS upgrade.

Finjan's SurfinGuard to guard your files. (Reviewed in SW Indiana PC UG Newsletter)

Here is something that guards your files from being changed unless you agree to it. A virus will usually change something, and this software will see it and ask you if it's OK, or not. It guards other changes, such as to your network connection as well. It can be downloaded at [http://www.finjan.com] and is FREE for the home user. Unfortunately, it is not compatible with Windows XP and IE 6. Use this if you don't have virus protection, perhaps even if you do have it.

Watch That Spyware

If you're thinking about using a program called Gator (a software that keeps track of user names and passwords for Web site logons and forms), be aware that it has a Trojan horse built in that will (behind your back) download spyware to report on your activities. A good firewall, though, will prevent it from dialing out to report. Surprisingly, Gator is a very popular utility. As has been said many times, read the EULA (End User Licensing Agreement) when installing. I just thought it would be good to warn you (from *Charlotte Bytes*, newsletter of Charlotte County Personal Computer Users Group, Inc.)

More on Antivirus

They mentioned a favorite Antivirus of their members, AVG, which can be found at [http://www.grisoft.com]. It is free for home users. Take a look. The article included Trend Micro's free "House Call" at [http://www.housecall.antivirus.com]. Also referred to was Computer Associate's new suite of protection software at [http://my-etrust.com] (I just heard CA was ending this free program, so check for sure). While I'm at it, Panda provides a free virus check at their Web site with the latest signatures. [http://www.panda software.com]. I might warn you that for an AV check of your system on line, you must disable your firewall if you have one. (From the *Chautauqua Cyber Chat* newsletter)

That's it for this month. Meet me here again next month if your editor permits. This column is written to make user group members aware of special offers I have found or arranged, and my comments should not be interpreted to encourage, or discourage, the purchase of products, no matter how enthused I might sound. Bob (The Cheapskate) Click [Bobclick@dealsguy.com]. Visit my Web site at [http://www.dealsguy.com] for past columns. Also, there are interesting articles from user group newsletters on my "Articles of Interest" page for viewing or downloading, with the author's permission.

Society News

New User Group Meeting

March 5, 2002
by John McMillan

As Snoopy might have written, "It was a dark and stormy night when five freezing fellows met at the Monroe Developmental Center for the monthly New Users Group." The meeting started with a review by John McMillan.

At our last meeting there was quite a discussion about various software packages that might make computer use a little easier. The first of these was End It All, which is supposed to facilitate closing open files before loading new software. Next was Ad Aware which is designed to detect spy ware programs sometimes included with other software for the purpose of reporting your computing habits to Market Research firms. Zone Alarm, a free firewall, has frequently been mentioned in the past and Go Zilla should ease the diffi- culty of long software downloads. Paths to many of these are available from www .Soundbytes.org (look for Websites I've heard about on your show). Bill Statt mentioned C-Net downloads as another way of getting to popular software and sends all of his down loads to MYDOWNLOADS, a folder he created for easy virus checking and to avoid down loading again if anything gets corrupted.

Several of these programs sounded very helpful and were free, though some promoted a more complete version for sale. I downloaded the following free versions to my ZIP drive and found them to be virus freeAd Aware (aaw.exe - 877,531 bytes); Cookie Wall (Cookies.exe — 233,130 bytes); End It All (Enditall.zip — 763,032 bytes); Go Zilla (gozilla.exe — 2,943,332 bytes) and Power Tools (JV16PT~1.exe — 1,382,437 bytes). During the down load process, descriptions from the web and read me files were printed so attendees, who desired, could read them. I also tried to download SpamKiller286.exe. It shows as 2,123 Kb file but I think the download was interrupted.

Ad-Aware included a 22 page writeup, describing the software and it's operation. On page 1 it states that Go! Zilla, and Audio Galaxy include parasites known as spyware. I was concerned that Ad-Aware might affect my Juno E-mail server so I have not activated it. Bill pointed out that Ad Aware is concerned with outgoing transmissions, not incoming ads. Another Juno user said he had installed Ad Aware and had no problems. Zone Alarm users already have the power to prevent outgoing transmissions and hence may not need Ad-Aware. The Ad-Aware download included a file named UNWISE .EXE, a 126 Kb program which I have not investigated.

When trying to install Cookie Wall, I closed everything but Explorer and Systray the old way, (Cntl, Alt, Delete); hit start; and typed COOKIES.EXE in the run dialogue box. This gave me the message "Cannot find the file 'COOKIES.EXE' or one of its components. Make sure the path and file name are correct and that all libraries are available." The 2nd attempt worked but then I uninstalled it because I found a note that said it only works with Microsoft Internet Explorer which I do not use. Bill Statt pointed out that Netscape offered a form of cookie control by clicking Edit> Preferences> Privacy and Security> Cookies. This allows you to view the stored cookies that are gathered in this one area making it easier to delete them en masse. There is a tab "Cookie Sites" which includes a status indicator, one of which is site can not set cookies. There is also a check box for "Don't allow removed cookies to be reaccepted later." Bill agreed that preventing cookie acceptance might keep him from some web sites and mentioned that Double Click is a cookie containing spy ware.

End It All is a zipped file that lead me to a number of questions. I have DOS versions of PKUNZIP in C;\Windows.com (32K 1/23/94); C\IBMtools\updater (32K 11/13/98); and C\smysticka (29K 1/04/80). In order to use PKUNZIP, I had to close Windows and reopen in DOS. Was there any way to tell which version of PKUNZIP was being used or did it matter? Other attendees did not know. Before going to DOS, I opened Explorer and copied the file name but PKUNZIP could not find the file. The backslash in the file path was reversed in DOS messages but no one knew why. The failure to unzip may have been

because of DOS's inability to deal with long file names because using the file name shown in File Manager (8 characters) resulted in the following messages1 [Inflating readme.txt.] 2 [PKUNZIP(W18) Warning! license.txt already exists. Overwrite (y/n/a/r)?]. I typed y and got1 [Inflating license .txt.]; 2 [Extractingeia _src.zip]; 3 [Inflatingsetup.exe]. When everything stop-ped, I typed exit and went back to windows. Was unzip successful and if so where are the unzipped files? Searching the entire C drive did not disclose anything called EndItAll, or a variation of that. Neither did searching for files changed in last 5 days. The last question on this topic was can zipped files be unzipped within window and if so how? Bill Statt mentioned WINZIP, shareware requesting a $29.00 fee, as one of the most popular programs available currently and suggested C-Net as a source for down loading. I subsequently down loaded Zip N Go which offered a 30 day free trial and then cost just $15.00 to register. It included a zipped users guide which printed as 22 pages. Without even reading the guide, I was able to unzip End It All. A test showed that End It All closed many but not all of the programs that were running but a better understanding may improve on that.

Go! Zilla installed ok but I found no instructions for it's use and was concerned about the Ad Aware warning. JV16Power Tools, which looked very interesting, appeared to down load ok but I have not researched it any further yet. Bill suggested adding Catchup to the down loads so you can check for software updates. This program goes to C-Netdownloads.com which scan your PC's software and then checks for any updates and reports them to you.

A Microsoft Office user asked how he could reinstall just the Word part of the suite. Bill asked if his virus checker was active and up to date because Word is a target for viruses. Using his laptop, he went to My Computer> Control Panel> Add/Remove Programs where Microsoft Office was listed but Word was not. Thus it would appear that the entire suite needed to be uninstalled and then reinstalled. It was recommended that the user check the suite disk to see if there was a separate uninstall for single products such as Word. There was concern that removing and reinstalling might affect data files so as a precaution, they should be saved to removable disks or to another folder before starting the removal process.

For users who have a hard time searching the net, Bill recommended Dogpile.com, a search engine that searches up to 15 other search engines and presents their results to give you the best chance of getting a hit. He is not required to insert www to use Dogpile.com on his machine. When asked if there was a standard way to include multiple criteria for a search, Bill suggested possibly using pluses between terms or enclosing all terms in parenthesis when quotes do not work. He also mentioned that some sites pay to be listed within the 1st fifteen responses.

The topic switched to memory addition because a user was experiencing pauses during processing. Usually the computers manual will indicate how much memory is installed, and the potential maximum. It may also say what types of memory can be used; whether parity or non parity is required; and describe the distribution of memory chips in available slots. Memory often has to be installed in matched pairs and may require the replacement of existing chips to effect an increase.

This is a good time to get additional memory because prices are down for the most popular sizes though chips for older machines may not be such a bargain. Bill suggested checking a web site, Crucial.com that will help you determine what your options are and allow you to price out the memory if you expect to install it yourself. Several local stores will install memory free if you buy it from them.

Program Meeting Minutes
March 12, 2002
by Charles Grover

The March 12, 2002, meeting of the Rochester Computer Society Inc., began at 630 PM at Element K. Bill Statt presided for Help's Half Hour. During the course of the discussion it was noted that we need to fill some slots in the Help Desk listing published in the Monitor. Bill brought copies of some articles to share.

Ron Matteson will lead Help's Half Hour next month and Bill will present a program on spy ware.

Steve Staub, Treasurer, presided for our business meeting. He noted that elections are coming in May. We need to elect a President, Vice President, Secretary, and Member at Large of the Board. Our President resigned because of not receiving sufficient help. We have a couple of candidates and need a couple more.

Steve is planning for a table at the next Market Pro show.

The monthly planning meeting of the Board will be held next Tuesday. We need as many Board members as possible for some decisions to be made.

Saturday, March 24, is our newsletter production date and help is needed.

Ron Matteson announced that Bill Statt will do a second program on Photoshop Ele-

ments in the next meeting of the Digital Photography and Scanners SIG. Ron then introduced his son, Steve Matteson, who presented a program on newspapers and computers.

Steve Matteson talked about the niches his publications [Ins fill, the hardware and software used for production, and his relationship with the printing firm he uses. He also told us about developing contacts in the communities he reaches with his publications. He explained to us his use of the Internet for research and news gathering. The program helped us understand a practical and thorough application of the technologies we enjoy.

We closed at 815 PM with a 50-50 drawing.

Planning Meeting
March 19, 2002
by Charles Grover, Secretary

The Board of the Rochester Computer Society, Inc., met at 7 PM March 19, 2002, at the home of Sally Springett, *Monitor* editor. In attendance were Sally; Steve Staub, Treasurer; Jim McGrath; Ron Matteson; and Charles Grover, Secretary.

Information about the newsletter was shared. The April *Monitor* may be assembled a week early to avoid the weekend on which Easter falls. A tri-fold flier may be produced for the Market Pro show. Our leased folding machine needs repair. The lease is for three years and runs to May of 2003. It is a "lease to own."

We considered nominations for the May election. Steve gave us the current information. Three people expressed interest in running for Member-at-Large of the Board: Dan Rothfuss, Bill Statt and Warren Ganter. Arpad Kovacs will run for either Vice President or Secretary. No one is yet running for President. So two more people are needed.

We considered the possibility of having Board meetings in different locations, thinking such flexibility might facilitate attendance by those who otherwise have a long distance to travel.

We next turned to the matter of Chairs. Ron agreed to serve as Program Chair. We were in need of both a Software Chair and a Librarian. (Joe Varga is storing 4 boxes of material belonging to the library.) Jim McGrath agreed to serve as Software Chair. Bob Avery has offered to help with the web site. We conversed briefly about software and training for web site development.

Steve then gave us his Treasurer's Report. (Steve gave his report to Sally to be printed in the *Monitor*.) We have 14 more payments of $86.72 each on the folding machine lease, totaling about $1214. As a possible money raiser, Steve aired the idea of an all day program of seminars by different computer organizations and interest groups. He shared another idea of a program with demonstrations, similar to a fair done in the past. Sally remarked computer assembly would make a good meeting program. Steve and Sally talked about a swap meet, charging for table space and/or admission. The former FROG once did a membership drive, where if you brought in a certain number of members your own membership would be covered. Steve will put a proposal to the membership for their approval and participation.

We gave some thought to a program schedule. Ron supplied a proposed list of programs. April and May speakers are confirmed. There are tentative proposals for after that. ISP's might make a good presentation. PowerQuest might again come. MicroWorks, or a member of the society, might do a demonstration on assembling or upgrading a computer. The picnic will likely be held on the first or second Sunday of August (the 4th or the 11th). Steve asked Sally to try to make a reservation at Brighton Town Park. Because of our picnic, there is no regular program meeting in August.

We finished about 9 p.m.

Treasurer's Report

Balance as of 2/18/02 . . . . $1,215.18
Income
Dues $128.00
Expenses
St. Stephen's $100.00
Pizza 20.91
Postmaster 150.00
Lease 86.72
APCUG 50.00
Total expenses $407.63
Balance as of 3/19/02 . . . . $1,0334.55

The Lighter Side

Virus Warning

WARNING! WARNING! WARNING! IF YOU RECEIVE A GIFT IN THE SHAPE OF A LARGE WOODEN HORSE DO NOT DOWNLOAD IT!!!! It is EXTREMELY DESTRUCTIVE and will overwrite your ENTIRE CITY!!! The "gift" is disguised as a large wooden horse about two stories tall. It tends to show up outside the city gates and appears to be abandoned. DO NOT let it through the gates! It contains hardware that is incompatible with Trojan programming, including a crowd of heavily armed Greek warriors that will destroy your army, sack your town, and kill your women and children. If you have already received such a gift, DO NOT OPEN IT! Take it back out of the city unopened and set fire to it by the beach. FORWARD THIS MESSAGE TO EVERYONE YOU KNOW!