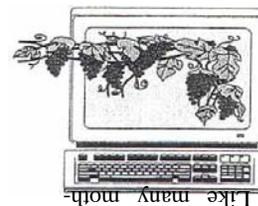


COMPUTER NEWS



Volume 23, No. 5

May, 2006

Inside This Issue:

- 2 President's Message
- 2 Special Interest Groups
- 2 Calendar
- 3 Officers List
- 4 Upgrading Your Monitor
- 5 Computer Hysteria: Spam
- 6 Installing New Hard Drives
- 8 Windows XP Housecleaning
- 9. Organizing the Favorites Menu
- 10 The New, Best, and Worst
- 12 Improving PC Performance
- 14 Tech News
- 16 Computer Recycling Event

The Napa Valley Personal Computer Users Group has served novice and experienced computer users since 1983. Through its monthly meetings, newsletters, online forum, special interest groups, mentor program and community involvement, it has helped educate people of all ages. The NVPCUG provides opportunities for people to find friends who share common interests and experiences. Through its Computers-to-Schools program, members refurbish used computer equipment for donation to local schools. Since January 2003 the NVPCUG has donated 401 computers and 124 printers.

Audacity Multitrack Audio Editor to Be Discussed at May 17 NVPCUG Meeting

By Susy Ball, Programs Coordinator

The Napa Valley Personal Computer Users Group will meet Wednesday, May 17, 2006, 7:00-9:00 p.m., at the Napa Senior Activity Center, 1500 Jefferson Street, Napa, California.

The main presentation of the evening will be a demonstration by **Susy Ball** of *Audacity*, a free open-source program that will help you enter the world of digital music, using your computer. This is a fully functional, multitrack audio editor. It runs on most *Windows* platforms, as well as *Mac OS 9* and *X*, and *Linux* and *Unix*. The producer of the program is SourceForge, and it can be downloaded free of charge. Susy is the programs director for NVPCUG.



Susy Ball

Preceding the main presentation, **Jerry Brown** will lead the **Random Access** portion of our meeting with an open-floor question-and-answer period, during which you can ask questions about specific computer-related issues and receive helpful information from other meeting attendees. Don't forget that you can also e-mail your questions before coming to the meeting (questions@nvpcug.org). If you have found a novel solution to a computer problem you faced, you might like to share it with the group during this session.

Following this, **Mike Moore** will lead the **Computer Tutor** session featuring *CCleaner*, a utility program that removes unused and temporary files from your system, allowing Windows to run faster and more efficiently and giving you more disk storage space. The program is small, fast, and best of all free. Michael is a retired instructor of computer studies at Napa Valley College and the current computer tutor coordinator at NVPCUG.

Need practical information that will enable you to make better use of your computer? Come to this meeting! Guests are welcome; admission is free.

Volunteers are needed to help with the annual Computer and Electronics Recycling Event to take place June 9 and 10. See the back cover for details.

President's Message—

Holding Fast, Moving Ahead

by Dianne Prior, President

NVPCUG Special Interest Groups

In SIG meetings you can learn about a subject in greater detail than is feasible at NVPCUG general meetings. SIG meetings are open to everyone. Meeting times and locations occasionally change, so for current meeting information, see our Web site, www.nvpcug.org, or contact the SIG leaders.

Digital Photography SIG

Meets: Monthly, second Wednesday
7:00 to 8:30 p.m.
Piner's Nursing Home,
Conference Room
1800 Pueblo Ave., Napa
Leader: **Susy Ball**
(707) 337-3998
SusyBall@aol.com

Investors SIG

Meets: Monthly, second Monday
5:30 to 7:30 p.m.
Jerry Brown's home,
23 Skipping Rock Way, Napa
Leader: **Jerry Brown**
(707) 254-9607
bqandjbb@sbcglobal.net

Macintosh SIG

Meets: Monthly, second Thursday
6:30-8:30 p.m.
Napa Senior Activity Center
1500 Jefferson St., Napa
Leader: **Jim Gillespie**
(707) 252-1665
napanerd@pacbell.net

Our meeting day will **NOT** change. At the recent Board of Directors meeting, we reviewed some additional information and realized that a first Wednesday meeting would not be any better and indeed may be worse than our current third Wednesday dates. The reason for the change was a supposed problem in getting presenters. We need to have a meeting day near the meeting days of other nearby computer user groups. We had based our "first Wed." recommendation on information from only one vendor. After further research it seems there are in fact other groups that meet during the third week. The Board agreed with the recommendation of our Programs Director Susy Ball (who is the one to arrange for presenters) that we stick to **THIRD** Wednesdays. I apologize for the confusion.

On April 24, the executive committee and Computers-to-Schools coordinators had an informal meeting with Charlotte Converse, Computer Services Manager of Dey, L.P. to give us a chance to ask questions and get to know each other better. Dey Labs, a manufacturer of pharmaceuticals, has been a strong supporter of the Napa Valley P.C. Users Group computers-to-schools program. In recognition of this, the Board of Directors voted to continue Dey's Honorary Corporate Membership for the year 2006. We presented Charlotte with a certificate of appreciation acknowledging the honorary membership. Thank you to Susy



Charlotte Converse and Dianne Prior

Ball for making the certificate.

There is an Association of P.C. User Groups Conference being held in San Diego around August 12. Our group is a member of the APCUG. If anyone is interested in attending, check their web site at www.swugconf.org.

August 12 is also the Saturday that we will have our annual potluck picnic. Dianne Prior will be the chairman. More on that later.

Remember to sign up to help at the Napa Electronics Recycling Event on June 9 and 10. See Bill Wheadon at the next meeting or e-mail him at recycler@nvpcug.org.

See you at the meeting on May 17. Happy Springtime!

Peace and **G**ood,

Dianne **P**rior

NVPCUG Calendar

Wednesdays	9:30 a.m.-12:30 p.m.
April 5	7:00-9:00 p.m.
April 10	5:30-7:30 p.m.
April 12	7:00-8:30 p.m.
April 13	6:30-8:30 p.m.
April 19	7:00-9:00 p.m.

Computers-to-Schools work parties. To volunteer, contact Orion Hill, (707) 252-0637.
Board of Directors meeting, Piner's Nursing Home, 1800 Pueblo Ave., Napa
Investors SIG meeting, Jerry Brown's home, 23 Skipping Rock Way, Napa
Digital Photography SIG meeting, Piner's Nursing Home, 1800 Pueblo Ave., Napa
Macintosh SIG meeting, Napa Senior Activity Center, 1500 Jefferson St., Napa
General Meeting, Napa Senior Activity Center, 1500 Jefferson St., Napa

Napa Valley Personal Computer Users Group

Officers for 2006

Board of Directors

President	Dianne Prior	252-1506*	President@nvpcug.org
Vice President	Ron Dack		VicePresident@nvpcug.org
Secretary	Julie Jerome	224-6620	Secretary@nvpcug.org
Treasurer	Roy Wagner	253-2721	Treasurer@nvpcug.org

Other Directors: Susy Ball, Orion E. Hill, Jim Gillespie, Bob Kulas, John Moore,
Dick Peterson, John Simcoe, James Stirling, Dean Unruh

Appointed Officers

Computer Equipment Sales Coordinator	(Volunteer Needed)		
Computer Recycling Coordinator	Bill Wheadon	224-3901	Recycler@nvpcug.org
Computer Tutor Coordinator	Mike Moore	255-1615	Tutor@nvpcug.org
Computers-to-Schools Program Coordinator	Orion E. Hill	252-0637	CTS@nvpcug.org
Facility Arrangements Coordinator	John Moore	252-3478	Facility@nvpcug.org
Greeter Coordinator	Bob Simmerman	259-6113	Greeter@nvpcug.org
Librarian	Dean Unruh	226-9164	Librarian@nvpcug.org
Membership Director	Dianne Prior	252-1506	Membership@nvpcug.org
Mentor Program Coordinator	Dick Peterson	259-1712	Mentors@nvpcug.org
Newsletter Circulator	Jim Hearn	224-2540	
Newsletter Editor	James Stirling	944-1177	Editor@nvpcug.org
Product Review Coord.	Susy Ball	337-3398	Reviews@nvpcug.org
Product Review Coord.	Marcia Waddell	252-2060	Reviews2@nvpcug.org
Programs Director	Susy Ball	337-3998	Programs@nvpcug.org
Publicity Director	John Simcoe	258-8233	Publicity@nvpcug.org
Random Access Moderator	Jerry Brown	254-9607	Questions@nvpcug.org
Special Projects Director	Bob Kulas	255-9241	Projects@nvpcug.org
Webmaster	Ron Dack		Webmaster@nvpcug.org

*All telephone numbers are in Area Code 707.

Come to the NVPCUG General Meetings

Held the third Wednesday
of each month

7:00 to 9:00 p.m.

Napa Senior Activities
Center

1500 Jefferson Street,
Napa

NVPCUG *Computer News*

Computer News (ISS 0897-5744) is published monthly by the Napa Valley Personal Computer Users Group, Inc. (NVPCUG), P.O. Box 2866, Napa, CA 94558-0286. Subscriptions: \$30 for one year (12 issues). Editor: **James Stirling**, Editor@nvpcug.org. The material in *Computer News* is intended for noncommercial purposes and may not be reproduced without prior written permission, except that permission for reproducing articles, with authors properly credited, is granted to other computer user groups for their internal, nonprofit use only. The information in this newsletter is believed to be correct. However, the NVPCUG can assume neither responsibility for errors or omissions nor liability for any damages resulting from the use or misuse of any information.

The NVPCUG is an IRC 501(c)(3) tax-exempt nonprofit educational organization (EIN 68-0069663) and is a member of the Association of Personal Computer User Groups (APCUG), an international organization. Donations to the NVPCUG are tax-deductible as charitable contributions to the extent allowed by law. Copyright © 2006 by NVPCUG.

Upgrading Your Monitor

by Vinny La Bash, *vlabash@home.com*, Member of the Sarasota Personal Computer Users Group, Inc.

In December 2005 I wrote about buying a PC for 2006, but other than size I was vague about the monitor.

Many more folks than I thought of are getting the urge to watch high definition video on their personal computers. If high definition has you captivated, pay attention to the technologies known as HDMI and HDCP.

HDMI, or High Definition Media Interface, is a technology that connects video receivers and DVD players to devices such as a television. It makes no difference to HDMI if your set is high definition or not. The technology handles both standard and high definition resolutions.

HDCP or High-bandwidth Digital Content Protection is a completely different animal. Intel developed the technology specifically to prevent distortion or any kind of electronic interference between source and receiver. For example, HDCP encrypts the digital content of anything that a device such as a DVD player might send through a Digital Visual Interface (DVI) to a television set, a projector or a computer monitor. The encryption used is not a form of copy protection, but a process designed to protect the integrity of the data. In other words, HDMI makes sure that what is sent is what's received.

It's important to understand that HDCP is content protection, not copy protection. It won't prevent you from pausing live programming or recording a program to view at a later time. Any content provider that did this would soon be at war with its customers.

As long as features such as "time-shifting" keep appearing, protecting copyright material becomes increasingly difficult. Copyrights are important because without them there is no protection for the artists, authors, and performers who create material or those who use them.

Your home equipment can implement any kind of copy protection, but a content provider might allow no copies whatsoever. Another provider might let you make a limited number of

copies. Still another provider might put limitations on how the material is used. Many factors come into play. The mechanism for distribution, source, equipment design, and equipment configuration all have their unique effects. A content provider will usually insist on enforcing its own brand of copy protection.

HDCP makes its appearance at the DVI connection, the last link in the video chain, but makes no decisions on any type of copy protection strategy; it merely protects the choice.

It may be a letdown to you to find out that HDCP isn't an issue yet. However, it will become more important when high definition takes over. Expect all high definition DVD players to eventually use HDCP.

If you own a DVD player that isn't HDCP compliant, you will still be able to use it even if your TV isn't HDCP compliant. You just won't experience high definition quality images. HDCP will restrict playback to standard quality. This prevents pirates from getting perfect copies of movies or other digital content. Upgrades are definitely in most people's future.

Windows *Vista* will certainly support HDCP, as will upcoming versions of the Mac OS. What it comes down to is, if you want to watch high definition content on your computer monitor, the monitor must be HDCP-compliant.

Almost any television set you buy today will use HDCP, but very few computer monitors are HDCP compliant. Do your research carefully. If you want to watch high definition on your monitor, it must be HDCP compliant.

The Editorial Committee of the Association of Personal Computer User Groups has provided this article.

Computer Hysteria: The Sentence

by Berry F. Phillips, Member of the Computer Club of Oklahoma City and a regular writer for the CCOKC Web site and the eMonitor; www.ccokc.org; [bfpdata\(at \) gbronline.com](mailto:bfpdata@gbronline.com)

I was terrified as I faced the Judge of the Spammers' Court awaiting my sentence. The Judge began reviewing my case. "You have been charged with sadistically deleting spam but reading 'ham.' Spam is described as unsolicited (usually commercial, usually unwanted) e-mail messages. 'Ham' is described as real e-mail messages. You are charged with a capital crime, spamocide in the first degree! Since your plea is not guilty, I will review your case."

The defendant's brief contains some material available from CAUCE, The Coalition Against Unsolicited Commercial E-mail which is an ad hoc, all volunteer organization, created by Netizens to advocate for a legislative solution to the problem of UCE (a/k/a "spam").

"UCE is the leading complaint of Internet users. But junk e-mail is more than just annoying, it costs Internet users and Internet-based businesses billions per year. Junk e-mail is 'postage due' marketing; it is like a telemarketer calling you collect. The economics of junk e-mail encourages massive abuse, because junk e-mailers can get into business very cheaply. The volume of junk e-mail is increasing every day."

Vint Cerf, Senior Vice President, MCI and acknowledged "Father of the Internet" is quoted by permission: "Spamming is the scourge of electronic mail and newsgroups on the Internet." It can seriously interfere with the operation of public services, to say nothing of the effect it may have on any individual's e-mail mail system ... Spammers are in effect, taking resources away from users and service suppliers without compensation and without authorization."

In 2002, Paul Graham discussed in a paper, "A Plan for Spam," how to develop Bayesian spam filtering to distinguish between illegitimate spam e-mail and legitimate "ham" e-mail. Many modern mail programs such as *Mozilla Thunderbird* utilize Bayesian spam filtering. Server-side email filters such as spamAssassin and ASSP make use of Bayesian spam filtering techniques, and the functionality

is sometimes embedded within the mail server software itself.

While there has been some excellent anti-spam software written, the increasing volume of spam clearly demonstrates the survival adaptability of the spammers. CAUCE indicates that very few legitimate marketers use spam. Spam takes a variety of forms, like chain letters, get-rich-quick schemes, quack health remedies, porno-related products, pyramid marketing, pirated software (Warez), and many more too numerous to mention, that can loosely just be called various scams. There are several techniques spammers use to get your e-mail address to be placed on a spam list. One that is very common is the offer of free software. In my opinion, deletion is the "ounce of prevention that provides a pound of cure." However, we are losing the war on spam; you may want to join CAUCE's efforts to get legislation to stamp out spammers. If you want to join other Netizens to support the efforts of CAUCE, visit the website for more information at www.cauce.org.

The Judge at the Spammers' Court banged his gavel and pronounced my sentence. "You have been found guilty of spamocide in the first degree! I remand you into custody of the processors at the Spammers' Cannery."

I shouted at the Judge in the same spirit of Patrick Henry, "If I must be canned, then can me ham, NOT spam!"

Thank goodness it was only a dream; I awoke looking at my e-mail client, for I had obviously dozed off while deleting spam. However, this article must now end because I have a strange craving for a "ham" sandwich!

Berry Phillips is a member of the CCOKC and a regular writer for the CCOKC Web site and the eMonitor.

The Editorial Committee of the Association of Personal Computer User Groups has provided this article.

New Hard Drives and XP Hard Drive Management Utility

By Ira Wilsker, APCUG Director; Columnist, The Examiner, Beaumont, TX; Radio & TV Show Host

WEB SITE: <http://www.langa.com>

With the oft-mentioned convergence, where our desktop computers are now commonly used for more than traditional computing tasks, many of us seem to run low on hard drive space. A quick review of the newspaper and online ads for the electronics and office supply stores often show a selection of large capacity hard drives for very reasonable prices. Sometimes these hard drives can be purchased for an exceptionally low price after the application of high-value rebates. Now that many of us are using our hard drives for the storage and editing of video (very large files), countless music files (typically a few megabytes each), and even recording and time shifting TV (huge files), it is quite easy for hard drive space to run short. This is an indication that it is time to somehow utilize an additional hard drive.

The aftermarket hard drives now so readily available come in a variety of packages. Generally the lowest-priced drives are name-brand drives packaged as “OEM” intended for computer builders, and typically lacking cables, installation software, instructions, brackets, screws, and other sometimes useful accessories. Commonly available at the retail stores, for slightly more, are drives packed in retail packages that usually include cables, detailed install instructions, partitioning and formatting software, technical support, brackets, and other paraphernalia. At the top of the price charts, but still sometimes bargain-priced, are external drives, already partitioned and formatted. You can use them by simply plugging one cable into a USB or firewire port, and connecting the traditional power cord, with no other hardware installation. External drives often come with a variety of utility software titles for creating backups and for other purposes. Since there are a variety of hard drive controllers (the device that physically connects the motherboard in the computer to the cable and drive) in use, the purchaser needs to be sure that any internal drives purchased are compatible with the controllers in the computer. Acronyms such as IDE, EIDE, and SATA are commonly used to describe the interface of the hard drives advertised. If the purchaser is not sure which type is

correct, a knowledgeable salesperson or call to the hard drive manufacturer may help the buyer select the correct type.

Installing an additional hard drive in a desktop computer may be easy and done by anyone with moderate mechanical or electrical skills. The retail packs often come with very easy-to-follow directions (and sometimes even a video!) showing the step-by-step process. Most typically, computers come with two hard drive controllers, either built in to the motherboard or on a separate card; each controller can usually manage two hard drives, or a hard drive and a CD/DVD player or burner, allowing for up to four hard drives or CD/DVD units in any combination without the installation of additional controller hardware. One proviso worth noting here is that if the computer is still covered by warranty, opening the case to install an additional hard drive may void the remaining balance of the warranty. There is no warranty risk in using an external hard drive, since there is no “hard” installation necessary.

Once a new internal hard drive is installed, it must be partitioned and formatted appropriately in order for it to function properly. If you bought a retail pack, you will likely find a floppy or CD included that contains the necessary utilities; if you got an OEM drive, either you must use a third party utility (my favorite is *Partition Magic*), or a little-known *XP* utility. External drives, unless home-built with a separate drive and case, generally do not need any utilities to make them function properly. Fortunately, users of *Windows XP* have a built-in utility that will do the necessary partitioning and formatting of new drives, as well as other hard drive and computer management tasks. Fred Langa, author of the very popular “Langa List” (www.langa.com) published a series of articles in early March documenting the availability and utilization of this integral utility. “Administrator” access is necessary to access this utility. While there are several ways to access the utility, one of the easiest ways is to right click on the “My Computer” icon on the desktop, and then click on “Manage.” “Disk Management” is listed under

(continued on page 7)

the “Storage” heading. From this point, hard drives can be partitioned, formatted, have drive letters designated or changed, and a variety of other hard tasks can be accomplished. It is important to be especially careful not to partition or format existing hard drives with this utility, unless you explicitly desire it, as it is likely that existing data on the drive may be destroyed or otherwise become inaccessible. Other non-hard drive management tasks can also be utilized from this utility.

If a new hard drive is installed, it will show up as an “unknown” disk. Right-clicking on the new disk will open a menu with “partition” as one of the choices. Selecting this will open a wizard that will guide the user through the steps of initializing and partitioning the drive, and then formatting it with an appropriate format. After the process is completed, the new drive should show up in *Win-*

dows Explorer.

Since many of the new hard drives are truly huge in capacity, it may be more convenient in the long run to partition them as if they were several smaller hard drives, each partition with a separate drive letter. This makes disk storage more efficient, with less wasted space, as well as easier for you to backup, maintain, defragment, and perform other tasks.

A new large-capacity hard drive may be useful to improve the performance of the computer as well as allow it to be used for the many new non-computing tasks that are becoming popular.

The Editorial Committee of the Association of Personal Computer User Groups has provided this article.

From the Daily Tips of *Smart Computing*

Fun Facts & Stats:

Looking for Love in All the Right Places

Match.com, a popular online dating site, reported that its fastest-growing age demographic isn't users in their late 20s or early 30s searching for someone to settle down with. Nope, it's baby boomers (users between the ages of 45-59). The number of such users has increased by over 350 percent since 2000.

Linux Users: Track Your Finances

Linux isn't on nearly as many desktops as *Windows*, but considering that home users can download and install the OS (operating system) free of charge, we'd be amiss if we didn't assume that at least a handful of users out there are running it. If you are running *Linux*, you already know that mainstay personal finance applications such as *Intuit Quicken* and *Microsoft Money* don't run on that OS. The good news is that *Linux* has its own stable, mature, and powerful financial application called *GnuCash*.

What's A Peltier Cooler?

The Peltier effect, discovered in the 19th century by French physicist Jean Peltier, occurs when a current passes through a circuit containing two conductors. Depending on the direction of the current, the unit will either absorb or release heat. Peltier units

have a hot side and a cool side, and heat is transferred from the cool side (which sits on the CPU chip core) to the hot side (which transfers heat to a heatsink). The temperature difference between the two sides can be dramatic, with differences reaching 150 degrees Fahrenheit in some configurations. Peltiers can use air or liquid cooling, but because the units can substantially increase the ambient case temperature, liquid cooling is recommended. The potential for water condensation and electricity problems means Peltiers are best for advanced users.

Fun on the Internet

Nearly one-third of American Internet users go online just for fun rather than to check e-mail, read news or use a search engine, according to Deborah Fallows, senior research fellow at the nonpartisan Pew Internet & American Life Project, which examines the social impact of the Internet. A survey of 1,931 Internet users found 30 percent of respondents said they went online "for no particular reason" on the previous day. The survey also showed that 34 percent of online men were surfing for fun on an average day, compared with 26 percent of women. The Survey said that sending or receiving e-mail ranked highest, with 52 percent of Internet users saying they did this on a typical day. Using a search engine ranked second, with 38 percent, while reading news online was third, with 31 percent.

—(From *Tech News*, by Sue Crane)

Windows XP Housecleaning

By Dick Maybach,

Member of the Brookdale Computer User Group, New Jersey; <http://www.bcug.com/>

Unless you are careful, after a period of use *Windows* will begin to slow down. This occurs because many programs are always active, even though you aren't using them, and because the number of files increases, which means that searches take longer. Fortunately, *Windows XP* contains several tools to help you ease these conditions. Using these tools periodically (every month or two is reasonable) will help you keep your PC lean and mean.

Use *Disk Cleanup* to delete useless files. Right-click on a disk icon in *Windows Explorer* (C: will be the most rewarding); then click *Properties*, click the *Disk Cleanup* button, and select the actions. (I prefer not to compress old files as I've had bad experiences with compression.) Also be sure to check the actions available under the *More Options* tab, in particular deleting all but the last restore image. Finally search all your hard drives for the strings "*.tmp" and "*.dmp" in filenames. Delete anything more than a week or so old; however, Windows will refuse to delete any files it considers important.

Go through your saved e-mail and delete old messages. This will reduce the size of the mail database file and help you to find important e-mail more quickly.

Look at the list of installed programs (*Start > Control Panel > Add or Remove Programs*) and remove any you don't use. Most of find that new software often is less useful than we expected. Also, many PC manufacturers ship machines with software that we neither ask for nor need. While you're checking, be sure to click on the *Add/Remove Windows Components* icon in the left margin of the window. You find MS tools that you don't need.

Windows allocates a large portion of your disk space for use by System Restore (*Start > All Programs > Accessories > System Tools > System Restore > System Restore Settings*). Select each drive and click on the *Settings* button. Reduce the Disk Space Usage by moving the slider to no greater than 1 GByte on each of your drives. Use less on small drives, especially if they contain nothing but data.

Check the startup folder for programs that automatically start; you will probably find that you don't

want many of these running. *Start > All Programs @ Startup* to view the contents of the startup folder. To stop a program from starting automatically right click on its icon then click delete. This does not delete the program; it only stops it from being started at boot-up.

Unfortunately, most programs that start automatically don't appear in the startup folder. To disable these, click *Start > Run* and type "msconfig". Click the startup tab and uncheck any programs you don't want to run at startup. When you finish, Windows will ask you to restart. After boot-up you will see a diagnostic screen. On it uncheck the box that displays the diagnostic screen each time you boot.

You can also turn off Windows services that you don't need, but you shouldn't do this unless you are very knowledgeable. However, it doesn't hurt to look at what's running, and you may learn something. Open the Services window by clicking *Start > Control Panel > Administrative Tools > Services* and the System Configuration window by clicking *Start*, then *Run*, typing "msconfig" and selecting the services tab. Move the windows so you can see both. Clicking on a name in the services window will display a short description. Removing a check mark in the System Configuration window will disable that service, but no matter how confident you are, don't disable any service marked "essential".

Check for unsigned files and drivers; these can be corrupted files or programs not approved by Microsoft. Click *Start > All Programs > Accessories > System Tools > System Information > Tools > File Signature Verification Utility > Start*. The search will take several minutes; then a list will appear showing all the program files without valid signatures. Consider deleting (by using the Add/Remove Programs tool) these.

Another utility you should know about is *System Information* (*Start > All Programs > Accessories > System Tools > System Information*). This doesn't allow you to change anything, but you can learn a lot about Windows by exploring it. For instance, if you click on the plus box by *Software Environment* then on *Startup Programs*, it will show you a list (after a

pause) of all the modules that start at boot-up. It shows information in each entry that may enable you to track down a troublesome program. As is common with Windows utilities, you can sort any column by clicking on its header.

If you have problems with a program that ran with an earlier version of Windows, try running them in program compatibility mode. Click *Start > All Programs > Accessories > Program Compatibility Wizard > Next > Next*. You will see a list of all the installed programs. Select the troublesome program and a compatibility mode (Win 95, Win NT, Win 98/Me, or Win 2000). Clicking *Next* brings up a screen allowing you to set a lower resolution on the screen, which may be needed for very old Windows programs.

You can tune your PC performance with very little risk, even if you are a novice. Right click on *My Computer* in Windows Explorer; then, click *Properties > Advanced > Performance Settings*.

Usually, checking “Let Windows choose what’s best for my computer” is satisfactory, but you might to try “Adjust for best performance” if you machine is slow. If you are more adventuresome, you can select *Custom* and disable individual features by unchecking items in the list. If you don’t like the result, you can just go back to “Let Windows choose what’s best for my computer.”

After completing the cleanup, check to see if you should defragment your disks. Right click on a disk icon in *Windows Explorer*; then click *Properties > Tools tab > Defragment now > Analyze button*. If Windows says the disk does not need defragmenting, don’t do it. Doing the C: disk defragmenting takes a long time and seldom results in any noticeable performance improvement.

The Editorial Committee of the Association of Personal Computer User Groups has provided this article.

Organizing the Favorites Menu

by Glenn Richards, Emeritus Member of the Lake-Sumter Computer Society, Leesburg, FL

This is a follow-up on a tip from Worldstart. I have been using the method for years. When you collect shortcuts to Web sites like I do the Favorites menu gets difficult to manage without some organizing. It is easy to add sub-folders to the Favorites main folder, either via the *Internet Explorer* menu item Favorites, or using *Windows Explorer*.

Under a main Favorites subfolder I named “Software,” I have a subfolder named “A to C,” etc. down to “U to Z.” The right-most column shows some of the contents of the U to Z subfolder.

I split the alphabetic range of the subfolders so that the height of the contents of any folder does not exceed the vertical space on the Desktop. The figure has squeezed the display horizontally to make more room for these words.

My Software folder is for Web sites where I have found worthwhile programs for download. One of its subfolders is “Tudogs,” a Web site that has shortcuts to hundreds of free programs. I have acquired many of them for the user group’s CDs.

The method of creating the subfolders using *Windows Explorer* that I use is to have *WE* in a two-pane mode with the Favorites folder highlighted in the left pane. Right-click in the right pane, New, Folder, and give the folder a name of you’re choosing. This method can be cascaded as far as you want to go.

The above method of organization can also be used to consolidate items in your Start, Programs menu. Use *WE* to open your Programs folder at C:\Documents and Settings\

My Favorites folder has 1968 files (Web addresses) in 136 subfolders occupying 403 KB, with no Web address more than two clicks away.

The Editorial Committee of the Association of Personal Computer User Groups has provided this article

The New, the Best, and the Worst

Collected by Pim Borman, SW Indiana PC Users Group, Inc. <http://swipcug.apcug.org/swipcug@sigecom.net>

Talking Turk-ey

If you've ever earned some pocket money stuffing envelopes, the advent of e-mail may have put you out of business. But the Internet giveth what it taketh away.

Much of the unanticipated success of the Internet was due to the contributions made by selfless volunteers. Businesses then realized the importance of the Internet to advertise themselves, and Wile E. Coyote would now be able to order his Road Runner catchers from www.acme.com (there actually is such a Web site). Nevertheless, volunteers expect to derive some form of satisfaction from their efforts, and the equivalent of envelope stuffing for free does not draw many aficionados.

The Internet would not be more than a large flea market were it not for the powerful search engines capable of retrieving information almost instantly. The retrieval algorithms depend on vast indexes maintained by constantly culling millions of Web sites worldwide. Only computer-readable text is indexable. Yet, there are many other types of valuable information on the Web that are not computer-readable, such as hand-written documents and graphical images. It is almost impossible for a computer to distinguish a picture of Picabo Street in her ski outfit from Mother Teresa in her nun's habit. A human can distinguish them at a glance. Hand-written documents must be retyped, as many genealogy indexers know. Thus there is a great need for indexing graphics and handwritten information that requires human input. There are many other instances where human input is required, such as rating the validity of computer-generated keywords describing search targets, or retrieving numbers from scanned documents, such as transfer deeds.

Amazon, with its interest in computer searching with its A9.com search engine, has established a program that enlists human help for such tasks. The program is called Mechanical Turk, after a mechanical chess-playing automaton in 1769 that defeated nearly every opponent it faced. It featured a life-sized wooden mannequin, adorned with a fur-trimmed robe and a turban, seated behind a cabinet. It confounded such brilliant challengers as Benja-

min Franklin and Napoleon Bonaparte. What they did not know was the secret behind the Mechanical Turk: a human chess master cleverly concealed inside.

Amazon has set up a Web site (<http://www.mturk.com/mturk/welcome>) as a link between programmers looking for "artificial, artificial intelligence," and paid volunteers providing human inputs to perform the requested tasks, referred to as HITS. These are typically of a simple, repetitive nature and pay a minimal amount, a penny or so, for each input. For instance, I saw a HIT listed to look up deed records on a Web site and find the transfer taxes. The volunteers that complete such tasks are rated on their proficiency and accuracy and build up a reputation that qualifies them for somewhat more challenging and higher-paying HITS.

It is an interesting concept that may catch on as it is further refined. (Mentioned in Bill Machrone's column in *PC Magazine*, February 17, 2006).

Oldie Tribulations

I own a 6-year-old former dream machine, once briefly the envy of friends and relatives, a Dell desktop with a 600MHz Pentium III processor and a 20GB hard drive. Over the years I added another 20GB hard drive, upped the RAM to 256 MB, and upgraded from *Windows 98SE2* to *Windows ME*. Lately I have been using this computer to evaluate a variety of *Linux* distributions that I installed on the second drive in separate partitions.

Recently I took advantage of a special offer to update my version of *Xandros (Linux) Desktop Open Circulation* to the DeLuxe Edition. I wanted to install it in a clean 10 GB partition, but as a result of the many installations of different operating systems, the second hard drive could not be repartitioned any longer because of a faulty partition table. I could read and write to the disk, but neither *Partition Magic* nor any other disk software was able to repartition the drive, or even to reformat it. It was time for drastic measures.

I discarded the faulty slave drive, bought a new Western Digital 80GB hard drive, installed it as the master, and relegated the original 20GB master

drive to slave status. All I needed to do was reinstall *Windows ME* and then repartition the disk to make room for *Xandros* and *Linspire*, my favorite Linux distributions. Easier said than done, as it turned out. I'll try to summarize the lessons I (re-)learned.

- *Windows ME* upgrades only from *Windows 98*, not from *DOS*.
- Read the manual about the proper location of the itty-bitty jumpers that determine if a drive is the master or the slave. Don't just go by the markings on the drives. Apparently all drives are different.
- Re-use the old IDE cable if the new cable doesn't reach both drives.
- Even the most recent BIOS version for this computer available from Dell (dated 2000) is not able to recognize more than 32 GB of the 80 GB drive.
- Believe it *when* it says on the box that the drive requires *Windows XP* or better.
- The special software, provided by Western Digital, to reach and repartition all 80 GB on an old computer must be used before installing the operating system.
- After using the special WD software to set up the hard drive, don't use *Partition Magic 8.0* to further repartition the drive. You won't be able to reboot and will have to start all over again.
- The computer won't boot any longer from the old hard drive, reinstalled as the master. In computing too, you can't go home again.
- After protecting the system with a *ZoneAlarm* firewall and *F-prot* antivirus you think it is safe to go online to update *Windows ME* and install *Internet Explorer 6.0*. You'll still receive half a dozen instances of a spy program called *Alexa*, courtesy of Microsoft. *AdAware* will identify and remove it for you.
- All's well that ends well. The computer now has 20GB of *Windows ME*, 30 GB of *Linspire 5.0*, and 30 GB of *Xandros DeLuxe Edition*, complete with boot manager.

Maybe I should just have bought one of those cheapy Dell computers. But removing all the junk programs they come with might have been just as

frustrating. I'll hold out for a system using the 64-bit AMD chip. That excludes Dell, which uses Intel only. *Linux* has long since run on 64-bit processors, and *Windows Vista* is just getting around to it. Now is not the time; later this year, maybe. I might have a local dealer build one to order.

The Editorial Committee of the Association of Personal Computer User Groups has provided this article.

Smart Computing Tips –

Getting the News Online

If you want to track the latest news, you can subscribe to CNN Pipeline www.cnn.com/pipeline). This news service features four live video feeds and its own news anchors. You can watch commercial-free news 24/7, and the service also lets you access CNN's vast video archives. CNN Pipeline requires a subscription: 99 cents for a one-day pass, \$2.95 for a monthly subscription, or \$24.95 for a yearly subscription. If you're looking for a local station, check the directory at [wwiTV \(www.mediahopper.com\)](http://wwiTV.com). This site lists channels from all over the world that offer live or recorded television programming. Another site that provides similar information is TVover.net. Here you can search for content by country, live or recorded shows, and more. Most of the "stations" that broadcast television on the Web require your computer to have the *Windows Media Player (www.windowsmedia.com)* or the *RealNetworks RealPlayer (www.real.com)* software. Both players are available free. Some services, such as CNN Pipeline, use their own custom players, which you can also download and install at no additional cost. Of course, you also need a broadband Internet connection due to the size and complexity of video files.

Improving PC Performance Without Upgrading Your Hardware

By Kevin J. Vella, Public Relations Manager, Uniblue Systems Ltd . kevinjv@uniblue.net

Boosting up the performance of your PC doesn't have to be difficult or expensive. Here's a step-by-step guide on how to do it

Nine things that Chip Manufacturers and PC retailers don't tell you!

The most common reasons for PC slowdowns are viruses, spyware, too many temporary files, software conflicts, residues from unwanted (and uninstalled) trial downloads and other applications, and, sometimes, just too many applications running at the same time hogging all or most of your computer resources.

The following are nine things that chip manufacturers and PC retailers don't want you to know or how to perform. Following this advice will drastically increase your PC performance and help you regain your sanity while saving loads of money. And, if your PC is three years old and you can't afford to upgrade yet, you will be able to squeeze some more juice out of the old thing!

1. Know What You Are Running

Sometimes slowdowns occur because you have too many programs open at the same time. Shutting down those programs that you are not using will immediately boost performance.

2. Monitor Windows Processes

If you press CTRL+ALT+DEL you will call up Task Manager, which lists most of the processes that you are actually running.

Although limited, Task Manager will give you a reasonably good overview of what's running. But before ending processes to increase your performance, please exercise extreme caution and learn what the processes do. You will find that either there is too much running or there is something hogging your CPU and memory. With certain *Windows* utilities you can even set up your computer to run certain system configurations, depending upon the type of application/s you are running at the moment. These utilities also give you an insight on resource allocation and, with the help of graphs, can help you identify which application and/or process is most likely to slow or crash your computer.

3. Have a Clean System

One of the most common reason (probably the most common) for slowdowns is viruses and/or spyware. Sometimes even spyware residuals that have escaped

your anti-spyware products can plague you for months. I had a problem with MSAA.EXE which was not caught by three spyware scanners – I eventually figured out what I had running because of point #2 above!

Virus and spyware authors just love creating menaces that hog your system resources, and the only protection you have is to keep everything up-to-date.

Make sure your antivirus software is up to date with current virus definitions. Then scan your computer for viruses. Make sure your spyware software is up to date with current definitions. Because of the way spyware works you should try and use at least two different programs to scan your system (scanners are usually free of charge and Microsoft has a free Anti-Spyware product you should use). Firewalls are also an important security tool – but beware, as having an active firewall may slow performance.

What you may do once you are 100 percent sure that your system is clean, is turn off your security only when not connected to the Internet. This should help you increase your performance too. But remember to switch everything on before going online. Otherwise, you will be immediately at risk.

4. Update Your Operating System

Having the latest updates of Windows may not generally increase system performance. However, Microsoft is continually patching up any security loopholes or performance-related glitches. So in the long run, your system will be better off with the latest OS updates.

5. Use Disk Clean-ups

Defragging and disc repairs are also extremely important. Defragging is the process of locating and consolidating your files and folders sitting on your hard drives. This can be done automatically by Windows, and as a result your system can access these files and folders (and new ones) more efficiently and quickly. Regular defrags and disk repairs will keep your computer running at optimum levels.

6. Manage Your Temporary Files :

Cleansing your temporary files, including your Internet history and cookies, gives you a larger amount of hard disk space to work with. This, in turn, gives more space for *Windows* virtual files (Page File memory). I go as far as limiting how much space *Windows* uses to create temporary files. For example, my setting is 1 Mb. In other words, at any time *Windows* is al-

lowed only 1 Mb of space to store cookies, activeX controls, etc.

7. Watch Your Start-up Time

Next time you start up your PC, just time how long will it take to boot and let you start using your applications. If you are lucky, start-up times may be no longer than a few seconds. In most cases, however, it takes minutes.

The Windows Startup Folder tells you most of the more visible processes that are running in your system. However, this is not enough – many installed applications start up processes at boot up that you don't even know about. Not that these are harmful, they're probably useful and required. However, by monitoring what is starting up, you have a good chance of finding out what should and what should not be started. Such utilities as performance optimizers (see # 9 below) will automatically identify your start-up files and allow you to disable some or all of them. Again, exercise caution here. Be sure to disable only those start-up processes that are superfluous.

My start-up times (and as a result my CPU and MEM Usage) were very short until I installed a particular program that I needed. However, I made the mistake of setting up the server version when I don't really need it – I thought that I would have more visible functionality. However, I was wrong. I had installed some system files that would have been needed were my PC actually a server (and not a client). One particular process hogged my system and used a constant 10,820 Kb of my memory when working in the background. Reinstalling the version I needed improved my performance without my having to spend as much as a penny.

8. Caution: Download in Progress

Be honest, whatever they tell you about security (although very true and serious), you just can't resist downloading and trying out new products and utilities. It's fun! I just love scouring the Internet looking for some new utility to try out.

A few weeks back I needed software that lets me sort out the myriad of documents I have on my PC. Thing is, I didn't want to spend too much so I started looking at Open Source products that are free of charge. Well, I must have downloaded and installed at least 10 different programs. I liked none, so in a second round I found the one I wanted. However, when uninstalling all the programs I tried, I had to be very careful. The uninstall operation of most applications or programs almost always leaves residual files or folders in your system. No uninstall operation will

leave your system the way it was – dlls, processes such as schedulers that kick in at start-ups, and other legitimate processes that, with the main program being uninstalled, have no specific function except to hog your system unnecessarily.

What I usually do after I uninstall and reboot my machine is use a *Windows* utility (WinTasks) to help me identify the unnecessary processes and just block or delete them. Again, exercise caution when doing this - make sure that you have all the program and its sub components uninstalled, then reboot, then try the manual clean up. If you are unsure, it is better to leave them in your system but make sure that they are blocked.

9. Use Performance Optimizers

Finally, if either you don't want to perform many of these things manually or you have exhausted all possible avenues, you may want to consider a performance optimizer.

Even the more experienced users cannot manage to fully control and monitor all that is happening within their system, without a small toolkit of software utilities that generally includes a sturdy performance optimizer.

If anything, these utilities do the work automatically. I use performance optimizers because they can do the job better and in as little time as possible. When I use a computer I am either working or playing some game - I just don't want to hassle myself tweaking and looking under the hood of my PC. Performance optimizers have been designed to inch their way into the system and help you boost your PC performance drastically. These utilities usually don't cost more than \$25 to \$30 and give you much more value than investing in RAM simply because they seek and solve slowdown problems rather than mask it.

Sometimes RAM is necessary. But, I believe that by following these nine steps and principles you can get much more out of your PC. Plus, performance optimizers go the extra mile because they improve your system's overall operation beyond any level that you can manage on your own; simply because operating systems are getting more complex by the upgrade. It is almost humanly impossible to keep track of all that goes on in your computer.

The Editorial Committee of the Association of Personal Computer User Groups has provided this article.

Tech News

By Sue Crane, Editor, Big Bear Computer Club, California

What's Your "Brain Age"?

If millions of Japanese are to be believed, it is the secret to a happy and healthy old age as millions of them take up Nintendo's brain training. Players have to complete puzzles as quickly and accurately as possible, including reading literary classics aloud, doing simple arithmetic, drawing, and responding rapidly to deceptively easy teasers using voice-recognition software. The player's "brain age" is then determined. The first in the English-language series of games, Brain Age, is due for its US release on April 17, followed by Big Brain Academy in May. Brain Training for Adults, a package of cerebral workouts aimed at the over-45s, is said to improve mental agility and even slow the onset of dementia and Alzheimer's disease and also proves addictive to over-45s anxious to ward off old age.

Implanted Microchips for Medical Records

When Daniel Hickey's doctor suggested he have a microchip implanted under his skin to provide instant access to his computerized medical record, the 77-year-old retired naval officer immediately agreed. "If you're unconscious and end up in the emergency room, they won't know anything about you," Hickey said. "With this, they can find out everything they need to know right away and treat you better." Some doctors are welcoming the technology as an exciting innovation that will speed care and prevent errors. But the concept alarms privacy advocates. They worry the devices could make it easier for unauthorized snoops to invade medical records. VeriChip Corp. is selling kits containing scanners and the large-bore needles used to insert the chips, and recommending that doctors charge patients about \$200 each. At an academic computing conference in Pisa, Italy, researchers plan to demonstrate how it is possible to infect a tiny portion of memory in an RFID chip with a virus.

Science Competition for High Schools.

Started by Westinghouse in 1942, STS is the oldest, and generally most prestigious, national science competition for high school students. Intel took over the competition in 1998 as part of its overall effort to promote science education, for which it spends \$100 million annually. Forty students make the finals, plucked from 300 semifinalists and more than 1,500 total entrants. Shannon Babb, 18, won top honors, which included a \$100,000 scholarship, for her research and remediation work on pollution. Yi Sun, 17, won a

\$75,000 scholarship for his discovery of new geometric properties. Yuan "Chelsea" Zhang, 17, came in third place to win a \$50,000 scholarship. Zhang, from Rockville, Md., studied the plaque buildup of arteries that leads to heart disease. Students taking fourth, fifth and sixth places get \$25,000, while those ranking 7th through 10th receive \$20,000. The remaining 30 finalists receive \$5,000, and every finalist gets an Intel Centrino notebook computer.

Intel's New Core Microarchitecture takes advantage of similarities to fuse certain types of x86 instructions into more manageable chunks. Three new chips--code-named Merom (a notebook chip), Conroe (for desktops) and Woodcrest (for servers)—are based on the Core microarchitecture. Intel has said all three chips will deliver significant performance increases compared with current chips – as much as an 80 percent improvement in the case of Woodcrest – while consuming less power. One way the new architecture makes this happen is through macro-ops fusion and micro-ops fusion. When the Pentium M chip that is the model for the Core architecture--was introduced in 2003, it used a technique called micro-ops fusion to glue pieces taken from the same instruction back together, reducing the overall amount of work the processor needs to complete a task. The new chips will also be able to combine separate large instructions that usually appear in pairs into a single instruction, known as macro-ops fusion, which increases performance but also reduces the amount of power used by the chip. Merom is scheduled for the second half of the year. It's really a major change in clock and in the amount of time it takes to execute a sequence.

Google Desktop 3 is a free, downloadable program that includes an option to let users search across multiple computers for files. The application automatically stores copies of files, for up to a month, on Google servers. From there, copies are transferred to the user's other computers for archiving. The data is encrypted in transmission and while stored on Google servers. The Electronic Frontier Foundation has urged consumers to boycott the software, warning that Google could be forced to turn over the data to the government.

The Editorial Committee of the Association of Personal Computer User Groups has provided this article.

Thank You!

The Napa Valley Personal Computer Users Group is grateful for the support provided by the following companies:



Dey, L.P.

Pharmaceutical products for the treatment of respiratory diseases and respiratory-related allergies

2751 Napa Valley Corporate Drive, Napa 94558-6268

707-224-3200 • www.dey.com



947 Lincoln Avenue
Napa, CA 94559-5066

(707) 299-1000 • www.napanet.net • custserv@napanet.net



**MINUTEMAN
PRESS
OF NAPA**

3148 Jefferson St., Napa, CA 94558

707-257-6260 • 800-550-6260 • fax: 707-257-8741
napa@minutemanpress.com • napa.minutemanpress.com

**WELLS
FARGO**



Offering Financial Services throughout the Napa Valley, with offices in Napa, St. Helena and Yountville

800-869-3557 • www.wellsfargo.com

Napa Valley Personal Computer Users Group

Membership Application/Renewal*

G New G Renewal G Information Update

Please Print

Full Name: _____ Nickname: _____

Street/PO Box: _____

City: _____ State: _____ ZIP Code: _____ - _____

Phone (check preferred): G Home: (_____) _____ - _____

G Work: (_____) _____ - _____

E-mail (check preferred): G Home: _____

G Work: _____

Occupation/Profession: _____ Retired? _____

Do you want to be added to the following NVPCUG e-mail lists?

News and announcements: G Yes G No

General discussion of computer-related topics: G Yes G No

If you do **not** want your preferred phone number and/or e-mail address published in the *NVPCUG Directory*, which is for the exclusive use of NVPCUG members, check the appropriate box(es):

G Do not list phone number G Do not list e-mail address

Family members whom you want to sponsor as Associate Members:
(Associate Members have the same membership rights as their sponsors, except for receiving newsletters)

Full Name

E-mail Address

Annual Dues:

\$30 **Regular Member** - an individual who is not a full-time student

\$20 **Student Member** - a full-time student who is not eligible for Associate membership.

\$10 **Associate Member** - a family member of a Regular or Student member. Associate memberships run concurrently with sponsors' memberships.

Make check payable to **Napa Valley Personal Computer Users Group.**

Mail application/renewal to: **Napa Valley Personal Computer Users Group, Attn.: Membership Director, P.O. Box 2866, Napa, CA 94558-0286.**

The NVPCUG is an accredited IRC 501(c)(3) nonprofit organization. Your dues payment may be tax-deductible as a charitable contribution.

* To request a Corporate Membership Application/Renewal form, e-mail: Membership@nvpcug.org.

Revised 8-19-05

For more information about the NVPCUG, visit our
Web site: <http://www.nvpcug.org>

Computer and Electronics Recycling Event Comes June 9, 10

By Bill Wheadon, Computer Recycling Coordinator

The Sixth Annual Napa County Computer and Electronics Recycling Event will be held Friday and Saturday, June 9 and 10 in the south parking lot at Napa Valley College, Napa campus. This once-a-year event provides an opportunity for Napa County residents and businesses to dispose of unwanted computer and electronic equipment free of charge at a convenient drop-off site. This year for the first time microwave ovens will be accepted.

Computer equipment collected at this event will be evaluated for possible reuse. Items deemed to be obsolete will be sent to a de-manufacturing plant where various materials can be recovered in an environmentally safe manner for reuse in new products. Not only does recycling conserve valuable resources but it is also essential for preventing toxic materials from contaminating the environment. Each cathode ray tube (CRT) in a computer monitor or television contains five to seven pounds of lead and cadmium which are deemed toxic substances and prohibited from landfills.

Items selected for reuse will be accepted for refurbishing by either the Computer Recycling Center in Santa Rosa or by the Napa Valley Personal Computer User Group for use in our Computers-to Schools (CTS) program. Last year two tons of functional equipment was recovered for the CTS program.

Sponsors for this event include the City of Napa, the County of Napa, Napa Recycling & Waste Services, Upper Valley Waste Management Agency, Napa Valley College, Electronic Recyclers of America, the Computer Recycling Center and, of course, the NVPCUG.

Volunteers Needed

NVPCUG volunteers are needed at this worthy event to direct traffic, survey drivers, and pull computer equipment suitable for reuse. Lifting of heavy equipment will not be required (or allowed) – workers provided by the City of Napa and Napa Garbage will be doing the heavy lifting. Volunteers will be provided refreshments and food. Please review the following shift schedule and let Bill Wheadon know which day(s) and shift(s) you would like to work. If you cannot work an entire shift, please indicate when you would be available. A minimum of eight people are need for each shift.

Friday, June 9

Morning shift: 8:30 a.m. to 11:30 a.m.

Afternoon Shift 11:30 a.m. . to 2:30 p.m.

Saturday, June 10

Morning shift: 8:30 a.m. . to 11:30 a.m.

Afternoon shift: 11:30 a.m. . to 2:30 p.m.

This recycling event is a very worthwhile activity, not only benefiting our community but also providing publicity for our group, To volunteer your assistance or to obtain more information about computer recycling, contact Bill Wheadon by email at wheadonb@aol.com or recycler@nvpcug.org or by calling 224-3901.

Napa Valley Personal Computer Users Group

P.O. Box 2866

Napa, CA 94558-0286

Address Service Requested