July / August 2003

$4.95

The Journal of Washington Apple Pi, Ltd.

# WASHINGTON APPLE PI

Volume 25, Number 4

OUTSTANDING DISCUSSION
http://tcs.wap.org

BEST TCS

# macUpgrades

**Apple Specialist**
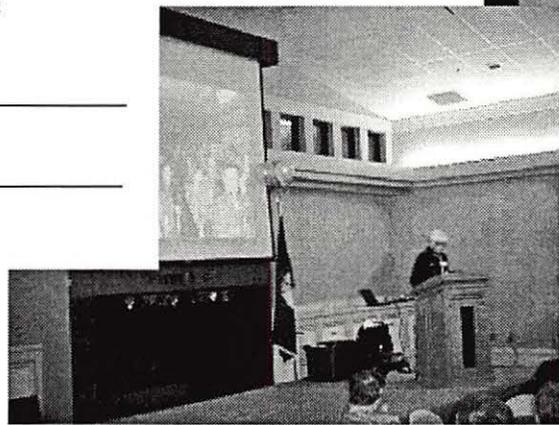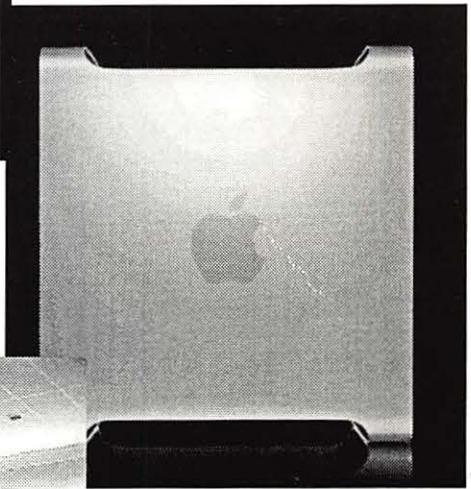
*Continuing a Decade of Macintosh Sales Service and Support Excellence!*
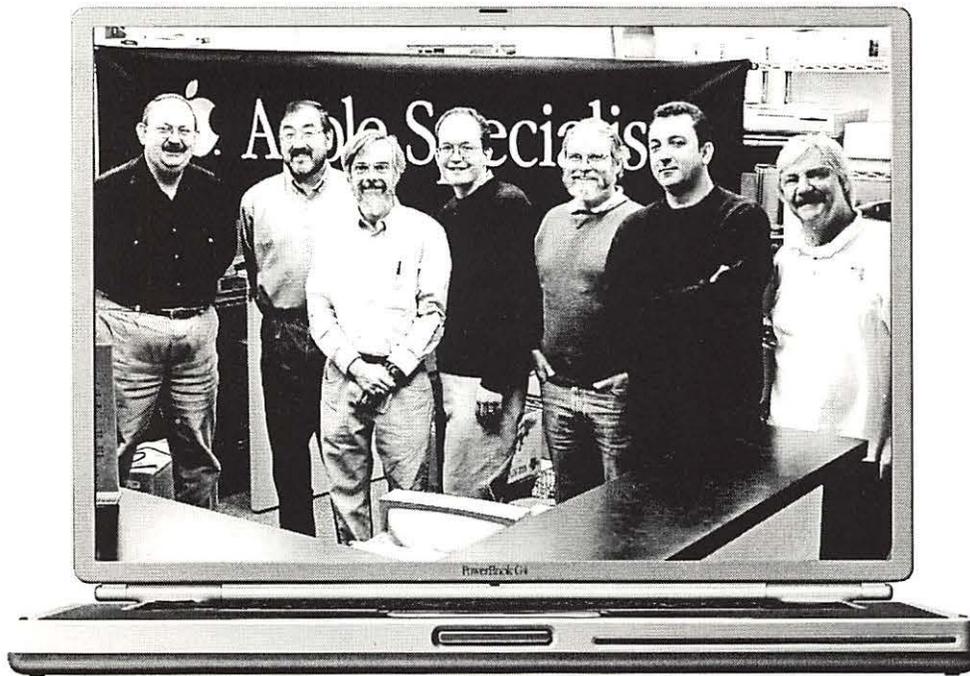


Pictured from left to Right: Gene Traynham, Craig Hirai, Alan Carroll, Jamie Mitchell, Lou Dunham, Fuad Hadi & Larry Sullivan. Missing from this particular photo are Debi Milligan, Lewis Bean Sr., Mike Cascioli, Kevin Billingsley, Mike Buckhout-White, Brad Gibson, Amy Wooden, Kurt Foster, Bob Gordon, Michael Surbrook, Scott Moulder and Glen Hirose.

New Hours! Mon 10-6   Tue 10-8   Wed 10-6   Thu 10-8   Fri 10-5   Sat 10-4

Voice 301 907-0300    Fax 301 907-9335   Web http://www.macupgrades.com

6931 Arlington Road Unit A Bethesda MD 20814

Check out our website for Sales, Service, Support and Training info!

*Summer causes changes in everyone's schedules and we have a change for you to note.*

# Our July meeting will be held July 26 at 9:00 a.m. the Arlington-Fairfax Elks Lodge in Fairfax, Virginia

*Brian Wayman, the Senior Systems Engineer from Apple Computer, Reston will be our guest speaker. He will tell us all about the latest announcements from Apple including the G5 computers, the changes that will come with Mac OS X 10.3, the new iSight camera, iChat AV and Expose.*

*The meeting promises to be an exciting one and we hope to have a trunk full of new raffle and door prizes. The Arlington-Fairfax Lodge #2188 is located at 8421 Arlington Blvd. (RT. 50) 1/2 mile west of the Capitol Beltway. It is easily located by the large U.S. Flag flying night and day.*

# The August 23 meeting will be held at NVCC Annandale in the Ernst Community Cultural Center Theater from 9:00 to 11:30 a.m.

*The presentations will be made by a number of Pi members and will include a demo of iChat AV, tips and tricks and demonstrations of software from the August Pi Fillings CD. Bring your PowerBooks and iBooks and firewire video cameras or iSights to take part in the iChat AV demonstration.*

# Table of Contents

## Volume 25          July / August 2003          Number 4

*Plus photos throughout the journal of the
TCS Open House, the 25th anniversary
party, the Computer Show and Sale and
other great WAP events.*

# Washington Apple Pi

# Welcome to WAP!

By Dave Ottalini

OK, please don't get mad at me but I have once again gone off the Macintosh deep end. We now have in my house an iMac and an eMac. I got them "previously owned" but they are both great machines and my kids are loving them. I fully expect that they will be able to use these Macs a good chunk of the way into college (my kids are 12 and 16).

That leads me to the point that recent statistics show Mac users tend to hold on to their computers longer than PC folks. There are any number of reasons but the one I like best is that because the Macs are made better and are more fun to use, people don't want to get a newer model when the older one is doing just fine.

We see that every week at the Tuesday night clinic. Folks bring in their older machines running OS's back to 7.5 and are not all that interested in moving up to OS 9, let alone X. It's a conundrum for Apple. The company, of course, wants Mac users to upgrade to OS X and the newer Power PCs. Not only does it make another sale, but you get to become part of the "Digital Hub Lifestyle" the will lead to further sales in the future (like music from the new Apple Music Store). Machines that don't boot into OS 9 is a not-so-subtle way of telling folks that it's time to move on. The trouble is, folks are not moving on. They like their Macs the way they are, thank you.

As a new (or continuing!) member of the Pi, you probably joined for any number of reasons. But you can rest assured that we are committed to helping support you no matter what version of the OS you are using (and that includes those of you who still turn on an Apple II, ///, GS or Lisa on occasion).

We are a membership organization that lives and dies by its volunteers. If you are a new member, please feel not only that you are welcome, but that we welcome you into our volunteer ranks as well. No matter what your talent or interest, we have a place for you. Just let us know. Oh, and by the way, Welcome To WAP! ∎

# President's Corner

THIS PRESS announcement was made for the twenty-fifth anniversary of the Maryland Apple Corps recently:

*The Baltimore Maryland User Group will celebrate its 25th year on June 1 with a MUG dinner in which Apple co-founder Steve "Woz" Wozniak and other user group notables will keynote.*

*Besides Woz, other keynote speakers include: Chuck Joiner, Apple Users Group Advisory Board Chairman; Dave Marra; Apple K-12 Senior Systems Engineer; Fred Showker, editor for AACUG and director of The User Groups Network: Daniel East, president of The Mid-Atlantic Macintosh User Groups Team; and Gail Murphy Glore, president and founder of WiredWomen.*

*The birthday party will include prizes, drawings, "goodie bags," and more in addition to a catered luncheon all provided by The Maryland Apple Corps.*

*With the majority of the tickets allocated to Maryland Apple Corps members, there are a limited number of tickets available for non-members. They're available on a "first come, first served" basis for US$40 each; there's a limit of two per household, family and/or organization.*

It certainly is a different kind of celebration than what we had. Imagine the crowd we could have drawn if we announced that Steve Wozniak would be at our meeting. We could have filled the auditorium at NOVA and perhaps used speakers to pipe the talk into the meeting room that we used. Or we could have rented one of those big hotel banquet rooms that abound around the beltway.

Just look at the user group luminaries that they invited. We could have had those and a whole lot more. We are a much bigger group and we are certainly more well-known. Why I bet we could have planned a celebration where we could have allowed only one person per household and I bet we could have charged at least another $10 per person to make even more money for our group. We could have turned it into a real fund-raiser!

Okay, stop the dreaming, come back to earth and lets examine what our birthday celebration was and why it was not a big media event.

User Group birthdays—or should they be called anniversaries are about us. That "us" is the people who brought the club into existence, those who run it today, and those who will run it in the future.

Our club has a long history and some of us who are active in running the group today were not early adopters of this new technology called computers. Since we live in an area that has grown tremendously in the past twenty-five years, many of us were not residents of metropolitan DC during those early years. Of course, over the years, many of the early club leaders have moved, developed other interests, or even just grown weary of the responsibilities that are a part of

running a group such as the Pi.

The Board of Directors chose to honor our early leaders and some of the outstanding leaders of today. We also recognized our newest leaders and members since they are our future.

We had a wonderful day and a great party, but there is also that desire to have an event that will draw the crowds, one that makes the news, one that makes some money. Lorin Evans talked about it for years, but the time was never right. Well, the time is now right and we are now in the earliest planning phases of a new event for the Pi, a Macintosh Computer Expo. If the idea sounds interesting, we could use some help. Drop me a note at president@wap.org and we'll add you to the planning team!

*Pat Fauquet*

## Thanks From All of Us

I T WAS JUST about a year ago that I found myself hesitantly agreeing to serve as President for the Pi. What a night it was! The Board of Directors was still in shock that Lorin Evans really was not going to change his mind, give us one of his thoughtful speeches, and agree to run the Washington Apple Pi for one more year. Of course we are still in shock that our long serving office manager, Beth Medlin had also left us just a few months earlier.

Even after agreeing to serve as president, I viewed the Pi with a sinking feeling. We had not had a complete board in years, there were few people volunteering to help out, our financial reserves were dwindling fast, and the people who had been volunteering for years were just plain tired.

Well, although not every problem has been solved, we have definitely turned the corner! We had an election with enough people on the ballot to cover every office. We have quite a few new volunteers (although we need even more). We had a year in which our income exceeded outlay and we were able to replace some of our reserves. The TCS crew has successfully rolled out a new and improved version and more of you are signing on each day. We had a great 25th anniversary celebration and some of our earlier members have promised not to wait so long to come back for a visit.

All of this did not happen without a large group of hard-working Pi members. Some of those people were

your board members, however, over the course of the year, we have had as many or more hours contributed by members who heard a request for help and agreed to lend a hand. Obviously, this would be a good place to give you a list of everyone who has helped us, however, we would obviously miss a few people, so instead I will take this opportunity to recognize just a few of people who have gone above and beyond the call of duty.

I hope to be able to recognize a few each month and I hope you will let me know about members that you have encountered who deserve some special recognition.

Bill Hanrahan First, the is Bill, one of the dedicated people who comes in one day a week for three or four hours to answer the phones and pass messages on. On
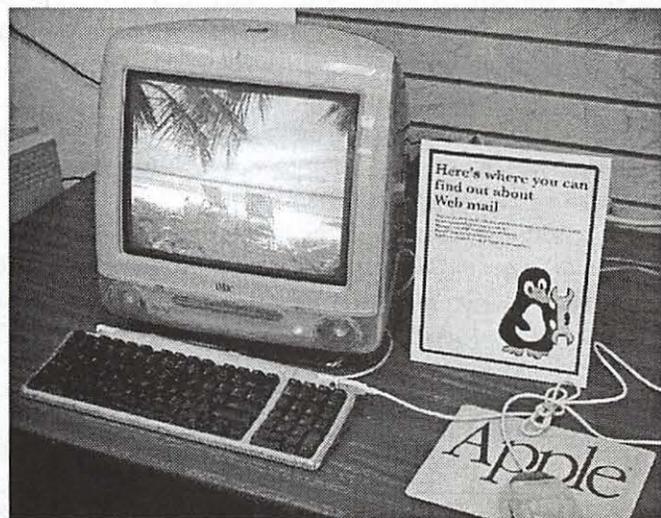


*TCS Webmail is used mostly by people when they are on vacation, using someone's borrowed computer to read their E-mail via the Web. (Photo by David Harris)*



*Tutorials on various aspects of the TCS were held in, oddly enough, the Tutorial Room. (Photo by David Harris)*

a recent Monday when I arrived early to teach both a morning and afternoon class, Bill arrived shortly after I did. While I taught, Bill answered the phone which rang constantly and he returned the calls from people who had left messages over the weekend. When class ended at 4:00 p.m., Bill was still hard at work. Unfortunately I had an evening appointment and so I was unable to stay and help him finish the tasks that needed to be done. Bill is very dependable and has learned the answers to many of the questions that are asked over the phone. The next time you call the office, take a minute to thank Bill or one of our other hard working volunteers who man the office and are ready to answer questions, take class registrations and membership renewals, and give out information and welcome new members to the Pi.

Greg Bartolett Greg and I have corresponded in e-mail. I do not think I have met him, but if I have, I cannot put a face with his name. He volunteered to help fix programming issues in our membership database. In the past several months he has spent untold hours assessing our needs, deconstructing the database design done by a member who has since left the local area. and he is now helping us add further functionality to this important tool that is essential to running the Pi. FileMaker programmers can command high fees and Greg volunteers his time for the Pi. Thanks, Greg, we really need an appreciate you assistance.

Ned Langston I hope you made it to the June Garage Sale. If you did, you experienced the organizational talents of Ned first hand. Ned has chaired the past four sales and the best part is that he has written copious notes on exactly what needs to be done and how to do it for every phase of the planning and running of the Garage Sale. There are duty charts, supply charts, vendor lists, and a paper trail to make the next chairman's job much easier. Notice I said "next." Ned has just retired from the Air Force and because he does not know the requirements of his next job, we are looking for someone to follow in his footsteps. Because he as been so organized, the next chairman will have a recipe for running a great sale. Ned, not only does the board appreciate your hard work, hopefully someone will read this not and decide that being the sale chairman is a task they can take on.

Dick Sanderson We have all relied too much on Dick this past year, and this spring we have asked for even more of his time. Dick was supposed to be our treasurer last year.. Instead he has been the total finance person for the Pi. He has deposited the checks, run the credit cards, sent out renewal notices and membership cards, prepared the mailings, ordered water and supplies, negotiated with the phone company and done the myriad of other task that happen in the front office. Of course, with all of that to do, he never did prepare a budget for this past year. That was not too bad because the board spent as little extra money as possible this past year in order to improve the bottom line. However, we have worn Dick out. He has two able helpers, Cheryl Lavoie and Bill Diffley, but he needs lots more help! I have promised to make finding people who enjoy financial and office administration tasks my top priority. Without help, Dick will resign. We really appreciate all he does and I know some more people will offer to give us a hand! Thanks Dick! ■



*From their rookery in one corner of the TCS Room, the resident penguins oversee all activity. (Photo by David Harris)*
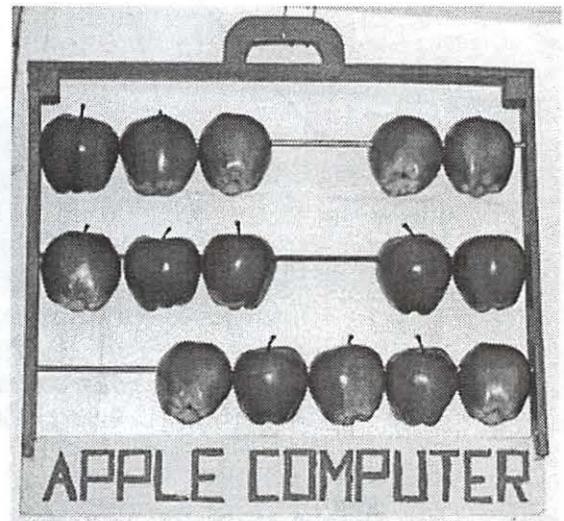


*The TCS has been around for a long time, but no longer uses some of the original equipment. (Photo by David Harris)*

Pi member with
dial-up Internet
provider

Pi member with
DSL or cable

Space aliens

Non-Pi Visitors

Amazon

Pi member with
wired desk job

Google

Pi member with
TCS Explorer

Internet

Apple, Inc.

Apple Pi
router

TCS Services
Network

Pi Office
Network

electronic
mail/
webmail

mail.wap.org

Pi
Web
site

www.wap.org

Tutorial Macs

personal
Web
pages

members.wap.org

tcs.wap.org
the Pi's
"24 hour a day"
General Meeting

File Server

store.wap.org
Pi electronic
store

mailing
lists

lists.wap.org

Office Macs

# Gena Urban's Remarks at the Pi's 25<sup>th</sup> Anniversary Party

G ENEVIE URBAN was one of the world's first programmers, working with one of the first commercial computers more than 50 years ago. The computers were so costly, and so rare, that they were considered national assets, with their own budget lines in the Congressional budget. Then, twenty five years ago, everything changed...

The Urbans' association with Washington Apple Pi was a long and rewarding one. By the way, it was I who suggested the name Washington Apple Pi for the group.

Both Bernie and I had programmed for large-scale digital computers back in the 50's and 60's, beginning with SEAC, a prototype large-scale digital computer developed at the National Bureau of Standards in the early fifties. We programmed for UNIVAC, RCA computers and various IBM models. I left the field in 1965 to raise my two sons, sort of letting my mind grow intellectually mushy. But then in 1978, Bernie declared we were going to buy an Apple II computer. I was a bit skeptical but went along with the idea. This little computer was sitting on a desktop in my bedroom, occupying a couple of square feet, when what I had been used to took up several rooms of equipment. And this one had memory to spare - I had programmed with 1024 words of memory, each word with 42 binary bits. Every morning when I woke up and saw this little computer I would burst out laughing at the wonder of it. And when we ordered extra memory that came in a small manila envelope, that was really amusing.

Bernie had attended user groups with IBM and RCA computers, and knew that they were a good idea. So he set about organizing a meeting of users, through John Ditman at Computers, Etc. in Silver Spring. They, together with Computerland, already had the nucleus of such a group. We had our first meeting in Silver Spring in late 1978, attended by possibly 15 Apple owners. Some names from that meeting that I remember are Sandy Greenfarb, Jim Kelly, Hal Weinstein, Dick Hodder, Joe Hilsenrath, and Bill Barker. The primary interest groups that were formally described at that meeting were programming in BASIC and Applesoft, quite different from the SIGs of today. Our next meeting was in the Bethesda Library, and then we managed to secure a meeting spot at the Computer Center in George Washington University with computers available to use, including demonstrating and copying software disks.

David Morganstein joined us there and took over the responsibility of distributing software. Bob Peck assigned member numbers randomly to attendees at that meeting. I think Bob was our first treasurer. Others who were early members included John Moon (I believe he was our first president and one of the original BBS operators, along with Tom Warrick and Dana Schwartz). Dana later took on membership chairman and adapted the program that we used for years at the Pi office to keep our membership information up to date.

We continued meeting at George Washington for quite a while. One of the most memorable of the GW meetings was when Steve Wozniak visited, and we presented him with a real apple pie. What a wonder the Woz was, and is! We later met at Georgetown, and then in the USUHS Building at the Naval Hospital. There was always good attendance and everyone wanted to get the latest software, but the highlight of those meetings as I recall was the Question and Answer session, so ably handled by Tom Warrick and Bruce Field. They knew everything! And members flocked to this session. I found among my souvenirs a pencil sketch of these two gurus that was done by WAP member and artist Jane Mason.

Bernie published the first newsletter in February, 1979, which I had typed on an old IBM Selectric. No word processing yet! But it wasn't long until we were able to enter our newsletter, soon to be called a *Journal*, into the Apple II, thanks to the ingenuity of Mark Crosby

*Sketch of Bruce Field and Tom Warrick by Pi member Jane Mason in 1983. Sketch courtesy of Gena Urban.*

who took over the Editorship for a short while, before it was returned to Bernie. Mark taught us the elements of this rudimentary word processor, and the *Washington Apple Pi Journal* was off and running.

We continued to publish the *Journal* in our home, with me doing typing when necessary and Bernie editing and doing the layout. Before the advent of the Macintosh and PageMaker, the layout was done entirely by cut and paste. The printed *Journal* was assembled and labels affixed in our dining room with help from a lot of volunteers. We also held board meetings in our living room with takeout pizza served beforehand.

WAP continued to grow by leaps and bounds and there was so much interest in learning and helping each other. It could have been thought of as a cult. I have here a copy of the 1981 Membership Directory which lists about 815 members who gave permission to have their name and phone number listed. I also uncovered a 1987 directory, called The Cast of Characters, which listed 4878 members and noted that membership number 10,026 had been assigned.

But with growing membership we could no longer accommodate the Pi board meetings and *Journal* distribution in our house. In 1982 the Pi opened an office on Woodmont Avenue, and Bernie and I became the Office Managers. I believe those were good years for the Pi. We worked hard and had the help of Bill Baldridge, Paul Koskos and Kevin Nealon in the office at various times. We also had many, many wonderful volunteers to manage all the fringe benefits of Pi membership.

We continued to publish the *Journal* as an offsite venture of Urban Enterprises, using the office only for the distribution of the *Journal*. The weekend prior to the Monday morning the copy was due at the printers was a real crunch time. We always asked for copy to reach us well in advance, but human nature and Pi members being what they are, the bulk of articles arrived late in that week. Of course, we never wanted to discourage anyone from submitting, even at the last minute. I remember my parting quote to the office staff on that Friday afternoon would be, "The night is dark, the forest deep, but I have promises to keep, and miles to go before I sleep." We traditionally spent the entire weekend working on the newsletter with only a small amount of time taken off for sleeping and eating. My teenagers referred to themselves as Pi orphans. But in the end we made all dead-

"The Urbans' association with Washington Apple Pi was a long and rewarding one. By the way, it was I who suggested the name Washington Apple Pi for the group."

lines and published each month. It would never have been possible had we not had the love and appreciation of the members.

I would like to recall a few more members in addition to those I have already mentioned. There are so many others I won't be able to mention due to time restraints and failing memory, but here's some of them. Marty Milrod, Rich Wasserstrom, Boris Levine, Robert Johnson, Ralph Begleiter (author of MacNovice column for many years), Rosemary Connelly, Ken DeVito, Lou Pastura, Lee Raesly, Howard Lefkowitz, Charles and Nancy Phillip, Bernie and Paula Benson, Jay Thal, Ron Wartow famous for games, David Granite, Bill Hanrahan, Don Kahler, Eric Rall, and Amy Billingsley who hosted Apple Teas.

*Gena Urban*
*April 26, 2003*



*Tom Warrick (left), Bruce Field and Bernie Urban in conversation (date unknown). Photo courtesy of Gena Urban.*

# Pi 25<sup>th</sup> Anniversary Honorees

S INCE ITS *founding, the Pi has greatly benefited from hundreds of thousands of hours of expert volunteer labor, devotion, passion and determination. It is impossible to mention all those who have played major roles in the Pi's birth, growth and development, but a few individuals representative of this long history were honored with commemorative clocks at the April 2003 General Meeting.*

**Gena Urban** — Gena was one of the world's first computer programmers, with only Ada Augusta Lovelace and Grace Murray Hopper holding much seniority for the title. She and her husband, Bernie, were among the founding members of the Pi and played major roles in the early years. They put out the first Pi newsletter, and held early Board meetings in their home. When the Pi moved out of their home into rented office space, they also served as the Pi staff for many years, editing the *Journal*, running the office and organizing monthly meetings and running the reference library, plus handling any other tasks that needed to be done.

**David Morganstein** – David became Member #1 through the random assignment of member numbers at an early meeting, and tried hard to live up to the honor, serving as an early Pi president. In his four years of office, he took the club from 500 members to 5000.

**Paula and Bernie Benson** – The Bensons hosted Apple "teas" for new members as a non-threatening introduction to the world of personal computers. Bernie Benson and Phil Shapiro created Apple ][ educational software and distributed it through the Pi. Bernie also came up with the idea of holding a beginners "pre meeting" before the General Meeting.

**Carole Weikert** – Carole supported the Pi for many years through simple acts of tolerance and wisdom: she tolerated the hours her late husband Dave spent in Pi activities, and she offered wise counsel to other computer spouses, male and female, who found themselves bewildered by the fascination with Apple computers. Her husband Dave served as the Disketeria Chairman and as club

treasurer for many years. Dave was also a member of the TCS crew for many years, and served as the Pi's E-mail server administrator from late 1997 until his death. Carole also served as a member of the Washington Apple Pi Board of Directors.

**Tom Warrick** – Tom was the first Pi "legal beagle" and one of the original Hotline helpers, and did the Question and Answer sessions at General Meetings. He set up the first Pi computer bulletin board in his home, the foundation of the current TCS system, using Apple II computers. He also served as Vice President and was President of the Pi in 1986-87.

**Lorin Evans** – When Pi members turned fickle and started to turn away from the Apple IIs in the late 1980s, adopting the upstart Macs, Lorin continued to embrace the Apple II. While serving as Vice President for Apple II programs in 1991, Lorin was reluctantly dragooned into serving as President by the Pi Board, and was unable to escape from the job for eleven years. During his tenure, large user groups around the world started to die off, but under his leadership the Pi stubbornly battled against the trend and survived. He formalized the Pi's computer reclamation project, gathering together electronic cast-offs and, with the help of volunteers, turning them into entire suites of computers, printers, software and peripherals that were then donated to schools. Lorin also served on the Apple User Group Advisory Board, and still serves as the Chief of the Tuesday night crew and the Reclamation Project

**Beth Medlin** — Beth was appointed assistant Office Manager in late 1991. About six months later she found herself suddenly appointed as the office manager – without an assistant — and served in that position until January 2002. In her first two years her strong sense of organization and acute perception of member needs helped turned WAP from a user group that was losing money into one of the few that survived into the 21<sup>st</sup> century. Her work ethic is legendary: Tom Witte says, "I may have been master of ceremonies at several Garage sales but Beth did *all* the work for the first few years before we moved the sales to NOVA and it was *lots* of work."

**Jon Thomason** – As a 14-year old Pi member, Jon became the 100,000<sup>th</sup> caller to the TCS, and won a tour of the TCS. He never left. He volunteered to re-write parts of the TCS software to make it more efficient. Then he rewrote other parts. Then still more parts. Eventually he rewrote the entire TCS to the point where it was the larg-

est multi-line Apple II-based bulletin board in the world. Then he added USENET news feeds. Then Internet-based E-mail. Eventually the TCS morphed into what it is today: a powerful multi-user Internet-based forum that serves as the Pi's 24-hour general meeting, a place to ask questions and tell jokes and trade recipes at all hours of the day or night. Jon has also served as a Pi Board member, and authored a number of *Journal* articles.

**Dave Ottalini** – Dave practically invented the post of Vice President for Publicity, using his media contacts to spread Pi press releases around the world. A member of the Tuesday night crew, Dave is also a world-renown expert on the Apple ///. He served as the Apple /// SIG chairman and spearheaded further development of the Apple /// operating system after it was abandoned by Apple. He is currently working on a massive DVD project that will collect an entire library of Apple /// software and reference material on one thin plastic disc.

**David Harris** – David is a long time Pi director who has his fingers in many areas of the Pi. As part of the TCS crew, he maintains the Web calendar, and created the internationally-renown directory of user group Web sites! He posts lots of info on the TCS, ranging from science news, to special user group discounts for hardware and software. He monitors other user groups, and headed our newsletter exchange. He is one of the principal office volunteers, and keeper of the Pi membership database.

**Lou Dunham** – Lou has been the Chief Sysop of the TCS Crew for several years, helping coordinate the long transition from an Apple II-based system to our current Internet and Web-based set of services. He is a former Board member, and a long-time member of the Tuesday Night Clinic crew.

**Brian Mason** – Brian succeeded Walt Francis as the Pi Librarian, and oversaw a massive cataloging effort in the mid-1990s. He was also the instigator and main volunteer in an effort that led to the donation of 23 shipping boxes – 60 linear feet — of Pi archival material to Stanford University's computer history collection. Brian is also a former Board member.

**Kathryn Murray** – Kathryn is, like all *Journal* editors, a long-suffering *Journal* editor. Each issue she attempts to create a polished *Journal* from graphics submitted in unknown formats, electronic text created by exotic word processors, and language that is definitely not English. When people submit things long past deadline and there

*"It is impossible to mention all those who have played major roles in the Pi's birth, growth and development, but a few individuals representative of this long history were honored with commemorative clocks at the April 2003 General Meeting."*

is no opportunity to check for spelling and grammar errors, she accepts the blame. When people offer praise for exceptional work, she shares it with others.

**Lawrence Charters** – Lawrence joined the Pi the day after he moved to the East Coast, and has served as the Pi Vice President for Programs, Pi Secretary, and on the Pi Board. The author of over a hundred *Journal* articles, he is also the Macintosh Editor for the *Journal*, and contributed hundreds of photographs. Lawrence was the 500,000[th] caller to the TCS and is a member of the TCS Crew, where he serves as the Pi Webmaster.

**Tom Witte** – Tom is a former Board member, long-time chairman of the Garage Sale, and Vice President for Administration from 1993 to 1999. An audio-video and HyperCard guru, he hosted the Question and Answer session at monthly meetings for many years. He is a Hotline helper and has written many articles for the *Journal*. He taught Tutorial classes and organized and ran the Pi presence at FOSE and MacWorld for several years.

**Paul Schlosser** — Paul is a member of the TCS Crew, and a former Chief Sysop, famed for repairing ancient computer equipment with unique and original parts, including on one occasion aluminum foil from a lunch sandwich. He supervised the TCS from its transition as a dial-up computer bulletin board to a suite of Internet-based services, and currently serves as the E-mail administrator. A former board member, Paul also teaches Photoshop classes for the Pi tutorials, and is a publishing and printing wizard.

**Dale Smith** — Dale was a long-time member of the Pi Board, and one of the helpers with the Pi Fillings CD series. He has helped beta-test a number of commercial telecommunications packages, including Mozilla, and is currently the Tutorial computer update person. ■

# Elections—We Did It!

YET ANOTHER yearly duty of the Pi has been accomplished. We have closed out of our old year and started a new one by holding our annual elections. This process is more time consuming and involved than what shows on the surface and we owe a major thanks to all who helped.

First of all, to the Election committee for keeping the board moving along in a process that takes a full six months. There are many deadlines and we met them! Steve Fink, the election committee chairman was the main worry wart. He kept all of us up to speed on what needed to be done and by when. Craig Contardi, the Pi BOD secretary, was the main paper pusher on behalf of the board and he was a great help. Nancy Seferian was in charge of making sure we had names to fill the ballot and she had great success due to all of you who kindly offered to run for office. Thanks to Nancy and the rest of you! Paul Schlosser was in charge of getting the ballot and information insert ready for publication. Paul, you did a great job! Next we had to get out the vote and we owe thanks to all of you who voted and encouraged others too. Steve Roberson deserves a special thanks for donating a roll of stamps for members to use at the May meeting to send their ballots on to the vote counters. Those people included Steve Fink and Seth Mize. We appreciate your work on Memorial Day weekend, no less.

The new board is in place and we want to take a minute to thank those board members who served last year, but who did not return. They include Len Adler, Will Byrd and Cheryl Parker. Thanks for all that you did to help us last year. We really appreciate your efforts.

At the end of the election process, we had one position that was unfilled. Dick Sanderson who was our treasurer last year had agreed to return to that position. We really appreciate what he did last year and we promise to find him more help this year. John Barnes , Gene Haddon and Grant Peacock filled the empty BOD seats and once again the Pi Board is back in business and already hard at work preparing for another year.

The complete Board of Directors for 2003-2004 is: Pat Fauquet President Lila Bednar VP Membership Hal Cauthen VP Programs Dave Ottalini VP Publicity Steve Roberson VP Volunteers Lou Dunham TCSO Craig Contardi Secretary Dick Sanderson Treasurer John Barnes Director Herb Block Director Gene Haddon Director David Harris Director Jim Little Director Nancy Little Director Grant Peacock Director Jim Ritz Director

We have a lot to do this year and we can always use a few more volunteers. If you have ever thought about giving a little of your time to our great organization, drop Steve Roberson, our VP for volunteers a note at vpvolunteers@wap.org to let him know what area of the Pi's programs might be of interest to you.

There is a movement to conduct our next election via the web. We are discussing itw feasibility and the by-law changes to make that happen. Just remember that we will begin this process again in January and it is never too soon to begin considering giving the Pi a hand.

*Pat Fauquet*



*Many people think the TCS Crew is composed of a bunch of highly skilled telecommunications gurus who come together for the sheer technical thrill. But, in fact, we come together for food. (Photo by David Harris)*
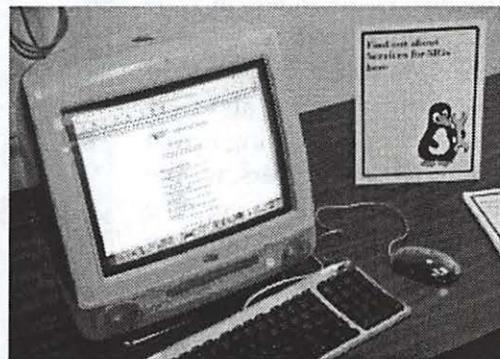


*TCS services for SIGs include mailing lists, SIG Web sites, and their own bulletin boards on the TCS. (Photo by David Harris)*

# June Computer Show & Sale



*New as well as old. (Photo by David Harris, taken with a Minolta DiMAGE X digital camera.)*

THE JUNE Computer Show and Sale drew over three hundred WAP members and friends to the NVCC Annandale gym to buy and sell Macintosh computers, software and accessories from thirty-eight vendors including twelve new ones.

Of course, an event such as the Garage Sale would not happen if it was not for the efforts of our members. Our biggest thanks must go to Ned Langston who chaired the event. He has also been making copious notes to make it easier for other to learn how to take his place. I will be taking those notes to the User Group Leadership conference that will take place in New York during MacWorld Creative Pro in July.

We also owe a huge thanks to Dave Ottalini who not only provided great publicity, but also contacted companies to provide door prizes and give-aways for the day. The event really started on Friday evening when the set-up crew went to work. They included Jan Bailey, John Barnes, Hal Cauthen, Paige Counts, David Harris, Jim and Nancy Little, Dick Nugent, and Dick Sanderson.

Saturday included even more volunteers including John Barnes, Lila Bednar, Abe Brody, Hal Cauthen, Ken and Teague Clare, Cindy Cole, Paige Counts, Lorin Evans, Pat Fauquet, Steve Fink, Grace Gallager, Dave Granata, Dave Groover, David Harris, Bing Inocencio, Bob Jarecke, Ned and Marylou Langston, Neil Laubental, Jim and Nancy Little, Dik Nugent, Bob, Colleen, and Mary O'Brien, Dave Ottalini, Jim Ritz, Dick Sanderson, Dale Smith, Jean Wade, and Dan White.

In listing names, I am sure to have missed a few of our wonderful helpers, and I do apologize. However, the nicest thing is that in addition to our long-time helpers, we see new names popping up. We thank everyone who helped and really appreciate our new helpers for they are the future of Pi activities. ■

*Pat Fauquet*
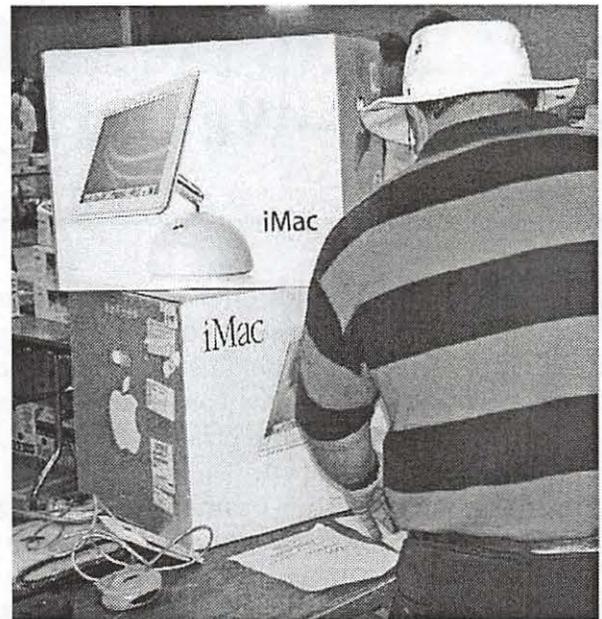


*I did all I could, Ma'am. (Photo by David Harris, taken with a Minolta DiMAGE X digital camera.)*
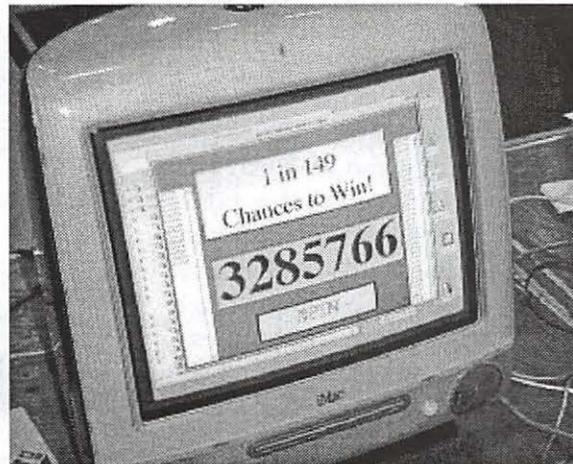


*We don't call it gambling. (Photo by David Harris, taken with a Minolta DiMAGE X digital camera.)*
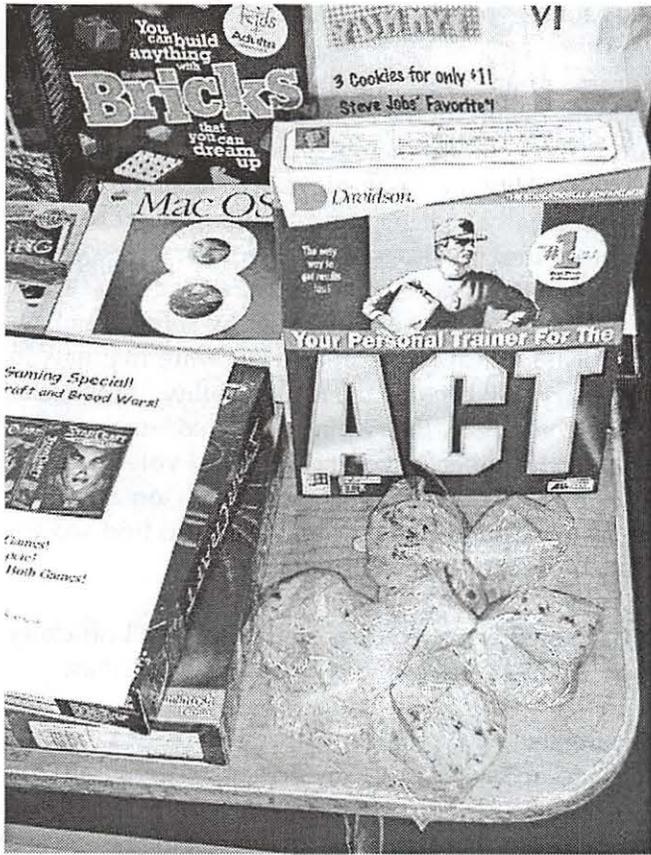
*Steve likes 'em. (Photo by David Harris, taken with a Minolta DiMAGE X digital camera.)*
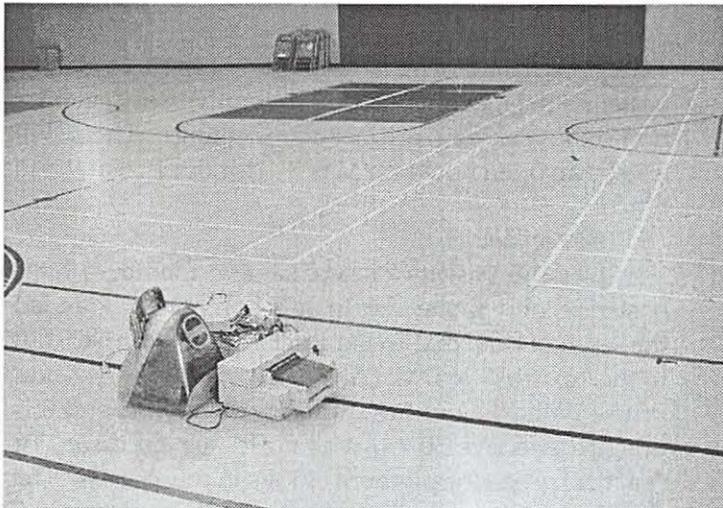


*The end is at hand. (Photo by David Harris, taken with a Minolta DiMAGE X digital camera.)*

# June 2003 Garage Sale Drawing Winners

### by Ned Langston

EVERYONE IS a winner at the Washington Apple Pi Computer Show & Sale (a.k.a. Garage Sale). However, some people take home a little more than others do. The Pi holds frequent drawings for merchandise and gifts during the show hours. If you paid admission to the show or are a vendor, you are eligible to win.

Some of the gifts came from Macintosh software vendors and some were gifts from the trade shows. The best prize was the OS X system package complete with the Jaguar upgrade. For the kids we had some balls with lights that flash each time it is bounced. If your child won, you have my sympathy.

Who knows what we will have for prizes at our Fall 2003 sale? See you on Saturday December 13! Here are the prizewinners for the June show. I could not always read the hand writing so I apologize in advance if I misspelled your name:

| | |
|---|---|
| Jan Bailey | Cable lock |
| L.M. Beck | T-shirt |
| Jeff Boland | Personal Organizer 4.5 |
| Marilyn Church | Personal Organizer 4.5 |
| Teague Clare | Personal Organizer 4.5 |
| Adam Cohen | T-shirt & Pi Grab Bag |
| Stephen Grass | Pi Grab Bag |
| Roy Jang | Retractable modem cable |
| J. Jennings | Adaptec T-shirt |
| J. Kelty | Aladdin Stuff-It |
| G.T. Keplinger | OS X Update |
| Mike Laughlin | Pi Grab Bag |
| Bob Manka | OS X.2 (Jaguar update) |
| Mark Nesley | T-shirt |
| Bob O'Brien | Retractable modem cable |
| Janet Russell | OS X Missing Manual, 2nd Ed |
| Bob Russell | Jaguar T-shirt |
| Matt Scandalis | Poster OS X |
| Kevin Wilson | Aladdin Systems Spring Cleaning ∎ |

# Minutes of the April 9 Board of Directors Meeting

AS JIM RITZ worked feverishly to photocopy the freshly-minted minutes from the March board meeting, President Pat Fauquet called the meeting to order shortly after 7:30 pm.

**Treasurer's report:** Dick Sanderson could use a helper/auditor, who need not have an in-depth accounting background, merely some spare time.

**General Meeting:** Pat commented on the significant remaining interest in OS9, and that perhaps those more interested in that 'classic' Mac OS would be well served by a sidebar meeting place when the primary general meeting topic is 'X-only'. Our current meeting arrangements at NVCC may not be ideally suited for such a dichotomy. Our two key needs are ample parking and room for at least 250 people; Virginia is preferred as a balance to the Pi offices being in Maryland. The discussion was tabled to a future meeting since we have a contract with NVCC through the end of 2004. Pat mentioned the need for a volunteer to serve as liaison with NVCC.

The minutes for March's board meeting, having made it off the copier successfully, were reviewed and approved.

**Garage Sale:** Ned Langston, acting coordinator for the semi-annual Pi "Garage Sale", indicated he wanted to start appointing the current slate of volunteers to specific tasks/duties for the June iteration. In the past, a misunderstanding that the loading dock shift required physical effort apparently kept people from agreeing to work there. In fact, that person need only "direct traffic" as the vendors unload their inventory and sign in. Nancy Little agreed on the spot to work a loading dock shift now that she understood the facts. Pat suggested rewarding volunteers, especially the "early-birds" that have already stepped forward, with Pi logo items from CaféPress. Ned is still in need of an under-study for the job of garage sale coordinator.

**Library:** Brian Mason (librarian) spoke to the board about the decline of the Pi library as a member benefit. Only 20% of current members expressed an interest in an updated library. Brian suggested the space in the Pi office currently housing library holdings might best be used for other purposes. Pat stated that single copies of the Apple II and /// holdings, and of any "landmark" Mac books, should be kept by some organization for historical importance. Hardware manuals in the library will become the responsibility of the reclamation committee. Everything else could be sold, given away or the paper recycled. The board voted to close the library. Dave Ottalini and Brian Mason agreed to canvass any sources they can think of to find worthwhile homes for the historic stuff.

**Office staff:** Down to three volunteers, still officially open 11am — 2pm Monday/Wednesday/Friday.

**Volunteers:** VP/Volunteers Steve Roberson asked for a "heads-up" when a new member joins the Pi, as they are even better candidates for volunteering than renewing members. He expressed an interest in authoring a bi-monthly message to all members with volunteering opportunities; Pat suggested doing it monthly, and offered to include Steve's prose in her monthly "Presidential email".

**TCS Committee:** The new version of the TCS will be unveiled the morning of the 25th-anniversary celebration (which is the April general meeting). There will also be an open house on May 3rd for the TCS at the Pi office.

*There will be food.*

Over the past few years, several members have hosted second phone lines in their homes that extended the reach of local dial-in Explorer access to the TCS out to the "exurbs" of D.C. (Anne Arundel, Loudoun and Prince William Counties). The board voted to end this practice effective 30 April as no longer necessary or practical given the plethora of ISPs in those areas. The TCS Committee will notify those members of the vote.

**Publicity:** Dave Ottalini will be on Your Mac Life with Shawn King to publicize our 25th-anniversary gala, and continues to do the same with local print media. In other news, Alien Skin will send stickers for distribution (tchotchke or door prize) at the June Pi garage sale.

**Tuesday Night Clinic:** There have been more clinic volunteers than customers lately.

**Computer Reclamation:** "Reborn" machines are moving out the door, but donations are coming in even faster.

**New York Bus Trip:** Jim Ritz still sees our bus trip as extremely worthwhile, regardless of what its name ends up becoming. According to Chuck Joiner (User Group Connection), there will be user group activities as with past Macworlds, including User Group University. Cost for UGU is $30 Early Bird/$50 standard for the one day.

**25th Anniversary Gala:** - Shawn King will arrive Friday night and have dinner with anyone interested in joining him. He'll also stay after the brunch for the LunchSIG at Ribsters.

**CafePress:** Lila Bednar placed a large order for 25$^{th}$-anniversary commemorative t-shirts, golf shirts, clocks, mugs, black hats. Board members were asked to buy and wear the golf shirts at the 25$^{th}$-anniversary gala, which will be available to anyone after the brunch.

**CD/DVD Burner Purchase:** Lila Bednar found two competitive prices on the featured burner from two Internet vendors. The Board voted to recommend that the membership approve purchasing the unit.

**Apple ///:** Dave Ottalini reported that Bob Consorti of On-Three fame will allow the Pi to scan his magazine/newsletters in but must do it alone. We can pay him a royalty if we like. This will be a bridge to doing the same with the old journals.

**Pi Officers:** Cheryl Parker has tendered her resignation as she is moving out of the area. It will be effective May 25th; no replacement will be made as the election cycle is imminent.

**NBC Digital Edge Expo:** we need a POC as last year's coordinator has elected not to do it again. It will be held some time in September.

Meeting adjourned at 8:45pm EST (unfortunately the U.S. had switched to Daylight Savings Time 4 days prior, so the clocks all said 9:45 pm). ∎

# Minutes of the May 14 Board of Directors Meeting

**P**RESIDENT PAT Fauquet called the meeting to order at 7:40pm

Also present were:

Len Adler (Director)
Lila Bednar (Director
Herb Block (Director)
Will Byrd (Director)
Hal Cauthen (VP/Programs)
Lou Dunham (TCS Committee Chair)
Jim Little (Director)
Nancy Little (Director)
Dave Ottalini (VP/Publicity)
Cheryl Parker (Director)
Jim Ritz (VP/Membership)
Steve Roberson (VP/Volunteers)
Dick Sanderson (Treasurer)
Carole Weikert (Past Director)

Pat commented on how well the 25$^{th}$ Anniversary Gala went. She enjoyed being able to put faces to names for many 'legendary' past Pi members. There are still a few limited-edition CafePress items remaining (T-shirts, mugs, etc.) Dave Ottalini will assume management responsibility for the Pi's Cafepress site from Lila in the coming month.

## Committee Reports

**Treasurer:** Proceeds from CD and raffle sales at the April general meeting totaled $424.

**Office Staff:** Nothing to report. Volunteers to staff the office are still very much needed.

**TCS:** The TCS open house (there was food…) was a big success, according to several of those present who attended.

The single DSL line servicing the Pi office is becoming

saturated at times by those accessing our web content and by the classroom Macs reaching out onto the Internet. Lou Dunham proposed the purchase of a second broadband (DSL or cable) connection to alleviate the bottleneck. After lengthy discussion, the board voted to purchase a business-class DSL line (in addition to the current one) and to drop three dial-in TCS Explorer lines to keep the total telecommunications expense stable. If the frequency of busy signals for Explorer subscribers increases as a result of the reduction in phone lines, the Pi can restore some or all of them. Many Pi members subscribe to TCS Explorer as a fallback means of Internet access for their cable or DSL modem.

**Garage Sale:** Ned Langston will contact the table vendor in mid-May to reserve 100 tables, and will contact anyone who's ever volunteered for whom we have an email address. He will also send the vendor notices out this coming week. We can have a live internet connection for $25 but will need to overcome a physical networking problem to actually put it to use (the jack is Token Ring, not Ethernet). Jon Thomason will supply the necessary hardware to connect to Token Ring.

Pat Fauquet suggested the Pi might want to undertake a true expo-like show next year in lieu of a flea market format; March is a good month to have such a show for several reasons (major vendors are in town for FOSE and are more likely to attend our expo if it's on the prior or following weekend, and there may be an increased market for an east-coast expo now that Macworld New York is CreativePro). Initially the Pi could hold the expo at NVCC (our regular meeting place) and consider a larger venue if things go well. Dave Ottalini and Hal Cauthen will form an exploratory committee, and the issue was tabled until next month.

**Publicity**: Dave Ottalini reported that the Pi received a nice write-up in Dave Zeiler's Sunspot column in the Baltimore Sun newspaper. The other good news is that Aladdin Systems was generous enough to mail us a box full of their products for door prizes. THANKS ALADDIN!

**Tuesday Night Clinic:** "We'll be there when they need us", says Jim Ritz.

**Computer Reclamation**: There are still more donations than outbound machines, creating space issues in the Pi office (yet again). There is a new potential volunteer with availability on Mondays.

**DVD Burner Purchase:** Lila Bednar, who did the necessary research on models and price-comparisons, will confer with Treasurer Dick Sanderson to order it.

**Macworld CreativePro Bus Trip:** Reservations are running behind last year's number; The total number of buses chartered will be based on the reservations as of June 1.

On the subject of Macworld CreativePro, Pat mentioned that there will be a User Group Leadership Conference on Tuesday July 15. Early registration carried a discount, but by the time this summary goes to press the deadline will have passed. UGLC cost includes 4 workshops plus a wrapup pizza party.

**Pi Election:** Board members will hand out Pi Journals (with ballots) at the May meeting and allow people to cast their vote there if they had not already done so. Once the new board is seated, Pat will motion for a Pi leadership retreat for the directors, officers and SIG chairs. She already has approached Pi member "Moody" Al-Darwish about serving as the facilitator. will run for free. A suitable location has not yet been chosen; Hal Cauthen volunteered to inquire about the availability of the Army-Navy club in Arlington.

**General Meeting:** Pat passed out the room schedule for the coming 18 months. If we like, we can rent a second classroom (see OS 9 comments in the April Board minutes).

**iMovie SIG:** There is 2.5 hours of raw footage from the 25th-anniversary brunch, so some guidelines are needed for what product(s) are best derived from that much video.

**TeenSIG:** Will Byrd announced he is moving out of the area so a new SIG sponsor will need to be anointed.

Having completed all agenda business, Pat adjourned the meeting at 9:41pm ∎

# Mac OS X Bootable CDs

*Creating a bootable compact disc under Mac OS 9 and earlier is not much trickier than creating any other sort of custom CD. Mac technicians routinely create and carry their own custom "rescue CDs" which boot into Mac OS 9 and provide convenient access to important disk utilities and installers.*

*Building such a CD with Mac OS X is considerably more difficult, as the underlying OS has trouble booting from a read-only device. But there are tools to help, as member Dan White explains in a message nominated among the "Best of the TCS".*

I have made an OS X Booting CD from scratch with the BootCD freeware utility.

For Mac OS X, 10.2 and up, <http://www.charlessoft.com/BootCD.dmg>

For pre-Jaguar, <http://www.charlessoft.com/BootCD-for-Puma.dmg>

I believe instructions come with it.

Shooting from the hip from about a week ago when I tried this at home, it works like this:

You run the utility on a working Mac OS X system. It creates a CD-sized image (you can specify the size. I picked 700Mb) and then extracts the necessaries from your running system to put onto the CD. It also asks which utilities you want on the CD. I messed up by installing a new utility in the middle of running BootCD. I should have installed the utility **before** running BootCD. Anyway, you take the resulting image and burn a CD from it.

Word of advice/warning: Mac OS X from a CD boots slower than (Pick your least favorite ISP) Customer Support. Be patient. When it finally boots up, it will have the name of the machine that you made the CD on. I did not totally explore it to see if it copied the network settings and such. ∎

*BootCD can be downloaded from <http://www.charlessoft.com/>*

# Rendezvous Is Not Napster

©2003 Jon C. Thomason

*Apple's Rendezvous networking technology is often mistaken for a music sharing service or other familiar application. The Pi's TCS Web site is a good place to go for clarification. When the iTunes 4.0.1 update narrowed the music sharing features of 4.0, one TCS participant blasted Apple for allegedly killing Rendezvous. Jon Thomason attempted to set the record straight with the following message, nominated among the "Best of the TCS."*

### Zero Configuration Networking

Rendezvous is Apple's brand name for a series of technologies they helped develop as part of the Internet Engineering Task Force's Zeroconf (zero configuration networking) working group. Together, their goal is to bring the famed simplicity of AppleTalk to plug-and-play ad-hoc TCP/IP networking. Individual parts of the suite facilitate assigning IP addresses, giving them human-readable names, advertising and discovering the services they provide, and a bit more that isn't much used as yet.

This is all about networking on a *local, unmanaged* network. It's for home users or small businesses without their own IT staff running a DNS server or even DHCP. People who would otherwise have to remember and hand-type "192.168.0...." whenever they want to do anything like share files or printers.

Anything that travels across the Internet is, by definition, *not Rendezvous.* The Internet already has that stuff covered by squadrons of trained professionals.

### Marketing The Unmarketable

Apple announced their support for this movement a year ago, to a roomful of software and hardware developers attending their Worldwide Developers Conference in May, 2002. It was abundantly clear within the building that those assembled understood the implications:
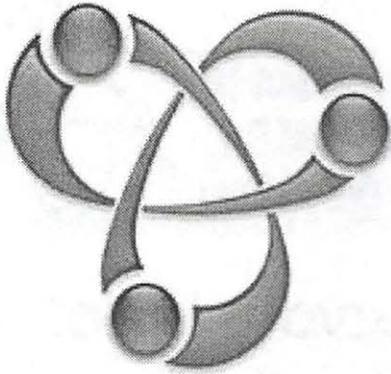
For more information about Rendezvous and the companies and products which support it, visit Apple's web site<http://www.apple.com/macosx/jaguar/rendezvous.html>

specifically that (with help from those present and the companies who sent them) we'll start seeing home networking become vastly easier in a fairly short order.

As developers embrace Rendezvous in their products, home gateway devices will become far easier to set up and will provide more services. Network-savvy printers can be built to communicate TCP/IP without any of the arcane setup that this has traditionally entailed. More interestingly, Rendezvous will pave the way for devices you wouldn't expect to be networked, to become networked. Wireless video cameras, PDAs, TV, stereo...

Of course, network infrastructure demos are always rather dry. To be certain they would seize developers' imaginations, Apple was compelled to demonstrate a little extra flash and pizazz.

So in traditional demo gimmick fashion, Apple



Orange signs (difficult to see in black and white) indicate systems slated for retirement after the current upgrades are complete. Note two critical components of the TCS: the Kleenex box threatening to fall off the shelf, and the Big Red Switch (partially out of the picture in the top middle of the screen). (Photo by David Harris)

tweaked a version of iTunes to be able to serve out its music list and share it with another copy of iTunes on the local network. And to the dismay of developers, many rumor sites took *this one gimmick* to be the entire promise and purpose of Rendezvous. (By logical extension, it might as well be said to be the promise and purpose of TCP/IP networking in general. We've of course *seen* file transfers before; what's new here is the way these two machines noticed each other and started talking without the need for some trained professional to have hand-configured a special server somewhere.)

The presenters stated up front that this was a gimmick. A "technology demonstration" meant only to show that Rendezvous is the kind of thing that can inspire clever developers to enable entire new worlds of networkability and sharing. Their more "on-message" demos involved real live printers and routers and video cameras. But like any other foundation network technology, it will take a while to get that support into products out in the field.

### The Dust Settles

OK—so flash-forward a full year. Mac OS X "Jaguar" is released to the public. Rendezvous has established itself for USB printer sharing, and for connecting to file servers: *It's finally managed to successfully replace the Chooser.* Linksys hasn't yet released their friendly home routers, but TiVo has jumped into a role embracing the iLife suite. A broad range of new ShareWare gizmos now share bookmarks, desktops, whiteboards, calendars... all sorts of things between local machines. And articles on the O'Reilly Network encourage pairing Rendezvous with the Apache Web server to facilitate informal intranet Web development.

Lastly, Apple has a new version of iTunes in the wings. Its primary feature is a new way to purchase downloadable content, but it also includes the feature they'd teased us with a year earlier: the ability to stream music between two Macs running iTunes. All copies of iTunes within a household network are put in touch with each other automatically, thanks to Rendezvous.

### Services vs Service Discovery

Now—it's important that you follow me here. The 4.0 version would talk to anyone who contacted it. If you set up your iMac in a fixed location on the Internet, ran a copy of iTunes 4.0, and told everybody where to find that machine, then up to five people at a time could contact it and browse through the music in your collection.

*This... Was... NOT... Rendezvous.*

Rendezvous is the behind-the-scenes part that iTunes

*iTunes 4.0 adds the Music Store plus any locally networked machines to its list of available music sources.*

While at the same time, new Web sites were presenting themselves with broad search engines designed to put interested collectors in touch with your Zappa collection.

This, once again, is separate from Rendezvous: Rendezvous would put your home Macs in touch *with each other*, but outside your home requires something like these Web sites to announce your collection to the world.

In other words, people were building a new ad-hoc Napster in two parts, both centered around iTunes. Apple needed to step out of the middle of this before it truly became dangerous to their music initiatives.

uses to automatically discover other copies of iTunes running on your local network. When your daughter opens her iBook, her music library appears next to Internet Radio as one more available source of content. This demonstrates the announcement and discovery of available services, which is one facet of Rendezvous.

All actual communication that takes place after the machines have found each other—the music sharing service being discovered—is a proprietary thing Apple created just for iTunes. It works over TCP/IP, and does not involve Rendezvous.

So when you post your IP address in a chat room and tell people that you've collected there all the known works of Frank Zappa, that's not Rendezvous. That's just you mouthing off in a chat room. Do you follow me, so far?

### They Will Come

Step a bit further: the open source community notices that the new protocol is nicely organized and fairly understandable. I have to say I did some of this myself: I've been playing with a few home jukebox ideas of my own for a while.

But then people started producing tools that would not just stream music but easily browse, select, transfer, and save songs to disk as pristine copies.

### Brace Yourself

So what *did* Apple do in iTunes 4.0.1?

They went back to the original "technology demonstration" and made it just so: iTunes will only communicate with other copies of iTunes on your local network. Just as originally demonstrated a year ago, and just as described in public ever since. It will no longer export your music into off-site collection pools. You'll just have to go back to using non-Apple software to do that for you.

The change had nothing to do with Rendezvous, except in that it reemphasized the home networking piece of the puzzle. And it didn't back away from any of the features that everyone has anticipated even after that popularly misconstrued demo of a year ago.

Well, that's my sermon. In this globally networked world I feel it's important to recognize that "sharing" and "networking" are not synonymous terms. ∎

*Jon is a software developer and network administrator, and is one of many regular contributors to the Pi's TCS discussion boards.*

# Playing Telephone on the TCS

O NE POPULAR game at both preschools and office parties is Telephone. You have one person pass on a message to someone else, and that person repeats it until the message has been passed on, one person at a time, to everyone in the room. You then compare the original message to the one heard by the last person. The results are almost always entertaining.

It would be just as entertaining to chart how normal conversation takes place at a party (or a preschool). Alas, tracking conversations is very difficult – but not on the Pi's TCS. This venerable combination of forums and computer bulletin boards, now in its 20ᵗʰ year, has a nifty feature for diagramming "threads" of conversation. Someone posts a message, other people reply to it, still others reply to the replies rather than the original message, and soon you have a thriving, multi-faceted discussion.

The accompanying illustration shows one such thread over the first 13 days of the newly refurbished TCS. Abraham Brody posted some information on upgrading Macs and – it was off to the races, with 54 messages in less than two weeks.

Are there any budding sociology PhDs out there? You could write a dissertation on how conversations diverge, merge, and otherwise move all over the landscape, and it is all nice and neatly charted for you, automatically, by the TCS. ∎

*In English classes, you probably had to diagram sentences — manually. The Pi's TCS diagrams entire conversations – automatically.*



# Power Users SIG

I N MAY, THE Power User Special Interest Group met at the Washington Apple Pi Offices to discuss troubleshooting a Mac. A variety of different suggestions were mentioned but everyone seemed to agree on a few basic principles.

- Learn how to reproduce the problem. Often the most difficult problems to track down are the ones that only happen once in a while under seemingly random circumstances because it's difficult to test solutions. If you can make the problem show up on demand then you're half way to a solution, even though it may not feel like it.

- Try to isolate the problem. Does it only happen to a user without admin privileges? Can you reproduce the problem on a friends machine? As one might imagine a geeky Sherlock Holmes saying "The more you know about what isn't the problem, the closer you are to finding out what the problem is."

- Find out who else has had, and possibly solved, the problem. Between the Washington Apple Pi bulletin board ( http://webtcs.wap.org ) the various support areas on Apple's web site ( http://www.apple.com/support/ ) , specific software/hardware vendors and google for that matter, you're likely to find someone who knows something about your problem.

Abraham Brody went a bit further and offered up his recipe for troubleshooting a problem. One of the strengths of Abe's step by step approach is that you start with the easily accomplished steps and if they don't work, you move on to steps that are slightly more involved. Below is the 10 step list printed here with Abe's permission.

- - - - - - -Put it simple I am stating an order of troubleshooting techniques, and if at anytime the troubleshooting fixes the problem, you can stop right there:

1. If Applications unexpectedly quit, check if dumping their plist file in the Home -> Library -> Preferences folder fixes the problem.

2. Repair permissions after running Classic or booting into Mac OS 9. Repair permissions may be done from the Disk Utility in your Application's Utilities folder from Mac OS X if you have the ability to boot into Mac OS X, and from the Mac OS X 10.2 installer program's Installer menu's Disk Utility if you don't.

Under the Utility's First Aid tab you'll find Repair

Permissions button and that will become available after you select the hard drive to work on. Mac OS X 10.1.5 and earlier do not have this ability, though Apple has a Repair Privledges utility you may download from < h t t p : / / d o c s . i n f o . a p p l e . c o m / article.html?artnum=106900 > if you have Mac OS X 10.1.5 to do this same routine.

3. Test to see if the problem is system level or user level by creating a second administrative user. If problems persist for second user, look for system level problems.

4. Repair Disk periodically, and repeat the Repair Disk process up to four times if the errors don't go away. Do this especially if you ever had to improperly shut down the computer. If a Repair Disk continues to indicate problems, you will need to make a bootable backup of your entire hard disk to an external hard disk and then run Disk Warrior ($70 commercial software). If you can't afford Disk Warrior, once you verified you have a bootable backup, erase the original and copy back over the data from the backup. The easiest way to make a backup and recover from it is to use either Bombich Carbon Copy Cloner < http://www.bombich.com/software/ccc.html > or Dantz Retrospect Express (available commercially).

5. Reset the PRAM -
Hold down the command-option-p-r keys at startup and wait 4 chimes and no more. Command key is the same key as the one with the Apple log, and cloverleaf logo on some keyboards. If using a Microsoft keyboard you may not be able to successfully reset the PRAM or reset the nvram.

6. Reset the NVRAM -
Hold down command-option-o-f at startup
at the command-line screen type:
reset-nvram
followed by return key
reset-all
followed by return key
It should startup after you type reset-all.
Some people even type reset-defaults after reset-nvram, though I'm unsure at the present time under what situations that is necessary and not necessary.

7. Run the hardware test CD - if problems take to AppleCare.

8. Remove any extra RAM installed to see if the problem is RAM related.

9. Remove extra hardware and see if problems persist, and try changing ports for extra hardware. Try testing to see if problems persist with Classic environment on or off, or with internet connection on if you have a 56k connection. Be sure when removing any data stor-

age medium holder to drag the icon of the medium to the trashcan icon on the dock first before detaching it from the computer itself.

10. Archive and Install the operating system and re-apply any combo updates to get to the necessary system to run your existing software.

Many of these steps in more detail are described here: http://www.macmaps.com/Macosxspeed.html as means of optimizing Mac OS X, as optimizing Mac OS X also entails troubleshooting its weak spots. ■

- - - - - - -

*The Power Users Special Interest Group meets the first Monday of the month from 7:30 PM until 10:00 PM at the Washington Apple Pi offices in Rockville. Everyone is welcome. For more information see the Power Users web page on the Pi web site. ( http://www.wap.org/power/ )*
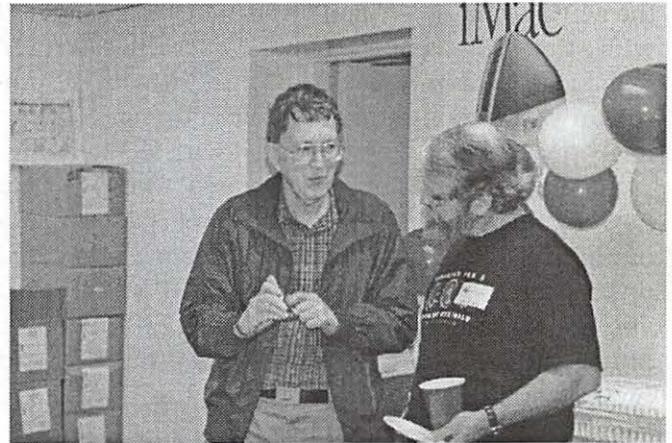


*TCS Crew member David Harris (left) and TCS Chief Sysop Lou Dunham examine the latest Star Trek communicator technology. (Photo by Richard Sanderson, taken with a Nikon D100)*



*TCS Software Architect Jon Thomason poses in the TCS Room with some of his look-alike friends. (Photo by Richard Sanderson, taken with a Nikon D100)*

# Graphic Arts SIG— May Meeting



THE MAY meeting of the Graphic Arts SIG was held at Mac Business Solutions with more than 25 eager attendees anxious to learn more about digital photography. Our guest presenter was Dave Freeman, avid photographer, retired chemist and emeritus professor at the University of Maryland. (Dave recently completed a years' internship in art conservation and art photography at the National Museum of Art).

The topic was: "Digital Photography: The how, the why and the wow" and Dave more than delivered with a thoughtful, informative and interactive lecture/demo for all present (See Photo 1). Along with the presentation, he brought equipment and engaged in a lively question and answer format with all attending.

Beginning with the basics, Dave showed the group how to understand the most important characteristics of digital photography; what you need to know and understand to buy a digital camera that will do what you need without spending too much or buying too little. The topics of "megapixels", "resolution" and image compression were all covered in a clear and straightforward way (See Photo 2).

The advantages of digital "film" were discussed and emphasized. Dave stated that he has gone completely digital (no film) and over the past two years has shot more than 15,000 pictures in places like Tur-



key, Greece and here in the Poconos and Shenandoah. Of course, with digital film, the need for backup and redundant copies becomes more important and several strategies to keep your images preserved were discussed.
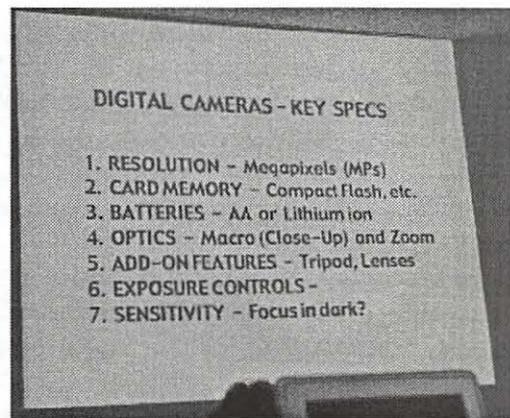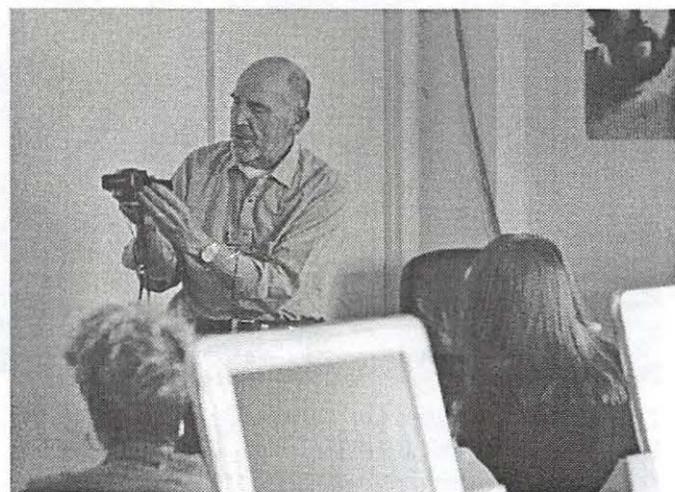
When the Dave finished the presentation, he was given hearty applause, and graciously remained to answer questions individually and there were many of those and some spirited discussions, too! (See Photo 3).

With the strong interest shown, the GASIG will have another meeting in September on digital photography, so if you missed this one, there is still time to join us and explore the new world of "no film, just fun!" For more information on the Graphic Arts SIG, see the website at: http://www.wap.org/gasig and consider joining the 'announce" list for reminders of meetings, and topics. To read previous topics, get a flavor for what sort of topics GASIG covers or to join the announce list go to: http://lists.wap.org/Lists/GraphicArts-announce/ ■

# Retired SIG—April Meeting

THERE WERE about eight people at the April 19th. We started out with some discussion about updating software by downloading and a little about combo updaters. The main program was about ways to get streaming radio, and about the use of i-tunes and Real Player and Windows Media Player. Members spoke of different ways of hearing radio such as from Macintosh Internet Radio, Real Player, Quicktime Pro and AOL. Others were using online radio stations.

At the May 16th meeting John Barnes brought in a show and tell of his first i-movie, a tour of real estate in his home neighborhood. He shared some of what he learned while making the movie. The main topic of the meeting was audio again. We talked about ways to convert our old forms of music to digital. Someone brought in a relevant article from Money Magazine, June 2003. John showed us various kinds of preamplifiers for conversion to digital outside the computer, and different shareware for recording incoming sound. There was lots of Q and A about all this, as members seem to have large libraries of LPs waiting to be converted. There were eight members present.Next time we will address the topic of mail again. Perhaps we will hear from vacationing members about their experiences with internet cafes!

There were eight members at the June 20 meeting.The topic was Managing your E-Mail. It was a survey of the field, a comparison of IMAP vs POP vs AOL. We learned about storing messages on the hard drive and maintaining records of e-mail transactions and communications. We discussed webmail and ways of accessing mail while away from the home computer.

The Retired SIG is a good daytime forum where anyone is welcome to come and suggest a subject for research and discussion. We look forward to seeing you. ∎
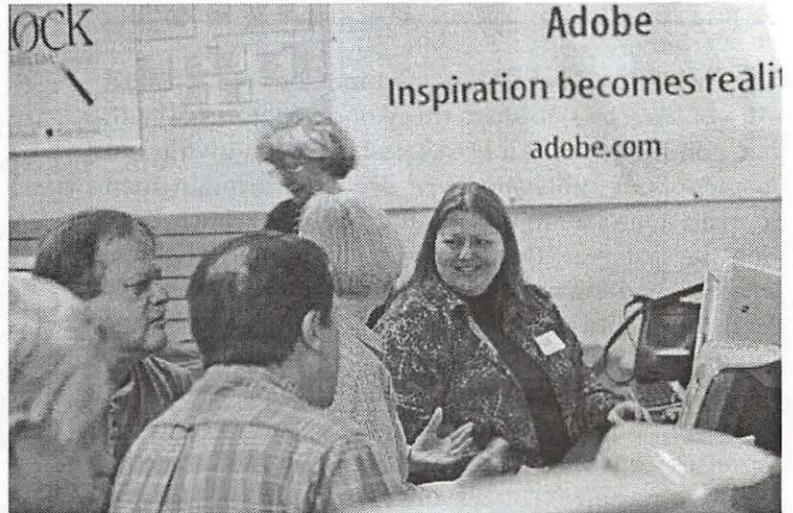


*In addition to food, the TCS Open House also featured hands-on demonstrations of TCS services in the tutorial room. (Photo by Richard Sanderson, taken with a Nikon D100)*



*Hands-on demonstrations covered: the TCS itself (a set of online forums that were the original reason for founding the TCS), E-mail services via Apple Mail, E-mail services via Webmail, and SIG services via Web pages and mailing lists. (Photo by Richard Sanderson, taken with a Nikon D100)*

# Help Us Improve the Journal

by Len Adler

I 'VE LEARNED how, as a member of the Board of Directors, to share this wonderful Journal with non-members. All Directors have been giving out copies of our publication wherever people might open it, read it, and learn about our great user group. During the last year, I've left copies in computer stores, medical waiting areas (since I've gone to a doctor several times, and work in a big hospital). But also, I've given them to friends who are Mac users. I've met a lot of them, either at work, at Church, or elsewhere. I've been paid by getting some very enthusiastic responses from Mac users who never knew about the Pi.

I've gotten feedback often from non-members. Some said they like reading the magazine, but the articles are over their head. Some still use OS 8.5, or 9. Some were members in years past. We'd like to hear from you if you'd like this Journal to feature something different. Or if you like what you read, let's hear that too. Many members give many hours to put this together.

I'd really like to collect the feedback, and publish it in a future edition. Just drop a brief note to me at lenadler@sysnet.net ■

# A Request from the Editor

P HOTOS. WHAT A great contribution they make to any journal—helping to give perspective on a meeting or an event. They let you know what face goes with that name you've been reading for years. They serve great purposes.

And I'm always glad to have them and place them when and wherever possible.

What I've found though, is that they come at a cost. Often they come without captions. They are therefore of very little use to me. Then sometimes they come and are extremely large and need multiple adjustments before they can be used. Sizing, grey scale, dpi, lightening up, contrast, etc.

I'm not asking anyone to do it all when submitting a group of photos of an event. What I would appreciate (and I'm sure Lawrence would agree) is captions. Also, please recommend which 5 or 6 photos are the best and why. We can't publish everything and it is demanding to go through all the photos and try and select. Were there are folder of "Use these first!" and then "these are secondary" and then others. Well that would truly help. It would also mean that we wouldn't miss putting in a photo that you believe tells the best story. This is just another way to make the journal a better publication. ■

---

*Did you know that Wall Street Journal technology reporter Walt Mossberg used to write for the Washington Apple Pi Journal? You can too!* Contact Kathryn Murray, editor, at KAM129@aol.com

# The Tuesday Night Clinic Helpful Information and Tips

By Dave Ottalini and the Tuesday Night Crew

### Need a Fix????

WE ALL LOVE our Macs. They can do so many great things. And they last a long time. So when it breaks, the local Mac repair store may not want to deal with it. Where can you turn? There are individuals and companies listed in the phone book or in computer magazines like the WAP Journal that provide one possible answer. Another is 's dedicated group of volunteers who are available most Tuesday Nights at the Pi office from 7pm to ? to help. We are not an authorized Apple service provider, nor can we do warranty or AppleCare work of any kind. But if you have nowhere else to go, we can help get your Macintosh (or original Apple for that matter) back in shape. All we ask for in return is a donation and a smile.

Beyond repairs, if you have purchased a replacement hard drive, memory or software package that you are not comfortable installing yourself, we can help provide you with the guidance to ensure a successful installation. Our volunteers have a wide range of experience on Macs and Apple's from the earliest machines up to the latest G4s, iMacs, TIBooks and iBooks running OS X.

### What Should I Bring?

The answer to that question is: It all depends. But at the most basic, you only need to bring your computer – the "box" that is your Mac (or earlier Apple). We have cables, keyboards and monitors (some Macs have integrated monitors). Of course, if you want to install software, memory or a hard drive, please bring that with you. If you want us to check your email or Internet service using a modem, be sure to bring the modem you use (if it is an external model). We do not have the ability to check cable or DSL modems. If you are unsure what to bring, call the office ahead of time and we'll be happy to give you some suggestions.

We also have replacement parts and batteries that you can purchase if they are needed.

### Is There A Charge?

The Tuesday Night Clinic is staffed by volunteers who are users just like you. Because we are offering our assistance, we request a donation to the Pi based on the amount of time we spend working on your machine. When you arrive, we will ask you to fill out a form that asks for a little information about yourself and what you think is wrong with your computer. The form also explains what it means to have your Mac examined and if necessary, repaired or upgraded by a volunteer. There is no warranty for our work.

Why Repair Old Macs? Here's what a long-time WAP member says about why it makes sense to repair old Macs:

" Macintosh Computers are unique in the computing world in that they just keep working long after a PC has been replaced. Older Macs can do so many useful things. They can be an electronic typewriter, act as a server on a network or surf the Internet. If you've been turned down for a repair, Apple no longer wants to acknowledge you, your machine is out of warranty and you have no where else to turn, the Tuesday Night Clinic may be your answer."

###

*All it takes is a little help to install a modem.*
*Our Brain Trust at work.*
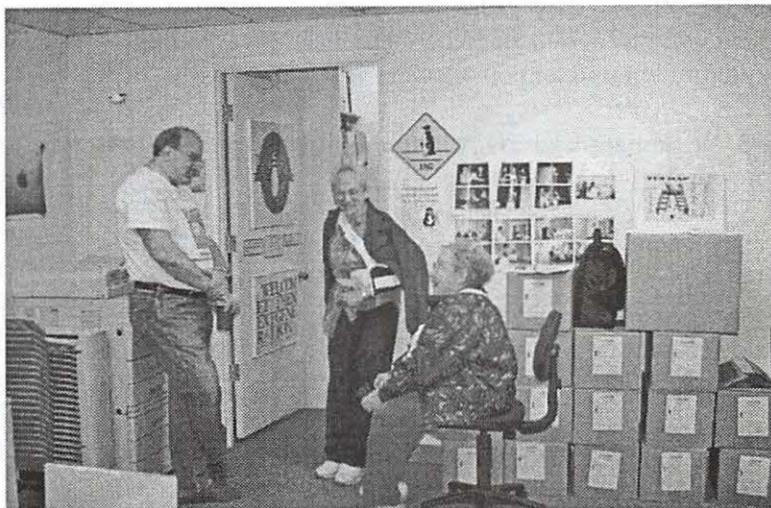
# Top Ten Hot Line Tips by a Pi a Hotline Volunteer

## #1 Think. Be nice.

The people that may help you are not paid. [Your dues pay for Journal and office space]. When you call, explain who you are, and ask the helper if it is a good time for them. If it is, be prepared to present your WAP number (it is on the mailing label of the Journal) and a clear description of what you want. Remember who you are speaking to. Try to not call the same helper three times in a row for advice just because their name is listed more than once on the Hot Line. Also, if you have call waiting - use *70 to turn it off before you call. It is really rude and unproductive to interrupt your help session for all those tele-marketers trying to sell you swamp things.

## #2. Think. Know what day and time it is.

If it is after 9 PM or before 9 AM or during the last minutes of the Superbowl or season premier of Star Trek, don't call one of the helpers listed in the Journal.

If it is daytime DON'T call the Pi office. The only time to call the Pi office for Tech Help is Tuesday evenings. Our office volunteer staff is there to run the business of the Pi. Beside the fact he/she probably knows less about your machine than you do, the time he/she spends telling the 30 to 50 people ,who call for Tech help each day, to use the hot line, can be much better spent making sure the Journal gets out on time or setting up a tutorial class or meeting site.

[If you really think we should have help on demand at the office, that is great. Just let me know what days you want to volunteer to be there, I can give you information that will let you answer most questions]

## #3. Be prepared. Know your name and complete phone number.

If you get an answering machine, don't hang up and call back every 5 minutes. Leave your name, phone number with area code, that you are a WAP member and a **brief** description of your problem. Make sure you mention if you are running OS 9 or X. If your call is long distance - tell the helper to call you back collect.

[If you don't leave the above info don't get mad when you don't get called back. I know this sounds really DUMB but I get one call a month left on my machine asking for a call back without a phone number. I even had one guy (Joe - no last name - no phone number) called back to the machine 4 times to complain that I never returned his call.] Also, if you don't have an answering machine, and you don't get a call back in a day or three, feel free to call a helper again. Most of us will only call a dead phone once or twice.

## #4. Be prepared. What?

Now. while your machine is running, find the application 'Apple System Profiler' and print out a report. At least 'System info' pages. If you have a really old Mac, while in the Finder select (under the Apple on menu bar) About this (Computer... Macintosh... ) then copy the information about your machine. [Or hit the keys shift Apple 3 at the same time, after you hear a click, hit command f and search for PICTURE 0 When you find PICTURE 0 double click on it and Simple Text will open the screen "picture" that you just took. Then print it. If it does not show your Macs model number look for a model number or name on the outside of the case.]

## #5. Be prepared. Words.

Look under the word HELP on the menu bar when in Finder. At least once select show balloons. Touch the things you see on your desktop - learn what word Apple uses for them. Words like Folder, File, Hard Drive, Window, Dialog box and menu bar work a LOT better over the phone than this thing or that one. Remember your helper at the other end of the phone can't see your Mac's Screen.

Checking out Macintosh Guide under the HELP menu on the menu bar is a good idea for everyone. Review Learning the Basics is a good idea for everyone. Taking one of WAP's basic tutorials is also a good idea.

## #6. Be prepared. Take notes

It really helps if you copy down the error message when they appear. Note- they can be a negative number. Sometimes the numbers or words really help. Don't sweat it if you can't or forgot.

## #7. Be prepared. Be close

Try to be in front of the misbehaving computer when you call. It is much harder to help when you have to run from room to room after each question. Have a paper and pencil ready. Often we may give you a list of things to try. Watching your Mac 'rebuild the desktop' is painful. Keeping a helper on line while you watch is abuse.

#### #8. Thing to try first.

- For most problems and weekly maintenance. Run Disk First Aid. DFA is a utility that came with your operating software.

In OS 9 it should be on a Floppy Disk named DISK TOOLS or an Apple CD-ROM. Use DFA to check that files being stored (on your hard drive or floppies ) are where they are suppose to be. Better yet get the latest version DFA, it is available on line and the Pi Fillings CD-ROM. This version will work on a start up drive, like Nortons'.

In OS X it is part of a program 'Disk Utility' which is in the utility folder inside the Applications folder. In OS X's Disk Utility you click on disk first aid tab and the name of the hard drive, then click on 'Repair Disk Permmissions' or 'Repair Disk' whichever is highlighted. [figure 1]

- In OS 9 if a program gives Type I errors. Try increasing the memory partition for that program. [Use the Get Info Command on the File menu of the Finder's menu. If you don't know what that is check out Macintosh Guide under the question Mark on the menu bar. Try trashing the preference file for that application.]

- Check all connections - Disconnect external items. This often fixes/ finds strange SCSI or USB issues

- Check <www.versiontracker.com> to see if you there is an update for your problem program.

#### #9. More help.

If no one is available on the Hotline, there are lots of other good source of information including our own TCS available by dial up. It is probably the best source of information. Its available 24 hours a day. And there are dozens of experts to help you with your problems. It is also available via the Interenet at webtcs.wap.org.

Apple's toll free 1 800 SOS APPL is there during business hours, even if it can take a long wait. This is only for a Mac under warranty.

Also <http://discussions.info.apple.com/> is a good source for useful information, for all Macs.

#### # 10. - Remember.

Life will continue even if your problem is not solved.

You are TAKING from the from the Pi's reserves of Givers, don't wait too long to return to the well to GIVE something. You don't have to be a computer expert to take membership flyers to your nearby computer store, or stuff envelopes, or run crowd control at the Tuesday Nite Clinic or ..... ∎
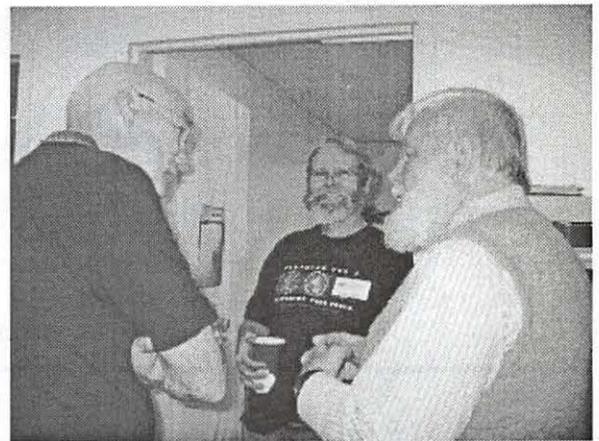


*Lou Dunham, Chief Sysop for the TCS Crew, stands in the door of the Pi's Reclamation Project room, listening to a discussion about the TCS. (Photo by Nancy Little, taken with a Canon PowerShot S40)*
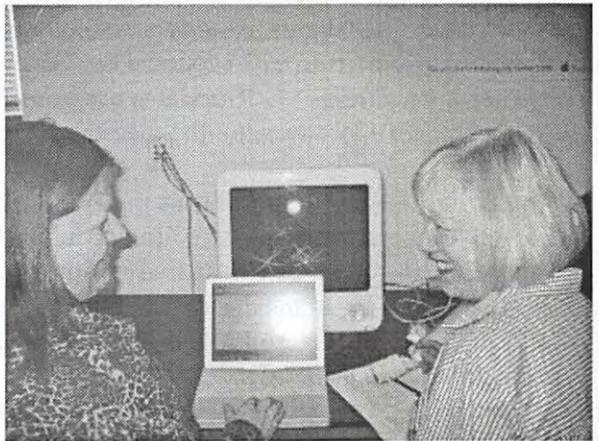


*TCS Crew member Lila Bednar demonstrates the TCS on an iBook (Photo by Nancy Little, taken with a Canon PowerShot)*



*Pi President Pat Fauquet, standing, listens to long-time TCS Crew member Dale Smith describe quantum carrier wave modulation harmonics in telephonic communications to former Chief TCS Sysop Paul Schlosser, left, and former Pi Office Manager Beth Medlin, right. (Photo by Nancy Little, taken with a Canon PowerShot S40)*

# A First Look at the G5 & OS X v10.3

by Lorin Evans

APPLE TREATED its developers to a double rollout at the World-Wide Developer's Conference in San Francisco, Monday June 23rd. It shared with them and the general public, its long awaited replacement for the G4 series tower and its next major release for OS X. Highlights of the over 100 changes which will be incorporated in v10.3 follows the G5 overview. Whether hardware or OS X updates are your bag, the keynote by Steve Jobs was not the place to doze off.

### G5 Highlights

The new tower incorporates almost all of the latest state-of-the-art technologies available to computer manufacturers. If you are in the desktop publishing business, audio, video, or any computational intensive whatevers, your box has arrived.

If your eyes are glazing over, there is good news for you as well. Because the G5 won't be available until September, there are some seriously good buys in new G4 towers and a throve of pre-owned machines [blue and white G3 and G4 towers] about to become available on the used market.

If you plan to stay in Mac OS 9 and/ or dabble in OS X, Apple has rediscovered you. At their on-line store, and probably available through your local retailer as well, is the final offering for the G4 tower. The line has been reduced to one model which (surprise!) is capable of booting into Mac OS 9. It use 1.25-GHz processors and includes a DVD-read/CD read-write optical drive. It is wired for an Airport [not Airport Extreme] wireless card, has USB 1.1 and Firewire 400 [not 800] built-in.

The list price is $1299 with a 1MB L3 cache, 256 MBytes of memory, 80GB ATA drive and a DVD/CD-RW "Combo" optical drive. Two "custom-built" models are priced at $1599 and $3274 with dual processors and 2MB L3 caches/processor. If you are tied to OS 9, this is your chance to acquire faster hardware that boots directly into that operating system as well as OS X. The basic model is the one to consider.

### Why All The Excitement?

First, and most important, what was unveiled is the beginning of a brand new architecture for the Macintosh, not an effort to extract another ounce of performance from the twilight of an architecture. The PowerPC 970 chip and its accompanying package of technologies is at the front end of its growth cycle. Second, this machine is optimized to move data. Each of the components that makes up the G5 has been redesigned to keep it from being a constriction in the processing cycle. To that end, the G5 features a 64-bit processor and 1GHz front-side bus. It can hold up to 8GB of memory and offers a processor chip made by IBM that is available in speeds of up to 2GHz.

In terms of hardware, it incorporates:

• serial-ATA hard drives

• the new PCI-X methodology for the expansion slots [one 133MHz and two 100MHz]

• AGP 8x Pro graphics slots

• SuperDrive (DVD-R/CD-RW) [DVD and CD read/ write]. SuperDrive reads DVD at 8x and writes at 4x to 4.7-gigabyte DVD-R discs.

port of symmetric multi-processing (SMP). SMP is the feature that allows Apple to claim to be the fastest personal computer available.

The new systems are also equipped with dual 1.5Gbps serial ATA interfaces and standard Nvidia GeForceFX 5200 or ATI Radeon 9600 Pro graphics cards (ATI Radeon 9800 Pro is available as an option should you order from the on-line store).

The Power Mac G5 is offered in three configurations:

• for $1,999, you get: 1.6Hz single-processor model, featuring 800MHz front-side bus; 256MB 33MHz Dual Channel (128-bit) DDR RAM, 4GB maximum; 80GB serial ATA hard drive; Nvidia GeForceFX 5200 Ultra with 64MB DDR; 3 33MHz PCI slots and 4x SuperDrive.

• for $2,399, you get: 1.8GHz single-processor model; 900MHz front-side bus; 512MB 400MHz Dual Channel (128-bit) DDR RAM, 8GB maximum; 160GB serial ATA hard drive; Nvidia GeForce 5200 Ultra with 64MB DDR; 3 PCI-X slots (one 64-bit, 133MHz, two 64-bit 100MHz) and 4x SuperDrive.

* for $2,999, treat yourself to a dual 2.0GHz system; dual independent 1GHz front-side buses; 512MB 400MHz Dual Channel (128-bit) DDR RAM, 8GB maximum; 160GB serial ATA hard drive; ATI Radeon 9600 Pro with 64MB DDR; 3 PCI-X (one 65-bit, 133MHz, two 64-bit 100MHz) and a 4x SuperDrive.

### iSight – Digital Camera

Steve unveiled Apple's new 30 frames per second digital camera/microphone that mounts most anywhere. Its output is Firewire which plugs directly into a Firewire equipped machine. It is designed to work seamlessly with the new iChat A/V to add a new level of angst to on-line life. It is $150.00 of broadband mayhem. The kids I deal with at school already want to know if they can connect iSight into an iPod so as record video to their music box. They then want to take it home and edit their creation via iMovie or FinalCutPro. Steve Jobs will tap into something with that camera.

### Highlights of the new OS X v10.3

• **New Finder** is an acknoweldgement by Apple that the current Finder is more for techs than the rest of us. Steve called the redesign a "user-centric Finder". It now

• three USB-2 ports. One is in the front of the case. Two USB 1.1 ports are in the keyboard.

• gigabit Ethernet

• has one Firewire 400 port on the front of the case and one 400 and one 800 port on the rear of the case

• built in 56k, v92 modem

• is wired for Airport Extreme and can be configured for BlueTooth

• analog and optical audio in/out. Headphone jack on front of case.

To house all this, Jonathan Ives, Apple's VP for industrial design created a strikingly minimalist all aluminum case.

Nine separate fans and a computer-controlled cooling system manage the heat output from the new hardware. The inside of the case is divided into four separate cooling compartments. Each processor is cooled by its own fan. Cables and assorted parts are kept to a minimum to avoid disrupting air flow. Apple claims it is quieter than prior Power Mac G4s.

The heart of the new Power Macs is the PowerPC G5 processor, developed by IBM. The 64-bit microprocessor features full support for 32-bit applications, and sports a massively parallel architecture that can handle 215 simultaneous in-flight instructions, features two double-precision floating point units and an optimized Velocity Engine. The processors are also designed for full sup-

shows all available volumes, your iDisk and favorite folders in the left column. The Places sidebar resembles the navigation you use in iTunes and iPhoto. Typically, you are now one click away from where you want to go. Other changes in the Finder speed up searches, reduce the need for scrolling and simplify display of file listings. I am not a fan of the brushed metal look. A piece of trivia: I suspect the two-faced blue face logo is back.

• **Eposé**, is a new user interface feature that allows you to take in your entire desktop at a glance. Let's say you have lots of windows open at any given time, and you are poking through open folders and documents just to uncover the one you need at the moment. Wouldn't it be nice if you could temporarily shrink and title all the open windows. Say hello to Eposé.

Tap the F9 key, and Exposé instantly tiles all of your open windows — scales them down and neatly arranges them, so you can see what's in every single one. That's not all. Move your mouse from one tiled window to the next, and you'll see its title displayed right in the center of the window. When you find the window you need, just click on it. Magically, every window will return to full size, and the window you clicked — whether it's a folder, a PDF, a QuickTime movie or a Word document — becomes the active window and at the very top of the stack. Eposé works via Quartz, the graphics engine behind everything you see in Mac OS X v10.3.

• **Fast User Switching** allows people in an office, a school or a household who need to share a computer, to see and use only their own data, including e-mail and personal contacts, customized desktop and applications. This makes it more convenient to have separate, personal user accounts for each member of a work group, a classroom or a family. With one keystroke, all changes to another layout. It is known around the Pi as the "Baldridge Memorial Effect" in honor of a long time member Bill Baldridge who year ago urged Apple to create such an option under Mac System 7. Back then, it was not an option.

• **Preview** is the built-in PDF viewer in 10.3. Preview is now three times faster than before. Preview now helps make the new built-in faxing feature a seamless operation. It has new features that makes working with text within a PDF document and copy it simpler.

• **Font Book** allows you to double-click any font in the Finder to see a preview. You can then install it with a single click. You can manage fonts individually or as groups, and you don't have to bother with special folders or locations.

• **Mail** has been reworked to make it speedier. Mail can now track multiple threads with the same subject line. Threaded messages group notes together in context, so you can file or delete them quickly. A new popup lets you see at a glance if someone's in your Address Book, and conveniently add an address if not. Mail now uses Safari's rendering engine. That means that HTML e-mail loads more quickly and displays more accurately. And for the spam you don't want, Mail offers more options for junk mail blocking.

• **File Vault** provides real security because nobody can rifle through your files without your permission. FileVault protects all the information in your home folder from the uninvited. Now you can completely erase sensitive files you no longer need. When you delete a file or folder, Secure Erase Trash makes sure that it no longer exists. Trash is immediately overwrites the file with random data, so that the file disappears and cannot be reconstructed. The contents of your home directory is encrypted using the Advanced Encryption Standard with 128-bit keys.

• **iChat/AV** will be a boon to the broadband business. Those last two letters and iSight will enable you, your family, friends, and co-workers no matter how far away they are to get lots of face time. There is a free download of the beta software to make this happen. After the first of the year, face time goes to $130.00.

Mac OS X v10.3 is to be released later this year and is a $30.00 upgrade. ■

# A Switcher's Tale

### by Lila Bednar

WHAT MAKES A person become a "Switcher"? That's a question easier asked than answered, I think. There are a lot of reasons, and they are as diverse as the people who switch. I've gotten more than a few incredulous looks when people see my Titanium Powerbook. Some regard it with envy, some as if it were a viper of some sort. And invariably the question comes: "What made **you** get a Mac?" Well, OS X did. But to see how that happened, I'll back up a few steps to the summer of 2001, back to the "dot bomb" era.

The company I had been working for was being reabsorbed into the parent company (for reasons I won't comment on here). Knowing I was leaving meant I had to give up my company PC laptop and other perks. I'd held off buying a laptop of my own for a number of years. Desktops were slower to become obsolete, and I knew that almost any company I'd work for would provide me with a serviceable PC laptop. But as I started stripping the personal files from my laptop, it occurred to me that this would be a good time to finally spring for a laptop of my own. One that I could have whatever I wanted on…one that I wouldn't have to return for an upgrade for yet another clunky laptop…one that I didn't have to have excess and cumbersome software on to satisfy a corporate directive. I finally admitted I was going to have to get my own.

So being the slightly anal-retentive that I am, I started researching. Everything from sizes, processors, features, weight, battery life and more ended up on the spreadsheet I was using to develop my "short list". All were PC laptops of course; I'd only used a Mac a few times (supporting them in the past or in a class where I'd had to fake my way through the requirement of "must be familiar with Macintosh computers"). Besides, all I knew was Macs were used in graphics and advertising and such. They weren't business computers. So I looked at Dell, Gateway, Sony, Toshiba, IBM, Compaq and more. And I kept refining the list. And kept finding more items to add as evaluation criteria. Most significantly, I kept finding that nothing really excited me about any of them. They were simply small boxes that had various pluses and more than a few minuses. It's depressing to think about spending money on something that doesn't excite you.

A number of my friends are Mac people. One in particular mentioned to me that there was a "new Mac operating system and it is based on Unix". That intrigued me. I've had some exposure to Unix systems but I was nowhere near a skilled Unix admin. So with some skepticism, I started reading about this daring step that Apple was taking with its newest operating system. The more I read, the more intrigued I got. I asked questions and was met with a great deal of excitement by users of this new baby. Some of them had been in the beta, some waited till the first release, but all seemed excited and extremely proud of this OS. It was a rather unique experience, to find people excited by the "operating system" itself, rather than some "killer application".

I've supported corporate networks for a long time. The occasional Mac aside, I saw the corporate world as one dominated by the Windows hegemony. And despite my experience, and those certifications I can display, the direction that Microsoft was taking was becoming more and more narrowed, defined and limiting. I was and still am particularly skeptical of "product activation" and its fair to say that it was one of the reasons I was willing to look at another OS. I felt Microsoft was too busy adding "features" and not nearly busy enough thinking about actual usability or security (not with the myriad patches that needed to go on systems on a weekly basis—or oftener!)

But once I looked at this "new Mac operating system", the reasons I kept looking were due to what I found in OS X. I spent a lot of time talking to my very patient, very amused Mac friends. One of them finally told me,
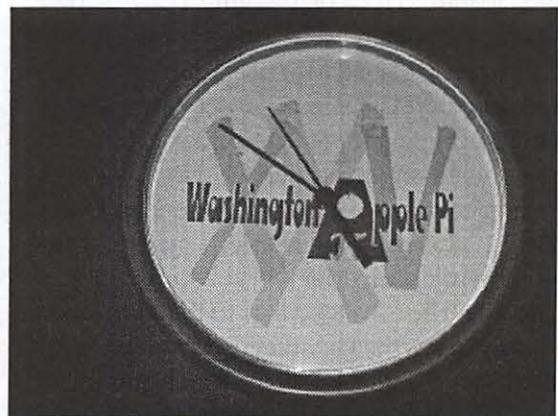


*$25^{th}$ Anniversary Washington Apple Pi clocks were presented to some present and former Pi leaders (elected and volunteer) for their contributions to the organization over the past quarter century. (Photo by Lawrence I. Charters, taken with a Nikon CoolPix 990 digital camera.)*

"Stop asking me questions and go **see** it. You've got an Apple store close by." That was true enough—Apple's Tysons Corner store is close to me. So I dropped by one day… and spent almost four hours there. Four hours touching hardware, playing with this sleek OS, and peppering several of Tysons' staffers with questions.

I was pleased to find that those I asked were able to answer the questions technically and do so without badmouthing other systems (i.e. Windows). While this may not seem like a big deal, talking to a potential "convert" by telling her she's been misguided all this time is nothing but a turn-off. I'd been braced for "the cult of the Mac" due to some of the tales I'd heard but found nothing of the sort. What I **did** find were solid, knowledgeable people who knew both sides of the street showing OS X off positively, and were smart enough to know when to be quiet and just let me play.

I think that was the sucker punch, actually. Playing with the hardware. I fell instantly, madly in love with the Titanium Powerbook. Nothing in the PC world was as sleek, as touchable, and as elegant as the TiBook. And the OS it ran was giving me all sorts of techie lust.

But I have a firm rule about "impulse purchases". I don't make them. So I left the Apple Store empty-handed that day and went home, though I think I babbled a few ears off over the TiBook. I added it to my spreadsheet alongside the PCs, and tried to be dutifully analytical about the choice. But I couldn't. The TiBook simply blew the others out of consideration. I'd decided to beef up the specs, and ran a final comparison with the others. I'd done "hands on" for virtually all the machines but kept finding myself comparing the others to the TiBook. I knew my impartiality was blown at this point, so I resorted to the old trick of dragging a friend down to look and try to keep me rational in comparisons (a friend who was **not** a Mac user). Unfortunately this failed to produce the desired result as she gushed about the Macs and admired the TiBook enthusiastically. (Eventually she became a Mac user, too!)

Having been advised by those wiser and more schooled in the ways of Apple, I sweated and waited until after July MacWorld 2001 (to be sure there wouldn't be any "bumps" to the hardware I was dying to own). I watched the keynote on TechTV, and was fascinated with the spectacle and pageantry that was presented. But once past that, I lost no time ordering the TiBook. And then began the waiting until it arrived. Time passes very slowly when you're waiting for something you know you want. And once I make a decision, I like to implement quickly. But I had to wait until the day Fed

Ex left me a little note on my door that there was a package waiting for pickup.

After a whirlwind trip to the FedEx office (I'm glad they're close!) I brought my new laptop home. Eagerly I unpacked it to set it up. It was just as sleek, elegant and sexy sitting on my desk as it was in the Apple store! When I first powered it up, and it began to run through the opening "setup" sequence, my younger cat was so fascinated she kept jumping onto the desk to watch the screen (she almost always ignores the PC's screen). I connected it to my network and stepped through the registration



*Pi Board member Lila Bednar handled sales of the special 25th Anniversary clothing and cups. (Photo by David Harris, taken with a Minolta DiMAGE X digital camera.)*
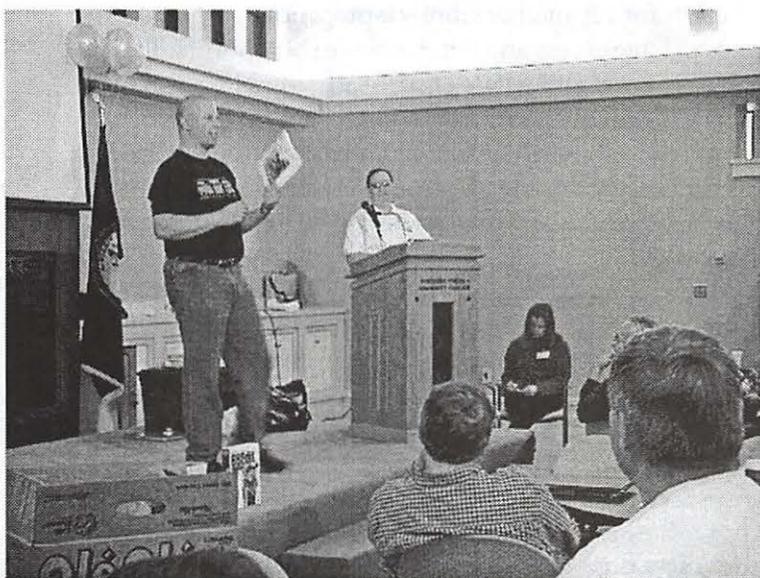


*Shawn King's face glowed an eerie blue when he stepped into the path of the projector. (Photo by David Harris, taken with a Minolta DiMAGE X digital camera.)*

"I've gotten more than a few incredulous looks when people see my Titanium Powerbook. Some regard it with envy, some as if it were a viper of some sort. And invariably the question comes: 'What made **you** get a Mac?' Well, OS X did."

portion. *And that was all, we were live and running!* (Now to Mac users, you're saying: "Well yes, so?" But you have to realize that was my first real experience with "It just works.")

I found that my TiBook came with OS 9 installed. Dutifully I tried making friends with OS 9. We got along, sort of, but it wasn't the operating system that had mesmerized me. (The experience of running OS 9 was rather like going on a blind date with a decent sort of person who does nothing for you). So since it shipped with the OS X disks in the box, I decided to install it. Normally I'd say you were looking for trouble to install a separate, newer operating system (that you don't know all that well) and have it co-exist with another operating system you don't know very much at ALL about...on hardware you're unfamiliar with. Being a geek, I figured the worst I could do was have to reinstall with the recovery disks included, so I went ahead. OS X installed without a hitch—I booted into it and found the Aqua interface I'd coveted. *It just worked!* No fussing with drivers, no having to add system patches, no hassling with obtuse workarounds. I kept thinking I'd missed something along the way, but nothing presented itself. OS X and I were inseparable from that point on.

That was August 2001. When I write this (sitting on the couch with my TiBook), it is May 2003. I'm surfing on an Airport connected to my home network. I have a G4 dual 800 and one of the beautiful flat screen displays upstairs in my office, also connected to the network. My two Macs play very nicely with the Windows machines on the network. I regularly transfer files back and forth with no additional software, and print from anywhere. I have found that I use the Windows machines less and less (except for my occasional gaming, which I think is still better on the Windows platform), and to test something work related.

Will I drop Windows entirely? I don't know. As long as I need to keep current on Windows knowledge for my job, I don't think so. But for my personal use, my two Macs are the mainstay and backbone of my computing

life, and I wouldn't have it any other way. Oh, and I've somehow managed to ignite a small "switchers world" in a number of my friends. As of now, I've got two for sure, and three others who I know I influenced to at least consider Macs. I've developed a "Switchers' classes" on the schedule at the Pi, and hope to be able to help others to find what I have: an operating system and hardware that gets out of the way and simply lets you do what you want to, without fuss or hassle and even lets you have some fun!

After all, isn't that what having a computer is supposed to be about? ∎

*Lila Bednar is an IT professional, author, graphic artist and medieval history geek who Switched and loves it. Mac owner and Pi member since 2001.*



*Richard Sanderson, sporting one of the 25th Anniversary golf shirts, checks the settings on his Nikon D-100 digital camera. (Photo by David Harris, taken with a Minolta DiMAGE X digital camera.)*

# Back from the Sand: A Mac in Iraq

### by Lawrence I. Charters

IN EARLY MAY a friend in the Pentagon sent me a photo of a Mac sitting on the hood of a Humvee, with a comment that "Marines use only the best." A few days later an Apple employee sent me another copy of this picture, plus a second, with a short note that said the photos were taken in Iraq.

I now had a mystery: where did these photos come from? Using clues found in the images as a guide, the photos were eventually traced back to Andrew Cutraro, a photographer with the *St. Louis Post-Dispatch*. Along with *Post-Dispatch* reporter Ron Harris, Cutraro was sent to cover the war in Iraq. "Embedded," as the Pentagon phrased it, with Lima Company, 3rd Battalion, 7th Marine Regiment (part of the First Marine Division), Harris and Cutraro crossed into Iraq from Kuwait, and chronicled the war all the way into Baghdad. Their stories and photos appeared in both the paper and on the paper's Web site, St. Louis Today (http://www.stltoday.com/).

Much has been made of how "embedding" allowed the press to cover the war in a more immediate and personal way. In contrast, not much as been mentioned about the technology used by the press, and that first picture captured the story quite well. Perched on the hood of a Humvee (HMMWV, or "High Mobility Multipurpose Wheeled Vehicle") was a PowerBook G4, hooked to a satellite phone, with a Marine at the keyboard.



St. Louis Post-Dispatch *photographer Andrew Cutraro sends photos from Iraq via satellite telephone from his PowerBook G4 while a Marine sleeps on the hood. Note the duct tape covering the headlights, reflectors and turn indicators on the Humvee; the Pentagon was willing to shed light on what was happening in Iraq, but not that kind of light. Through EXIF (Exchangeable Image File Format) data embedded with the image, we can see the photo was taken March 23, 2003 at 11:46 p.m. (according to the timestamp, at least), using a Canon EOS-1D camera with an 18 mm focal length, f9.4 aperture and exposure speed of 1/279th of a second; the original photo is 2464 x 1504 pixels. (Photo by U.S Marine Corps).*

As it turned out, it wasn't a Marine, but Cutraro, busy sending photos back to the *St. Louis Post-Dispatch* by satellite telephone. If you look closely, you'll see that not only is the Humvee a convenient bed for a sleeping Marine, it is also the power source for the satellite telephone. The Marines supplied the transportation, the food, the helmets and flak jackets, the camouflage uniforms, goggles and gloves (not to mention a heavily armed company for protection in a dangerous environment); Cutraro supplied his PowerBook G4, his Canon EOS-1D digital camera, and his satellite telephone. From the middle of a battlefield in a desert on the other side of the planet, the PowerBook G4 allowed him to transmit photos directly to the newspaper –

"As I said in later correspondence with them, I have a simple philosophy when it comes to my tools: when things don't work, I bitch. When they do work, I preach. So, as you can tell, I am thrilled with my G4. In Marine Corps parlance, it's 'High Speed. A sweet piece of gear.'"
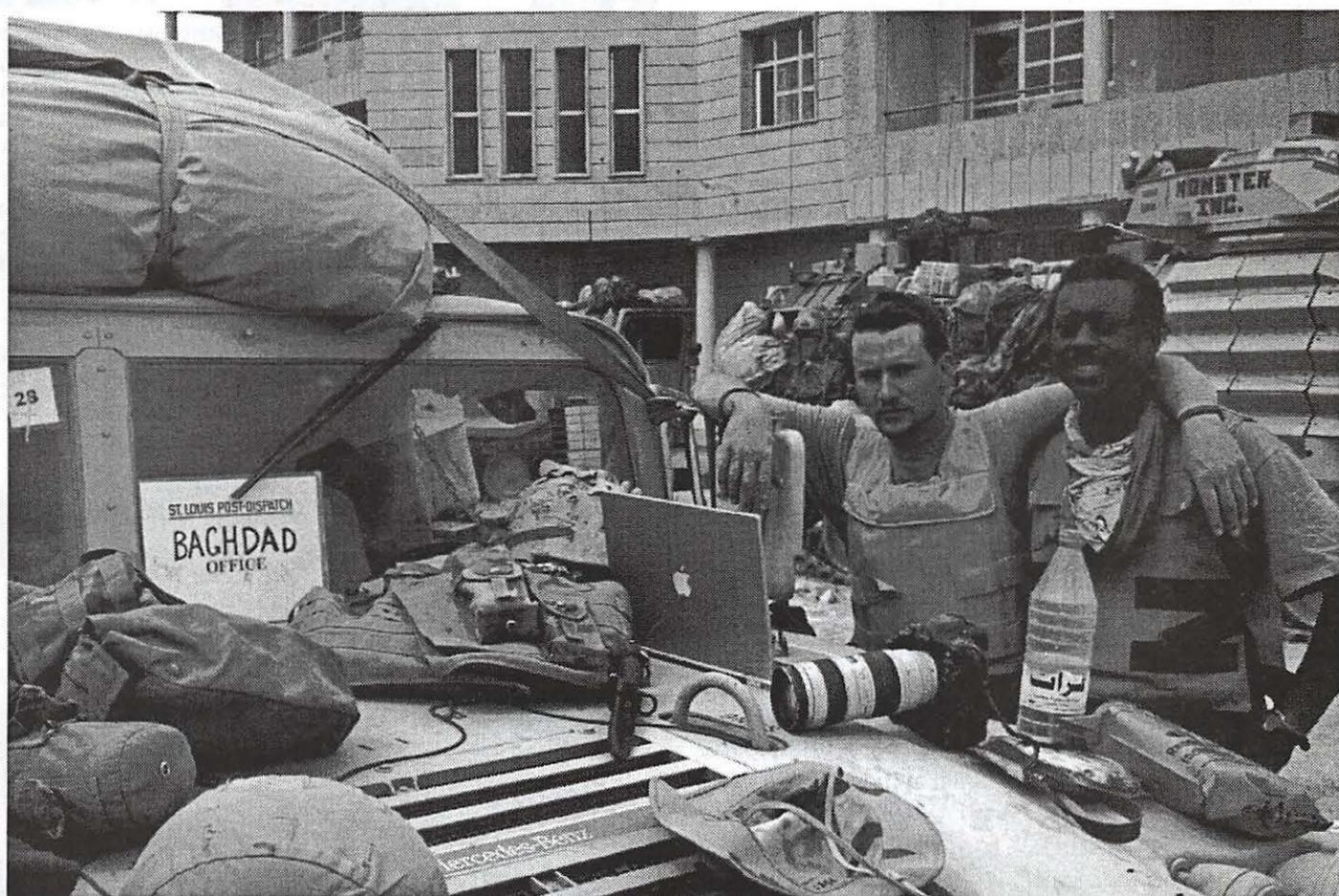


*Andrew Cutraro, left, and Ron Harris in Baghdad shortly before leaving for home, with Cutraro's PowerBook G4 in the foreground. Note that both are still wearing flak jackets, though they've temporarily removed their helmets. Other interesting details in the photo: a sign in the Humvee window declares it is the* St. Louis Post-Dispatch Baghdad Office; *between the helmet and the floppy hat on the hood is a decal that claims the Humvee is a Mercedes-Benz (they are actually made by AM General); the turret of the vehicle behind them claims it is "Monster, Inc.," probably because the occupants intended to give the enemy nightmares. As the Journal isn't printed in color, one thing you can't see: Cutraro has a really severe sunburn. Through EXIF data we can see the photo was taken April 13, 2003, at 2:21 p.m. using a Canon EOS-1D camera with a 35 mm focal length, manual exposure, with an f11.3 aperture and exposure speed of 1/512th of a second; the original photo is 2000 x 1338 pixels. (Photo by U.S. Marine Corps)*

without going through a military censor.

Cutraro passed on a note he wrote to Vin Capone, who works in digital video and QuickTime development for Apple.

Dear Vin,

Just a note to say how [colorfully expressed] well your G-4 performed on my journey into Baghdad with the 7th Marines. I've never been in such grueling conditions. I had no expectation of any gear surviving the trip: thirty one days in blinding sandstorms, swamps and firefights.

My reporter's Dell didn't make it home in one piece. And here I am sitting in St. Louis typing email at a coffee shop on the same machine. The screen has some potmarks on it, and the titanium finish is a little worn, but it's still running. I never even shut it down, just slept it. Flawless!

When the shooting died down, Marines would gather in the back of a Humvee and we'd watch DVDs. So, I have to say, you'll have some MAC converts in the Corps when they return.

Attached are some photos of your machine in [a colorful and descriptive phrase]. I only wish my body could stand up to the conditions in the same manner. Thirty one days without a shower does funky things to the human body.

Take care and Semper Fi.

Cutraro later wrote to say that, "I heard back from Apple that the note was passed all the way up the chain to Jobs. Funny. I didn't send it with that in mind. As I said in later correspondence with them, I have a simple philosophy when it comes to my tools: when things don't work, I bitch. When they do work, I preach. So, as you can tell, I am thrilled with my G4. In Marine Corps parlance, it's 'High Speed. A sweet piece of gear.'"

Cutraro returned home to St. Louis in mid-April to shower and take a much-needed vacation. Eventually, he attacked a "flood" of mail and E-mail that "overflowed" his desk, and found my message asking about his pictures. In a nice bit of irony, both these pictures – which nicely document how the war was covered with minimal military oversight – were taken by Marines.■



The new Washington Convention Center (http://www.dcconvention.com) opened in April, and one of the first events at the massive new complex was FOSE, the Federal Office System Expo (http://www.fose.com/). This is usually the largest annual computer show in the Washington, DC, area, and as the name suggests it is heavily biased toward federal and state governments. This year, homeland security, the war in Iraq, and similar security and military interests dominated the show. Macintosh computers were scattered around the exhibit floor, running printers, plotters and slide projectors, demonstrating touch-sensitive screens and graphics tablets. While Windows computers were dominant, it really wasn't a "Windows show," since a large number of vendors were devoted to patching, protecting or overcoming various problems with Windows security. Apple had a large booth. but on such a vast exhibit floor their sign is all but invisible; look above the blimp in the center of the screen. And yes, that really is a remote-controlled blimp. (Photo by Lawrence I. Charters)



While the convention center was open for business and FOSE managed to fill a large portion of one exhibit hall, it didn't fill the entire hall. Screened off from curious eyes was this vast expanse of bare concrete, construction equipment and exhibit paraphernalia. It rained heavily during the time the Expo was opened, and water leaks were everywhere. One of the most spectacular was right at the escalator leading from the Mount Vernon Square Metro station into the Convention Center. If it had been planned as an ornament, it would have been an impressive waterfall. But it wasn't planned. (Photo by Lawrence I. Charters)

# iTMS FAQ (iTunes Music Store Frequently Asked Questions)

W**HAT IS THE iTunes Music Store?**
It's Apple's entry into the business of selling music online.

### How many songs are available?

At the rollout, there were 200,000 songs in the library, far from a historically complete collection. Apple has added a couple thousand songs each of the past 5 weeks since the store opened on April 28th. Some albums are only partially available (i.e. they are missing tracks). On the other hand, Apple has secured exclusive rights to a few dozen songs by artists such as Bob Dylan, U2, Live, Sheryl Crow, Coldplay, and several others. The most glaring artist omissions are the Beatles and the Rolling Stones' entire catalogs. On the other hand, there are 51 Elvis Presley albums available in whole or part, and the iTMS is the first place that the Eagles songs have been available for download.

### How much does it cost?

Individual songs are 99 cents, most albums are $9.99, or less if they have fewer than 11 tracks. Naturally, there are exceptions to the rule.

### Such as?

There are various ways record companies have inflated whole-album prices. Some albums are not sold on a song-by-song basis; others are only sold by the song (so you pay 11.88 for a 12-track album), or have one "anchor" song that cannot be bought except as part of an entire album.

### There are a handful of companies already offering digital music downloads; what's so great about Apple's store?

The "competition" breaks down into two categories: the subscription based services and the peer-to-peer networks. iTMS is completely different than either. Subscription services charge a flat monthly rate for varying levels of service, but you end up only 'renting' the songs. As soon as you cancel your subscription, any music you have downloaded runs the risk of becoming unplayable. Peer-to-peer networks are Napster and its progeny, essentially file-swapping software that usually acts in wanton disregard for intellectual property rights and copyrights. In exchange for letting anyone rummage through your computer's hard drive, you get the opportunity to do the same to theirs. Not only do you contend with the "bad karma" of stealing (to quote Steve Jobs), you also experience a "Forrest Gump" moment because like the box of chocolate, you "don't know what you're going to get" in terms of sound quality. You also run the risk of bringing malicious code into your system that would otherwise be stopped by a firewall.

Apple's offering is unique in at least three ways: It is the first time that all five major record companies have come together in one place; there is no subscrip-
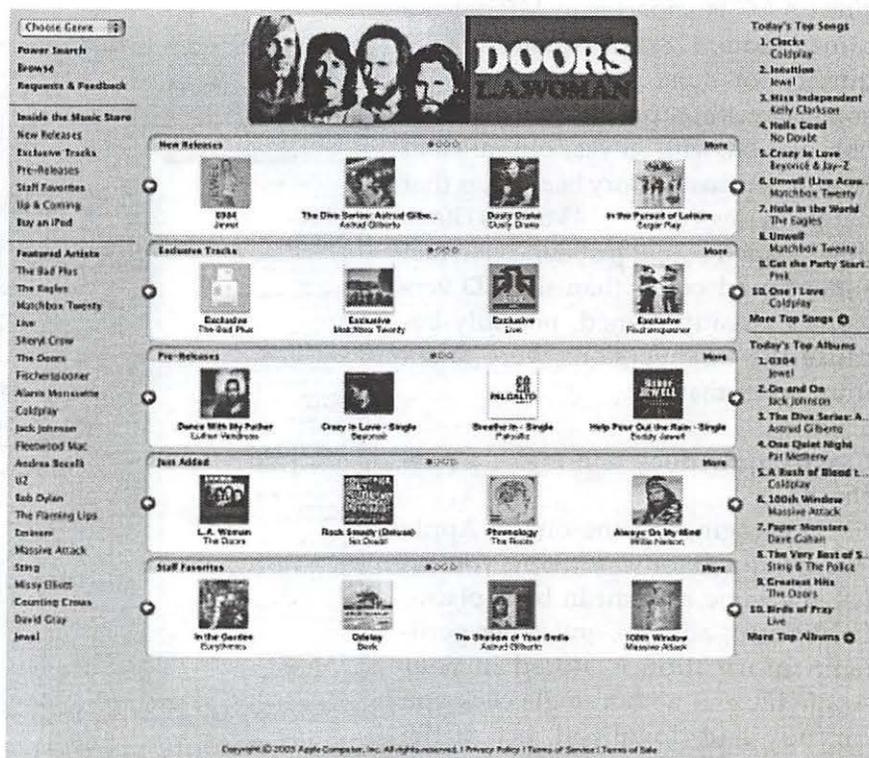


*Mainpages: The opening page of the Music Store changes constantly, and new selections are added all the time.*

tion fee; and <u>each and every song</u> for sale has a full-quality 30-second preview available at all times. I believe Apple was able to succeed in launching the iTMS because they have initially restricted their customer base to the less than 5 million U.S.-based users of Mac OS X. This, along with the digital rights management (DRM) discussed later in this FAQ, ameliorated much or most of the concerns the five major record labels had about rampant music piracy.

### Are the songs in MP3 format?

No. Apple has chosen Advanced Audio Coding (AAC) as the format for all the songs on iTMS. AAC is part of the MPEG4 standard, and was developed by Dolby Labs who owns the licensing rights. In addition to being marginally better than MP3 at a given file size/data rate, it also allows much better control of who is authorized to use a given song.

The marginally better quality, according to Apple, means that every song can be encoded at 128kbps, roughly 1MB for every minute of music and an eleven-fold savings in file size from the original, uncompress audio file. 128kbps is the most-often cited file size for MP3 files intended for play on portable devices, as it is "good enough" for most people's ears in the relatively noisy environment of an airplane, a commute, or with non-audiophile headphones. Apple claims that since AAC is superior to MP3 at the same bitrate, 128kbps equates to CD-quality for most ears on most consumer-level equipment. My personal observation, with 36-year old ears that have taken an auditory beating, is that the claim rings true. All 43 tracks I have downloaded sound just dandy; in fact some sound better than the CD versions I already owned, possibly because the new versions were taken from better masters.

### Exactly how does one make a purchase?

Leveraging off the online Apple (hardware and software) Store, you can use the same account in both places. Credit card, address, and other pertinent information is stored in your Apple ID, and with a single click you can buy and download any of the 200,000+ songs. If you prefer, as I do, to be a bit more methodical or plodding

in your purchases, iTunes gives you the option in the preferences panel to employ a "Shopping Cart" where clicking on a song or album simply adds it to a queue of songs ready for purchase. When ready, clicking on the "Buy Now" button at the bottom of the Shopping cart page will initiate the download of all purchased songs and charging of your credit card.

### Does that mean if I buy 15 songs in "1-Click" mode, I will see 15 charges on my credit card for $.99?

No (fortunately). If you choose to remain in "one-at-a-time" purchase mode, and buy 15 songs over less than a 24-hour period, all 15 are aggregated into a single transaction on your credit card statement. I do not yet know if multiple shopping cart purchases in a 24-hour period are combined in the same way (as I have not received the first credit card statement yet).

### What are the system requirements, beyond OS X ?

The requirement is a credit card with a U.S. address, Mac OS X 10.2.5 or later, a connection to the Internet (broadband recommended), 256MB RAM (recommended), and iTunes 4 or later (a free download from Apple's website). Quicktime 6.2 (free download) is required to fully exploit the AAC capabilities of iTunes 4. Apple intends to expand iTMS to Microsoft



*CheckForPurch: If you experience a problem downloading songs you have purchased, this menu selection will "try again". The Author let his disk space dwindle to nothing during a download and needed to invoke this capability.*

Windows clients later this year, and is working toward opening the service to the rest of North America and the world at some unspecified point in the future. The latter intention is dependent on music industry cooperation, since the copyright laws are different in other countries than the U.S.

**What about the extras that come with a tangible CD purchase, like liner notes?**

At present, all you buy for your .99 or 9.99 is the digital file(s) containing the music as well as a medium-resolution image of the album cover. Unlike a regular CD, you need to supply the physical media upon which the music is stored (be it a CD-R, hard drive, or inside a portable music device such as the iPod). If you're a fan of liner notes, you should factor that into your decision whether to purchase from the iTMS or not.

**Why would anyone buy an album on iTMS for $9.99 when [insert big-box retail chain here] sells it for $11.99, and sometimes for the same $9.99 on sale?**

Here are what I see as the advantages of iTMS.
1. You can pay less (maybe a LOT less) for just the songs you like off an album, and you get the album art with single-song purchases
2. You get immediate gratification because your purchase is downloaded right after you click to make the purchase.
3. You can shop 24/7… in your pajamas.
4. Apple has not indicated any intention of running time-limited discounts/sales, so you need not worry about not getting the best deal possible.
5. You're helping Apple's fiscal bottom-line, as roughly 1/3 of the purchase cost is kept by "our favorite charitable organization".
6. Although it is dependent on the record companies digging their master tapes out of cold storage, there is a <u>much</u> higher possibility of seeing rare, out-of-print albums for sale on iTMS than in standard retail stores because of the cost commitment to stamp thousands of physical CDs. If you happen to own these kinds of albums and were counting on them as part of an investment portfolio, you may not see this as a good thing.

**Can you freely copy the songs you purchase?**

The file itself is not <u>copy</u>-protected, but does have <u>usage</u>-protection which Apple has labeled Fairplay. You can do the following:
1. Play the purchased song on up to three Macs that are authorized by you.
2. Burn a song to an audio CD unlimited times, but only 10 times for a given iTunes playlist. Add or delete a song to the playlist, and the counter reverts to zero.
3. Transfer a purchased song to and from an iPod unlimited times. This is important if, like me, your music collection exceeds the capacity of any iPod Apple has yet made. You can freely shuffle your purchased songs into and out of the iPod without concern about being "locked out".
4. Backup the purchased song (in native AAC format) to CD or DVD as many times as you like. The file is tagged with your Apple ID and name, and will only play on your authorized machines.
5. Use the song in any other iLife application (iPhoto, iMovie, iDVD)

You cannot do the following, at least not as of June 1st:
1. Transfer ownership of a song to someone else.
2. Purchase a song as a gift for someone and assign initial ownership to them (unless you go to the questionable length of creating an Apple ID under their name but with your credit card info.)
3. Burn a purchased song directly to MP3 (iTunes tells you it is unable to do so). The workaround is to burn to audio CD (AIFF) format and then re-import the song,



Feedback: From the main iTunes Music Store menu, you can click on "Requests & Feedback" and submit either (but not both at the same time).

which introduces a slight reduction in fidelity because of the need to re-compress the song. It's also enough of a pain in the neck that many people won't bother, and will just buy an Apple iPod so they can listen to the AAC version directly.

## What can you do if the song or album you want is not available?

There is a hotlink at the homepage of the iTunes Music Store to submit recommendations for a particular song, album, artist, or a general suggestion. While you do not get a direct response, it is read by the store's staff.

## How's the iTunes Music Store doing?

Apple announced 1 million song downloads after one week, and 2 million after 16 days, but has not reported sales levels since the middle of May. Nonetheless, the rest of the industry is all abuzz now about the idea of successfully selling music via the Internet, and rival companies are posturing themselves to compete with Apple. I've seen heavy airplay of iTunes Music Store commercials on CNN, and have had officemates approach me expressing their frustration that it's Mac-only. However none of them intend to buy a Mac as a result.

## What if you have a problem with your download?

While Apple clearly states that all sales are final, the newsgroups which I regularly read indicate that the iTMS customer service staff has been willing to work individual issues in a very consumer-friendly manner. If you have a question about the audible quality of any song, even before you buy it, they will listen for themselves and let you know if they agree there is a problem. Responses to email inquiries have been timely.

Also, I failed to watch my hard drive space closely and initiated an album download when I had no space left on the volume where iTunes stores its music. I scrambled to move files to other volumes as the download began, and managed to get all but one song to properly download. At the end of the album download, iTunes warned me that "one or more tracks did not properly download" and that I should try again later via a specific menu command. Since the problem of free space had been resolved, I followed their instructions immediately and the final song transferred down just fine. It was impressive to see how well Apple addressed such an issue.

## Anything else worth mentioning?

■ The recording industry has only committed to licensing their catalogs to Apple for a year, in case they grow dissatisfied with how thing turn out. As a business, one would hope they would react positively to this revenue opportunity and continue the relationship.

■ Before buying a song, make sure it's the exact version you are expecting. Many songs are available in multiple versions, by both the original artist and in 'cover' versions. Also, try to listen to the preview of every copy of a song before buying, as I have found that audio quality can vary from album to album for the exact song (due to remastering or similar reasons).

## What questions remain unanswered in YOUR mind?

■ Once the Windows version is unveiled, can a given purchased song be authorized on both kinds of platforms at once?

■ Will the FairPlay DRM permit non-iPod portables from playing the purchased AAC songs?

■ Since you can now buy individual songs, even the same song multiple times (iTMS warns you if you try to do this), can a creative professional legally use iTMS to purchase individual tracks of copyrighted music for use in a client's project (such as a wedding or birthday party video not intended for public broadcast)? ■

*—Craig Contardi*



*ShoppingCart: In lieu of one-click purchasing, you can select "Shopping Cart" from iTunes Preferences and the "Buy Now" button changes to "Add Song".*

# Disk Warrior 3.0

## Review from the Pi Labs Annex

VISITORS TO THE Tuesday night clinic at the Pi Labs Annex marvel at how we are able to keep our Macs working so well. Besides not turning them on but one evening a week, we have found one of the best tools available to keep a Mac from choking on all the information we store on a hard drive. It is is a utility called Disk Warrior from Alsoft.

### Why do I Need It?

Whenever you use your computer, and especially if your are running OS System X, you introduce fragmentation into the directories that keep track of where your files are located and into those files themselves. It is also possible for a program to write its directory information into a location already being used by another program. Now that is not nice, but assorted events can result in it happening. If information about a file [directory information] gets damaged, your computer could lose track of that file, even though the file itself is still on your hard drive.

Disk Warrior is a utility designed to prevent and resolve directory damage. By checking the integrity of the directory data on your hard drive, the program can alert you to existing damage. If you tell it to repair the problem, you keep that damage from spreading. If that damage involved the location of a file, repairing your directory restores information about that file causing it to reappear, which makes you happy and your investment in Disk Warrior a bargain.

If you want to learn more directories and stuff, read on. If you want to learn to use Disk Warrior 3, skip to "Getting Started."

### What Is the Directory?

The directory is an area of a disk used by the Mac Operating System (OS) to store the information you record to your hard drive. Some of what is saved in the directory is the numbers, names, locations, types, and sizes of files and folders saved on the disk. When any software wants information from a disk, the Mac OS must go to the directory to find out where the information is located. Also, when any software wants to save information to a disk, the Mac OS must go to
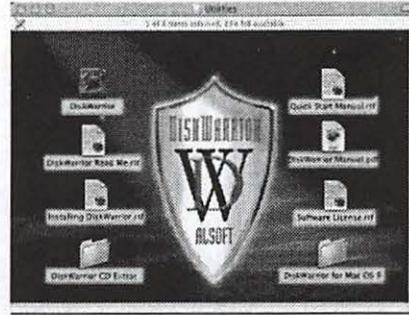
the directory to find out where the information can be placed. All the necessary information about where the data was saved is then recorded in the directory.

The directory structure is the organization of this data in the directory. The Mac OS uses the structure to quickly access the data and thus find out where in the directory the data is located.

### What Is Directory Damage?

When any of the data in your directory or the structure of a directory is either incorrectly updated or not updated at all, that directory is considered damaged. If any portion of the directory is overwritten by an errant program that inadvertently writes its own data at that location, the directory is damaged. When the Mac OS attempts to use the incorrect directory information to read or write information on a disk, an error will occur. This error may be very minor and go unnoticed. It might cause a kernel panic [in OS X] or make it appear that the file disappeared. Left unrepaired, you could find that you no longer have access to your drive.

Disk Warrior resolves existing disk damage by rebuilding the disk directory using data recovered from the original directory, thereby recovering files and folders that you thought were lost. As Disk Warrior performs that recovery work, it also creates a new optimized directory.

Unlike Norton Utilities, Disk Warrior is not a disk repair program. Warrior specializes in fixing problems it finds in the master directory. Directory errors are the most common problems you have with a hard drive. Disk Warrior rebuilds the directory on a hard drive and, through that process, can recover lost files.

### Directory vs. File Defragmentation and Optimization

Just like the files on your hard drive become fragmented through use, so can the directory structure. When Disk Warrior finished repairing any damage it finds in your directories, it then optimizes those files so that they are again in the correct logical and a physical order. This function is not available in Norton Utilities whose program Speed Disk can recombine fragmented files and optimized the order of those files. When Speed Disk is finished you have one continuous

block of files and an empty area on your hard drive.

### When Should I Use It?

The most basic use of Disk Warrior is as preventative maintenance for your directories. Mac OS System X is a little terror when it comes to fragmenting its directory structure. Pick some interval, like three or six months, and note the number of fragmented directory files Disk Warrior 3 finds. That number is a function of your frequency of use and how often you install/remove applications or files.

After a crash or power outage, run Disk Warrior as insurance to rebuild your disk directories in case some part of your directory structure got lost in the outage. Disk Warrior tries to recover files that are 'lost' because the directory lost track of them – not that you deleted them and have now changed your mind. Disk Warrior 3 is not designed to search for lost files that you deleted from your hard drive.

### How Hard is it to Use?

Not hard at all. The new Disk Warrior 3 is a single CD that supports users of Mac OS System 8/9 and OS X. Thus the CD comes with both operating systems installed. It senses which OS you use and boots into the correct format for your drive. Hold down the "C" key when you start your computer and either a red (OS 8 or 9) or gold (OS X) Alsoft shield will appear on your screen. Note: Disk Warrior can't repair a volume on which it is located, nor can it work on a volume that will not mount.

### Now What?

Using Disk Warrior 3 is more like a guided tour than anything else. There are eleven steps the program goes through as it methodically cleans up your directories. If you have questions about what is happening, Disk Warrior has a detailed manual on the CD in PDF format. Keep in mind that with System X, there are thousands of files to be examined. Unless you are big on watching grass grow, plan on a case of the munchies.

While this write up is about using Disk Warrior 3 in OS X, the process is the same for OS 8 and 9.

### Getting Started
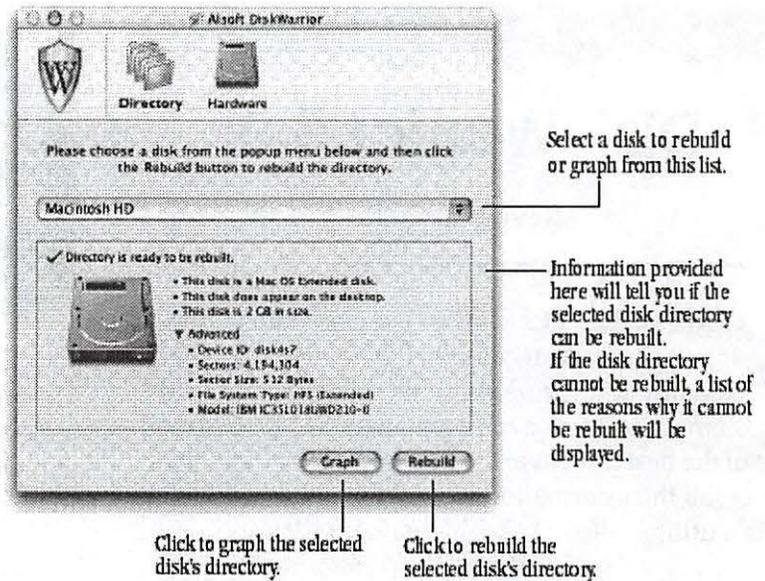


*Figure 1.*
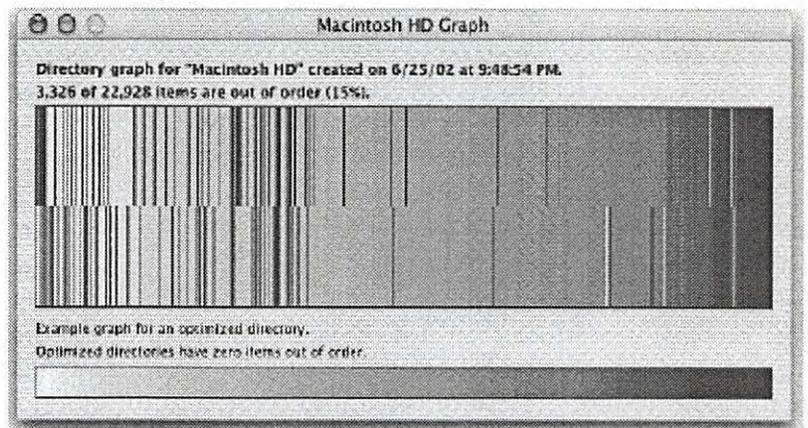


*Figure 2.*

Disk Warrior must be your startup disk. It will open, bypassing the normal Finder desktop. You will notice that you have to agree to the terms of the license each time you use Disk Warrior 3. That is because it works from a CD and has no place to write your acknowledgment.

You will see the Disk Warrior main window from which you can rebuild disk directories. If you have more than one hard drive attached, you get to pick which goes first. *(See Figure 1.)*

Select the disk to be rebuilt from the disks pop-up menu. If you have problems finding the disk whose directory you want to rebuild, there is a complete help section in Chapter 3: Troubleshooting and Error Messages of the PDF manual.

The lower portion of the main window will indicate whether the directory is ready to be rebuilt. If for some reason Disk Warrior cannot rebuild the disk's directory, it will indicate the reasons the directory cannot be rebuilt.

### Graphing Directories

One of the neat things you can do with Warrior 3 is ask it to show you a graph of what your directories look like before and after optimization. To graph a disk,
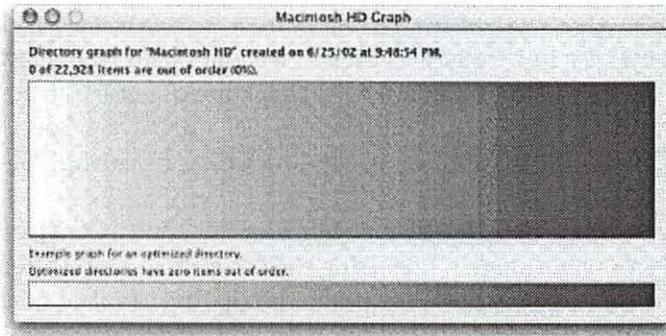


*Figure 3.*

click the Graph button. A progress dialog will appear and, after a brief delay, it will be replaced with a window containing the graph. For this article, the iMac I picked has 51,000 files of 168,000 out of order. That is about 30% of them. *(See Figure 2..)*

When optimization is complete you can see how you got your money's worth by again asking for the graph. *(See Figure 3..)*

Click on the red jelly bean to close that window so that Warrior can get back to work.

Click the Rebuild button. Disk Warrior will begin building the replacement directory on the disk to be rebuilt. It will first analyze the disk. This analysis can take anywhere from several seconds to several minutes or longer, depending on the number of files and folders on the disk.

Disk Warrior 3 found that the Volume Wrapper information was damaged in our iMac. I gave it permission to repair it. Overall, it tested over 1.7 million files and folders looking for differences in our iMac.

### Read the Disk Warrior Report

When Disk Warrior is finished, it will display a window informing you of the results of the rebuild. This will include any files and folders that may have been affected by directory damage. If you would like to preview the new directory, pay particular attention to these

files and folders while inspecting the Preview disk in the next step. If you want more details, page 29 of the PDF manual is for you.

### Test the replacement directory

At this point, the original directory information on your disk has not been replaced, and it will not be until you click "Replace". Click "Replace" to install the replacement directory, or "Cancel" to leave the directory untouched. The Disk Warrior Report gives you an option to preview how your disk will appear after the original directory is replaced. If, for instance, you are using Disk Warrior to recover lost files or folders, you can verify that the replacement directory has these files.

### What to Look for During Preview

Here you have the opportunity to see your drive as it will appear after it is rebuilt. You can see if files and folders that you lost have been recovered. You can also inspect the files and folders listed in the Disk Warrior Report.

The left pane of the Disk Warrior Preview Window will show the contents of your disk in its original state, displayed with its original icon. The right pane of the Disk Warrior Preview Window will show the contents of the preview disk if the disk was originally mounted and appeared on the desktop.

### Do It

Click "Replace" to install the replacement directory, or "Cancel" to leave the directory untouched. If you click "Replace," Disk Warrior will write the replacement directory to your disk. This will result in your disk being "replaced" by the Preview disk described above. If you click "Cancel," your disk will be untouched and you will be returned the main screen.

### Seriously Ill?

The "Replace" button is disabled if your hard drive is locked, if there is a malfunction, or your drive is too severely damaged to be repaired. If you are using Warrior to locate missing items, and you don't see them in the Preview window, Alsoft recommends that you not proceed with the rebuild. The manual has more details in its Preview section as to what are your options.

Disk Warrior will write the rebuilt directory to the disk and keep you updated with its progress. The program requires contiguous space to write a new directory before it will replace the old one. If for some reason the files (not the directories) on your hard drive are so spread out that there is no such space, the pro-

gram will tell you that it can't continue and why. You will need to use a program like Speed Disk from Norton Utilities to remove the file fragmentation before you restart Disk Warrior. This happened to two of the iMacs in Pi Labs.

### Overwritten Files?

If there were any files listed in the Disk Warrior Report as occupying portions of the disk already occupied by other files, Disk Warrior will relocate the files to unique portions of the disk. When the procedure is complete, you must inspect these files to determine which of them had been overwritten and damaged. The detailed view of the report lists the files that overlap. The amount of time that this process takes depends upon the amount of disk space taken by the overlapped files.

### All Done

When you quit Disk Warrior 3, the system restarts and boots into your hard drive. We are told that the version of Mac OS X on the CD [10.2.3] does not restart properly on dual-processor systems like a G4 (QuickSilver). Alsoft says it is safe to manually restart the system once it looks hung, because all disks have been unmounted.

### Hardware Monitoring

One of the new features in Disk Warrior 3 is its ability to monitor hardware using internal diagnostic routines built into disk drives by their manufacturers to detect and track how often a drive exceeds its operating tolerances. The interface for this is called Self-Monitoring, Analysis, and Reporting Technology [SMART]. Almost every hard drive mechanism released in the past six years supports SMART, which is a protocol for alerting you, via software, to potential errors on the drive.

While the drive platters are spinning around inside their enclosure, the firmware monitors several parameters to see if they are wander outside specifications. Mac OS X 10.2 reads that data and can pass it on to a program like Disk Warrior. If you want continuous monitoring, installed Warrior 3 on your hard drive. Complete documentation on using SMART via Disk Warrior 3 can be found in Chapter 2 of the manual.

### What It Doesn't Do?

Disk Warrior 3 is not Norton Utilities. Norton approaches your hard drive from a different perspective. Disk Doctor examines the resource forks of your files,

corrects those "bundle" bit sets and scans your hard drive for bad blocks and blocks them. Disk Warrior does not check for bad blocks, but it does not write to any areas that are so marked.

Speed Disk both defragments and optimizes the files on a hard drive, whereas Disk Warrior 3 does the same for the directories on that drive. There is no comparable program to Speed Disk in Disk Warrior for OS X. The one that is there, PlusOptimizer, works under Mac OS Systems 8 and 9.

### To Summarize

Our style at the Pi Lab Annex is to use technical utilities judiciously. Typically we start with Disk First Aid, then to Disk Warrior to check the directory structure, then defragment the files on a drive via Speed Disk. If the machine is running OS X, repairing Permissions is a must.

How often? Always after a kernel panic [OS X], or a power outage while using the computer. Use it after installing a major OS update or copying a lot of files one at a time.

The beauty of Disk Warrior 3 is that it resolves the vast majority of disk problems via its 11 step process and optimizes your catalog as part of that process. Using Disk Warrior will help you solve most of your disk problems. The Pi Labs Annex is a believer.

---

Disk Warrior 3.0
Alsoft, Inc. <http://www.alsoft.com/>

You can obtain your copy one of three ways: celebrate your wideband connection: download it directly from Alsoft. Support your endangered local Macintosh dealer and buy it there. Don't have either? Alsoft will have it delivered to your door.

The retail price is $79.95. Special prices are available to owners of previous versions. You will need the serial number. Coming soon: French, German, and Japanese editions. Details are available at the Alsoft website.

Alsoft Sales
P. O. Box 927
Spring, TX 77383-0927
(800) 257-6381

# So, Who Do You Trust?

© Pat Fauquet

ALTHOUGH THERE is a wealth of information about Macintosh maintenance of the Web, some of the sources of information are full of questionable materials, outdated materials, opinionated pieces and some stuff that is just plain WRONG.

Over my years of doing Macintosh support, I have found that there is much information out there that is either pure conjecture, or based on flawed assumptions, or biased because of a dislike for a piece of software, a version of the Macintosh OS, a piece of hardware or even a technique to do something.

While things, on the surface, may seem black and white, there are far too many factors which can cause problems for individual computer users. I find that both Macintouch.com and MacFixIt.com, along with many forums—including Apple's own contain really BAD information. People swear that some update caused their machine to fail. They blame their problems on things which could in no way be at fault. Or they never even tried the techniques suggested by the manufacturer or developer.

So, how do you know what is causing the problem? Well, was your computer being a little flaky before you applied the update? How stale is your basic operating system? How out-of-date is your software? Did you buy good RAM or is it the cheapest you could find? How long has it been since you reformatted your hard drive? Have you removed all USB devices and restarted. When was the last time you restarted your computer. Does a restart make the problem disappear? It might be a good place to insert one of my little stories. Three summers ago we were preparing to begin teaching iMovie classes at the Pi. However, neither of the DV iMacs in the lab would mount a FireWire Drive. I read Macintouch, MacFixIt, the Apple Forums and every other tech site I could find. Everyone was reporting the same problem and blaming it on Apple. People swore that nothing worked to fix the problem and that Apple was refusing to admit that there was a problem. I ran all sorts of test software on the lab computers. Nothing reported problems, but the darn drives would

"So, how do you know what is causing the problem? Well, was your computer being a little flaky before you applied the update? How stale is your basic operating system?"

NOT mount. The mechanics of the lab at that time were such that we were using an application to make our machines match each other exactly after each class. This software made it difficult to completely wipe the hard drive and begin from scratch. Doing a reformat and reinstall of all the software on each computer was the suggested cure from Apple. Everyone on the forums swore that they had done this—and it did not work. I spoke to Apple trying to find an easier fix. The answer, according to them, was the dreaded reformat-restore, but what a pain! I finally bit the bullet and did exactly as they had asked.

The problem disappeared and I learned my lesson. Hundreds of people were just as lazy as me. The answer was right there—and the solution worked, but meanwhile, lazy people were talking of filing a class action suit because it was too hard to listen to the experts at Apple.

Summer camp went great! Our computers worked as they should and over that summer I met quite a few Pi members who were telling me that Apple had made a bunch of bum iMacs with FireWire ports that would not work and that the only solution was to replace the motherboard, or worse yet, there was no fix! They read it on the forums and info sites—and they were all WRONG. The solution was there. Why would no one listen?

Just because you read it on the web does not make the information correct even if hundreds of people are spouting the same line! Before you conclude that an update ruined your computer, before you swear that Apple is now producing junk, go to the AppleCare Knowledge Base and read the latest articles, straight from the source. Before you believe what people on the Internet might be saying, remember my little story and the next time you are at the Pi, check out those to gray iMacs that are still working and still recognizing firewire devices because I listened to Apple instead of hundreds of other people! ∎

# Special Offers
# Apple User Group
# Bulletin
# June 2003

*These special offers are brought to you by the Apple User Group Advisory Board. You must be a current user group member to qualify for these savings. Not a member? Join a user group today and take advantage of all the benefits of user group membership.*

*All passwords and web page links can be found on the More Member Specials area of the Classified Board of the Washington Apple Pi TCS. To access this area, log into the the TCS at http://tcs.wap.org. Click on the Classified button and then select the More Member specials area and browse the offers.*

## 1] - Circus Ponies

Getting organized just got easier. Circus Ponies NoteBook is a new iApp that helps you organize your stuff in the digital hub. NoteBook helps you keep track of photos, e-mails, graphics and documents. Take notes, build outlines and share information. Create project journals or portfolios. Clip and annotate e-mails and news stories. Add formatted, searchable notes. Add emphasis with built-in highlighters, stickers, and keywords. Find anything using NoteBook's patented indexing technology. Regular price: $49.95 (US). MUG special offer price: $29.95 (US).

See the TCS for the link to the web site.

This worldwide offer expires December 31, 2003. *For MUG Members ONLY*

## 2] - Hemera

Save up to $50 (US) off The Big Box of Art 800,000, the world's largest Mac DVD image collection. Regular price is $149.99 (US).

The Big Box of Art 800,000 is packed full of quality images for the Mac: vector clip art, photos, illustrations, Photo-Objects images and Web graphics. That's 800,000 images on 8 DVDs, perfect for every Macintosh project. You won't believe how fast it finds images or how quickly it gets that image to your project.

1. Save $25 (US) instantly by purchasing through this MUG Exclusive Offer.

2. Receive an additional $25 (US) off if you own any other image collection of 125,000 images or more, through a special mail-in rebate.

Read more about The Big Box of Art 800,000 at:

See the TCS for the link to this offer

This worldwide offer expires December 31, 2003. *For MUG Members ONLY*

## 3] - Design Tools Monthly

Free issue and 50% off a new subscription

You know that stack of magazines in your office that you wish you had time to read? And all those websites you need to scour for updates? If you prefer to spend your time being creative, get Design Tools Monthly instead. For the past eleven years, Design Tools Monthly has provided "the Executive Summary of Graphic Design News" to subscribers in more than 40 countries. If you're a graphic design professional, you owe it to yourself to see how Design Tools Monthly will save you thousands of dollars in time and trouble each year.

Our regular price is $229 (US) per year, but Mac user group members can get their first year for just $99 (US). Price is $125 (US) outside the nffU.S. & Canada.

Please contact us for a free sample issue, or to subscribe: See the Washington Apple Pi TCS for the link to the offer

This worldwide offer expires September 30, 2003. * For MUG Members ONLY *

## 4] - Total Training

The most trusted name in video-based training is offering 20% - 50% off of two of its most popular training CD-ROMs.

"Total Training For Apple OS X," retail price $49 (US), can be ordered for only $24.50 (US) plus applicable tax and shipping.

You can also get the newly released "From Design to Print: A WorkFlow Series" which teaches you exciting tips and tricks on how to take a project through Adobe Photoshop, Illustrator, InDesign and Acrobat to produce a professional print piece. This program retails for $49 (US), but can be yours for only $39.20 (US) plus applicable tax and shipping.

This is a "phone-only" special. To see the phone number, go to the Washington Apple Pi TCS.

This worldwide offer expires September 30, 2003. *For MUG Members ONLY*

## 5] - The Digital Video Professionals Association

The Digital Video Professionals Association (DVPA) is the world's largest organization devoted exclusively to meeting the needs of those who use DV technology. The

organization is known for its many member benefits including the Online University with over 25,000 streaming video training files that teach programs like Final Cut Pro, AppleScript Studio, Photoshop, After Effects, Director and many more.

User Group members can sign up for any DVPA membership and receive four FREE Sound Effects CDs from Music2Hues. Sign up for the DVPA All Access membership and also receive a large collection of royalty-free video and animation clips from major stock libraries including ArtBeats, Creatas, Digital Juice, Digital Vision, Sekani and Videometry.

For complete details and to see sample files of all of the video clips, go to the Washington Apple Pi TCS for the link to the offer. This worldwide offer expires September 30, 2003. *For MUG Members ONLY*

---

## 6] - The MUG Store

It's raining eMacs at the MUG Store! The MUG Store has hundreds upon hundreds of specially priced brand new prior-model eMacs for sale, starting at just $649 (US), plus a $99 (US) rebate on any one of four Canon printers. Simply click on the New Apple Product link when you enter the MUG Store site, then click on the eMac picture, and you'll see all the great eMac deals available. Models and prices only good while supplies last. There's never been a better way to put a robust G4 system on your desk!

Remember that your user group gets 1% back toward anything the MUG Store sells every time one of your members orders from the MUG Store.

        http://www.applemugstore.com

Password schedule:

See the Washington Apple Pi TCS for the passwords
This offer is available to members of U.S. user groups.

—

Apple User Group Quick Bytes Get involved. Join a user group near you. http://www.apple.com/usergroups/

..................................................

# DiMAGE Scan Dual III

### by David L. Harris

DIMAGE SCAN Dual III AF-2840 is a mouthful. What it is, is a consumer-level film scanner. [Get it: Digital iMAGE…?] After reading good reviews for it, at a price of $300 for a 2840 ppi scanner for slides and negatives, I bought one to archive my slide and film collection of 50 years.

### Scanner

The scanner itself is an unassuming lightweight, dark gray box with dimensions 6.5 by 3.75 by 12.25 inches. It comes with two scanning applications and an essential 92-page manual. The scanner can be used with PCs, or Power Mac G3 or better machines running System 8.6 or higher, a minimum of 128 MB of RAM for the scanner software itself, and with a USB connection. The manual is illustrated with Windows pictures, but is OK otherwise. I did find its directions confusing in several respects: you are supposed to turn scanner on and launch the scanner software in correct order, and load it with slides correctly too.

### Loading slides into the scanner

Figure 1 shows the plastic slide holder; I took the picture on a black background, so I could lighten it and show some details of the completely black slide holder. The added arrows show the insertion mark, and the slot near one end of the holder that indicates that this end goes first! In spite of the manual's directions it took me about two weeks to learn how to consistently load slides into the holder the right way, and to load the holder into the scanner correctly. Fortunately, the software lets you rotate and mirror-image loaded pictures, which takes care of all misloaded slides except for ones with reversed emulsions (the side of the film that actually contains the image).

The manual says: "Insert the film holder into the scanner in the direction indicated by the arrow [black on black]… Carefully push the holder into the scanner until the arrow mark is aligned with the scanner door; the holder will be automatically fed into the scanner from that point. Never touch or hinder the holder when it is in the scanner." Aside from finding it difficult to

remember which end of the (did I say black?) holder was to be fed into the scanner, and which side was up, I thought something was wrong the first time I pushed the holder into the scanner: it fed in slightly and stopped. The manual did not say that this was normal behavior. So I tried to push the holder in further. Didn't work. I finally realized that the holder would be drawn more fully into the scanner when the scanning process was later initiated with the software.

### Easy Scan

The DiMAGE film scanner comes with two pieces of scanning software: Easy Scan and Scan Dual III Utility. (Euphonious names, those.) Easy Scan is a semi-automatic scanning utility. It has a "wizard" to lead you through the scanning process, and a set of default settings for scanning parameters. You can change parameters for some settings. It lets you set the film type (color or black and white, positive or negative), whether or not to use "Pixel Polish" (automatic image correction) or Auto Dust Brush (that deals with small dust particles which cannot be removed from the film). It lets you change lightness, contrast, and color saturation. Images can be saved as BMP, JPEG
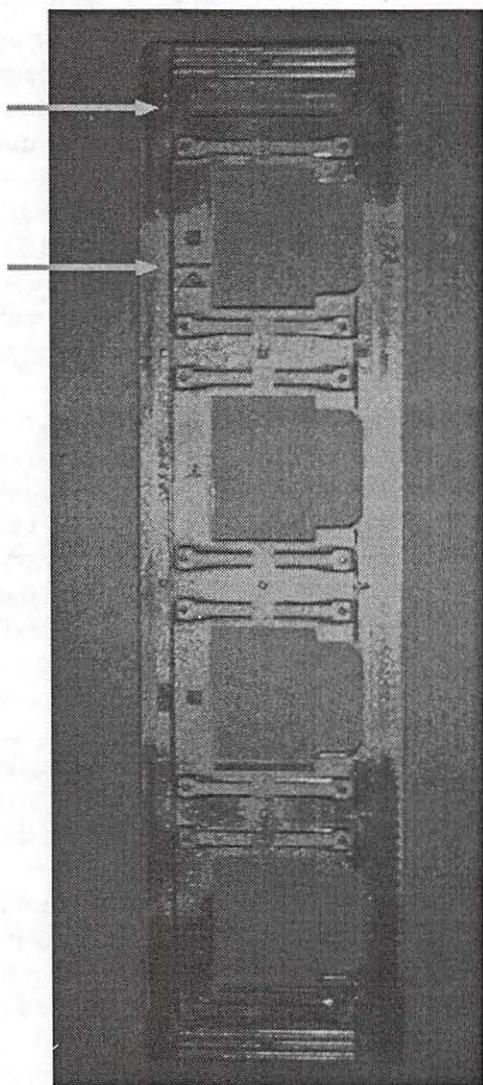


*Figure 1: The black slide holder*

(with selectable compression), TIFF, and PICT. Other parameters are determined by choosing among a number of output buttons, depending on the use to which the scans are to be made: on screen; printing large and small; to attach to e-mail; for Web pages, etc. One of the automatic settings that Easy Scan forces is that the output "color space" is set to sRGB. sRGB is described in the manual as "the color space promoted by Hewlett Packard and Microsoft. Since it reflects the average PC monitor characteristics, it is considered to be the standard for multi-media and Internet usage. sRGB is not suitable for professional prepress applications because of its narrow reproduction range." Since I was scanning my pictures for possible future use in a wide variety of ways, I did not use Easy Scan after the first trial scans with it.

### Scan Dual III Utility—Indexing

This Utility is the full-power scanning software that comes with the scanner. Figure 2 shows the main scanning window; an index has been made to show thumbnails of the four mounted slides that the slide holder will accept at one time. The picture at lower right has been selected to work on, as indicated by the black border around the thumbnail.

As you can see, there are lots of items here to occupy the operator's attention. Putting the mouse cursor over any one produces a text message in the box at the upper right, telling what it does. In this case the cursor is over the right-pointing triangle on top a grid, at the left just below "35mm." (In the screen shot, the cursor does not show.) This is a button to click, which tells the scanner to create the index thumbnails. Below and to the right of this button is a tab called "Index," in a row of tabs I have labeled "Work areas." Clicking on the tabs presents different subject areas, and the contents of the window below them changes accordingly. I found the proximity of the triangle action buttons and tabs to be confusing; I still often click on a tab when I need to click on a triangle. This is especially confusing with Prescan, since clicking on the Prescan tab has the same effect as clicking on the Prescan triangle, if no Prescan has been made. (A Prescan of a selected thumbnail produces a larger-sized view of the image, which one uses to see the effects of image changes made with the software—Figure 3.)

The Utility allows one to make many of the same kinds of image corrections in the scans that are available in advanced software programs used to process already-produced images. It can be operated in basic, semi-automated mode, up to completely manual con-

trol. The default scanning resolution, as indicated on the left, is 705 dpi, but this can be changed; the maximum is 2840 dpi. The buttons on the top of this part of the window ("Jobs" in Figure 2) can be used to save or retrieve supplied sets of parameters for this area, depending on what the scans are to be used for. An extensive list of these Jobs is already provided, depending on what kind of output device (laser printer, inkjet, monitor) is to be used, the desired final picture size, and so on.

### What scanning resolution to use

Information at the middle left of Figure 2 indicates that a 35mm color slide scanned at 705 dpi (and 8-bit color, selected in Preferences) will produce a file size of about 1.7 MB. My original instinct was to scan all slides at 2840 dpi and 16-bit color for archival purposes, so that I would have the best possible image to use at a later time. Unfortunately, this produces file sizes on the order of 80 MB per image. Fewer than ten of these would fit on an archive CD. I was convinced to reduce the color depth to 8 bits, since apparently no output device, printer or monitor, can distinguish images with 16 bit color from those at 8. (Given this, I am not sure why 16-bit color is possible in the first place.) After experimenting, I accepted having to limit my archiving resolution to 705 dpi, reserving higher resolutions for special cases. This is because of the larger file sizes produced by higher resolutions, and the number of slides (in the many hundreds) I want to archive. I also abandoned the idea of archiving all my slides, and decided to prune out ones that probably had no particular attraction. (For instance, a picture of the Capitol building taken in 1957 would probably show nothing that couldn't be found elsewhere.)

### What do I have—and where is it?

With this many pictures remaining from my slide collection to archive, and those from a new digital camera in addition, I have become aware of how difficult it is to know what pictures I have, and where they are. This brings up the subject of resource-cataloging software, a subject that I may cover in a future ar-
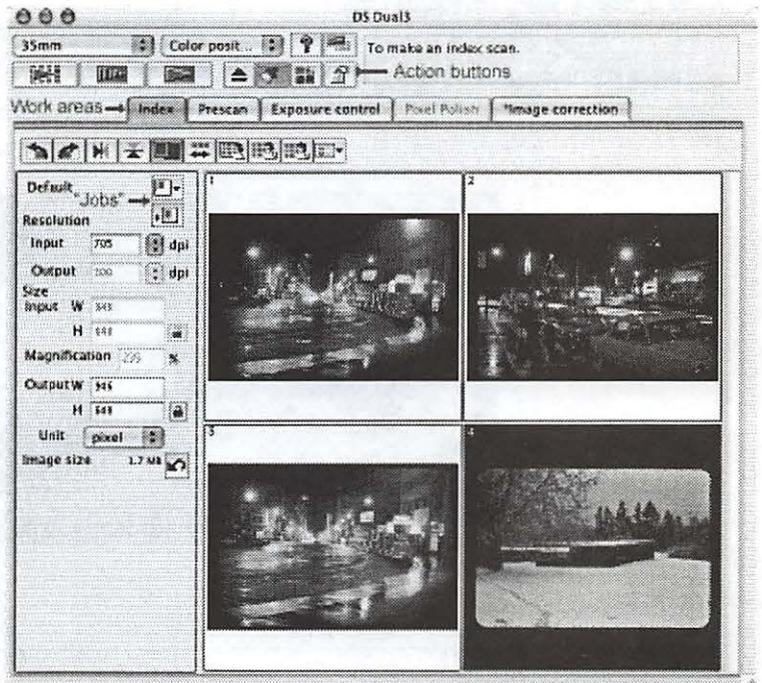


Figure 2: Main scanning Utility window
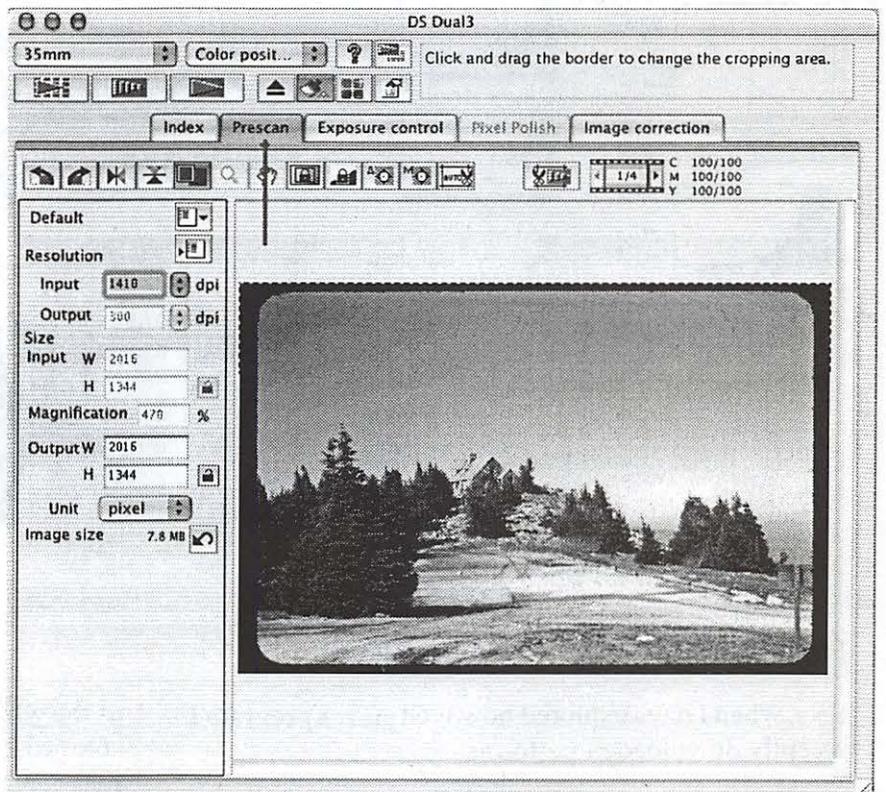


Figure 3: Prescan of one image
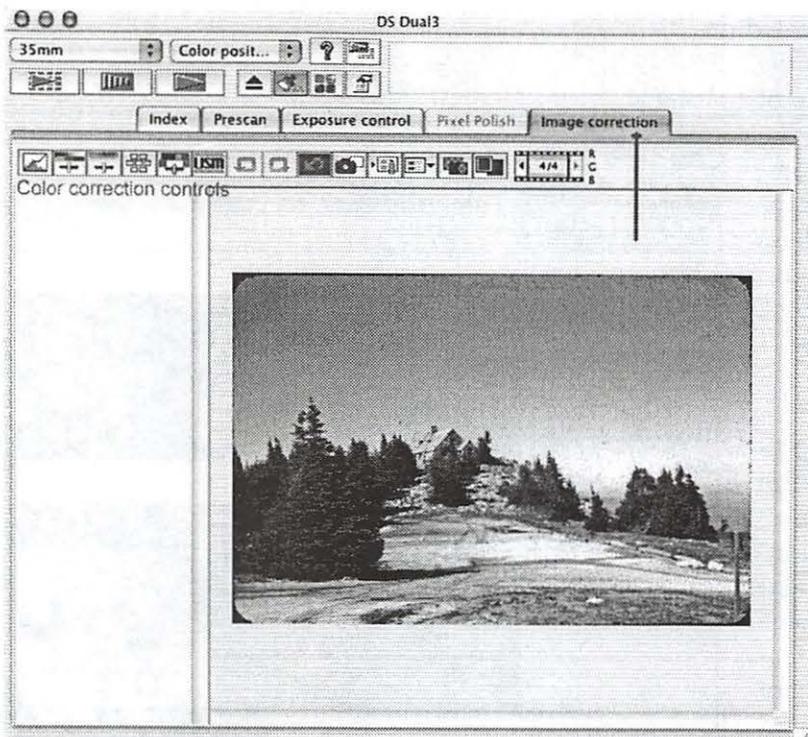
*Figure 4: Image correction selections*
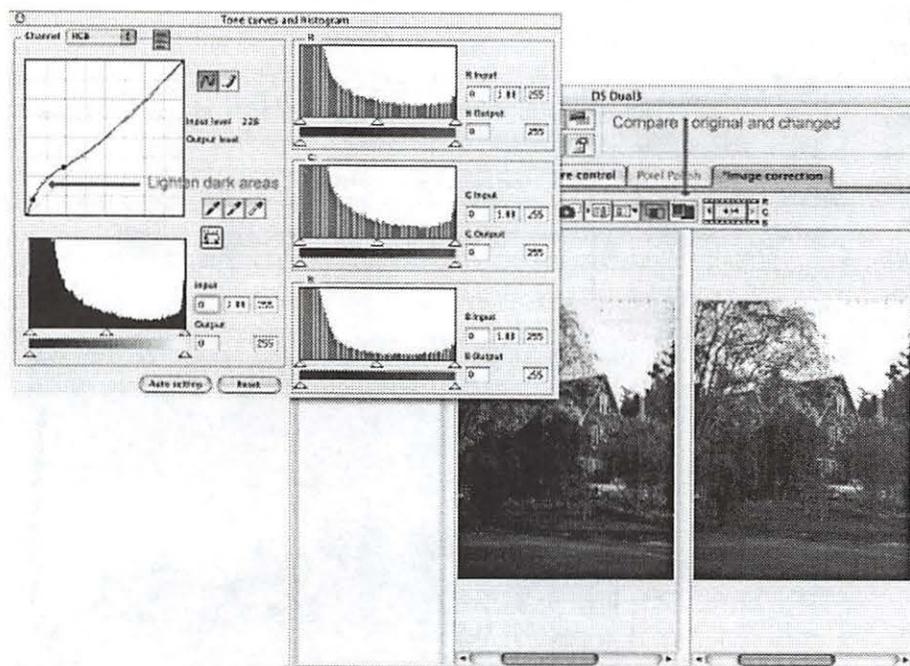


*Figure 5: Manual control of exposure and color*

ticle, when I have explored how well such a program I recently downloaded performs!

## Prescan

Figure 3 shows a Prescan, where one has scanned the image at a size sufficient to monitor the effects of

corrections made on it. Black parts (the cardboard slide holder) may be automatically or manually cropped out of the scan. Auto cropping sometimes gets fooled. One may also manually crop into the picture, to produce a desired improvement in format. Here I set the resolution to 1410 dpi, and the file (a picture taken in 1955 on top of Mt. Spokane) size has grown to almost 8 MB.

## Image Corrections

The Exposure Control area seems to be where one can set exposure and color-balance corrections for film types, and save them for batch use. I have not explored this much.

In the slide of Mt. Spokane one would probably want to correct the slight magenta color cast, noticeably particularly in the light areas, that seems to be characteristic of Kodachrome films of at least this era. (Remember ASA exposure indices of 8 or 12?) Click on the Image Correction button to get to the right tools (Figure 4). The color and exposure correction tools are brought up by clicking on the five left-hand boxes; I have labeled them "Color correction controls." From left, they are "Tone-curve/histogram," Brightness, contrast, and color balance," "Hue, saturation, and lightness," "Variations," and "Selective color" buttons. As with many photo enhancement programs, there are several different methods of achieving similar color changes; one can pick among these to see if the simpler ones will give the desired result, or go to ones that give more control. In this case I might try the histogram box/button, which has the eye-droppers, and set the light area of the lower sky as the white point. This would correct for the magenta color cast seen most easily in that area. Multiple buttons can be used to make additional corrections.

One of my favorite controls is the far-left one: Tone-curve/histogram. With it one can manipulate the input/output curves in RGB or in separate colors. Fig-

*Figure 6: Default PICT file format*

cursor is placed over an area of the picture (on the right), a small circle shows the point on the input/output curve corresponding to that point. Figure 5 also shows, on the right, an optional view comparing the original with the modified image. And it also shows the need for a large-screen monitor, to handle all the possible windows!

### File formats

A number of different formats for saving the files are possible: BMP, JPEG (selectable compression), TIFF, and PICT. Unfortunately, the default for Macintosh is PICT, and I could find no place to change that setting to my preferred TIFF, so that each time I save a file I have to remember to change it to TIFF. See Figure 6.

### Summary

In spite of certain interface factors that annoy me, the scanner works well, and the software is very full-featured, at least for this home user. As the nicely de-tailed manual says, "Image processing is a highly specialized and difficult field that takes years of practice to master." I've just started to use some of the capabilities of this system. There are many more I have not even enumerated in this review. ∎

ure 5 shows how I have redrawn the curve to lighten dark areas of a picture, while not substantially lightening middles or highs. One nice feature is that when the

# Getting Envelopes and Labels Imprinted

by Steve Roberson

IMPRINT IS A small application for printing envelopes and labels. It requires the Jaguar version of Mac OS X, also know as Mac OS X 10.2, because, among other reasons, it uses the names and addresses stored in Apple's Address Book application. Before all go into the details of Imprint, allow me to give you a little background information about Address Book.

In November of 2002 I stood up at the General Meeting and talked about Address Book, iCal and iSync. During the questions that often pepper the presentations at the General Meeting, someone asked about printing envelopes from Address Book. I had to let them know the sad truth, Address Book treats you like e-mail is the only kind of mail the world has ever known. It other words, printing from Address Book is about as limited as can be. It only prints the list view.

How could Apple, which seems to work hard at understanding the needs of users, create an address book application with such limited printing features? Will they add better functionality in the future? I don't know and it may not matter because with the Jaguar edition Apple made all the data stored in Address Book easily accessible to other applications. The hope is the more and more applications will store and retrieve information about people in one central place. Already Apple's iChat and Mail applications do this, hopefully other software makers will follow suit. There have already been a number of small applications written to address the issue of printing envelopes and labels with the data managed by Address Book. I've looked into three, Addressix, Address Book Reports and Imprint, but have chosen to focus this article on what I found to be the best of the group, Imprint. Your mileage may vary so by all means, download all three and take them for a spin yourself. (http://www.versiontracker.com)

As far as using Imprint is concerned, it's fairly straightforward. When you start Imprint two windows appear. The small one is called the "Info" window and that's basically where you spend your time as the large window is simply there to let you look at the envelopes and labels you create. There are three views in the Info window: Source, Layout and Format.

In Source you chose individuals and groups from your address book. If you have both a home and a work address for a given person there's a menu for you to indicate which address should be used. There's a convenient search field for those of use with large or disorganized Address Books. You can also import addresses from a text file.

In the Layout view you choose what type of envelopes or labels that you want to print. Imprint has built in support for eleven envelopes, over a hundred Avery labels and a number of labels for Dymo label printers. You can also define custom envelopes or labels by specifying the dimensions.

The third and final view is Format. In the Format view you can choose the various attributes like font family, typeface, size and alignment associated with your destination address and your return address. As you make changes in any of the views your decisions are reflected immediately in the large window. That makes it easy to try out a flowing font like Shelly - Volante Script before settling on something a bit more legible like Optima - Italic.

When you save a file in Imprint you're saving the choices you've made, what size envelope, the font and the like, but you're not saving the addresses of the people on your mailing list. Instead, Imprint saves a list of pointers to the records in your Address Book. Every time you open that file, Imprint looks in Address Book to gather the names and addresses it needs. Not

Steve Roberson
789 e-Commerce Street
Alexandria, VA 22314

Jane Notreal
2003 J Street, NW
Suite 1234
Washington, DC 22002
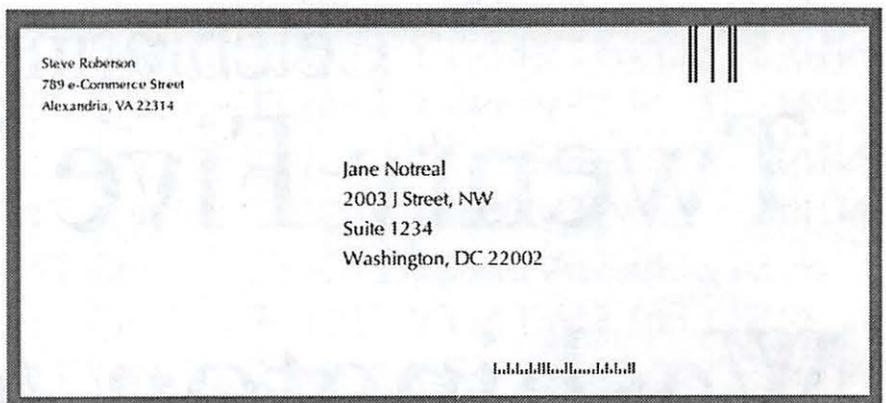
*One window shows you what your envelopes of labels will looks like as you work on it in the other window.*
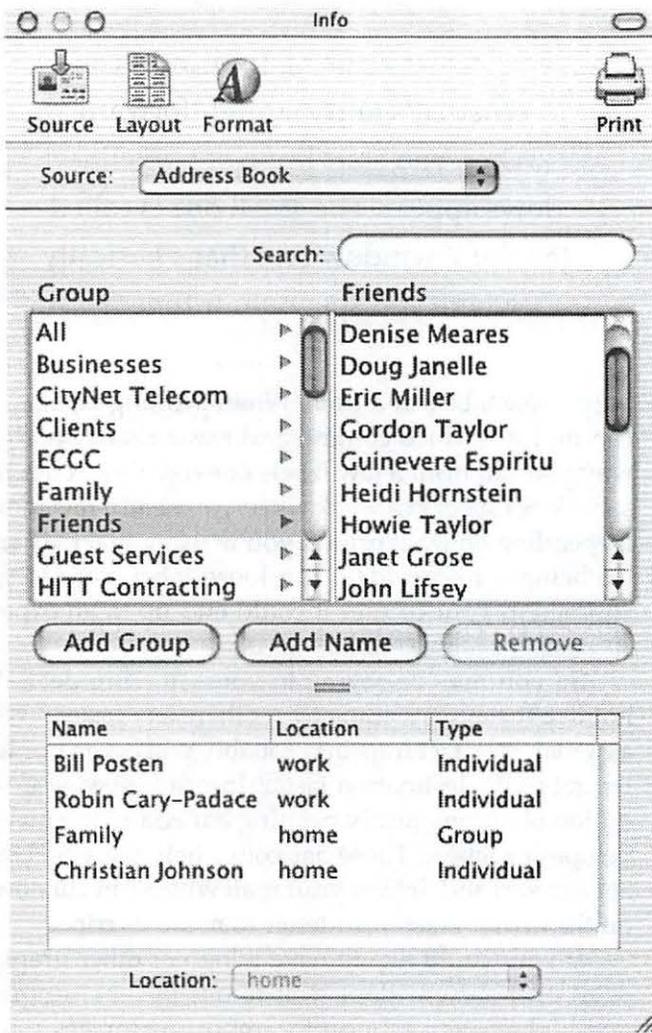
*The individuals and groups for your mailing list are specified in the Source view.*



*In addition to specifying which type of envelope or labels you'd like to use, you can turn on the automatic bar codes from the Layout view.*

surprisingly, that strategy has some advantages and some disadvantages. Let's look at the advantages first.

Say I want to use Imprint for printing a hundred or so Christmas card envelopes one year. I have a group in my Address Book called "Family" so I add that to my mailing list first. I'll add individuals as well as other groups. I'll choose my envelope size and a festive font. I'll print of the envelopes and I'm done until next year.

Next year is when it gets interesting. Between Christmas 2003 and Christmas 2004 my Address Book is likely to change. For instance a number of people will change their address over that period of time and hopefully I'll keep my Address Book up-to-date. It's possible that my "Family" group or any other group for that matter might grow or shrink in the next year. When I open my Christmas Card file in December of 2004, Imprint will gather all the latest information from my Address Book and I'm ready to print!

The down side of Imprint's strategy is that I can't easily transfer my Christmas Card file to someone else like my wife. When she opens it on her computer it won't be the same because her Address Book isn't the same as mine. One work around would be to choose "Save As PDF" from the print dialog box. Anyone with a PDF reader like Adobe Acrobat or Apple's Preview can view or print it.

It's worth noting that in Address Book you can put a group inside another group. For instance, I have a group called "In-Laws". As you might expect, I've included the group "In-Laws" in my "Family" group. If I were to send an e-mail addressed to "Family" both my immediate family and my wife's immediate family would get a copy. Unfortunately Imprint ignores groups that are nested in other groups.

Imprint has a feature aimed at those of us who print

Normal Text Style

| Font Family | Typeface | Size |
|---|---|---|
| Palatino | Plain | Auto |
| Papyrus | | Auto |
| Parisian | | 9 |
| Park Avenue | | 10 |
| Party LET | | 11 |
| Poetica | | 12 |
| Poppl-Laudatio | | 13 |
| PRNC | | 14 |

Left | Center | Box | Right | Top | Middle | Bottom

Return Address Style

| Font Family | Typeface | Size |
|---|---|---|
| TaxType Mono | Regular | 11 |
| TaxType Pi | | Auto |
| TaxTypeCondens | | 9 |
| Techno | | 10 |
| Tekton | | 11 |
| Tekton Plus | | 12 |
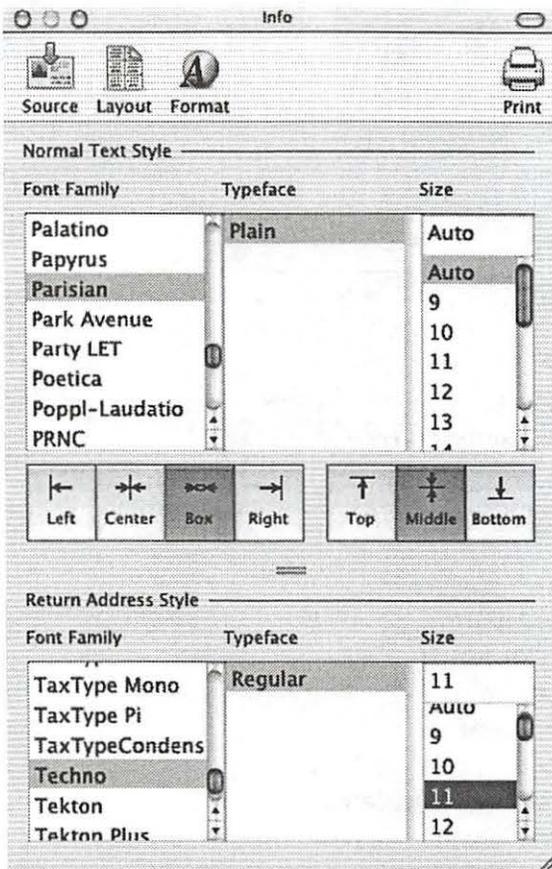
*You're welcome to use a different font for your return address but I'm not sure why you would want to.*



Jane Notreal
2003 J Street, NW
Suite 1234
Washington, DC 22002

Steve Roberson
789 The Long And Winding Road
Alexandria, VA 22314
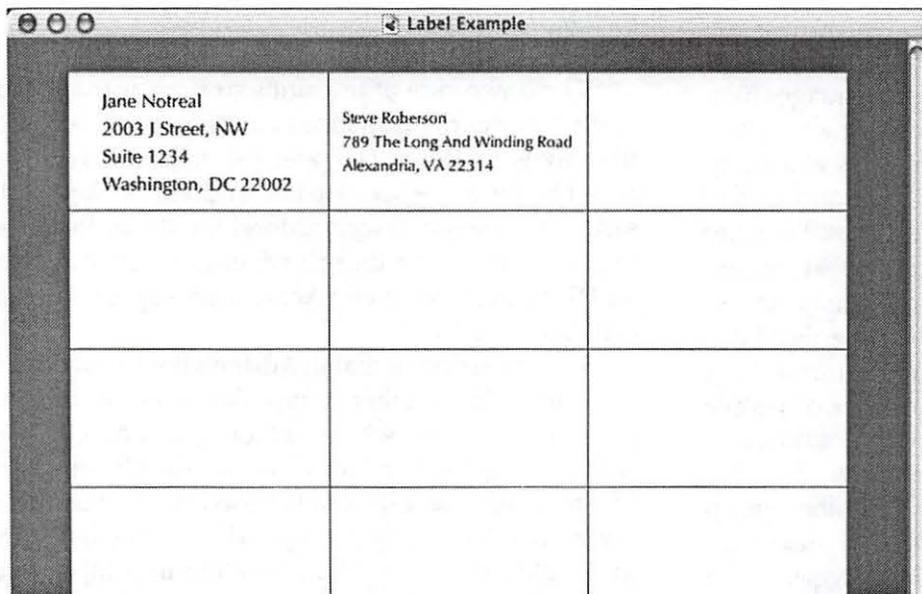
*One thoughtful aspect of Imprint is the way the text on labels automatically scales to insure that long street addresses aren't wrapped awkwardly onto multiple lines.*

"As far as using Imprint is concerned, it's fairly straightforward. When you start Imprint two windows appear. The small one is called the 'Info' window and that's basically where you spend your time..."

only a few labels at a time. When printing labels you can indicate which column and row to start on. That way you can print a few labels one day then reuse the same label sheet in a week when you need a few more. Depending on what printer you're using that may end up being a messy idea. If a loose label were to get jammed in your printer it could end up in an expensive printer repair bill.

So you may be saying to yourself, "Big deal, it's not like the letter's going to get there any faster." Well as a matter of fact Imprint probably will help your letter get to its destination faster. Imprint gives you the option of automatically printing bar codes on you envelopes or labels. These bar codes help the US Postal Service sort and deliver your mail which can cut down on the time it takes your letter to make its trip.

If you would like to have a logo or other graphic print on your envelope you're out of luck. Imprint doesn't have any support for importing images.

Finally there's the price. Imprint costs $19.95. That's several dollars more than it's competitors and you may not be sure if it's worth it. Thankfully you can download a copy from the Ampersandbox web site (http://www.ampersandbox.com/) and try it out before deciding.

It's worth noting that Ampersandbox is a small and responsive company. At one point while I was evaluating Imprint I ran into a small bug and sent e-mail to the company. Later that same day I received an e-mail back letting me know that someone else had reported the bug a day before me and that it had been fixed. I downloaded the latest version of Imprint from their web site and, as promised, the bug was gone. ■

# Design Tools Monthly

**By Nicholas Pyers (nicholas@nicholaspyers.com)**

**D**ESIGN TOOLS MONTHLY has been providing Macintosh graphic designers with monthly summaries and quarterly software updates for over 10 years and this is the review of it that I was told I should not publish, but have anyway. While each issue only contains 12 pages, they are crammed full of:

- tips & bug fixes
- industry news
- software & hardware updates
- font news
- book reviews
- upcoming events
- virus warnings

The only thing which is "missing" from each issue is advertising, which is actually a bonus as you don't have to wade through all the marketing hype.

In fact, I hate to admit this, but the best feature I found with Design Tools, was its compact format and well laid out design because this format made it extremely easy to read while sitting on the coldest seat located in the smallest room of the building and thus I could use that "wasted" time to catch up on all the news and information and theoretically I could save hours of browsing the web each day.

Well actually, I still browse the web for hours each day, but I get a great summary of what's happening and often pick up great tips or updates from Design Tools that I managed to miss on the web.

A sample issue of a recent Design Tools issue may be downloaded as a PDF from their website to give you idea of a typical issue:

http://www.designtools.com/html/sample.htm

Design Tools Monthly is available as a paper based publication which is printed on recycled paper with soy-based inks, or as an electronic

> "I still browse the web for hours each day, but I get a great summary of what's happening and often pick up great tips or updates from Design Tools that I managed to miss on the web."

download from the Design Tools website as an Acrobat PDF.

The electronic only subscription costs US$199 per year and gives you access to the Subscribers Only sections of the Design Tools website, which includes the Software Closet and the magazine as a PDF.

The PDF is extremely well constructed, with an excellent bookmark/ index system, and hyperlinks to relevant websites.

If you are located within the United States or Canada, the paper based version costs US$229 and if you live anywhere else the cost is $249. As a "paper" subscriber, you get access to the Subscriber Only areas on the website as well as a printed version of the magazine posted to you each month. Then four times a year, you'll also receive a CD that contains a copy of all the software that was posted to the Design Tools website during the last quarter. ∎
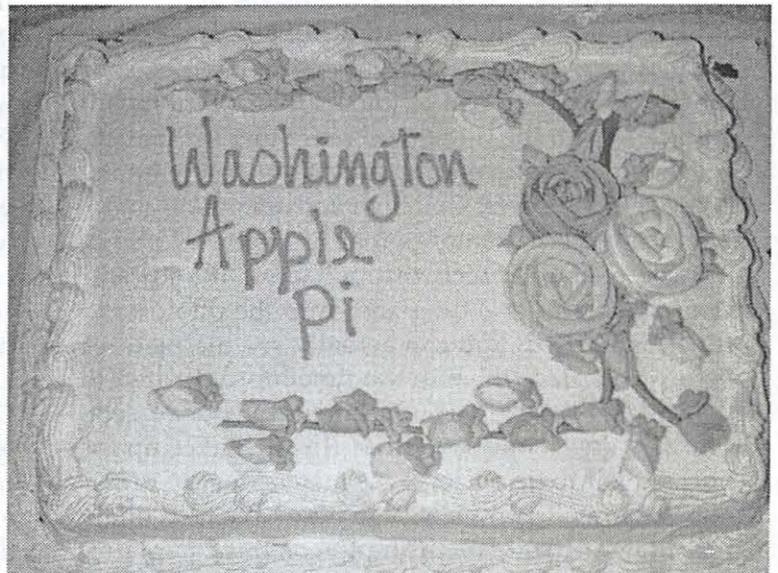


*Three cakes were prepared for the Pi's 25th Anniversary General Meeting and party. Not only were three cakes required to handle the crowd, but each cake represented an era: the past, the present, and the future. (Photo by Lawrence I. Charters, taken with a Nikon CoolPix 990 digital camera.)*

# iLife, a review (and some how-to with multiple cameras!)

by Guy Serle

LET'S START BY giving credit where credit is due. Thank you Apple for the release of the newly integrated Digital Lifestyle productivity suite commonly known as iLife. All the (currently known) pieces finally work together. Thank you also Apple for giving Macusers such a wonderful program as the original iMovie. Who else would give you an easy to use, powerful, and (best of all!) free of charge piece of software as iMovie. Yes, it is a beginner's introduction to Digital Video, and it's not really capable of true professional output, but for the average user, it accomplishes its mission quite nicely thank you very much. With each version, Apple has added more features and capabilities, but there are some things that it just cannot do.... or is there?

## Lights....Cameras.....iMovie 3!

Beginning with iMovie 3. Prior to the latest release, if you wanted to add photographs (Jpeg's) or music (MP3s), you had to import them. That meant going through the finder and searching for that exact picture or tune needed and if you made a mistake, well that's why God invented delete and undo. The new version removes that necessity by allowing the user to search through their iPhoto and iTunes libraries and drag and drop the photos and tunes as needed. You can actually see the pictures before you place them in the timeline and listen to the songs before you commit them to your project. This is a great time saver that almost makes up for how slow iMovie performs as matched up to previous versions. The reviews you may have read in the Mac Mags are right on the button on this complaint. iMovie 3 drags in comparison. Apple hopefully will deal with this issue in some other way than recommending a faster machine.

What do I like about iMovie 3? Number one with a bullet is the integration between Apple's Digital Lifestyle programs (assuming of course that you have either downloaded or purchased the latest releases that is). At the touch of a button, your entire iPhoto and iTunes libraries are ready to drag and drop onto your project. New transitions and editing features. More titling and sound effects (from Skywalker Studios no less!). Feeling nostalgic for the iMovie 2 sounds? They can be added (though why Apple removed them I have no idea). If you have downloaded further sounds, or additional titling/editing effects from Ezedia or Gee Three, not to worry. So far, every one of them I have checked seems to work fine. Also nice is that iMovie no longer takes over your entire desktop. In the past, if you were running iMovie and needed to go to another program, it had better be either in the Dock or already running. Otherwise you needed to go to the iMovie drop down menu and select hide to get it out of the way. Not anymore. Now you can resize it to fit. A great idea that took way too long to implement.

For the first time, Apple included volume controls for the sound channels that allows you to fade songs and sounds in or out. The interface for doing so is simple, once you play with it a bit, and as with most Apple procedures, just works. Also new is the "Ken Burns" effect (named after the award winning documentary director) for pictures used in your iPhoto library. Using this effect is both mind blowing and addictive. Watching photos zoom in/out or pan across is amazing and so simple to use that it is assured to be overused. There is one thing I don't really care for about the "Ken Burns" effect. Once you set up a picture to pan or zoom or whatever, the parameters you set for that photo remain until you change it. If you wanted your next picture to just be there without the effect, you must manually set the zoom value to 1.00 in both the Start and Finish button selections (Doing just one or the other doesn't reset it). It would have been helpful if the effect only stayed until you selected another photo. Defaulting to the 1.00 position for each photo selected (are you listening Apple?) would make this more useful and less frustrating, especially considering that the moment the photo with effects is dropped onto the timeline, it begins its agonizingly slow rendering process.

Another leap forward is iMovie's integration with iDVD. The new version allows you to set chapter marks in your video from within the program.

While this (or something kinda like it) was possible before, it was difficult and clumsy and certainly not possible within the iMovie program.

While all this integration sounds terrific, there are limits to what you can do while in iMovie. You can't for example, edit existing photos in your iPhoto library to make them look better. You can't edit a song in your iTunes library to cut the parts you don't want. Are these important features that Apple left out? Not really. Edit your photos in iPhoto BEFORE trying to put them in iMovie. Use the volume controls in iMovie to cut off or turn up the sounds and songs as you need them. Easy solutions for problems are what I like best.

Now on to the parts I don't like. System requirements. If you're not running 10.2 (you OS 9 stalwarts can forget about this or probably any other update to iMovie), don't bother. iLife as a complete package is not for you. Also, you need a relatively fast processor (I would recommend a 500Mhz or faster G3/4). Next on the list is speed. As in, there isn't any. iMovie 3 runs slow. Slower than iMovie 2 by a significant amount. Hitting buttons and seeing instant results just doesn't happen from darn near everything from playback to resizing windows. If you have multiple clips rendering, the program slows to a crawl. Even Transitions and Titles can be held up while your computer and iMovie tries to catch up with your LAST action much less your current one. Dropping DV clips and iPhoto pictures can also be subject to a bad case of the slows. I've tried to figure out what the common denominator is when it slows down and I can't think of anything specific. It's not my computer (A SuperDrive equipped 933Mhz with 768 megs of Ram) or my Operating System (10.2.6 as of this writing). Another consistent problem I've encountered is crashing. It seems to occur most often while moving video or audio clips along the timeline or while saving a project. Oddly enough, after restarting the program, half the time the edits I did before saving are still there or if not on the timeline, they're saved as individual DV clips in the Shelf.

Another new feature I have kind of a love/hate thing for. In a nutshell, as you create your project, iMovie is creating and updating a QuickTime movie (projectname.mov) in the same folder as where you store your project. I love it because I usually make QuickTime movies of the project as I go along in all their various stages. Now I don't have to since iMovie does it automatically. Why is something like

this important? You can review your project in full-screen through iMovie, but you can't start it or easily rewind to look at something again. But you can at near full screen size in QuickTime. Sounds like I love it right? What I hate is the feeling I get that this is part of the reason for the overall sluggishness of iMovie 3. Also, it doesn't save the previous version of your project since it updates on the fly any changes you make. You'll have to do that manually if that's how you operate. Some of the forums on various Mac-friendly websites have accused Apple of releasing iMovie 3 in essentially a beta form. I don't think I would go that far, but parts of iMovie 3 does feel unfinished.

As great as iMovie is, there are still some pieces and features I would like to see. Like a second video channel. Wouldn't it be nice to be able to easily cut from one scene view to another without disturbing your audio playback? Before the iMovie experts start screaming about cutaways (which I will tell you how to do later), J-Cuts and L-Cuts, let me say that I agree with you. It can be done. However, don't kid yourself that it's as easy as dropping DV clips onto a timeline. To do it effectively requires extracting the cut-scenes audio and a hit or miss drop sequence. Once the clip is dropped onto the timeline, if it's not in the correct spot, you have to undo the action and try again. After making a video with multiple cameras looking at the same scene and splicing them in, I can tell you with authority that this is a pain the neck and very time consuming. With a second video channel, you slide the cut scene to the exact moment that both scenes are in sync. Voila! You're done. Another editable audio channel for the audio embedded in your DV clip would be terrific. I envision the audio from your DV clip automatically dropping (locked in place with video to prevent sync problems) to this channel. You could raise, lower or fade in and out the volume as required for whatever effect you need within the project. Another feature I would like to see is further integration between iMovie and iPhoto. As you look at the pictures to drag and drop, sometimes they're just still not quite right. What to do? Open iPhoto, correct them and then go back to iMovie. What if instead, you double-click the image and iPhoto's editing features came up and allowed you to make simple changes (which is all iPhoto really allows anyway)? These are things I would like to see in future releases. Why not charge for a SuperSized (™ McDonalds) version with some of the features I listed? Call it, iMovie Pro! No, that

would cause confusion with the Final Cut people. How about iMovie Plus? No, there's that whole Microsoft OS Plus package dilemma. AH! iMovie Deluxe! I would pay 50 dollars for the advanced features I described and the simplicity of iMovie. I bet a lot of others would too. Certainly enough to pay for the R/D required I would think.

Chances are Apple will never get around to most of this list, as they would rather sell you a copy of Final Cut (Express or Pro) than spend a lot more time and money in a product that doesn't put much money back into their coffers. Granted, iMovie is a free product and Apple uses it to attract new users. But let's face it. In order for Apple to keep their user base, they must continuously innovate to stay ahead of the PC crowd. Many new PC's I see advertised are touting their DV capabilities (Welcome aboard PCers. You're only about 10 years late to the party). Apple has a huge head start, but they did with their GUI too.

### Snap Snap...Nudge Nudge....Wink Wink

Along with the new version of iMovie, there is also a next generation iPhoto. My big complaint of iPhoto in the past was that it seemed more geared toward photo archiving than editing. As an archiver, it works great, but the photo editing features were totally inadequate. With iPhoto 2 some of those complaints (though Adobe PhotoShop and Elements don't have anything to worry about) have been answered. It's still a great place to keep all your digital photos especially if you're going to use the integration features of iMovie 3, but now it's capable of some rudimentary edit tricks. The Enhance button does an overall look at the photo and attempts to improve it. This kinda works, but my idea of enhancement and Apple's sometimes doesn't see eye to eye. The Red Eye feature works as it ever has without any real complaints. The biggest improvement in the editing department is hands down the Retouch feature. Getting rid of wrinkles, shirt stains, or any other minor retouching (hence the name) is simple. Click Retouch and a crosshair appears as you move your cursor across the photo. To put it simply, it blends the affrontment with the colors around it and it disappears. As in the past, if you prefer to edit your photos using another photo editor, simply select the program desired in your iPhoto preferences. Keep in mind that this is the only way to select another editor while in the program. IMHO (in my humble opinion), double-clicking a photo

should bring up an options list to select an editor. Since many of us have multiple programs for dealing with digital imagery (PhotoShop, Painter, JPegView, etc), it can be pain to have to select only one to be used with iPhoto.

Another new feature is iPhoto's integration with iDVD and iTunes. It is brain-dead simple to create a slideshow that can be put on DVD, however I hope the slideshow only lasts as long as the background song selected from iTunes as you can't pick more than one song. I would suggest using iMovie to create these slideshows where more editing options are available.

In the past if you wanted to send photos from your library out to the Internet, you could only use Apple's Mail program natively. AOL, Entourage, and Eudora are now supported from within iPhoto though you need to go to iPhoto's preference panel and pick one.

### Burn, Baby! Burn!

While iDVD was never the most featured DVD creation program around, it was elegantly simple. The new version follows that same philosophy, while adding tricks we never knew we missed until Apple put them there. Along with new themes (While keeping the old ones as well. Why iMovie's sounds didn't follow this as well I'll never know), there are such things as selectable backgrounds. Instead of a static folder, you can drop a DV movie to play. Want one of your MP3 files to play while you make up your mind which folder to select? Integration with iTunes. However, it will only play a 30 second loop from the selected song. Integration with iMovie. You can now select chapter marks within iMovie (didn't I already say this?). A great program made only better. Still only works with internal SuperDrives. Don't have one? Don't bother with iDVD.

### Turn on! iTune out!

Other than iMovie, the most changed program at a glance would seem to be iTunes. Version 3 was released when the iLife package came out and just a few months later, version 4 came out when Apple started selling songs off the Internet. As an MP3 player/organizer, iTunes was darn near perfect. New additions for version 3 like Smart Playlists, networkable volumes (for sharing libraries across a network), and MP3 to CD burning capabilities (imagine 10 hours of music on a single CD at 160kbps) are more than welcome. Smart Playlists are

as easy to use as only Apple could make it. Select "New Smart Playlist", enter the criteria of the playlist (artist name, music genre, even your own created notes) and all the songs that fit those conditions are entered.

Version 4 went in a completely different direction. If you're looking for say, the complete works of Brittany Spears (shudder), get online, fire up iTunes, type the eternal virginal one's name in the search box and every song available from Apple's music site is there for downloading. The cost is set at the measly price of .99 cents per tune or around 10 dollars per album (Different albums have different prices, but most I looked at were around $10). You must first register a credit card with Apple (and this same registration allows you to buy products from the Apple Store) and select a password. Pick and choose individual songs or entire albums, the choice is yours. Once downloaded, the song is in a different file format than you're probably used to, AAC. You can burn as many copies of this to a CD as you want (it changes to the old reliable AIFF format on the CD), however you can only copy the file from the original computer it was downloaded to, to two other computers. This was done to alleviate the piracy concerns of the main music companies. Of course you COULD always just re-download the AIFF file from a CD you created to have an MP3 copy if you so desire, but why bother? As long as you don't move the AAC formatted copy around a lot (and most of us really aren't interested in giving free copies away), you always have a fresh burn at your fingertip. Hopefully, this is an idea that's here to stay. 99 cents a song I can live with and will be more than happy to pay. Who else but Apple could have pulled this off.

My only complaint on this isn't with Apple but the music companies. Many are not on board yet and until they are, some music catalogs (The Beatles and the Rolling Stones to name a few) are not available. In the short time of its existence, millions of songs have flowed from Apple's website to music lovers everywhere. The most amazing thing is that so far only people with OS X.2 can use it! Imagine how many downloads will occur once our misguided Windows friends are able to use it too (A version for Windows in supposed to be in the works)! If you're an OS 9 user, you will probably be out of luck at least for awhile. Here's a "you heard it here first". Rumor has it if Apple makes a go of this with music, that movies could be next. Imagine download-

"Who else would give you an easy to use, powerful, and (best of all!) free of charge piece of software as iMovie? Yes, it is a beginner's introduction to Digital Video, and it's not really capable of true professional output, but for the average user, it accomplishes its mission quite nicely thank you very much."

ing your movies for say, $5-10 and burning it a DVD via your SuperDrive. You wouldn't get all the packaging of course, but I could live with that for cheaper full quality DVDs.

Minor complaints aside, I recommend iLife as a whole to family and friends. It has its rough spots and iMovie 3 can sometimes be temperamental, but the additional features and benefits of the package as a whole far outweigh the negatives. If you have the hardware, and your current on the OS X front, give it a try.

### Climbing off my soapbox

In the title of this article I promised some how-tos. If you're looking for iMovie instruction manual type stuff, go on to the next story. These are going to be more along the line of helpful hints. I have learned many painful lessons on Digital Video since I started about 4 years ago, and I'm going to pass on some of that guidance here. First off, you don't always get what you pay for. You can spend a lot of money getting involved with DV and that doesn't always translate into better looking videos. Before you take the plunge, decide what you want out of it. If all you're going to do are vacation videos of the family, or friends weddings, don't run out and buy a $2500 digital camcorder. You'll probably find that the $400-700 camcorders work just as well without loads of trinkets and features you'll never use. Same thing with digital cameras. A digital camera in the 2-4 megapixal range will make pictures that are just as good shown on a TV set as a 6 megapixal one for a lot less. Lastly, the computer.

I bought a 933Mhz off eBay for around $1600 (a

great price last October), but I could have accomplished the same thing (now, not then) with an eMac. On my recommendation, two friends have recently purchased eMacs that had formally been PC users. One just wanted an easy to use (she was tired of all the problems she had had with Win 98), trouble-free computer for surfing the web and writing. An eMac 700 with a combo-drive was perfect. I got about three calls after it arrived for simple differences between the platforms and I haven't heard from her with any problems since. The other friend had watched me demonstrate iMovie (version 2) on my Pismo 500Mhz G3 PowerBook at work. He wanted to do DV but wasn't sure what direction to take. He was smitten with the 17" iMac, but I suggested an eMac instead. Functionally, they're about the same machines, but the eMac is $400-500 less than a comparably equipped iMac. Yes the usable screen size is a little bigger with the flat screen on the iMac, but my friend is not a rich man and cost does matter. So for roughly around $1700, he's got an eMac with a SuperDrive, a 3 year warranty, built-in Ethernet, 80 gig hard drive, a darn nice graphics card, 512Megs of Ram, a color printer/scanner, and a digital lifestyle productivity suite that Windows PCs can't touch. Not a bad deal. How will he use it? That's up to him, but if I was giving advice on Digital Video projects (and since I'm writing this, I guess I am), I would say this.....

### Equipment

1. A DV capable Macintosh with the following minimum requirements

A. 500MHz G3/G4 processor or better. Faster is always better. 400MHz DV equipped teardrop iMacs will work, but be prepared for a long slow ride.

B. 66MHz buss speed minimum. Any slower and you're sure to get dropped frames and choppy audio. Just about every native G3 PowerMac should qualify. If you're not sure, check out the specifications of your machine at www.everymac.com.

C. 512 megs of Ram. There is no such thing as too much Ram.

D. 60 gig minimum hard drive. If this also serves as your system disk, consider partitioning the drive or adding more storage space. Keep your application (iMovie) and your project files on separate partitions or disks. DV video takes up an ungodly amount of space. 120 gigs or more would be better.

E. Built-in FireWire ports. PCI cards with FireWire ports will work, but there ain't nothing like the real

thing baby.

F. iMovie 2 or 3. iPhoto and iTunes if you have JPEG's or MP3 files to be used. Got a SuperDrive? Get iDVD too. Oh, heck, just get iLife.

G. QuickTime Pro. The ability to save in different video formats alone is worth the 30 bucks for this software.

H. PhotoShop Elements. Because you never know just what can come in handy at times.

2. A DV camcorder with FireWire out. Most if not all come that way anyway. It should also have as a minimum 680,000 pixels. An optical zoom of at least 3X would be nice too. Digital zoom, especially at the higher range will pixelize your video noticeably.

3. A digital camera at least in the 2-4 megapixel range. Many also shoot AVI movies, but most are limited to either a set time limit or the amount of storage available on the camera and generally only shoot about 5-10 frames a second. Also, not all record sound along with the video.

4. An analog to digital DV converter. Not only is this good for getting analog video into your Mac as DV files, most will also go both ways. You can take your finished product and convert it to analog video for VHS tapes for your DVD deprived friends and family.

5. Erica Sadun's "iMovie 2 Solutions" (available on Amazon.com). This is not an iMovie "how-to" book, but a guide to taking iMovie in directions you never thought possible. Amazon has listed "iMovie 3 Solutions" by the same author and as soon as it's available, I plan on getting it.

### My little cutaway. Cut, cut, cut, cutaway!

Prepare for your project ahead of time. If you have multiple camcorders at an event and you're going to be pressed for your services in putting together a video project, think about what you want the overall video to look like BEFORE you start. Take the best camera of the bunch and put it on a tripod for stability. Select a location that has the best angle and shows the event clearly. Do a test for audio levels. Most camcorders have built in microphones of differing quality and if your audio is weak or garbled, you won't be able to fix it later. Set up your camcorder so you can hear clearly anything that's pertinent to the project. If you have an external microphone and the camcorder has a jack for it, all the better. Of course, most of us don't have extravagances like this so that's why you test for audio levels before you're committed.

OK, you've selected a great place for your camcorder, you have a decent audio pick-up, and you have a rewound fresh tape in the machine. Turn it on just before the event starts and walk away. Resist the urge to make changes, you be glad you did later. This video will be the establishing reference shot for your project. More than likely, you'll have no control over the actions of your fellow cameramen, but that's ok. You can pick and choose in the editing process how much of their material makes it to the final stage. One thing you can control (hopefully) is the time date stamp of the other camcorders. Unless you're filming a tornado, car crash, or scenes of police brutality (Can't we all just get along?), please turn off the time date stamp. With multiple camcorders, they won't look the same or probably even be in the same place, as the other camcorders involved. Plus it just looks cheesy. Don't worry too much about color correction between the camcorders. There's not much you can do about it anyway unless all the camcorders involved belong to you. You can make some corrections in iMovie later. On to the next step.

You now have collected all the video that you need for your project. If it was all shot on digital camcorders with a FireWire connection, you can proceed to download it into your computer. If any was shot on VHS or 8mm camcorders (analog), you will need an analog to digital video converter to get it into your Mac. Several are available at prices ranging from about $200-500 on the low-end side. Of course you can pay thousands if you like, but I'm assuming a low cost solution is better if it gets the job done. I use a Dazzle Hollywood DV and it has served me very well for the last year. Start with your reference video. Since this video is your starting point, when you import it into iMovie, resist the urge to edit it at this time. View it several times and make notes as to the strong and weak areas of the footage on the whole. Go to the "Advanced" menu and select the "Extract Audio" command. This will move the audio from your reference video to the first audio track and lock it into place. Save it and set it aside for now. Now import the secondary video into your project. Give each video clip from your secondary camcorders unique, easy to remember names (Like Ben's clip 1 or George's clip 2 etc) so you don't have to try and remember what's on each. For each of these secondary videos, review the raw footage and use the split clip function to weed out any footage you are not going to use. The best way to select

and edit your cutaway video is to find a unique movement (Like a hand raising or a head turning) at the beginning of the shot to use as a drop point reference in your main video.

Using your main reference video as a guide, find the exact spot to place your cutaway video on the timeline. Make note of the time stamp within iMovie. Typically this is displayed as minute/second/frame (such as 10:12:27. The 10 represents the minute guide, the 12 represents the seconds guide, and the 27 represents the frame guide. Remember there are 30 frames of video per second). Go to your clips shelf and select the video shot you're going to use over the reference video. On either side of the scrubber bar (The blue line on the bottom of the video playback monitor) there will be two white triangles. These are called crop markers. Select the left marker and move it to where you wish the cutaway video to begin. Select the right marker and move it where you wish the video to end. Go to the "Edit" menu and select copy. Now turn your attention back to the main timeline. Click near the time that you wish to use the cutaway video. Using the right and left arrow keys on your keyboard, move one frame at a time to get to the exact moment you want to drop the cutaway video. Once you're at the exact moment that matches the start of the cutaway video, go to the "Advanced" menu and select the "Paste Over at Playhead" command. This drops the copied video over the timeline. Review the sequence to make sure it's in the exact spot you desire. If it's not quite right, use the "Undo" command in the "Edit" menu to remove it and try again. As the video you copied earlier will still be "Pastable", you won't have to go through all the selection process again. This trick and many more are available through Erica Sadun's excellent book "iMovie 2 Solutions" available through Amazon.com. For anyone interested in going beyond the basics of iMovie, this is a great reference guide.  ∎

*The author does not consider himself an expert on digital video. I make plenty of mistakes and uses colorful vocabulary while doing so. My current crop of Macs consists of a 933 QuickSilver Tower and a Pismo 500MHz G3 for the road. I use a JVC DV520 digital camcorder and a Any tips on easy iMovie tricks would be appreciated and can be sent to floridakid@aol.com.*

# Review of NoteBook by Circus Ponies Software

by Lila Bednar



*Figure 1.*

$S$ O I SAID to myself, "Circus Ponies? Oh how cute." I should mention I abhor "cute" except in kittens or puppies. So it was with some trepidation that I downloaded the NoteBook software from / www.circusponies.com" http://www.circusponies.com. The website wasn't **too** cute at least, and seemed well organized. The download was fast and the install was the usual "drag this to your applications folder". Once installed, I fired it up to see what NoteBook is all about.

Like so many people, I constantly run across things I want to keep track of or that I think will be helpful later on. And like many people, I have sticky notes (real and virtual) and odd scraps of text or pictures or URLs scattered all over my TiBook. It would really be nice to have some way of putting all that **stuff** in a place that I could organize it or have it organized for me. Often the problem I run into isn't one of not having the information, but of **finding** the information.

Circus Ponies bills NoteBook as: "Photos, e-mails, graphics, documents. NoteBook helps you keep track. Take notes, make outlines, and share information. Create project journals, directories, or portfolios. Clip images, e-mails, and news stories. Add formatted, searchable notes. Find anything using NoteBook's patented indexing technology."

That's a tall bill to fill and if it can do that, would be impressive indeed. When you first launch it, you're faced with what looks like a blank spiral notebook page (Figure 1). Upon opening a new NoteBook, you have by default: Contents, Untitled Divider, and Indices. This isn't especially inspiring, so I poked around and looked at the options included. Besides the relatively obvious ability to make and record notes you can highlight selected text (with your choice of colors). You also can apply stickers and change the page styles. There are six different NoteBook paper styles available, and you can customize the background of your pages with your own photos/artwork.
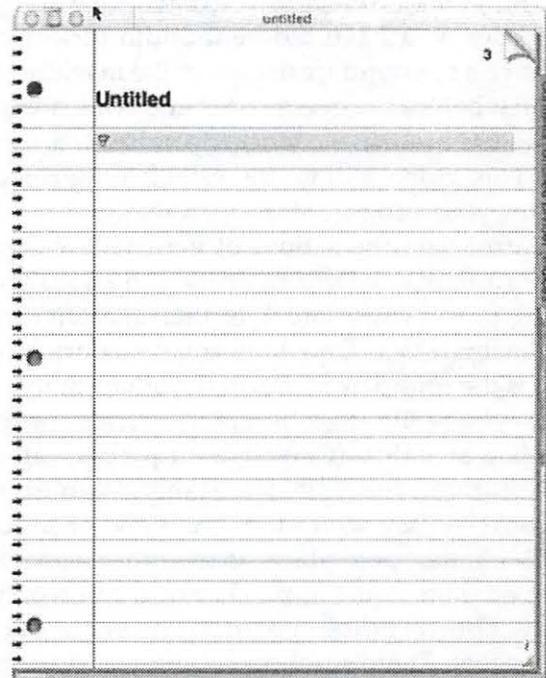
What became clear as I played with it was that this software allows you to outline and then collapse portions of the outline under the main headers with the now familiar rounded triangles (Figure 2). As you can see from the illustration (from Circus Ponies' sample notebook), you can add pictures as well. The instructions also indicate that video can be embedded, but I did not attempt this.

Outlining and using the NoteBook as a place to gather ideas or all related notes is the easiest way for me to picture the software at work in my life. I can see the usefulness of this after spending a couple hours playing with a test notebook and looking at various ways to get information into it. I'm like a lot of other people in that information and notes and things I want to follow up on are scattered all over my desk, desktop and life with sticky notes, browser bookmarks and text files sort of arranged in my documents folder.

Perhaps the most intriguing thing was the "clipping service", which allows you to cut text from whatever you're in and paste to your NoteBook even when the NoteBook isn't open. (Once you've enabled a "clipping service" NoteBook appears in the "Services" menu of all other applications; you can select which notebook or page you want the desig-
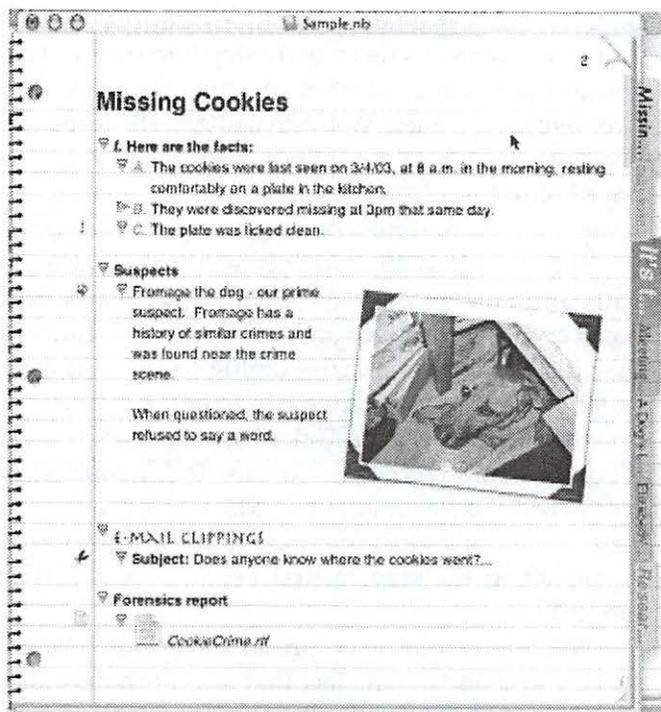
Figure 2.

nated clipping to go to if you have more than one NoteBook or multiple pages with clipping enabled).

Clipping worked well, though it does appear from my testing that when you are in your NoteBook, you can only expand one "clipped" portion at a time. This could become rather annoying fairly quickly if you have a number of clipped notes and would like to scan or review them all for something. I'd suggest this as something for the developers to look at for future versions.

NoteBook also includes the ability to AutoSave, which can be a boon for the forgetful, although I'd like more options than "every 5 minutes", "every minute" and "never". Something between "really anal" and "devil may care" would be good for the "rest of us".

There really isn't a user manual (does ANYTHING have a user manual these days?) but the online help is actually helpful. It is well organized and explains features in more detail than many OS X help files do.

While I've only played with this software for a few hours, I intend to put it to use in real life and see if the features work as well during the grind as they did in testing. I tend to be somewhat skeptical of what I call "black hole" applications, since it seems to me that **finding** things in them can be more of a chore than it is worth. Nevertheless, the organi-

zation of NoteBook and the search ability it has enticed me to take the plunge. ■

**Review Summary**

Name:          Notebook
Author:        Circus Ponies Software, Inc
Website        http://www.circusponies.com
Operating System(s): Mac OS X only
Cost:          $49.95 ($29.95 academic)
Slice Rating:  3.5/5

*Comments: Price makes it appealing to the general user. Ability to embed all sorts of files is excellent and the clipping service is great. Search capabilities extensive and indexing are well designed. Would like better control of autosave times or more options. The ability to expand clipped notes several at a time would make this more useful (at least to the reviewer).*
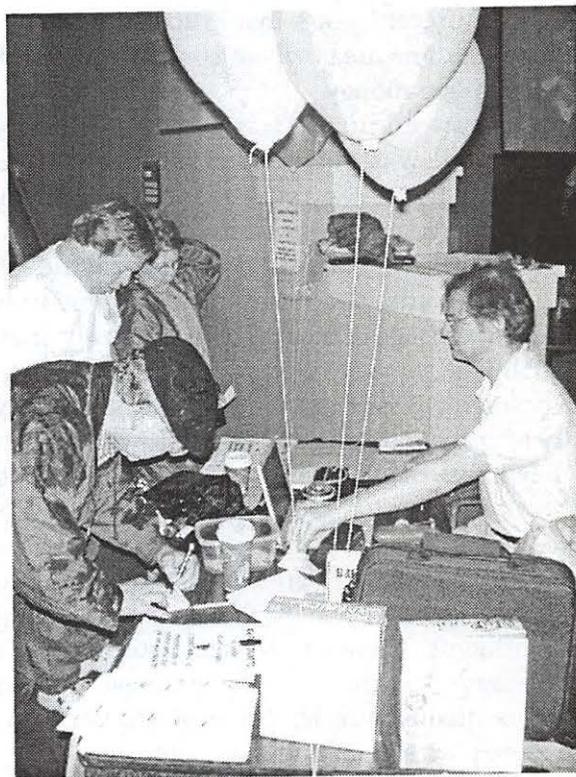


*Chris Bastian handled the registration desk at the 25th Anniversary Party. This was highly entertaining, since Chris was a guest: he lives in New York City. But as a former Pi officer, he knows how to lend a hand. (Photo by Lawrence I. Charters, taken with a Nikon CoolPix 990 digital camera.)*

# Crosswords Online: Cruciverbalizing on the Web
## (In other words, Crossword Puzzles)

by Kirk McElhearn <kirk@mcelhearn.com>

MANY THINGS CAN be converted into bits and transferred over the Internet, which is one reason why small pockets of special interests, hobbies, and pastimes flourish on the Web. One such interest is that of cruciverbalists, or crossword puzzle solvers. It may come as a surprise to the uninitiated, but not only has the passion for crossword puzzles flourished in recent years thanks to the Internet, but it's one of the few areas where content providers are actually making money.

The crossword puzzle was invented in 1913, and the first puzzle was published in the New York Sunday World. In the 90 years since then, little has changed - sure, new types of crosswords were invented, and they swept the world (at least parts of the world - there are no crosswords in Chinese), but the fundamental structure and usage of the crossword puzzle remained essentially the same until puzzles hit the Internet.

The Internet has of course provided increased availability of crossword puzzles, but crossword constructors have also used the medium to develop contacts and work together. On 13-Jun-99, Will Shortz, the New York Times crossword puzzle editor, even published a cryptic crossword that had been created jointly on a Usenet newsgroup by more than 40 people living on five continents. Crossword puzzle constructor Will Johnston says that, thanks to the Internet, "we are getting more quality puzzles per day, and constructors have more places to submit than before."

### Big Apple Paper: 15 Letters

For most American cruciverbalists, the New York Times crossword puzzles are the benchmark for quality, difficulty, and just plain trickery. Progressing in difficulty as the week moves ahead, they offer a range of puzzles that few other publications can provide. The New York Times made an early step into paid Internet content when they started offering their Premium Crosswords via their Web site in 1996. (Free registration with the New York Times is required to access the page below.)

<http://www.nytimes.com/pages/crosswords/>

The Premium Crosswords service includes the daily and Sunday puzzles, bimonthly acrostics, additional cryptic crosswords and special puzzles, and more than 2,000 archived puzzles dating to 1996. And as a testament to how attractive it is to cruciverbalists everywhere, the New York Times has managed to parlay this service into a profitable venture. Today, some 40,000 crossword puzzle fanatics pay $35 a year to access the service (the price just went up from $20 per year in April; when the service first began it cost $10 per month).

Will Shortz says he is "proud and honored" at this success and adds, "The fact that tens of thousands of people would pay for the Times crossword (when it's available free with the newspaper) is proof of its popularity and validation of its quality." Of course, many of the subscribers to the Premium Crosswords service don't buy the New York Times, or live in areas where it is not readily available.

The New York Times Web site also has a forum for crossword puzzle fans, who discuss the daily puzzles and converse about other puzzle-related topics. Some of the foremost puzzle constructors contribute to this forum, and the community that has grown around these puzzles is solid and quite eclectic.

There are many other Web sites and pages about crossword puzzles, with links or collections of downloadable puzzles. Crossword constructor Ray Hamel has the most comprehensive Web page with links to puzzles, puzzle resources, software and articles about puzzling. <http://www.primate.wisc.edu/people/hamel/cp.html>

### Beverage for Puzzle Solving: Four Letters

Some puzzle sites offer Java interfaces to solve puzzles. The New York Times even provides several ways to solve puzzles using its Java applets: you can solve against the clock, with the ten fastest times displayed; you can solve with a friend, helping each other out; and you will soon be able to solve in head-to-head competition with others. My experience with these Java applets is mixed - in some cases they work well, whereas in others they work partly or not at all. Browser choice matters too; some Java applets work fine in

Internet Explorer, but don't even load in Safari. The New York Times acrostic puzzles don't work at all under Mac OS X, though other puzzlers report that they work fine under Mac OS 9.2; this may be a temporary problem with Apple's Java implementation, which is usually much better in Mac OS X.

You can also download crossword puzzles from the Internet in two formats: PDF files you can print out and solve on paper, or .puz files, which are used by several programs available for the Mac and other platforms. These .puz files contain information defining the grid layout, the clues and the answers, and enable you to solve crosswords on-screen with special software. The New York Times and many other puzzle sites, including other major newspapers such as The Washington Post and the Los Angeles Times, use the .puz format, so it has become the de facto standard. Puzzles in the .puz format either come with solutions in the file or let you "unscramble" the solution (if you use Across Lite, described below) the next day by entering a four-digit code. You can then check the entire puzzle, individual words or letters to see if they are correct, and, if you get stuck, display the solution for a letter or word, or for the entire puzzle.

### Common Mac Puzzle Program: Two Words

The most widely used program for solving .puz crosswords is Across Lite, which is available for almost a dozen platforms, including the Mac, Windows, Linux, Solaris, and several others. The Macintosh version is available for both 68K- and PowerPC-based Macs, and runs in System 7 on up. The Mac OS X version is, for now, available only to subscribers to the New York Times Web site. Other versions are available for free from the developer, Litsoft.

<http://www.litsoft.com/>

Across Lite does what it is designed for very well. When you open a puzzle, it selects the first answer and displays the clue at the top of the window, as well as in a list at the side. (There are many display options so you can choose the type of layout you prefer.) Type the letters of the answer, and then press the Tab key to move to the next answer. You can change direction (from across to down, or vice versa) using the arrow keys. Clicking anywhere in the puzzle makes the square you clicked active, and displays its clue.

Across Lite also offers excellent printing options, such as allowing you to choose whether the puzzle and clues print on one page or two. Many solvers prefer using a pencil and paper, and Across Lite is a good program for printing crosswords if you don't want to do them on screen.

However, Across Lite is quirky. Menu items often don't function properly, though clicking in the grid can cause recalcitrant menu items to work when chosen. This is annoying, and one can hope that future versions will work correctly. In addition, you can't open .puz files with Across Lite in Mac OS X by double-clicking them; the Open With association doesn't stick, no matter how many times you try to set it. So you must use the Open button or menu item to open puzzle files.

The other Macintosh program that can .puz files is MacXword, a Mac OS X-native program that offers many of the same functions as Across Lite. It is $15 shareware and lets you solve puzzles in the same way, but it lacks some of Across Lite's layout and printing flexibility. Another drawback is that MacXword can't unscramble puzzles whose solution is protected by a code, as is true for the New York Times puzzles.

<http://www.advenio.com/macxword/>

But MacXword is more Mac-like, has a cleaner interface, and all its menu items work. It also offers a nifty feature for solvers, like myself, who can't find all the answers. Selecting OneAcross Lookup from the Solution menu opens a dialog containing information on the clue and the number of letters the answer contains. Click OK, and it sends this information to the One Across Web site, which is a kind of online crossword puzzle dictionary. Die-hard puzzlers may think this is cheating, but it helps me find some of those obscure words that would otherwise prevent me from finishing puzzles.

<http://www.oneacross.com/>

Similarly useful for Mac OS X users is the $25 shareware program Crossword Assistant, which helps you find words when you already have a few of the letters. For example, if one word in a puzzle is "tidbits", and you have the second, fourth and fifth letters from words that cross the answer, type "- i - b i - -" in Crossword Assistant's text field. The bottom section of its window then displays all the matches in its 150,000-word dictionary, allowing you to find the word that fits the clue. Registered users receive another dictionary with an additional 165,000 words, and you can add your own dictionaries or word lists to the program. Crossword Assistant can also help you solve anagrams by presenting all the words that match the letters you input.

<http://mathmac1.anu.edu.au/~neville/CrosswordAssistant/>

Thanks to being able to access the New York Times crosswords online, I've acquired the habit of doing a puzzle when I start work every morning. With a steaming pot of tea by my side and my iBook in front of me, nothing gets my mind ready for the day ahead like the mental stimulation of a crossword puzzle. In the past I would have to wait for the newspaper to arrive, or ration puzzles from previous days' papers. But now, I just go to the New York Times Web site and download the day's puzzle. I still can't solve them all, but the challenge is just a click away.

Not all crosswords cost money, and both Ray Hamel's page mentioned above and a page maintained by constructor Will Johnston offer links to the main crossword puzzle sites available on the Web, both subscription-based services and free puzzles.

<http://www.fleetingimage.com/wij/xyzzy/nyt-links.html>

So, for a reasonable cost, or even for free, cruciverbalists can have their daily fix, and solve crossword puzzles either onscreen or on paper. It may seem like a niche market, and it is, but the advantages provided by the Internet allow it to turn a tidy profit, something relatively few other types of content have accomplished. ∎

*[Kirk McElhearn is a freelance writer and translator living in a village in the French Alps. He is currently working on a book entitled Unix for Mac OS X: Learning the Command Line, to be published by Addison-Wesley in September 2003.]*
PayBITS: Did this article turn you into a cruciverbalist?
Consider thanking Kirk with a few bucks via PayPal!
<https://www.paypal.com/xclick/business=kirk%40mcelhearn.com>
Read more about PayBITS: <http://www.tidbits.com/paybits/>

# Repairing Permissions

© Don Mayer, Small Dog Electronics

---

THE OTHER DAY my desktop machine was running sluggishly and I was having trouble loading some software. I have a dual 1.42 GHz, and the last thing I want is a sluggish feeling! Patio asked me when was the last time I had "repaired permissions." Well, I had never repaired permissions and didn't know why I should. I ran the "Repair Permissions" utility from the Disk Utility supplied by Apple with the system and bingo, that sluggish feeling was gone and the software loaded without problem. Ah...I thought, here's a topic Kibbles & Bytes readers might want to hear about. Most of the following material is paraphrased from Apple's Knowledge Base.

### What are Permissions?

Mac OS X is based on a UNIX-style operating system that uses permissions in the file system. Every file and folder on your hard disk has an associated set of permissions that determines who can read, write to, or launch it. Using iMovie and one of your movies as an example, this is what the permissions mean:

Read (r—) You can open an iMovie if you have the read permission for it.

Write (-w-) You can save changes to an iMovie if you have the write permission for it.

Execute (—x) You may launch the iMovie application if you have the execute permission for it. This permission is only relevant for applications and other types of executable files.

If you have "rwx" permission, you can do all of the above. Permissions for a folder behave similarly. With read-only permission to a folder containing documents, you can open and read documents but not save changes or add new documents to the folder. Read-only (r—) permission is common for sharing files with guest access, for example.

### You (Owner), the Group, Others

Abbreviations like "rwx" and "r-x" describe the permission for one user or entity. The permissions set for each file or folder defines access for three entities: owner, group, and others.

Owner - The owner is most often the user who created the file. Almost all files and folders in your Home directory will have your user name listed as the owner.

Group - Admin users are members of the groups called "staff" and "admin." The super user "root" is a member of these and several other groups. Non-admin users are members of "staff" only. Typically, all files and folders are assigned to either "staff," "admin," or

"wheel."

Others - Others refers to all other users that are not the owner or part of the group for a file or folder.

### Root: The "Super User"

In Mac OS X, a super user named "root" is created at time of system installation. The root user has complete access to all files and folders on the computer, as well as additional administrative access that a normal user does not have. In normal day-to-day usage of your computer, you do not need to log in as the root user. In fact, the root user is disabled by default.

### Issues Related to Permissions

Incorrect permission settings may cause unexpected behavior. Here are several examples with troubleshooting suggestions:

Application installers, Applications folder A third-party application installer incorrectly sets permissions on the files it installs, or even the entire Applications folder. Symptoms of the Application folder's permissions being set incorrectly include applications appearing in the dock as question marks, and/or not being able to connect to the Internet. It is also possible that software installed while logged in as one user will be inaccessible when logged in as another. To avoid this, make sure you are logged in with your normal user account when installing software that you wish to use with that account.

Files created in Mac OS 9 Files created in Mac OS 9 may appear in Mac OS X with root ownership. When you start up in Mac OS 9 on a computer that also has Mac OS X installed, you can see, move, and delete all files, giving you the equivalent of root access. For this reason it's a good idea not to move or open unfamiliar files or folders when started up in Mac OS 9.

**Power interruption** The file system may be affected by a power interruption (improper shutdown) or when it stops responding (a "hang" or "freeze"). This could affect permissions.

**Emptying the Trash** In some circumstances, folders for which you do not have write permission can end up in the Trash, and you will not be able to delete them or the files contained in them. Remember that in Mac OS X there is not a single Trash folder. Instead, each user has a Trash folder in the Home directory (named ".Trash"). There is also a Trash folder for the startup volume, and Trash folders for other volumes or disks. Issues with emptying the Trash are much less

likely to occur in Mac OS X 10.2 or later, since the Finder empties the Trash as the root user. However, issues may still occur with files on remote volumes for which your local root user has no special privileges.

Other symptoms that may be solved by running the Repair Permissions utility include printing difficulties and difficulties playing music purchased from the Apple iTunes Music store.

### How to View and Change Permissions Using Get Info

The Mac OS X Finder can be used to inspect and modify permissions settings for some files and folders. You can only change permissions for files and folders of which you are the owner. This can aid in troubleshooting permissions-related issues. To view and change permissions in the Info window, follow these steps:

1. Select a file or folder in the Finder. 2. Choose Get Info from the File menu. 3. Choose Privileges from the pop-up menu in the Info window. 4. Using the pop-up menus, change permissions settings as necessary 5. Optional: If you are changing permissions for a folder and you want the changes to apply to enclosed folders as well, click Apply. Apply only appears when you Get Info for folders.

Note: Changes made using the Info window take effect as soon as they are made, even before closing the window.
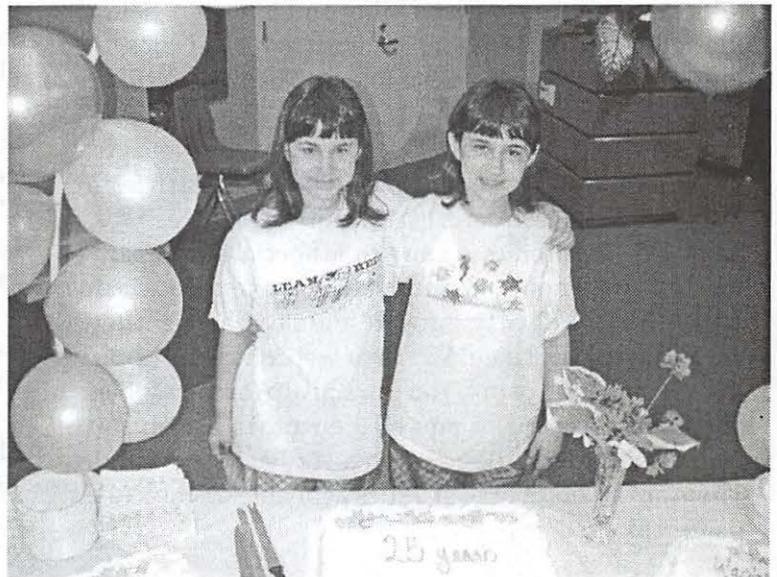


*Colleen and Mary O'Brien pose behind the rainbow balloon arch in front of the 25th Anniversary cakes. Mary and Colleen were also at the Pi's 20th Anniversary party in 1999, and we still can't tell them apart. (Photo by Lawrence I. Charters, taken with a Nikon CoolPix 990 digital camera.)*

> "Mac OS X is based on a UNIX-style operating system that uses permissions in the file system. Every file and folder on your hard disk has an associated set of permissions...."

# Flaming Wires and United States Bees Part 2

**by James Higgins, Webmaster**

### Viewing and Changing Permissions With Terminal

The Terminal application is located in the Utility folder in the Applications folder. You may use Terminal to inspect or change permissions. Unlike the Finder's Info window, the sudo command gives you the convenience of root access without having to log out and back in as root.

Warning: Basic knowledge of the command line is required to utilize this tool. Data loss and/or unusable system software may result if the Terminal application is used improperly. I am not going to get into talking about Terminal mode in this Kibbles & Bytes issue — that is another whole issue or two!

So, what do you do if you feel that you have permissions problems? Look in your Applications folder—>Utilities—>Disk Utility and launch it. Select the hard drive or partition you wish to fix and click on the First Aid tab and choose Repair Disk Permissions. Depending upon how many files you have, this process may take several minutes.

This article was reprinted with permission from the Small Dog Electronics listserv Kibbles & Bytes #319. Small Dog Electronics is a an Apple Specialist company that sells both new and refurbished Apple products in addition to third party software and peripherals. They are located in Waitsfield VT. Their web address is http://www.smalldog.com/. You can sign up for the Kibbles and Bytes Listserv or any of their other listservs at http://www.smalldog.com/subscribemain_n.html. There are archives of past issues available on the same page. ■

### The FireWire Standard

FIREWIRE IS a new standard, which was originally developed by Apple. Apple released the standard into the public domain, and it is now officially known by its ID number as IEEE 1394, or more generally as just 1394. However, Apple still refers to it as FireWire on their products and in their literature. In almost all cases, the terms FireWire and 1394 are interchangeable.

**FireWire Connector**

In many ways FireWire and USB are very similar. In fact some peripherals, such as portable hard drives, have connectors for both FireWire and USB. But there are also significant differences.

**FireWire Symbol**

The main difference is that USB is primarily designed to connect peripherals to a computer. You cannot directly connect USB devices together, such as two USB camcorders, and have them communicate with one another. However, it is possible to do this with Firewire. For example, some of the newer VCRs and TVs have FireWire connectors that you can use to connect directly to a FireWire-capable camcorder without the user of a computer.

FireWire is also much faster than standard USB, although USB 2.0 is faster than some of the slower FireWire protocols. However, both standards are evolving and new transfer protocols have been defined for FireWire that enable faster transfer speeds than for USB 2.0.

Like USB, FireWire is also plug-and-play compatible, so you can connect FireWire devices to a computer to another FireWire device, and they will automatically

recognize each other.

And also like USB, FireWire has its own special set of connectors, although there is only one main type of connector (see Figure 1) instead of the two main types defined under USB. However, just like USB, many companies have developed their own proprietary connectors for their FireWire-enabled devices.

FireWire also has its own special identifying symbol (see Figure 2), although many manufacturers use either "I 1394" or just "1394" to identify FireWire components, since this is the official name for the FireWire protocol.

Devices are connected using FireWire cables that have male connectors on each end. All Macs currently produced have at least one FireWire port, as do most Windows-based PCs.

However, since it is more expensive to implement than USB, FireWire is normally found only on more expensive equipment. Because of its high data transfer rate, FireWire is ideal for data-intensive applications, such as video cameras, and is often included in high-end audio/visual equipment.

Here is an overview of the main features and benefits of FireWire, which include:

### Speed

The original IEEE 1394 specification defined three speed ratings, referred to as S100, S200 and S400, which transmit data at roughly 100Mbps, 200Mbps, and 400Mbps respectively. Note that the slowest speed is about eight times faster than standard USB, which is why it is ideal for video applications where it is necessary to transfer large amounts of data. Recently two new data transfer rates have been defined, 80S and S1200, which up the transfer speeds to 800Mbps and 1200Mbps, respectively. FireWire devices are capable of dynamically negotiating transfer rates and will connect at the highest speed at which both devices can connect.

In addition to raw speed, FireWire also uses isochronous data transmission, which is a way of transmitting multiple data streams simultaneously in the same or different directions, sort of like a double-deck freeway. Consequently, effective transfer rates can actually be higher than the rated speed in some applications.

### Plug-and-play

Technically, since FireWire does not necessarily require a computer to connect devices, it is not truly plug and play, although many PCs (including Macs) support plug and play for peripherals when attached to

"In many ways FireWire and USB are very similar. In fact some peripherals, such as portable hard drives, have connectors for both FireWire and USB. But there are also significant differences."

the computer using FireWire.

### Hot-swappable

FireWire devices are fully hot-swappable, and can be connected and disconnected without first turning off the other devices in the chain.

### Daisy-chainable

The IEEE 1394 standard specifies that one bus, or chain, can contain up to 63 devices connected together. Theoretically, using repeaters and bus bridges, you could connect an absolute maximum of 60,000

### FireWire devices

Because of the way a FireWire bus works, there is no specific length limit for the entire bus as there is for USB. However, no single cable run can be longer than 4.5 meters (about 15 feet).

### A powered bus

FireWire can also carry power like USB; in fact the FireWire bus can carry higher voltages than USB and is ideal for portable hard drives, CD-Rs and other devices that would otherwise require an external power supply.

Okay, so when should you use FireWire and when should you use USB? USB and 1394 are complementary technologies. 1394 is for devices where high performance is a priority and price is not, while USB is for devices where price is a priority and high performance is not.

Of course, if you have the choice between FireWire and USB, as with some portable hard drives, you'll probably want to use FireWire, since it is generally much faster than USB. ∎

# Resolving OS X Printing Issues

© Don Mayer, Small Dog Electronics

ONE OF THE most common questions we get as our customers migrate from OS 9 to OS X is related to setting up printers and using the Print Center. If you are having these problems, here's a guide to help you print in OS X.

1) Check the printer If the printer prints a test page, it is a good idea to test that to make sure that the printer is functioning properly independent of the Mac. If a test page does not print, turn the printer off, check your power cord connections, and retry. If it still does not print a test page, you have a printer problem that should be referred to the printer manufacturer. The most common failure we have seen in printers is improper ink cartridge installation. If you are unable to get the printer to produce a test page, reinstall the ink carts and try again.

2) Check your connections How is your printer connected to your Mac? Are you sure that the cable is functional? Make sure that cables are fully inserted. If you are using a USB cable, try a different USB port or plug it directly into the Mac's USB ports as opposed to the port on a USB hub.

3) Worked with OS X previously? If this is the first time that you are attempting to print using OS X, there may be a specific OS X printer driver that is necessary. The first place to look for that driver would be Apple's Mac OS X downloads page: If the driver corresponding to your printer's model is not there, the next step is to go to the printer manufacturer's website to see if the latest driver is there.

4) Got the driver, but it's still not working? The next step in troubleshooting your printing problem is to launch the Print Center.

5) Delete old print jobs

At this point, you should make sure your printer queue is clear. Assuming that you are the only one printing (it might be politically questionable to delete your coworkers' print jobs!), you can open Print Center, select your printer, and delete any jobs that are stuck in the queue.

6) Stop queue?

Make sure that the button for "Stop Queue" is INAC-TIVE. That button basically suspends all printing from that printer until you deactivate it.

7) KISS principle — Keep it simple, stupid.

The next step in troubleshooting printing issues in OS X is to simplify. If you are using a USB printer, disconnect all other USB devices (except your keyboard and mouse). Connect the printer USB cable DIRECTLY to one of the USB ports on your Mac. No extension cables, no hubs, and make sure you are not plugged into the keyboard or monitor ports — directly into the Mac!

For USB printers, launch Apple System Profiler (either by launching the application in the utilities folder inside your applications folder or via the "more info" button on the "About this Mac" screen under the blue Apple). If you click on the "Devices and Volumes" tab, you should see your printer listed.

For a Network Printer:

a) Verify that other network services, such as file sharing and Web browsing, are available and work.

b) If the printer is an AppleTalk printer, verify that AppleTalk is active in the Network pane of System Preferences.

c) If there is another node on the network that can successfully print to this printer, move the computer to this node. It may be necessary to change network settings at this point.

8. Delete all printers and start over

If you are still unable to print, the next step is to delete all the printers from the Print Center and then add back your troublesome printer.

9. Repair permissions

Some printer problems can be traced to faulty permissions. You can follow the directions in last week's Kibbles & Bytes to use the Disk Utility to repair permissions.

If you have the right drivers and the latest version of Mac OS X and your cabling is sound, you should have no trouble printing your documents and photos.

This article was reprinted with permission from the Small Dog Electronics listserv Kibbles & Bytes #320. Small Dog Electronics is a an Apple Specialist company that sells both new and refurbished Apple products in addition to third party software and peripherals. They are located in Waitsfield VT. Their web address is http://www.smalldog.com/. You can sign up for the Kibbles and Bytes Listserv or any of their other listservs at http://www.smalldog.com/subscribemain_n.html. There are archives of past issues available on the same page. ∎

# The Blogging Phenomenon Takes Off

by Phil Shapiro

LAST MONTH I was watching the News Hour with Jim Lehrer on WETA and saw a 20-minute news story about blogging. I knew right then that blogging was a phenomenon. What other technology story gets 20-minutes of coverage on the News Hour? For those who might not know, a blog (short for "web log") is a form of personal journalism, somewhat related to a personal web page. The difference between a blog and a personal web page is that a blog is constantly updated with fresh material — usually daily. A blog is a way for you to share your commentary about the world, bringing your unique slant to the issues of the day.

As I look over my personal web site, set up eight years ago in 1995, I can see that the site is now a "cobweb site." It might have been mildly interesting in its day, but now it's downright musty. No new ideas there at all.

So I decided to plunge into blogging. Here is an overview of some of the things I've learned in the past month.

There are several different services a person can use for setting up a blog, the most popular of which is Blogger.com. Blogger has a free version and a pro version. The pro version currently costs $35/year, but it will soon cost $50/year. I opted to go for the pro version because the extra features seemed well worthwhile.

Signing up for an account on Blogger.com is a breeze and the interface is easy to use. The only difficult part is adding links to your blog posts. Doing so requires knowing a little about html, namely, the syntax for creating a link on a web site.

Here is the syntax for creating a link. the text you're linking from here.

When read aloud in plain English, the way to say this is: anchor hypertext reference equals quote http://www.yourlinkhere.com endquote greater than sign the text you're linking from here end anchor. Typically,

the time you refer to html in "plain English" is when you're teaching or explaining the meaning of html to others.

Some of you may be wondering, "What's the big deal with blogs? They don't sound like such a big deal." The big deal about blogs is their cumulative effect on the web. Remember the Trent Lott flap last fall? Trent Lott was done in by blogs. Bloggers wouldn't let the story die and the press picked up on this.

One of the neat things about blogs is the capability of syndicating one's blog. I'm just beginning to learn about syndication, but I do know it's a way of driving traffic to one's blog. You'll see two terms often used in the context of syndication: RSS and XML. I won't go into detail about these here, but if you're interested in learning more about syndication, you'll be running into these terms a lot.

Where can a person go to learn more about blogging? Several good books have been written on the subject. I particularly like the book We Blog, by Paul Bausch. Essential Blogging is another excellent book. I found these in the Fairfax County Public Libraries, which owns multiple copies of both books. Although I live in Arlington, I often head over to Fairfax libraries for my computer book readings. Their computer book holdings are vastly superior to any other library system in the DC-area. Library reciprocity allows me to get a Fairfax libraries card even though I live in Arlington. ("Thanks, Fairfax! I owe you one.")

Another way to learn about blogging is to visit blogs. One of the most successful blogs is run by a law professor in Ohio, Glenn Reynolds. (http://www.instapundit.com.) His blog is so well done the New York Times described it in detail in an article earlier this year. Glenn Reynolds' blog has lots of links to other blogs. Once you dive into the "blogosphere," you'll get a better understanding what this phenomenon is all about.

One fascinating aspect of blogging is its democratizing effect. Blogging lets anyone self-declare themselves a journalist, and if you put in the time and effort, you can develop a readership. One way to think of blogging is having your own text-based television show on the web. It wouldn't be surprising at all for some of the most popular bloggers to parlay their blog into a television show.

Blogging is not just for ordinary people, though. Several professional journalists have taken up blogging. Dan Gilmor, an astute technology reporter for the San Jose Mercury News, maintains a blog. Last week I noticed an entry on his blog to the effect: "I'm currently

traveling in Helsinki, Finland, and have free time on Thursday and Friday evenings. Any bloggers who'd like to get together for dinner can send me some email." The upshot of this comment is that Dan Gillmor considers other bloggers to be peers. He mentioned as much in one of his columns last year. He said something like: "On any given topic, my readers know much more about it than I do." What a refreshingly humble viewpoint for a reporter to take. It also happens to be true.

I can't help but think that blogging is turning into its own literary form. There definitely is a skill to composing pithy blog postings. In fact, many published book authors list their blogs within advertisements for their books.

Are blogs interactive, you might be wondering? Many bloggers like to get email from their readers — and often cite reader feedback and ideas on their blogs. Some blogs allow readers to post comments to blog entries, making the blog experience a truly public conversation. I wince a bit when I hear about reader comments posted on blogs, because there are a thousand ways for readers to post inappropriate comments to a blog.

You might be surprised to hear that not all blogs are public blog. There is such a thing as a private blog. I haven't looked it such beasts, but I do know that blogs are sometimes used as intranets within a company or organization.

For me, the most exciting thing about blogging is that the smart people who create blogging software (which you usually access using a regular web browser) are continually adding new and better features. Blogger.com was recently purchased by Google, which means that blogging is definitely here to stay. The geek in me can't help but get excited when I see new features listed on the Blogger.com web site. Summoning up all my willpower, there is no conceivable way I won't be trying out those features a few days after they have been announced.

Meanwhile, I'm keeping my eye out on the most feature rich of blogging software, Movable Type, published by a company named Six Apart. http:// www.movabletype.org Although I'm not a Movable Type user yet, I signed up for their free newsletter so I stay in the loop on developments with Movable Type. I may migrate my blog to Movable Type in a year or two. Or perhaps not, if Blogger.com develops some of the very lovely features that Movable Type already has. When you have the full power of Google standing behind you, much becomes possible. ∎

*Phil Shapiro*
The author is an independent Mac trainer and educational technology specialist in Arlington, Virginia. He recently started teaching free blogging workshops at in the Computer Training Center (Room 315) at MLK library in downtown DC. His blog is at http:// teachme.blogspot.com. He can be reached at pshapiro@his.com.
— Phil Shapiro pshapiro@his.com http:// www.his.com/pshapiro/ (personal) http:// teachme.blogspot.com (blog) http://storymakers.net (multimedia explorations)

*"Where there is storytelling there are relationships. Where there is storytelling there are folks who crave to speak and learn." -Brenda Laurel.*
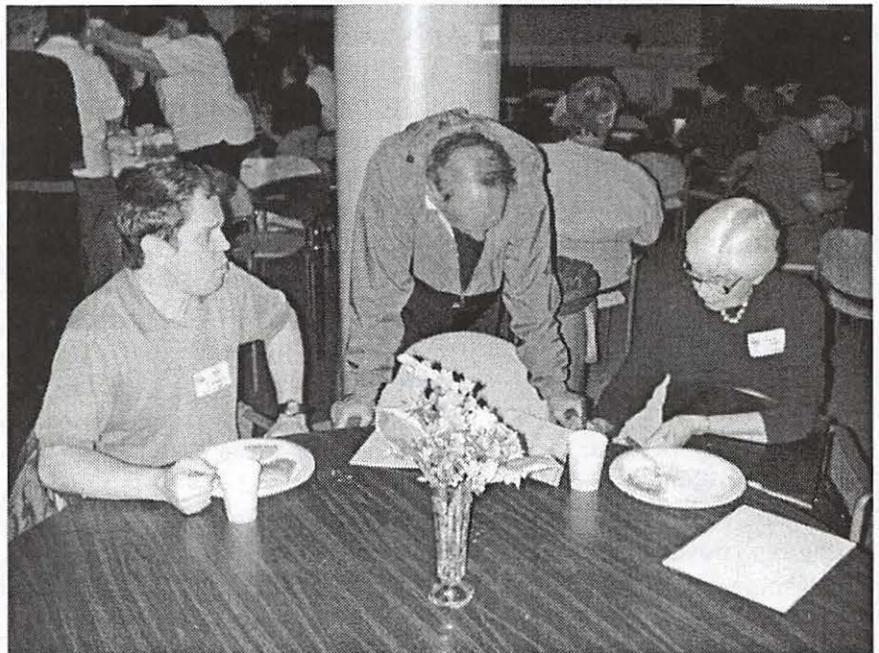


*Former Pi Secretary Dana Gregory (left), former Pi President Lorin Evans (center) and Pi Founder Gena Urban look over some material before the start of the 25th Anniversary meeting. (Photo by Lawrence I. Charters, taken with a Nikon CoolPix 990 digital camera.)*

# Taking out the Trash

by Brian Mason

O NE OF THE most frustrating things about Mac OS X for those who move from Mac OS 9, or even those who "switch" from Windows, is the fact that you can't just drag files to the trash and then with a simple push of a button, empty the trash. At least not all the time. If a file is locked or you don't have the right privileges, the file stubbornly stays in the trash.

The problem is, every file can be different. The only way to find out whether the file is locked or what privileges have been assigned to the file is to select it and press Command-I, Get Info. When you have a slew of files to get rid of, you can't go through every single folder and check every single file and unlock them or change their privileges so they can be deleted.

If you understand Unix, you can go to the Terminal and enter a few commands from the root level which will empty the trash. But this requires typing from the command prompt.

There has to be an easier way.

There are a few. One is to get the free utility from Renaud Boisjoly called BatChmod (http://macchampion.com/arbysoft). It can unlock lots of files at once and even empty the Trash for you. In bright red on the web site it very clearly states, however, "WARNING: BatChmod has the potential to make changes to your privileges which could adversely affect your system. Make sure you know what you are doing! This means, do not change the privileges of system files especially, it may make your Mac unuseable!"

I have found that the easiest way around this conundrum for me is a simple AppleScript. I can't remember where this came from. I'm certainly not expert enough to have dreamed this up on my own. But let me share it with you because it works every time, and I've never had any problems running it.

Find the Script Editor. It may be in the a Folder called AppleScript within a folder called Apple Extras. On my computer, the AppleScript folder is in the Applications folder. After running the Script Editor application, in the lower panel of the window that opens, type the following exactly. (To type the Â character, type Option-Return.)

display dialog "Empty Trash as root?" buttons Â {"Cancel", "TRASH"} default button "TRASH" with icon note set the user_choice to the button returned of the result if the user_choice is "Trash" then display dialog "ARE YOU SURE?" buttons {"NO", "YES"} Â default button "NO" with icon note set the user_choice to the button returned of the result end if if the user_choice is "Yes" then do shell script Â Â "rm -rf /.Trashes/* ~/.Trashes/* ~/.Trash/* /Volumes/*/.Trashes/*" with administrator privileges end if

*President Pat Fauquet managed to do an elegant job of filling time awaiting arrival of our guest speaker for the 25th Anniversary party. (Photo by Lawrence I. Charters, taken with a Nikon CoolPix 990 digital camera.)*

*While computers may have brought people together for the 25th Anniversary Party, food certainly helped. It looked like a church picnic. (Photo by Lawrence I. Charters, taken with a Nikon CoolPix 990 digital camera.)*

> "If you understand Unix, you can go to the Terminal and enter a few commands from the root level which will empty the trash. But this requires typing from the command prompt. There has to be an easier way."

The core of the script is the last part. This is what you would have to type each time you wanted to empty the trash if you were doing it from the Terminal's Command Prompt. As you can see, whenever you want to empty the Trash, there are actually four different places where the trash may be located. This script finds the trash folders on every drive mounted on your desktop. The "rm -rf" part of the script is Unix for "remove all files and folders and all files and folders within the folders". So if you have trashed folders, they will be completely removed along with all of their contents.

The first part of the script is what ensures that you have the necessary privileges to run this script. In other words, you still have to have administrator privileges to do this. But if you are working on YOUR PERSONAL computer, you are the administrator, so no problem, right?

After typing in the above script, check the syntax to make sure you have typed it correctly. Then under File -> Save As . . ., save your script as an application, naming it something meaningful like, "empty trash". You should probably save it to the desktop. That way it will be close by any time you need it. Or you could move it to your Favorites, or put it in the Finder windows' tool bar.

Now, any time you need to empty your trash, just double-click on your "empty trash" icon and, wahla!, after correctly answering the questions posed by the script, your trash will be as empty as an Iraq factory when the UN inspectors arrive. ∎

# DoubleClick

**D**AVE AND Derek: I have a Power Macintosh G3, 161MB memory, OS9.2, 266MZ, purchased when they first hit the streets. Two upgrade questions, I have a HP680C printer connected thru the serial port. I would like to buy a newer printer but they all seem to have a USB connection. I cannot find a new printer with a serial port connection. Can I upgrade to a newer printer? 2nd, I would like to do video editing, converting home VHS-C video tapes to a more professional, entertaining look. Will the G3 be able to edit home videos? Can I upgrade the G3 or should i buy a newer system? How do you sell old computers?

*thank you*
*god bless america*
*ron and cindy gird*

**DAVE:** The Girds are facing issues that many folks with older Macs face. Apple is a company that loves to make major changes in its hardware and software and never look back. Those with the money or desire to live on the cutting edge pay for it. Over and over. Those of us who want to keep using what we have face some dilemmas at times.

The fact is, Apple's hardware is well made and it works for a long time. People feel comfortable with what they have and want to get the most they can out of their investment. Apple would prefer we buy a new computer every year (and what computer company is different?) but that just isn't going to happen for many. Thus, the question for the Girds is, how can we upgrade our G3 without breaking the bank and keep it going a bit longer. Luckily, their machine has 3 industry-standard PCI internal slots. These slots allow you to add capability to your machine. One way to do that is add a USB card. In fact, they may want to get a combination USB/Firewire card to give them even more flexibility. The USB ports can be used for a printer and (say a) digital camera while the Firewire port can be used to bring digital video into their Mac.

These cards can be found at the Apple store, CompUSA, or local Mac vendors in the DC area like MacUgrades or Bethesda Computers. You can also buy them from MacMall or other online store. They run in

the $60 to $80 range.

The Girds should also note that most of these cards now come with the upgraded USB 2.0 standard. That's fine. They also work with the older USB 1.0 (which is slower but printers don't care much).

The second question is a good one too, which I'll save for a future column. But I will say that the short answer is you can video edit but you will be very frustrated because of the slow processor speed. The small size of the hard drive is also an issue.

A good source of information about the Mac 233 G3 is at : .

Derek, upgrading older computers is a challenge whether you're a Mac or a PC user. I know you're a strong advocate of buying new but installing a PCI card to connect a printer is an easy upgrade on either platform.

**DEREK:** Dave, you're right. It's an easy upgrade to add a USB port to the Mac. Windows users face a different problem. If you have a computer without a USB port, you probably have a Windows 95 machine. Windows 95 machine doesn't inherently support USB (neither does Windows NT 4). So you'd also have to upgrade the operating system in order to get that to work. At that point, it just may not make sense.

I don't necessarily always recommend buying new, I just recommend what makes the most sense. Both economically and wit the PITA factor. That means Pain In The Aspiration. Or something like that anyway.

Those loyal readers to our column Dave (both of them) will recognize, I often don't recommend upgrading. Mostly because if it's working, don't change it. In this case, our reader in my opinion must buy a new machine in order to do what they want. Video editing as Dave points out isn't going to happen on your 266MHz Mac. And he's also right about the small hard drive. Us Windows users need to have some heavy horsepower in order to make video editing something that won't drive you crazy. I recommend a Pentium 4 of at least 1.8GHz, 256MB of RAM, and a really big hard drive. At least 40GB preferably 80GB. Windows XP 2 comes with Movie Maker which is nice when you download the free update making it Movie Maker 2. The problem with Movie Maker 2 is that no one will be able to see your video unless they download the latest Media Player from Microsoft. Ah, gotta love the forced upgrade philosophy huh?

Anyway, I just made a Powerpoint presentation with some video and Movie Maker 2 on my home Windows XP machine and it's pretty capable.

> "The fact is, Apple's hardware is well made and it works for a long time. People feel comfortable with what they have and want to get the most they can out of their investment. Apple would prefer we buy a new computer every year..."

Windows users have a great price advantage which is why I will recommend a new machine over upgrading an old one WHEN you need to upgrade. You can get a new Emachine for $400 assuming you keep your old monitor. You can get a machine that would handle movie making based on the specs I gave above for $600.

Sure, $400 isn't chump change, but when you're faced with spending a couple of hundred making upgrades to a machine that is still slow and will only get slower as you ask it to do more advanced things, it just may not make sense for some.

But remember, if you are just using your machine for the same thing you did when you purchased it new, there is generally no reason to upgrade, unless you end up upgrading your software. If you put Windows XP on your Pentium 266MHz with a 4GB hard drive and 64MB of RAM, you're asking for trouble. The newer software requires newer hardware. ∎

# DoubleClick

**D**OUBLECLICKERS: A few weeks ago, readers Ron and Cindy Gird asked questions about printers and what you need to do video editing on a computer. In the February 27 column, Derek and I took on the printer question. This week, we take a look at their question about using "older" computers to do video editing or if a newer computer would be a better bet.

**DAVE:** Ron and Cindy have decided to ride a wave that has really started to take hold with computer users. Taking all those videos you shoot and editing them into viewable "packages" saved to CD (as a video CD), on a DVD project or even as a streamable web movie is not only a lot of fun, but it's a great way to share your best moments with family and friends.

I have done a number of iMovies on my Mac now and also a couple of DVDs. I will tell you that even with many years of broadcast news experience, it took some work to edit and produce the movies and the DVDs. But it was all worth it in the end. And the best part is that these are memories that can last virtually forever.

That said, it takes a lot of oompf to really be able to make these movies and record them. I tried using an older Mac updgraded with a G3 processor and firewire PCI card but it just couldn't do it. All current generation Macs can handle what the Girds want to do. Frankly any G4 can. But they would need at least 512 MB of memory (I'd even go for more) and at least an 80 GB 7200 rpm drive. These projects take lots of memory and lots and lots of hard drive space. And you'll also have to make sure you have a "Superdrive" - a DVD/CD burner that Apple offers on many of its computers.

As for what to do with that older machine, use it for the internet or give it to the kids or a local charity. You can sell it at the June Washington Apple Pi Computer Show and Sale or even on EBay but used computers (for the most part) don't always bring much by way of return. Just be sure to erase the hard drive and reinstall only the Mac OS if you donate it.

Derek - more and more people are becoming their own movie producers and the best part is that manufacturers are including many of the tools to edit and burn them as part of the package.

**DEREK:** You're right about that Dave. I have used Windows Movie Maker a few times. This package
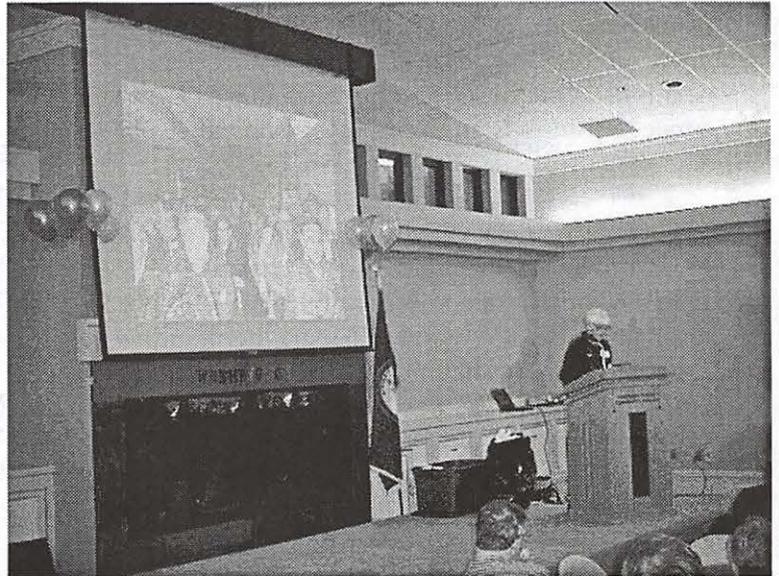


*Gena Urban, one of the Pi founders, recalls some of the early Pi history. (Photo by David Harris, taken with a Minolta DiMAGE X digital camera.)*
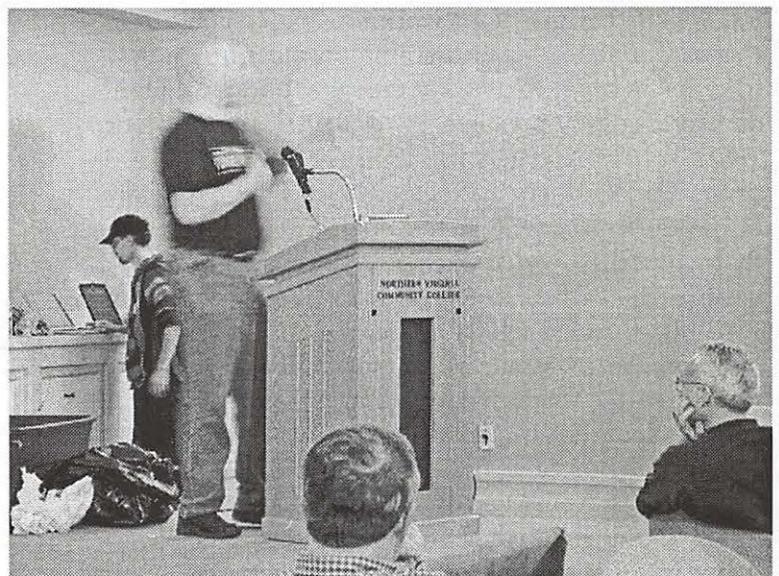


*Special guest Shawn King was a blur of activity once he arrived. (Photo by David Harris, taken with a Minolta DiMAGE X digital camera.)*

*Gena Urban receives one of the special 25th anniversary clocks. (Photo by David Harris, taken with a Minolta DiMAGE X digital camera.)*



*If anyone left hungry from the 25th Anniversary Meeting and Party, it wasn't due to a lack of food. (Photo by Richard Sanderson, taken with a Nikon D-100 digital camera)*

"Ron and Cindy have decided to ride a wave that has really started to take hold with computer users. Taking all those videos you shoot and editing them into viewable "packages" saved to CD (as a video CD)..."

comes with Windows XP and is pretty capable. If you download the newer Windows Movie Maker 2 which is a free upgrade you get considerably more capabilities. The downside to the new Movie Maker 2 is that it uses the new Media Player 9 encoding which is great. It gives you excellent quality and small files. But you can't view it without having the new Media Player 9 decoders. They are free, but they have to be downloaded on the machines that watch your movie. On most computers it will prompt you to download the new decoder. The other cool thing you can do is take your video, make a Windows movie out of it, and then use the web server built into XP and host your own home movies. I've sent movies of my daughter to the family this way. It's much better than trying to E-mail the files which are too big and allows everyone to look at them easily. Windows movies also start to play before they have finished downloading so you get a bit of "streaming." All for free! ■

# DoubleClick

**P**LEASE ELABORATE on your statement in your Feb 6 Journal column that "You can create PDFs directly without Adobe software from within any program." I have not found a PDF option in "save as" of Word Perfect 7, for example.

*Nora M Taylor*

**DAVE:** Nora is following up on last week's column during which we discussed PDF files, a way of saving your work in a format that is portable and readable on any platform.

As the Mac guy, I was saying that Apple licensed the format from Adobe and incorporated it into the company's new OS – called OS X (X for Ten). You can literally create a PDF file from within any program by clicking on the print icon and then saving the document as a PDF file. However to edit PDF files fully, you still need the complete Acrobat 5.0 package. For more information on PDFs and OS X you can go to the support tab at www.apple.com or go to www.adobe.com directly.

OS 9 and 8 users have a great little utility called "Print to PDF" that is still available online athttp://www.jwwalker.com/pages/pdf.html. I believe it's also available on the Pi Fillings CD from Washington Apple Pi (www.wap.org) . It is essentially a PDF "printer" that you can just drag your document on top of and it will create a PDF file for you. A bonus - the files are smaller than those created by Acrobat!

And that brings me to our PC friends. As you might expect, there are a number of third party solutions for them to easily create PDF files without having to buy Acrobat. In just a brief seach of the Inernet, I came up with three possibilities for you, Nora. One is called RoboPDF athttp://www.ehelp.com/products/robopdf/ and appears to be a free download after you give them your name, ad-dress and serial number. Another one is called PDF995 at http://site4.pdf995.com/download.html. The download is free but each time you use it you get an ad. A license fee to get rid of it that problem starts at $9.95. Another that I found interesting was PDF Mailer at www.pdfmailer.com .

Derek, the PDF format has become a standard simply because it is fairly easy to use and share with just about anyone. Have you tried any of these or similar products? Nora really needs to create PDFs from within Word Perfect 7.

**DEREK:** Sure thing Dave. First, I use Acrobat itself quite a bit. However instead of paying the high price for Acrobat, Adobe has a free online utility that will allow you to create PDF files through the Internet for 5 documents. After that they expect you to pay $9.99 per month. Not too bad in comparison to the full Acrobat package however. You can access the site at: https://createpdf.adobe.com/  There are also several other packages out there like Dave mentions that you can use to created PDF files.  You can search for them by going to www.download.com and searching for "create pdf".  If you want to get a little more under the hood in your knowledge of PDFs, check out the PDF Zone at: http://www.pdfzone.com/  Dave, like we said before, PDFs, can be a great tool for those who need to send out documents to others. ■



*Pi founder Gena Urban cuts one of the cakes at the 25th Anniversary meeting and party. (Photo by Richard Sanderson, taken with a Nikon D-100 digital camera)*

# More DoubleClick

DERREK AND Dave, once again I come for help, and this time I am desperate.

Up until last year I used CAIS for my internet ISP. Just over a year ago after several iterations(Ardent?) they announced they were going out of business. However, they said they would continue forwarding e-mail for four to six weeks. I found another ISP, notified CAIS of my new address and they continued to forward e-mail sent to the old address. My problem is they will not stop. After a year I still receive e-mail sent to my old address most of which is SPAM. I am now receiving 80 to 100 items of SPAM per day to my old address and I can find no way to stop it being forwarded. I can find no way to contact who ever is running the computer which continues to forward e-mail from my CAIS address to my present one. Can you help? I know I could change my present address but that would be a serious effort. I would just like to have CAIS become a memory.

*Thank you,*
*Jim Wood*

**DAVE:** SPAM is a growing problem for all of us. Unfortunately, Jim is facing more than his share because someone has forgotten to turn off the "forward." Let's take a quick look at this from a couple of directions. Ardent Communications (ARDT is the stock symbol) is the company that was formerly known as CAIS. In fact they are a local firm! Here's the information for you:1820 N. Fort Myer Drive; Arlington, VA 22209; Phone: 703 276 4200; Toll Free: 800 500 2426; email is info@ardentcomm.com. Yahoo has a lot of information about them at http://biz.yahoo.com/p/a/ardt.ob.html. Give them a call and see if you can't get this stopped pronto!

Derek and I both have written over the years about SPAM and how it continues to be not just a problem but a growing problem for folks like Jim. There are tons of good programs and suggestions out there for dealing with it in some ways. The best ones include creating an email account just for the web - to only use when ordering things online, when talking in newsgroups, etc. I like free accounts provided by Yahoo or Hotmail. Another good one is to never reply to SPAM. You don't even want to click on that button that says "remove me" because it tells the spammer you exist!

Mac users know that the Mail program in OS X has the ability to learn about what it calls "Junk Mail" and can redirect it into its own folder for deletion. Outlook and other mail programs also give you the ability to create rules to catch many SPAM emails. But as we all know, spammers are getting more and more sophisticated with each passing day. They have to to keep ahead of everyone trying to stop them!

Derek, do you have any other thoughts or suggestions on this front?

**DEREK:** Well, my first question would be how does Jim know that the email is really getting forwarded? The thing that you want to look at is the header of the message to make sure it is indeed going to his other email address and then being forwarded to his current one. I assume that really is the case, but for our readers looking at the E-mail header is a way to really see what's going on the with the message. For example there are a couple off viruses out there that will send a mail virus as someone else. We get calls all the time from clients saying that they are sending viruses out but they scanned their computer and it didn't find any viruses. The problem is that someone ELSE is sending out the virus using the other person's name and e-mail address as the from address. Looking at the header would show that it didn't come from the person that the from address said.

To get to the header if you're using Microsoft Outlook, right click on the message and select Options. You'll see the Internet headers at the bottom of the new window that opens. Reading headers takes a bit of practice, but if you look through them you'll see what computers the email message traveled through. The first line is usually where you received the message. Each line down shows the previous stop for that message and it will show the computer name, the E-mail program used by that computer, the IP address, and the date and time.

For Jim's specific problem, if you're using Outlook you can setup a rule to filter out those emails messages that are forwarded by using some of the text within the header as your filter option. So you can tell Outlook to delete any messages forwarded from that email address.

# DoubleClick
# CD Player questions

**D**AVE & DEREK, Thanks for being there. I look forward to Thursday and reading your page in the Journal. I have learded a lot from the page. I have a HP Pavilion 8693C with windows 98. Also a CD-RW and a CD-Rom. I would like to make copies of photos onto a CD. I can put them on a floppy but I prefer the cd as it will hold much more. I have tried every way and cannot seem to copy them only backup. How can I make a copy of them? Also why does my cd not eject when I click the eject on my cd player? Thank you for any help I may receive. Lois Whorton

**DAVE:** Hi, Lois!

Digital Hub questions are coming fast and furious these days. Whether you own a Macintosh or one of those PC thingies, making CDs, DVDs, movies and more are at the top of many folk's to-do lists. It sounds to me like Lois has the knowledge to import digital photos and a CD burner in her PC so she is ready to

forge ahead. And it also sounds like she has some kind of software that allows her to burn CDs, since she mentioned the ability to make backups. I think what you may NOT have is the RIGHT software.

As Derek and I have discussed before, there are many great software tools available to assemble pictures on your computer and then burn them onto a CD. Mac folks already know about Apple's free iPhoto, which allows you to import your pictures and burn them onto a CD in many ways. Roxio makes a great software package called Toast for the Mac and EZ CD Creator for the PC that lets you make CDs in many different ways and formats.

Derek can talk more directly to some of the PC specific programs available to do things like make photo albums, slideshows, etc. But I think you are close, Lois! And with a little extra software help, you should be able to save pictures onto as many CDs as you like. As for the eject problem, the Mac's allow you to press a button on the keyboard to eject a disk or you can do it from software. PCs many times have an eject button and it may be that you are not pressing it long enough or it is simply broken. CD burners are cheap these days and that might be an alternative if you keep having that problem. Many times they also come with burner software too.

**DEREK:** Dave, it almost makes you wonder how we got along without the huge amounts of storage that CDs offer. Now we can even get much more with DVD drives! They really are necessary if you want to start saving those digital photos, music, or video files. You need lots of space. Lois, Dave is on the right track with your CD problem. Your CD came with software that allows you to copy data to and from it. There are lots of those kinds of programs out on the market and if you dig through that stack of stuff that you put away after you got your computer, you'll probably find it. If you wanted to purchase new software, you can do so. The two most popular progams out there are Nero and Roxio. Nero just won editors choice at Cnet (http://www.nero.com) and can be purchased for $49. Roxio is another good choice. (http://www.roxio.com). Remember
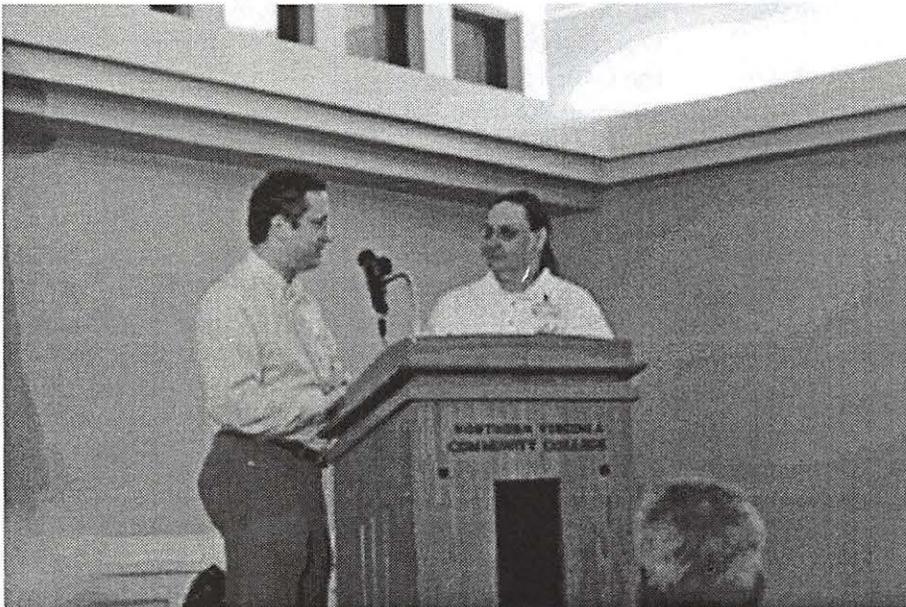
*Tom Warrick, one of the first Pi Presidents, receives a 25th Anniversary commemorative clock from current President Pat Fauquet. (Photo by Richard Sanderson, taken with a Nikon D-100 digital camera)*

there are many great software tools available to assemble pictures on your computer and then burn them onto a CD. Mac folks already know about Apple's free iPhoto, which allows you to import your pictures and burn them onto a CD in many ways.



*David Harris, one of the "unsung heros" who works behind the scenes for years on end, receives one of the 25th Anniversary commemorative clocks from President Pat Fauquet. (Photo by Richard Sanderson, taken with a Nikon D-100 digital camera)*

though that you probably have the software you need for free already. You just have to install it or find it on your computer and run it. Windows XP makes this process much easier since support for CD RW drives are built into it. You can just drag and drop onto the CDRW drive, or right click and select Send To, CDRW for your files. Once you have your files all ready to go, just select your CDRW and click Burn these files to CD under the task menu. To do some fancy slide shows of your photos, there are tons of programs out there to help. If you have Office XP with Powerpoint, it has a photo album template. What's cooler, is that Office XP is *very* web friendly. You can easily save items as HTML web files that look just like their originals without any fuss. This is much better with the Office XP than in previous versions. And what you may not realize, is that if you have Windows XP, you already have a Web Server!! Yep, Windows XP has a web server built in. You can just save those photo albums to a special folder of your hard drive that is for your website, give out your IP address and bang you're in business. Ok, I admit there may be a little more initial setup than that, if you're a tickerer, start looking at XP's built in Web Server and post those albums to your friends and family! ■
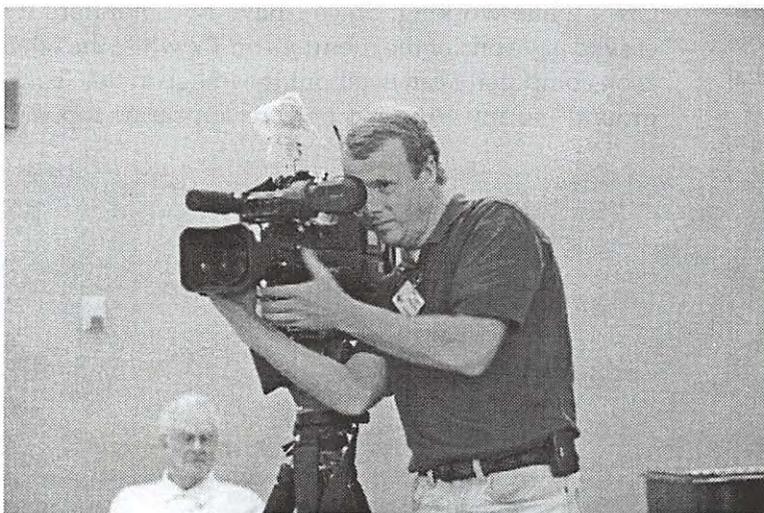


*Grant Peacock filmed (is that the proper term?) the 25th Anniversary Meeting and Party with a high-end digital video camera. (Photo by Richard Sanderson, taken with a Nikon D-100 digital camera)*

# More DoubleClick from May

**D**EAR DAVE and Derek:
   I have read through google searches until I am nearly blind and researched every article possible but would still appreciate your comments on the most user friendly and simplest way to convert my family movies from VHS tapes onto DVD. I plan to upgrade to a digital camcorder soon so that I can burn future birthday parties directly to DVD. But can you then send these to grandma so she can pop them in her DVD player? What format allows the lowend non-techie to accomplish this transfer the easiest?

I have also been reading about EYE TV. Do you have any insight into using this method of transferring analog VHS to digital for capture to DVD? I really hope you will respond as this topic is of great interest to many of us low end users. Thanks

*Ginger Hayes hayescg@cox.net Falls Church, VA*

**DAVE:** Ginger - you are right at the center of what more and more people want to do with their computers these days. Apple led the way of course with it's "digital hub" of programs but there are a number of PC makers now -Sony at the top, I think - that are jumping on board. As our regular readers know, the question about how to get your family movies into a digital form is of great interest. So let's dig right in.

The first way to record moving images was on film - which goes way back to almost the start of the last century. It was only about 25 to 30 years ago that manufacturers were able to make affordable camcorders -which recorded in an analog format just like audio cassette tapes - a magnetic head took the video and magnetically recorded the information onto a moving tape. The original camcorders used regular sized VHS tape and late r a compact "VHS-C" format still available today. Later, Sony came out with a smaller cassette akin to 8 mm film. Today's camcorders now record digitally with ones and zeros - but still do so on a small video cassette tape using a magnetic head. Soon you'll do this directly to a CD, DVD or hard drive.

Most digital camcorders have what Apple calls a high speed serial "Firewire" port (Sony calls it "iLink") to get the video out and into a computer. Some used a slower serial connection called USB, tho many are now offering a faster USB2 port. With a Macintosh, getting your video directly into your computer is easy - hook your digital camcorder via a firewire cable into the computer, start up iMovie and import your video.

But for folks like Ginger who have older formats to contend with, the challenge is taking the analog video and changing it into a digital format useable by Macs or Windows. If you want to transfer film, you'll need a projector and a device that takes that video (or even still pictures) and, using a mirror in a box, shines it directly into the camcorder to record. I just saw Sears advertising one the other day. Other folks just project the film on a wall and record but the quality is poor. As for video tape, whether it's using a VHS machine or an older camcorder, you have a number of choices that are actually reasonable in cost. Look in most computer catalogs today and you'll find a wide range to choose from. Rather than go through the list, check out http://www.macworld.com/2001/08/reviews/converters/ which provides a pretty good review of what's out there.

Derek - Ginger asked about iTV too - it's actually a TV tuner for your computer. Have you every tried one?

**DEREK:** Actually, I have two TV tuners in my house. One in my home office computer where I can watch CNN while working. Since I have two monitors it's easy to have one of the monitors on TV while the other is on computer. I can even put the image in the "background" so any windows or icons appear on top. My
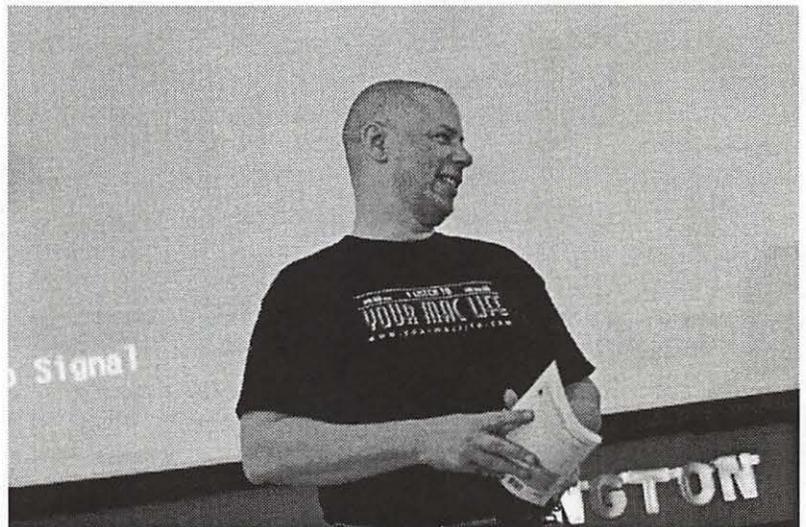
other tuner is in the computer driven home theater. It projects onto a 110" projection screen. It's great for sports. Soon I'll be upgrading to a computer card that will display High Definition Television. I'm waiting for the next generation of cards before I do that. I also have to upgrade my video card in the theater machine too, so that will be a good time to do both.

Your question though of the simplest easiest way to do it is not quite so simple if you have a PC that doesn't have a capture card. Some do, but most don't. Basically a capture card is a device that allows you to capture video. Many TV tuner cards have this capability whereas you can view a TV, Cable, or Video program on your PC. You connect your VCR to this card using the regular cables, and start the "capture" program that came with the card. It will save the info to the computer's hard disk which you can then transfer to DVD using DVD authoring software. Your DVD writable drive will have such software with it.

You mentioned having some trouble finding the information in Google. Here's what you want to search for:

In the search box type in +convert +"vhs to dvd". Notice the quotes around vhs to dvd and the plus sign before the word convert and the quote in vhs. What that will search for is all pages that have the PHRASE vhs to dvd AND the word convert in them. You'll get lots of hits such as companies that offer the service and some ways to do it yourself. Here are some quick links: http://download.com.com/ 1200-2028-965095.html http://www.masterdvd.com/ vhs-to-dvd.html ■

# More DoubleClick from May

GUYS -

I have a question that I hope will be easy for you. I have a Compaq Presario desktop PC a few years old and a very new Mac PowerBook G4. With the Mac, I also got a separate Apple 17" TFT display (this was before the newer wide screen G4 went on the market). The Mac works fine and the PC works fine. My question: can I hook up both the PC and the Mac to the 17" Apple monitor and switch back and forth from one to the other? It would certainly save a lot of desk space for me.

I've been very impressed with your column in the Montgomery Journal and I will appreciate any assistance you can give.

*Kevin Winch*



*Richard Sanderson attempts liftoff during setup for the Washington Apple Pi 25th Anniversary meeting and party. (Photo by Nancy Little, taken with a Canon PowerShot S40 digital camera)*

**DAVE:** Hi Kevin!

What you are looking for is a KVM ("Keyboard, Video and Mouse) switch. These devices are great when you need to control one or more computer using just one keyboard and mouse, hook up more than one computer to a single monitor or any other similar combination. I did a quick search on the Internet and found a number of companies that offer a wide range of products. NTI is one at http:/ / w w w . n t i 1 . c o m / servswt.html. They offer a technical guide and some great examples of the kinds of uses you might have for a KVM switch.

Another site is "KVM Switches Online" at http:// w w w . k v m - s w i t c h e s - online.com/. Click on "Single User KVM's" and you'll be

offered a wide range of products. Since many of these are USB based, they are also cross platform. Others include so-called "legacy" connections including serial, PS/2 and ADB. Prices range widely as you might expect depending on what you might want to do.

I've heard that Derek thought that KVM stood for "Kalamazoo Valley Museum" so I'm sure this explanation comes as something of a shock to him. Derek, I know you are always looking for new things to learn in the computer world, so this is my "last column in May" gift to you with a big smile.

**DEREK:** Aw, shucks Dave. Thanks. Our reader can definitely be served by some KVM switches and maybe an adapter or two. A great article on connecting a Mac and a PC to a shared mouse, keyboard, and monitor can be found at: http://www.macwindows.com/keytips.html

I've been using KVM switches for almost 20 years and I've wondered what that stood for! We use Cybex ones now a days mostly. www.cybex.com. Of course, I've also always thought that MAC stood for "Maybe A Computer." ■

*Washington Apple Pi thanks the Journal Newspapers for their permission to reprint these DoubleClick columns.*



*Pi President Pat Fauquet served as master of ceremonies at at the Pi 25th Anniversary Party and meeting, wearing one of the commemorative golf shirts. (Photo by Tom Tessler)*
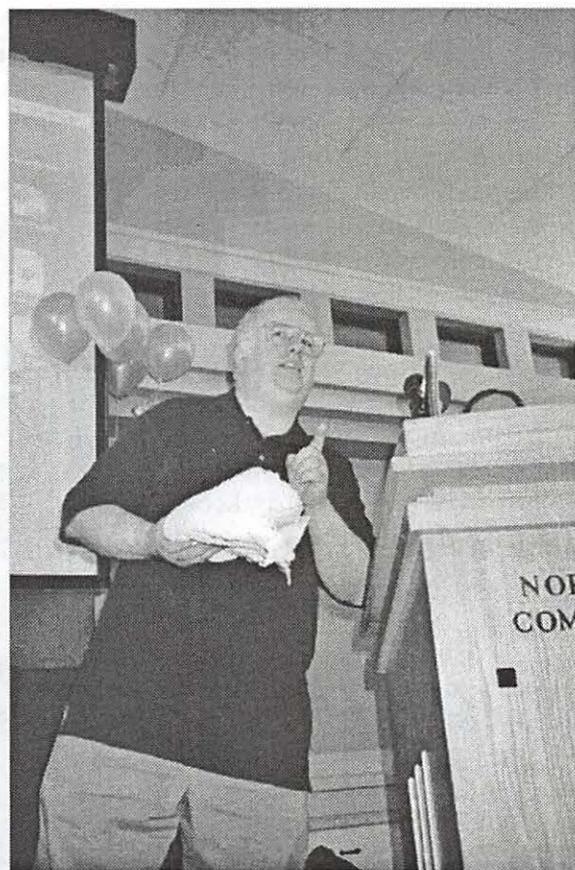


*Former Pi Secretary, Webmaster, Mac Editor, etc., received one of the 25th Anniversary commemorative clocks, and used his few seconds of fame to plead for people to send in photos of the movie for use in the Journal. They did. (Photo by Tom Tessler)*



*Pat Fauquet gave the first 25th Anniversary commemorative clock to Gena Urban, one of the founders of Washington Apple Pi. (Photo by Tom Tessler)*

# Macintosh Tutorials for July & August

## General Macintosh Classes

### Mastering OS X*
Monday, July 7, 2003; Wednesday, July 9, 2003 and Friday, July 11, 2003 9:30 AM to 12:30 PM (Instructor: Pat Fauquet)* Thursday, July 10, 2003; Thursday, July 24, 2003 and Thursday, July 31, 2003 1:00 PM to 4:00 PM (Instructor: Jim Ritz)* Thursday, August 7, 2003; Thursday, August 14, 2003 and Thursday, August 21, 2003, 9:30 AM to 12:30 PM (Instructor: Jim Ritz)

This course is designed for people who have prior computer experience, either on the Macintosh platform or on Windows. The sessions are taught at a faster pace than the New User Series and additional material will be presented. The sessions cover basic and intermediate skills and troubleshooting using OS X. The use of the Terminal applicaiton and Unix commands are NOT covered in these classes. This couse consists of a seriers of three three hour sessions. Students are expected to attend all three sessions in the same series.
Member Cost: $150.00, Others: $200.00
Prerequisites: OS X Four Part New User Series or intermediate level computer skills

### Mac OS X New User Series
Monday, August 18, 2003; Tuesday, August 19, 2003; Wednesday, August 20, 2003 and Friday, August 22, 2003, 1:00 PM to 4:00 PM

This course is meant for people who have their first computer or for those people who would prefer learn about the Macintosh at a slower pace. Emphasis is given to hands-on practice, frequent reviews and a slow class pace. Topics covered include simple word processing, printing, writing emails with the Mail application, an introduction to the Internet and emphasis on using the Finder and the Dock. While students who complete this course will be ready to take several other courses, you will need to complete the Mastering OS X series to enroll in the majority of classes being taught at Washington Apple Pi. This course consists of a series of four three hour sessions. Students are expected to attend all four sessions in the same series.

Instructor: Pat Fauquet
Member Cost: $140.00, Others: $190.00
Course Prerequisites: None

### Getting the Most from Your .Mac Account*
Monday, July 7, 2003 and Wednesday, July 9, 2003, 1:00 PM to 4:00 PM* Tuesday, September 2, 2003 and Wednesday, September 3, 2003, 9:30 AM to 12:30 PM

Apple's .Mac accounts have so many uses and features. Are you getting the full value of your account? Come learn how to access your mail and address book and calendar from any computer, share your photos and files with family and friensd and back up your importantdocuments and files. Learn how to use Virex and keep it up to date. Learn about the dotmac.info web site and learn about the things hidden in your iDisk. Bring your digital camera full of images, a Zip 100 MB Disk or CD with digital images to use in class. Thiscourse is six hours long. It will be taught either as an all-day class or in two three hour sessions.
Instructor: Pat Fauquet
Member Cost: $100.00, Others: $150.00
Course Prerequitsites: OS 9 or OS X New User Series or intermediate computer skills.

### Maintenance and Troubleshooting for OS X
Thursday, July 31, 2003, 9:30 AM to 12:30 PM

There are certain things that should be done to keep your Mac running in top condition. When a problem occurs, there are procedures you can use to fix the issue. Learn basic troubleshooting and maintenance in this three hour class.Instructor: Jim Ritz
Member Cost: $50.00, Others: $100.00
Course Prerequisites: Mastering OS X

### iTunes, Internet Radio, iPods and Making Music CDs
Friday, August 22, 20039:30 AM to 12:30 PM

There is more to iTunes than meets the eye. Learn how to copy your CDs to your computer, add song information to the files, listen to Internet radio stations, make mix CDs and use your iPod to store music, addresses, dates, notes and even files. If you do not have an iPod, you will learn why you might want to add one to your wish list. This course is offered as one three hour session.
Instructor: Pat Fauquet
Member Cost: $50.00, Others: $100.00
Prerequisites: OS X Four Part New User Series or intermediate level computer skills.

**Lets Burn Some CDs**
Wednesday, September 3, 2003 1:00 PM to 4:00 PM

Learn the finer points of making music, data and video CDs in this three hour class. Learn all about Roxio Toast and the Apple Disc Burner software. Learn how prepare data, optimize files and make labels too. This course is offered as one three hour session.
Instructor: Pat Fauquet
Member Cost: $50.00, Others: $100.00
Course Prerequisites: Mastering OS 9 or Mastering OS XDigital Imagery and Video

**Web Pages with iPhoto, iDisk and .Mac Homepage***
Thursday, July 10, 2003 and Thursday, July 24, 2003, 9:30 AM to 12:30 PM* Thursday, September 4, 2003, 9:30 AM to 4:00 PM Calling all .Mac users. This is your chance to make easy web pages and share them with family and friends. Bring your digital camera full of images or a zip or CD with digital images and by the time class is over you will have not only a web page, but a web site! This course is six hours long. It will be taught either as an all-day class or in two three hour sessions.
Instructor: Jim Ritz
Member Cost: $100.00, Others: $150.00
Course Prerequitsites: OS 9 or OS X New User Series or intermediate computer skills.

**Using iLife to Make Movies***
Monday, July 21, 2003 and Wednesday, July 23, 2003, 9:30 AM to 12:30 PM* Tuesday, August 19, 2003 and Wednesday, August 20, 2003, 9:30 AM to 12:30 PM

## Some Specifics

**Who**—Standard members are those who have paid the standard membership dues and includes all family members living within the household of a standard member. Associate members are those who have only paid the associate membership dues.

**What**—The tutorial program of Washington Apple Pi is hands-on training for our members in the use of Macintosh computers. The tutorial room is furnished with computers so that each student has the use of a computer during class.

**When**—Classes are no longer scheduled months in advance. You need to contact the office via snail mail, email or by phone to tell the office what classes you are interested in taking and what times you are available to take the classes.

**Where**—Unless otherwise stated, all tutorials sponsored by Washington Apple Pi are given at the office located at 12022 Parklawn Drive in Rockville, Maryland. A map to the office may be found on the web site at http://www.wap.org/info/about/officemap.html.

**How**—After enough students have stated their interest in taking a specific class the interested students will be contacted and the class will be scheduled. If you would like to inquire about the current level of interest for a specific class please either call the office during business hours or send email with the classes you wish to know about along with a daytime phone number. The office will get back to you either by email or by telephone.

**Fees**—Class fees vary due to the level of the class. Please see the specific class description for the fee for that class. Pre-registration and Pre-Payment must be made to hold a seat.

**Class Size**—Class size is limited to 6 students per class.

**Instructor Cancellation**—If a class is canceled by the instructor, all students will be notified of the cancellation. Please check your home answering machine and email if you have not given a work number for notification.

**Student Cancellation**—A student cancellation must be received 72 hours prior to the scheduled class time. Student Cancellations may only be made via telephone during Washington Apple Pi's business hours or via email to the email address of office@wap.org. The office does not have an answering machine - only an announcement machine.

**Office Information**

Washington Apple Pi
12022 Parklawn Drive
Rockville, MD 208522
www.wap.org        email: office@wap.org
Office Hours:
Monday - Wednesday - Friday (10 am - 6 pm)

Bring your digital video camera with some movie footage, your firewire cable and the power cord for your camera, a new video tape and we %ll make a movie. You will learn to edit your video, add pictures from iPhoto, add titles, transitions and effects, add music from iTunes and your voice to your movie. Then we send the edited movie back to your camera, make a QuickTime movie, and show you how to make DVD %s and V ideo CDs. This course is six hours long. It will be taught either as an all-day class or in two three hour sessions.

Instructor: Pat Fauquet
Member Cost: $100.00, Others: $150.00
Course Prerequisites: Mastering OS 9 or Mastering OS X

### Introduction to iPhoto*

Monday, July 21, 2003, 1:00 PM to 4:00 PM* Monday, August 4, 2003, 9:30 AM to 12:30 PM* Monday, August 18, 2003, 9:30 AM to 12:30 PM Users of OS X can use iPhoto to import, organize, edit and share their digital images from cameras, scanners and Picutre CDs. Come learn about this simple but powerful application that can also be used to make slideshows, books and prints. Bring your digital camera full of images, a Zip 100 MB Disk or CD with digital images to learn how do these projects. This course is offered as one three hour session.

Instructor: Pat Fauquet
Member Cost: $50.00, Others: $100.00
Prerequisites: OS 9 or OS X Four Part New User Series or intermediate level computer skills

### How Fix a Bad Photo*

Wednesday, July 23, 2003, 1:00 PM to 4:00 PM* Monday, August 4, 2003, 1:00 PM to 4:00 PM

Not all photos can be rescued, but using the levels adjustment tool can do a lot to fix your photos quickly and easily. You will also learn when and how to sharpen an image and how to crop and straighten images effectively using iPhoto and Adobe Photoshop Elements or Adobe Photoshop. Bring your digital camera full of images, a Zip 100 MB Disk or CD with digital images to use in class.This course is offered as one three hour session.

Instructor: Pat Fauquet
Member Cost: $50.00, Others: $100.00
Prerequisites: OS 9 or OS X Four Part New User Series

### Selections and Layers in Photoshop Elements

Wednesday, August 6, 2003, 9:30 AM to 12:30 PM

The ability to add layers to an image and then to work one each layer individually demonstrates the real power of Photoshop Elements. In this class we will use layers to adjust parts of an image and add elements such as type and a different background to images. Bring your digital camera full of images or a zip or CD with digital images to use in class. This course is offered as one three hour session.

Instructor: Pat Fauquet
Member Cost: $50.00, Others: $100.00
Prerequisites: Mastering OS X and How to Fix a Bad Photo

### Computer Projects and Crafts with Your Photos

Wednesday, August 6, 2003, 1:00 PM to 4:00 PM

There is so much more that you can do with in digital photos! Learn to make vignettes, make your photos look like drawings or paintings or add an artistic touch. Make greeting cards, photo magnets, wearing apparel, personalized gifts and many other projects using common Macintosh applications Bring your digital camera full of images, a Zip 100 MB Disk or CD with digital images to use in class. Since there a so many different techniques, each time the course is offered, it will focus on different techniques. This in an all day course. There will be a 30 minute lunch break.

Instructor: Pat Fauquet
Member Cost: $50.00, Others: $100.00

Course Prerequisites: Mastering OS 9 or Mastering OS X and How to Fix a Bad Photo

### Fun With Your Scanner
Tuesday, September 2, 2003, 1:00 PM to 4:00 PM

Bring your scanner, its software, cables and power supply and explore what you can do with it. Bring a few pictures that you would like to fix, some printed material you would like to convert to text and bring a few small items you would like to have "pictures" of. We will have a "scanning" good time! This course is taught in one three hour session.
Instructor: Pat Fauquet
Member Cost: $100.00, Others: $150.00
Course Prerequisites: Mastering OS 9 or Mastering OS X

### Productivity
### AppleWorks Word Processing
Thursday, August 7, 2003, 1:00 PM to 4:00 PM

The word processing module of AppleWorks contains many powerful features. Learn how to format documents, make lists and outlines, add pictures, use the spell checker and thesaurus, set up tabs, and make templates.This course is offered as one three hour session.
Instructor: Jim Ritz
Member Cost: $50.00, Others: $100.00
Prerequisites: OS 9 or OS X Four Part New User Series

### Super Simple Databases
Thursday, August 14, 2003, 1:00 PM to 4:00 PM

Do you need to make a simple address list or labels, keep track of recipes, passwords, books, CDs or videos? Would you like to archive e-mail or listserv messages so that you can keep track of information? Learn to use iData Pro by Casady and Greene, a very simple and inexpensive database to keep track of all the information you need. Participants will be given a demo of the program to take home and information about how to purchase this $40.00 program at half price. This course is offered as one three hour session.
Instructor: Jim Ritz
Member Cost: $50.00, Others: $100.00
Prerequisites: OS 9 or OS X Four Part New User Series

### Introduction to Spreadsheets
Thursday, August 21, 2003, 1:00 PM to 4:00 PM

This class will introduce basic spreadsheet concepts. Students will learn how to set up a spreadsheet, how to enter and edit numbers and words, how to enter basic formulas and make basic charts and graphs. They will learn how to sort data and how to print the whole spread sheet or only a portion of it. Students will use either the spreadsheet module of AppleWorks (ClarisWorks) or Excel. This class is not meant for persons who are intermediate or advanced users. This course is taught in one three hour session.
Instructor: Jim Ritz
Member Cost: $50.00, Others: $100.00
Course Prerequisites: Mastering OS 9 or Mastering OS X ∎

---

## Washington Apple Pi
## Tutorial Registration Form
www.wap.org

Washington Apple Pi
12022 Parklawn Drive
Rockville, MD 20852
301-984-0300  Office@wap.org

Name _____

Address _____

City/State/Zip _____

Phone (day) _____ (Evening) _____

Member Number _____ Non-member _____

Email address _____

Times when your are available for classes _____
_____

Type of class wanted _____

Please fill in the name(s) of the class(es) that you wish to attend.

Class #1 _____

Class #2 _____

Class #3 _____

Class #4 _____

Class #5 _____

Class #6 _____

Mail registration and payment to the above address.

---

## Volunteer!! Make a difference in the future of WAP.

---

*Write for the journal. Share your computer experiences!!!*

---

*Part of a SIG? Send in your meeting summary and have it published in the journal.*

---

# Classifieds

Classified advertisements can be placed by mailing copy to the business office of Washington Apple Pi, Ltd., 12022 Parklawn Drive, Rockville, MD 20852. Be sure to include your WAP membership number and indicate area codes with your phone numbers. Ads must be received by the ad copy due date listed in the calendar page for that month in order to be included in the appropriate issue. Any ads postmarked after that time will be included at the discretion of the editor. Cost is $2.00/line (40 characters per line), maximum 12 lines. Members of Washington Apple Pi, Ltd., may place ads up to three lines at no charge. The editor reserves the right to refuse any ads deemed inappropriate.

## For Sale

—Power Mac G-4, 450MHz, 18GB HD, 512 MB RAM, CD-ROM/DVD-RAM, Studio Display, keyboard, mouse, OS 9.2, $400 OBO; HP Laserjet 2100M, $200 OBO; 21" NEC XE21 monitor with video card, $200 OBO, Lynn Trusal, 301-972-6137

—Computers on Demand
Used Macs, Powerbooks & Peripherals. We Buy, Sell, Trade, Repair & Upgrade all Mac Equipment. Call for Quotes. All Major Credit Cards Accepted (301) 718-0822

—ClarisWorks Users Group Discount. Loyal WAP members receive a $5 a year discount on their CWUG (ClarisWorks User Group) membership and renewals as a benefit of their WAP membership. WAP Members must identify themselves as such and then deduct $5 from the regular $39 (printed ClarisWorks Journal) or $34 (electronic ClarisWorks Journal) membership dues when they join or renew. Contact the ClarisWorks Users Group directly at Box 701010, Plymouth, MI 48170; toll-free at (888) 781-CWUG; Fax: (734) 454-1965; Email: <membership@cwug.org> or web site http://www.cwug.org.

## Services

—Mac Hardware, software, networks & training. Apple factory trained & A+ Certified. Marchetti Associates. LLC. 301-404-2210 or philm@erols.com

—Waterfront property Are you interested in a second home or a retirement home on the water but not too far from DC? Within 2.5 to 4 hours of the District is the Northern Neck of Virginia. Located between the Potomac and Rappahannock Rivers this area has an extensive selection of waterfront properties either in communities with amenities or in more secluded settings. If you are interested in learning more about properties in the Northern Neck please call Kathryn Murray at 804-580-2366 or email her at KAM129@aol.com (Realtor® with Barnes Real Estate Inc.)

## Law Office of Richard S. Sternberg

A General Practice of Law
since 1984
General Civil & Criminal Litigation
Employment, Labor & Civil Rights
Personal Injury & Auto Accidents
Business and Corporate Practice
Domestic Relations
Wills & Probate
Admitted DC, MD, VA &
Fed. Courts
First consultation free and discount rates with valid Pi membership
(202) 530-0100

—Mac Tutoring and troubleshooting help. Washington DC area. $50/hour. Phil Shapiro. Contact pshapiro@his.com

## Help Wanted

—Senior Software Engineer: V-ONE Corporation is looking for a Senior Software Engineer for Mac Client. Please refer to our website at www.v-one.com, or e-mail HR at paige@v-one.com

—Idactix, LLC Consulting - Expert Mac solutions and troubleshooting. Services include networking, AirPort, FileMaker databases, AppleScripting, PC/Mac integration, and data backup. Prompt on-site service. 301-530-2607 or info@idactix.com.

—Volunteers Needed: Recording for the Blind and Dyslexic of Metro Washington is looking for volunteers who can read technical books (currently working on data structures in c++ for example). We are located in Chevy Chase at the Friendship Heights Metro, 5225 Wisconsin Ave. NW (at Jennifer Street- across from Mazza Gallery). We need computer literate folks willing to volunteer for 2 hours a week, to help read textbooks onto tape. The tapes are used by students borrowers. Interested folks can come by on Wednesday evening, January 20th, between 6-8pm for an open house orientation. Else, they can call Laurel after 3pm at 202-244-8990 and get more info. Evening sessions start at 5:30 and 7pm, Monday-Thursday. ∎

# Washington Apple Pi, Ltd. 12022 Parklawn Drive, Rockville, MD 20852

## Membership Application  ☐ *New Member*  ☐ *Renewal*

*Please print or type:*

Name _____  Company _____

Address _____

City _____ State _____  Zip _____ Email _____

Home Phone _____  Work Phone _____
*(Must have for the TCS)*  Occupation _____

---

*Please answer a few questions for us regarding your computer use. Check the computers/equipment that you use on a regular basis.*

☐ Apple II or III
☐ Apple II GS
☐ Apple III (SARA)
☐ Pre PowerMac
☐ Other _____

☐ PowerMac
☐ IBM, PC clone
☐ PowerBook
☐ iMac
☐ G3 or G4

**WAP has many Special Interest Groups (SIGs) and Regional Groups (SLICEs). Please check each group you would be interested in.**

☐ Annapolis Slice
☐ Columbia Slice
☐ Delmarva Slice
☐ Frederick Slice
☐ Disabled SIG
☐ Excel SIG
☐ FileMaker SIG
☐ Geneaology SIG
☐ *I can serve as a Hotline contact for*_____

☐ Graphic SIG
☐ NOVA/Educators SIG
☐ Game SIG
☐ QuickTime SIG
☐ Retired SIG
☐ Stock SIG
☐ Women's SIG
____

---

*Enclose check or money order payable to Washington Apple Pi, Ltd. If you are using a credit card please remember that we only accept VISA and MasterCard.*

☐ Check/Money Order  ☐ VISA  ☐ MasterCard

Card Number _____

Exp. Date _____ Signature _____
*(Required)*

☐ Basic Membership—1 year  $49
☐ Student rate* for 1 year  $42

*Indicate desired New Member Kit (1 only)*
☐ Mac 1.44 k
☐ Mac CD

*For other options please add correct amounts*
☐ WAP Bulletin Board System (TCS)**with e-mail **$ 20**
☐ WAP Bulletin Board System (TCS)**with Internet **$ 171**
☐ 1st class mail (U.S.) **$17**
☐ Airmail to Canada, Mexico, West Indies or Cental America **$20**
☐ Airmail to Europe & South America **$38**
☐ Airmail to Asia & elsewhere **$48**
☐ Surface to Europe, Asia & elsewhere **$18**

**Total enclosed $_____**

*Please circle Yes or No for the 2 items below.*
1. Please leave my name on the Pi mailing list. (The list never leaves the office and all mailings are supervised by the Pi staff.)
  Yes    No
2. My name, address & phone number may be published in the membership director.
  Yes    No.

*Please enclose photocopy of current student ID.
** Access to the TCS is contingent on WAP having a current home telephone number for the member.

*Applicant signature and date*

# Pi Fillings: The X CD

Washington Apple Pi

presents

## Pi Fillings – The X CD

Version I

©MMIII Washington Apple Pi, Ltd. (January 2003)

301–984–0300

www.wap.org

Available at General Meetings for $X, or $XII via snail mail. Call the Pi office at 301-984-0300, or send an order by mail to: Washington Apple Pi, 12022 Parklawn Dr., Rockville, MD 20852

**Washington Apple Pi, Ltd.**
12022 Parklawn Drive
Rockville, MD 20852

July / August 2003