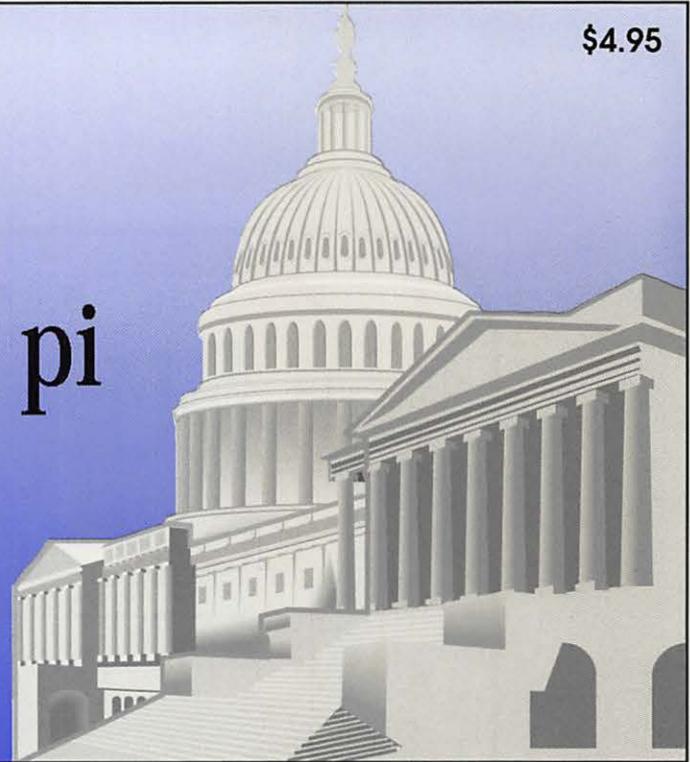


The Journal of Washington Apple Pi, Ltd.

washington pple pi

Volume 25, Number 6



WAP Introduces a New Store for Members at Cafepress.com—13

Power Mac G5: First Look—17

Tools to Distill Your Digital Collections —25

Paper Modeling—31

Interview with Aaron Adams, "Switcher" (Part 1)—42

Default Folder X: A Review—50

Mac OS 8.1 to Mac OS X—52

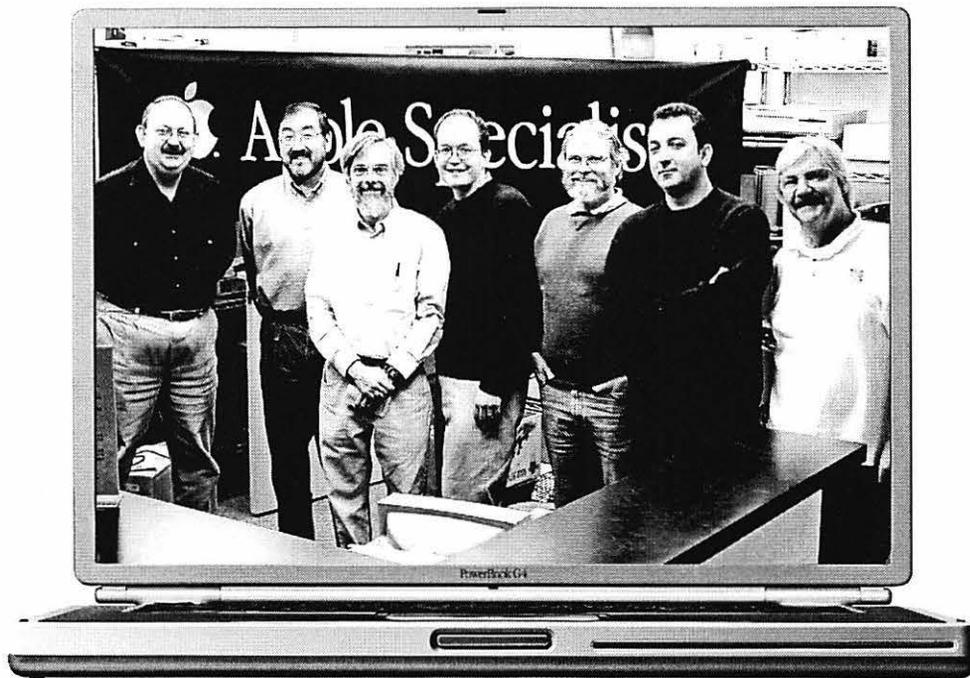
Installing Classic Applications with Mac OS X—67



macUpgrades



Continuing a Decade of Macintosh Sales Service and Support Excellence!



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

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!



Absolute MAC

 Apple Specialist

This October 24th Absolute MAC brings you the power of PANTHER. Visit us and test drive the new Mac OS X 10.3 the New G5 Family, the Aluminum Powerbooks, and the new Imacs. But most importantly, let us extend to you a new level of Macintosh experience ...

The Absolute MAC Store



Absolute MAC is the areas New MACINTOSH ONLY showroom brought to you by the experts at MCIS - an Apple Specialist Apple dealer and Apple authorized Service Provider, celebrating 12 years of service to the Greater DC Area Mac Community.

WAP Day & Audio Open House

October 18th 10AM - 4PM

Absolute MAC brings Music to your ears!
Door prizes, great Open House discounts,
and fun Music and Audio presentations!

PANTHER FEST

October 24th 6PM - 9PM

October 25th 10AM - 4PM

Come to Absolute MAC and feel the power of PANTHER on the amazing new G5s! Demos of Panther & many Hot products around the clock in our Digital Surround Sound theater. Free gifts and awesome discounts for all WAP members

Come to our website for our 12th Anniversary schedule of Events

18525 N. Frederick Av Gaithersburg Md 20879 • I-270 exit 11, left on Rt-355, right on Travis (4th light)- 1st right into p-lot

301 - 417 - 0600

[www . AbsoluteMacintosh . com](http://www.AbsoluteMacintosh.com)

Table of Contents

Volume 25

November/December 2003

Number 6

Club News

WAP Calendar	48, 49
Index to Advertisers	17
Tutorials	84
WAP Bylaws	87
Statement of Ownership, Management & Circulation	94
Classified Advertisements	95
WAP Membership Form	96

General Interest

Welcome to WAP!	4	by Dave Ottalini
President's Corner	5	by Pat Fauquet
Summary of the 9 July Board of Directors Meeting	7	
Washington Apple Pi Board of Directors Meeting, Aug. 6	8	
Summary of the 10 September Board of Directors Meeting	9	
September & October Power Users SIG Meetings	11	by Steve Roberson
WAP Introduces a New Store for Members at Cafepress.com	13	by Dave Ottalini
WAP Needs Experts and Speakers	13	by Dave Ottalini
How to Get the Most Out of the December Computer Show and Sale	14	by Dave Ottalini
Power Mac G5: First Look	17	by Washington Apple Pi Labs
Finding a Few Good Pictures Tools to Distill Your Digital Collections	25	by Dennis Dimick
Paper Modeling	31	by Pat Fauquet
Terascale Computing on a Pizza Budget	33	by Washington Apple Pi Labs

Mac Love Stories	36	by Sheri German
Crafting for the Grandchildren: Magnetic Paper Dolls	38	by Pat Fauquet
Interview with Aaron Adams, "Switcher" (Part 1)	42	by Craig Contardi
Apple iDisk Service	44	by Phil Shapiro
Injecting Playfulness into Computer Training	46	by Phil Shapiro
Default Folder X: A Review	50	by Brian G. Mason
Mac OS 8.1 to Mac OS X	52	by Stuart Bonwit
Impressive Apple Firsts	53	
Clone Wars	54	by Guy Serle
Low Cost Gifts for Macintosh	59	
Macintosh Web Browsers	60	by Darrel E. Knutson
What's on this Disk	66	by Dave Ottalini
Installing Classic Applications with Mac OS X	67	by Guy Serle
The Marvels of Cyberspace	68	by Joseph "Scotty" German
The Next Generation of Teachers or how Trinity College is using a Mac lab to train teachers	68	by Sheri German
Extensis Portfolio 6	71	by Veda Lewis
DoubleClick	73, 74, 75	
Special Offers—Apple User Group Bulletin	76	
Apple Offers Free Online Seminars from the MacTert Discussion Group	83	

Postal Information

Washington Apple Pi (ISSN 1056-7682) is published bi-monthly by Washington Apple Pi, Ltd., 12022 Parklawn Drive, Rockville, MD 20852. Periodical postage paid at Rockville, MD.

Annual membership dues for Washington Apple Pi, Ltd. are \$49; of this amount \$24 is for a subscription to the Washington Apple Pi Journal. Subscriptions are not available without membership.

POSTMASTER: Send address changes to Washington Apple Pi, 12022 Parklawn Drive, Rockville, MD 20852.

Change of Address should reach us 60 days in advance of the move to ensure that your Journals continue uninterrupted.

Deadlines

Writers' submissions

Jan./Feb. Nov. 25
March/April Jan. 25

Ad space reservations

Jan./Feb. Nov. 25
March/April Jan. 25

Camera-ready ad copy

Jan./Feb. December 1
March/April February 1

Editorial Staff

Managing Editor

Kathryn Murray 804/ 580-2366
KAM129@aol.com

Review Editor/Macintosh Editor

Lawrence Charters 410 / 730-4658
lcharters@tcs.wap.org

Tutorials Editor

Pat Fauquet patf@mac.com

Apple II Editor

Seth Mize 410 / 766-1154

Art Editor

Blake Lange 301 / 942-9180
blake.lange@tcs.wap.org

Calendar Editor

Bill Wydro 301 / 299-5267
wwydro@aol.com

washington apple pi

This issue of the Washington Apple Pi Journal was created on a G3, with proofing on an HP LaserJet 5000 N.

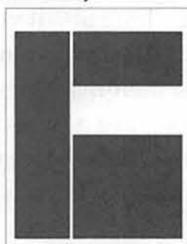
The page layout program used was PageMaker 6.5 the word processing program was Microsoft Word 5.1; the principal typeface is Palatino (10/12) for the articles; and Avant Garde Demi for headlines, subheads, and emphasis. Charlemagne Bold for drop caps.

Cover Design: The WAP Journal cover design was created by Ann Aiken in collaboration with Nancy Seferian. The Capital artwork was illustrated by Carol O'Connor for One Mile Up, which donated it for use on our cover.

Advertising in the Journal (available sizes)



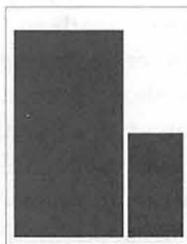
Full Page
7.5" x 10.0"



Third Page
(vert.)
2.5" x 9.5"
Sixth Page
(hor.)
5.0" x 2.5"
Third Page
(hor.)
5.0" x 4.75"



Half Page
7.5" x 4.75"



Two-thirds
Page (vert.)
5" x 9.5"
Sixth Page
(vert.)
2.5" x 4.75"

No. of times ad runs	1	2-3	4-5	6+
Full Page	\$450	\$383	\$338	\$270
Covers	\$550	\$468	\$413	\$330
Two-thirds Page	\$360	\$306	\$270	\$216
Half Page	\$300	\$255	\$225	\$180
Third Page	\$225	\$191	\$169	\$135
Sixth Page	\$125	\$106	\$93	\$75

Special guaranteed positions incur a 10% surcharge

Ad Deadlines

The Washington Apple Pi Journal is published bi-monthly. The ad copy deadlines and ad space reservations are listed on page 2 for your convenience.

Submission may be via email, or on CD when files are large.

SIG Chairs

Annapolis Slice

Website <http://www.annapolisappleslice.org>

President Tony Murphy murf79@comcast.net
 Vice President Jeff Straight jstra_2000@yahoo.com
 Secretary JoeAnn L. Kuhn jalkuhn@aol.com
 Treasurer David Illig david@davidillig.com
 Treasurer/Membership: Albert Gomezplata agomezplata@riva.net
 Librarian Michael Harfordmzharford mzharford@riva.net
 Webmast/Program Chairman Ted Martens
tmartens@annapolisappleslice.org

AOL SIG

John Barnes (301) 652-0667
JDBarnes@aol.com

Apple IIGS

Lorin Evans
lorin.evans@wap.org

Art SIG

Joe Morey (703) 281-5385

Columbia Slice

Website <http://www.wap.org/columbia/>

Contacts:

Tom Cook tom.cook@wap.org 410-995-0352
 Henry Yee henry.yee@wap.org (410) 964-3706

Database SIG

volunteer needed

DisabledSIG

Jay Thal (202) 244-3649
jay.thal@wap.org

Excel SIG

Dick Byrd (703) 978-3440

Final Cut Pro

Abba Shapiro

Abba@DigitalVideoDC.com

Frederick Slice

Website: <http://www.frederickapple.com>

President Dick O'Connor rjpaconn@aol.com
 Sec./Treas Russ Robinson

JRRobinson@aol.com

Webmaster/VP

Dick Grosbier dick@grosbier.com

Past President

Bob Esposito

bobesposito@worldnet.att.net

Newsletter Editor

Greg Esposito bobkiwi@mac.com

Genealogy SIG

Volunteer needed

Graphic Arts SIG

Lila Bednar (703) 456-1886
lila.bednar@wap.org

iMovie SIG

Hal Cauthen (703) 323-8934

chrgrhorse@aol.com

Mac Programmers

volunteer needed

Music SIG

Ed Moser (301) 924-1573

Newton SIG

volunteer needed

NOVA Educators SIG

Pat Fauquet (703) 550-7423
 email: fauquet@erols.com

ProSIG

John Barnes (301) 652-0667
JDBarnes@aol.com

QuickTime SIG

Stuart Bonwit (301) 598-2510
 email: sbonwit@wap.org

Retired SIG

John Barnes (301) 652-0667
JDBarnes@aol.com

StockSIG

Morris Pelham morris.pelham@wap.org

Teen SIG

Three SIG

David Ottalini (301) 681-6136
dave.ottalini@wap.org

Officers and Board of Directors

President — Pat Fauquet — president@wap.org
VP, Membership — Lila Bednar — vpmembership@wap.org
VP, Programs — Hal Cauthen — vpprograms@wap.org
VP, Publicity — Dave Ottalini — vppublicity@wap.org
VP, Volunteers — Steve Roberson — vpvolunteers@wap.org
Secretary — Craig Contardi — secretary@wap.org
Treasurer — Dick Sanderson — treasurer@wap.org

Directors

John Barnes — john.barnes@wap.org
Herb Block — herbertb@Capaccess.org
Gene Haddon — gbhaddon@mac.com
David Harris — david.harris.wap.org
Jim Little — dukeow@aol.com
Nancy Little — nancylittle@mac.com
Grant Peacock — grantpeacock@mac.com
Jim Ritz — jim.ritz@wap.org

Volunteers

Telecom Sysop — Lou Dunham — lou.dunham@wap.org
Webmaster — Lawrence Charters — webmaster@wap.org
Mac Editor, Review Editor — Lawrence Charters — maceditor@wap.org
Tuesday Night Clinic — Jim Ritz — jim.ritz@wap.org
Calendar Editor — David Harris — david.harris@wap.org
Tutorial Coordinator — Pat Fauquet — tutorials@wap.org

Washington Apple Pi, Ltd.

12022 Parklawn Drive, Rockville, MD 20852
Business Office: (301) 984-0300
TCS: 2400 bps (301) 984-4066
14,400 bps (301) 984-4070
Web address: www.wap.org
e-mail address: office@wap.org

Office hours: Mon., Wed., Fri. 10 am-6pm
*Tues. 7-9 pm—Clinic Night Only—
Not Regular Office Hours*

When weather is bad, call to check if office is open.

© COPYRIGHT 2003, by WAP, Washington Apple Pi, Ltd. User groups may reprint without prior permission any portion of the contents herein, provided proper author, title, and publication credits are given, except in cases where the author has reserved copyright permission. In these cases, the author should be contacted directly. Please send a copy of the article as printed to Washington Apple Pi; 12022 Parklawn Drive, Rockville, MD 20852.

Welcome To WAP!

by Dave Ottalini

AS A NEW member of Washington Apple Pi, you probably joined because of your interest in learning more about your Macintosh computer. But you might be interested to know that your Pi leaders have been talking of late about another reason we exist as a club. A social reason.



WAP is chartered as a social club that just happens to be made up of folks who are interested in computers. At one level, that can be pretty dry since computer clubs tend to have a reputation for being made up of a bunch of geeks who wear glasses and pen holders in their shirt pockets.

The great thing about your new club is that we are not in that mold. We do have members who are focused and committed to their machines and to making them work for the Pi. But we have a pretty diverse group of women and men (tho we could use more young people) who have joined to do more than just learn what the best keyboard shortcut is.

Many of the events that we promote on a monthly basis have a social aspect to them. Our upcoming Computer Show and Sale in December is a prime example of that. Members come to these shows not just to find bargains, but to see old friends and interact with other members. Our recent 25th anniversary celebration was the club's social event of the year. And our monthly meetings, SIG get-togethers, Tuesday Night Clinics and tutorials even qualify as social events at some level.

But there's interest in doing more and that's where you can make a contribution. What would you enjoy doing as a new member of WAP that could help take us socially "up a notch" as a famous Food Network chef might ask. All you "old timers" should be giving this a thought or two also. If we had more social events tied in with our regular meetings, would that entice you to come out more, bring a friend, renew your membership?

We would love to hear what you think about this so give us a holler at office@wap.org. And for all you new members, Welcome To WAP! ■

President's Corner

WHEN I BEGAN college many years ago I wanted to major in Biology. It was a subject that fascinated me. I could see myself studying animals and plants, discovering new species and teaching others about the natural world. By the end of my first semester I realized that my dream was unattainable without several extra years of college to undo some unwise decisions and course choices made in my earlier study of mathematics.

Another semester and many hours with a tutor made it clear that it was time to re-think my plans and choices. I was seriously behind in math and it was not an easy subject for me to master. I met with the counselors, took interest tests and talked with the professors. The clear choice for me was Recreation Administration. It was almost laughable. I would be switching from a major that was academically respected to one that everyone joked about. I would be going to college to teach people to PLAY????

The following semester I loaded my schedule with general education requirements. Then I added two more classes to those 15 units so that I would not fall behind if this new major did not work out. To say that I was not enthusiastic was an understatement. My advisor wisely suggested a class in outdoor recreation and one in event organization. I was hooked and excited! Not only were there challenging things to learn, but I would have a way to share my love of nature and my skills in group organization without having to master mathematics.

Of course, not every class in any major is simple. There are always a few courses and professors that present particular challenges. In the study of Recreation Administration, the class that many people dreaded was one on the organization and administration of non-profit groups. This class was also added to the course requirements for several other majors and so it was a class in which we were competing with students in a wide variety of majors for the few A's that would be awarded. Add to that, a professor who wanted to make sure there was respect for the study of Recreation Administration and his interesting way to make sure we were intimately involved in the learning process. It was the most difficult and time consuming class I ever took.

His approach to presenting the material was to di-

“Washington Apple Pi is huge. It is an elephant of an organization and its members are like the group of blind men who were given the task of describing the animal. There is no one who fully understands the breadth of the various sub-groups and activities that make up the the Pi.”

vide the class into several group and then to have us form organizations, write the bylaws, hold elections and do all the other tasks that are involved in running a non-profit.

One thing that I learned in the class was to avoid the bylaw process. Bylaws are difficult to write or revise because it is hard to bring a group of people with diverse interests, experiences and personalities to a consensus. Over the years since college I have belonged to many organizations and I have helped with a number of bylaw revisions. Each was challenging, but none of the groups were as large as Washington Apple Pi, they had fewer leaders with strong feelings, and the bylaws were not as many years old as those of Washington Apple Pi.

When I attended my first Pi board meeting over ten years ago, the the group identified that the club's bylaws were in serious need of study and revision. Over the years, the topic was brought up by many people. Committees were appointed and meetings were held, but it became clear that the task was enormous and fraught with certain disagreement. Each year the project was abandoned. We did make minor changes, but it was certainly not a major reexamination of the group and its inner workings.

Washington Apple Pi is huge. It is an elephant of an organization and its members are like the group of blind men who were given the task of describing the animal. There is no one who fully understands the breadth of the various sub-groups and activities that make up the the Pi. Ask a group of members what they value and what parts of the Pi are unimportant and you will find that what one group thinks is disposable is very important to another part of our membership. Do away with a function or activity and you risk alienating a sizable portion of our membership.

Until about two years ago, the Pi had been run by the

same core group of volunteers for more than 10 years. While there had been a few additions to the board, new directors were brought in very slowly and they took on major functions only after a long period of intra-group training.

With Lorin Evans, our long-time president, stepping down and Beth Medlin, our long-time office manager, leaving, Washington Apple Pi was in the midst of a leadership crisis. Elections had been held and there were so many vacancies that it was difficult to meet the requirements for a quorum. No one had run for President and there was no one on the Board of Directors who was willing to assume the presidency.

The last thing I needed at that time in my life was another responsibility, particularly one that could mean making a long-term commitment to run a large and diverse club like the Pi. I reluctantly agreed to become the president.

It was clear that my task as President would be to help build a new leadership team and oversee changes to the bylaws which would move our club into a different leadership model.

As we found members who were willing to serve on the Board, it became clear that our newest leaders saw the challenges that faced the club and that they were ready to attack the problem by eliminating the unnecessary things associated with Washington Apple Pi.

Many of these new board members had never used the TCS. They had new computers and deep technical knowledge. Some did not see the need for the Tuesday Night Clinic program. Many did not have children in school and so they did not see the value of fixing old Macs and donating them to schools and community groups. Some questioned the Journal, others the General Meeting, still others found the Tutorial program or the Pi Fillings CDs to be of questionable value. Our newest board members had plenty of enthusiasm and energy. However, they lacked corporate knowledge.

Our present bylaws are out of date. They do not reflect how the club is being run. They make it difficult to make minor changes while providing little protection for long-standing programs and functions. They do nothing to encourage the healthy growth of new leaders.

As I met with the 2003-2004 Board of Directors for the first time, I outlined my goals for the year. The top item on the agenda was the bylaws. We formed a committee to study them. We planned a Leadership Retreat to focus on the mission and role of Washington Apple Pi, and the task began.

It is been long and frustrating. There have been serious disagreements and grudging compromises. There are

still things which need to be reexamined and re-thought, but we now need to make several changes to allow that process to move forward. Our present bylaws do not make it clear who has the final vote to approve bylaw changes. It is possible for the Board of Directors to amend them and then simply publish the changes in the next Journal. The Board of Directors voted to require that all bylaws changes be voted on at a General Meeting. The other change we made was the definition of quorum. The old bylaws required 100 members to be present at the General Meeting. That is a number that hard to achieve at many of our meetings, so the quorum will be constituted by the members present at the meeting.

These changes will make it more difficult to make wholesale changes to the organization without the consent of the members, and at the same time, it will not make low attendance at a general meeting an impediment to necessary changes.

Many members of the Washington Apple Pi Board and staff are working together to craft the additional changes to the bylaws. We will publish those in the next Journal and you will be asked to vote on them at the January General membership.

Thank you, everyone who has participated in the process to date. I am certain the proposed changes you are working on will help the club in the many years to come. ■

*Pat Fauquet
President, Washington Apple Pi*

Presto Vivace, Inc.

Fast and Lively Public Relations

Presto Vivace specializes in public relations for small technology companies. Our press contacts database is now available for companies to manage their own publicity.

For only \$99 you can use our professional database to place your press releases. Available in AppleWorks format, e-mail marshall@prestovivace.biz for sample.

4902 Powell Road, Fairfax, VA 22032
703/426-5876, fax 426-5892
<http://www.prestovivace.biz/>

Summary of the 9 July Board of Directors Meeting

PRESIDENT PAT Fauquet called the meeting to order at 7:43 p.m. The minutes from the June board meeting were reviewed, amended and approved with changes.

Present were:

John Barnes (Director)
Lila Bednar (VP/Membership)
Herb Block (Director)
Craig Contardi (Secretary)
Pat Fauquet (President)
Gene Haddon (Director)
David Harris (Director)
Jim Little (Director)
Nancy Little (Director)
Jim Ritz (Director)
Steve Roberson (VP/Volunteers)
Dick Sanderson (Treasurer)
Jon Thomason (TCS SIG)

SIG/Committee Reports

Treasurer: Dick Sanderson reported he was not yet done with the end-of-year budget numbers due to some missing pieces of information. The room deposits through December 2004 for our monthly meetings at No. Va. Community College, our office rent (through when?), and our Macworld Bus Trip charter cost is all paid-in-full (in fact we are owed \$100 back from the bus company which should be forthcoming).

Office Staff: Herb Block would like to expand coverage hours from 11-2 up to 10-2. VP/Volunteers Steve Roberson said he knew of someone who wanted to "get more involved". John Barnes has lobbied the members of the Retired SIG to volunteer in the office, and encouraged them to come in pairs if they prefer.

Facilities: Pat praised Nancy Little for taking the lead in keeping the Pi office tidy. Nancy said that many others have chipped in a little each to help. Jim Ritz said we have found someone to come in every wednesday to haul

away bigger discarded computer items that are no longer useful to the Tuesday night clinic or reclamation SIG.

Bylaws: In preparation for the 2 August "executive offsite" Pat will post the Pi's complete bylaws on the TCS for review/comment.

Pi Fillings: Mary Keene is working on integrating Apple Knowledge Base (KB) information for future Pi Fillings CDs.

Website: Lila will convene a meeting of those interested in participating: she feels the top priority is doing a 'housecleaning' on the content.

Finance: Cheryl Lavoie, Bill Diffley, and Dick Sanderson are sharing the data-entry duties.

Budget: [someone] will sit down soon with the club Treasurer (Dick Sanderson). Once that happens others can/should be brought in as well.

Store Representatives: No reports this month.

Membership: in the next 2-3 weeks Lila Bednar will meet with the management at the Tysons Apple Store to work out teaming arrangements. She has also contacted the Apple representative at Micro Center. Jim Ritz said there were two Mac Goddard User Group members there and they would like to work more closely with us.

Database: Fixing the problems will involve a three-phase process. First, Dick Sanderson, Greg Bartolett and Lila will meet. Greg will then propose some sweeping changes and present them to board. Jim stressed that there is nothing more important to the Pi than that database. Pat said that Greg needs to be brought into the communications loop. Several more minutes of impassioned concern about the status of the database.

Digital Edge Expo: no one has yet stepped up to chair this. [note: the decision was later made to not participate in this activity because unlike prior years, neither electricity nor Internet access are being donated to us during the show. - ed.]

SIGs/Slices: lion's share of this will be covered at the retreat.

General Meeting: this month will be 26 July at Elks Lodge in Fairfax. Speaker is Brian Wayman of Apple [Note: or so we thought at the time of this board meeting: Brian will be the speaker in August, not July - ed.]. David Harris will put sign at NVCC on Friday 18 July to alert people

Lila Bednar offered to donate her Microsoft Entourage prize from the Maryland Apple Corps 25th Anniversary celebration as a general meeting raffle prize.

Macworld CreativePro Bus Trip: Jim Ritz will bring two cases of Pi Journals on the bus with him on thursday July 17th. Pat Fauquet will bring as many journals with her as she can fit in her van.

Pi Journal: 18-20 cases of Journals are coming in to the Pi office later in the week, so the office and facilities staff will need to make sure there is room for them. Lawrence is re-writing the writers' guidelines for Journal articles. Craig Contardi (secretary) reported that he interviewed Aaron Adams, one of the original people from the first "Switcher" ads. He has 92 minutes of audio from which to glean one or two Journal articles.

Garage Sale: Ned Langston sent the board an email with the end results. There clearly a steady downward slide in revenues. Need to publicize better: garage sale is not in pre-meeting slideshow, and was not posted to the list server Ned says. The next sale is 13 Dec. which is still kinda late. "at that point people are only buying stocking stuffers. People are buying fewer tables and counting on being able to spread out to vacant space. Pat has posted questions on the TCS and has found out that many members have never been to a garage sale. one reason is "I don't buy old stuff". Jon said that the consumer machines are less upgradeable recently vs. 1998. Ned reminds vendors that two tables for \$60 is pretty cheap advertising to get the word out that a company sells Mac stuff.

Expo: Ned followed on that does it make sense to expect \$500 for a booth from a vendor if we have trouble selling garage sale tables?

John Barnes has expertise in expos and seems willing to lend his expertise.

TCS: Need to establish an iMovie board on TCS. Jon said no movement since last month on secure certificate and bandwidth plus-up. Richard Sternberg is willing to do research on bundling of communications for cost savings.

Discussion of restarting apple teas as recruiting tool.

Events calendar: no one is formally notifying David Harris of events: John suggested that he subscribe to Retired and Power User sig email list; jon countered back that John should just CC: david when he does event announcements.

DVD Burner: hopefully to be ordered 7/10

Pi Table at MWCP&E: reminder to man the table if you're still up in NYC

Retreat: watch the TCS

Pat asked Ned for a copy of his Garage sale archives/ checklists.

CPCUG TV: nothing to report.

Refund for TCS Exp. who moved to high-speed service: actually not yet an issue. Customer is asking in advance of signing up. long intense discussion ended up

just deferring until the retreat.

This past month there was a problem with possible misuse of some office supplies and services.

John Barnes was reminded he is revising the NDA.

The club's bookkeeper asked for a \$5/hr. raise which was granted. She is still worth every penny.

Pat proposed we hold the August board meeting on the first wednesday of the month instead of the second. Everyone present agreed to this.

Pat adjourned the meeting at 9:19pm ■

Washington Apple Pi Board of Directors Meeting August 6, 2003

IN THE ABSENCE of the Pi Secretary, David Harris volunteered to record the proceedings. No sign-in sheet was circulated.

The meeting was called to order at 7:45 PM. Minutes of the July 9 Board meeting were presented and approved.

Committee Reports

Budget: On the financial side, Expenses are higher this year compared to the same time last year. Two main factors contributed: newsletter costs this month, and paying NoVA six month's rent in advance for meeting there.

Office Staff: Office hours have increased to 11 am - 3 pm for one day of the week; all other days remain 11 am - 2 pm. Office workers were having trouble accessing the database on the office iMac.

There was a discussion of electronic voting; member Dan McGuinness volunteered to look into the matter.

Retreat After-Action: Hal Cauthen and John Barnes will work to draft by-laws changes that were discussed at the Retreat held on August 2. The legal requirements associated with planned leadership changes are being investigated.

There was discussion of the Pi's Mission Statement, developed at the Retreat. Some members think it needs to mention Macintosh specifically. There needs to be a

second paragraph along with the Statement, when sending descriptive material out about the club to whomever requests it. This too can be hammered out more on the DOV board of the TCS.

DVD Burner: The new CD/DVD burner has not yet been purchased. Questions were again raised as to whether it could pay for itself, but the Board and membership have already voted to buy it. New material for a monthly disk will be available from Chris Breen.

Wap.org redesign: There has been no meeting of the Web page committee; however, a member had sent in a promising suggested redesign; also a former member of Santa Fe MUG was interested in working on it.

Financial: Jim Little needs to get together with Dick Sanderson and Frank Zappacosta to develop a financial budget. If there is no MacWorld in NYC this year, there will be no income or profit from a bus trip. Hal Cauthen will meet with Dick Sanderson to see if a definite trend of membership figures can be established.

Membership: There was a discussion of the grace period for expiring members. Members whose memberships have expired should no longer get Journals for three months after expiration.

A discussion of a new members class was held: this would be to teach members how to utilize Pi services, not how to use their computers.

A motion was made by Pat Fauquet to buy the latest version of FileMaker Pro Server, at a cost of up to \$500, if we cannot get it donated. It is needed to make the membership database work as planned. After discussion the motion was seconded and passed.

Vendor Liaisons: We need more people to take Journals to stores. Nancy Little got several volunteers at the meeting to take on this duty.

SIG/Slice Policies: Pat Fauquet will contact Slice officers about a possible luncheon meeting after the August general meeting, to discuss the status of Slices. SIGs need to hold their elections in October, according to the by-laws.

General Meeting: Hal Cauthen wondered if we should have monthly general meetings at all. They used to pay for themselves with things like disk sales, but now they are a considerable net cost. Hal will look into possible alternative meeting venues that might be cheaper than NoVA and better suit our present needs. There was some discussion of possible TV or Internet broadcasting of our meetings, as well as recording them.

Pat described the MacNexus (Sacramento MUG) corporate memberships, which allow businesses to have tables at each general meeting. They have two meetings per month, one of which is a tutorials meeting. Should

we do something similar?

Garage Sale: Pat Fauquet made a motion to drop the June Garage Sale, since it brings fewer people than the December one. The Garage Sale might be held elsewhere, instead of NoVA. In light of this the motion was tabled.

TCS Committee: TCSO Lou Dunham expressed pleasure at how the DOV (Directors, Officers, Volunteers) board of the TCS was now being extensively used for discussion. General usage of the TCS is also up.

A draft of the non-disclosure agreement for use of the DOV board and mail lists was presented by John Barnes; there will be more discussion of this on the TCS.

Lou Dunham presented the TCS Guidelines and they were approved.

Meeting was adjourned at 9:48 PM. ■

Summary of the 10 September Board of Directors Meeting

PRESIDENT PAT Fauquet called the meeting to order at 7:43pm.

Also present were:

John Barnes (Director, Acting VP/Programs)

Lila Bednar (VP/Membership)

Craig Contardi (Secretary)

Lou Dunham (TCS Committee Chair)

David Harris (Director)

Jim Little (Director)

Nancy Little (Director)

David Ottalini (VP/Publicity)

Steven Roberson (VP/Volunteers)

Dick Rucker (Member)

Dick Sanderson (Treasurer)

Jon Thomason (TCS Chief Architect)

Pat discussed her email of earlier that day, which referenced the spirit of dissent coloring the BOD discussions on the TCS. She said it was time to revisit what our goals and priorities are as a club. From this moment for-

ward, we need to pick the most important issues and solve a few every month; we are just habitually spinning and deferring right now.

All those present were given a stack of notecards, and were told to write down the 3-6 top priorities for the club in their opinion, one per card. Steve Roberson collected the cards and collated them into distinct categories, combining any priorities in common into a single bullet. Some examples of priorities include:

- Dropping to three major programs and suspending everything else.
- Stop operating under the "we've always done it THIS way" mindset.
- Provide services people can believe in/trust, even if that means hiring help.
- Focus on the members and member service.
- Market more Pi-logo merchandise as revenue and "club pride" source.
- Reduce the size of the Pi Board of Directors.
- Make a budget and stick to it #(DAVE O.)# / Get a clear fiscal picture.
- Make the Pi more visible/approachable/fun/friendly. An example would be a social activity that was wholly unrelated to computers.
- Have a Pi member staff a table at retail stores to field questions about the club.
- Conduct exit interviews on all non-renewing members.
- Finish updates to bylaws reflecting new club focus, electronic balloting for elections.
- Get our legal ducks in a row.
- Demand full accountability from every program/SIG/Slice.
- Standardize on a single application form and a single renewal form.
- Concentrate on appearance & tone of electronic services (TCS/Email/website).
- Concentrate on appearance & value of our office space in Rockville.
- Establish a new member SIG.

The most commonly-addressed topics were effective office manning, the need for exit interviews, improving electronic services, and updating the membership form.

1. Office manning: There is a need to train the office staff; Two volunteers at a time would be a great way to accomplish this. To try to grow the staff of volunteers, an invitation/announcement will be added to the slideshow that runs before every general meeting. Jon Thomason asked if the incumbent three-step procedure of process-

ing applications and renewals could be revised in the interest of shrinking the timeline. Currently, the volunteers opening the mail are not the ones updating the database, who are not the ones printing the updated membership cards. It can take up to two weeks as a result to complete the process,

formalize the admin duties like mailing/folding.

2. Exit interviews: Dave Ottalini repeated that past canvassing of departing members revealed no prevailing single reason or group of reasons for people not renewing. It is eventually possible to use the membership database to automatically send emails to members before and after their expiration date. Dick Sanderson agreed to provide the expired member list at the October BOD meeting.

3. Electronic services: Board agreed to add a link to TCS and ".wap" webmail from the main www.wap.org webpage. Our site is lacking in dynamic content (vs. static), so that is something to strive toward. Having one webmaster is restrictive, especially an entrenched webmaster. Many attendees recommended Apple's public website (apple.com) as a layout format worthy of emulating; Santa Fe MUG's website is another.

4. Membership Form: Ottalini said the new form is done except for the pricing section; he has no idea what the holdup has been to approving and using it. Lila said there are 7 versions of the membership form in existence, with different dollar figures. All we need are a new-member form, a renewal form (which is an invoice), and a brochure-based application. Dick Sanderson will let Greg Bartoletti decide when to meet to nail down the three forms, as he is critical. Lou Dunham asked that we add a blurb to the forms requesting members give two weeks for "volunteers to process your renewal". Pat Fauquet mentioned the possible need to consider giving some number of days of "TCS amnesty" on expiring memberships because it took 10 days for her mail to get from Rockville to Lorton (she did an experimental mailing just for metrics purposes).

Lila asked who our target members are: Unix geeks? twenty-somethings? novices? Pat said yes to all.

The meeting then moved on to "the usual topics".

Mission Statement: reviewed and approved unanimously, acknowledging for the record that some remain concerned about specific focus on the "Macintosh" brand name. WAP was conceived based on a common interest in Apple II style computers used by electronics hobbyists. It embraced many technologies and platforms as they arose, and will surely continue to do so in the future.

General Meeting: September will be "Pi Services" where all SIGs and committees will get to pitch their angle.

John Barnes will ask for volunteers from the iMovie SIG to tape this meeting as the foundation for the new users orientation.

Riderwood (a senior center) has asked to be a Pi Slice. Pat Fauquet and John Barnes will visit there and try to gain them as Pi members, but slices are not part of WAPI's core philosophy any longer.

Pi-sponsored Trade Show & Expo: Pat has found a Pi member who is a show promoter, and will help us produce an expo. He will work on revenue-sharing basis. John Barnes is concerned that the Pi is not ready for any large financial commitment. Also, major vendors usually need several months advance notice to participate in expo-like shows, so deadlines have have come and gone. Pat is thinking of a late spring iteration.

Pat adjourned the meeting at 10:27 pm. ■

September & October Power Users SIG Meetings

by Steve Roberson

THE SEPTEMBER Power Users SIG meeting began with a discussion of the Virtual Network Computing (VNC) software called Share My Desktop. We tested out the product with laptops that a couple of members brought.

Back-up strategies, a common topic at the SIG meetings, were discussed for a short period of time. At least a couple of members believe that having a bootable backup is critical. Various aspects of the TCS were discussed as well as recordable CD-ROM technology.

The October Power Users SIG meeting started out with a discussion about networking. Specifically, we looked at the roles of two technologies, Network Address Translation (NAT) and Dynamic Host Configuration Protocol (DHCP).

The world has run low on IP (Internet Protocol) addresses. One way to deal with this shortage is to only give one IP address to a home or a business and have all their computers use addresses intended to only for local area networks. NAT is a process where a single device,

"The discussion turned to instant messaging and video conferencing. As an experiment we set up an ad hoc network and used the technology built into Mac OS X 10.2 called Rendezvous to find each others' *iChat* client."

such as a router, sits on a network like the Internet and acts as an agent for all the devices on another network, like a home area network. When a computer on the home network wants to contact something on the Internet, such as a Web site, it sends network traffic to the router and the router forwards that traffic to the Web site as if it came from the router's own address. When the Web site sends a message back to the router, the router then forwards the message to the computer.

DHCP is used to provide network configuration information to computers on a network. As computers join a network they might request information like what their IP address should be from a DHCP server. Many products such as routers and wireless access points like Apple's Airport Base Station act as DHCP servers.

The discussion turned to instant messaging and video conferencing. As an experiment we set up an ad hoc network and used the technology built into Mac OS X 10.2 called Rendezvous to find each others' *iChat* client. One member of the group asked about using *iChat* to talk to people with ICQ clients. After some experimentation we discovered that it is indeed possible but noted that the ICQ client software has to be of a fairly recent vintage.

While discussing video conferencing, the following URL was offered as a good starting point for more information http://homepage.mac.com/john_kenn/video.html. We plan on bringing in cameras and experimenting further with video conferencing at the next meeting.

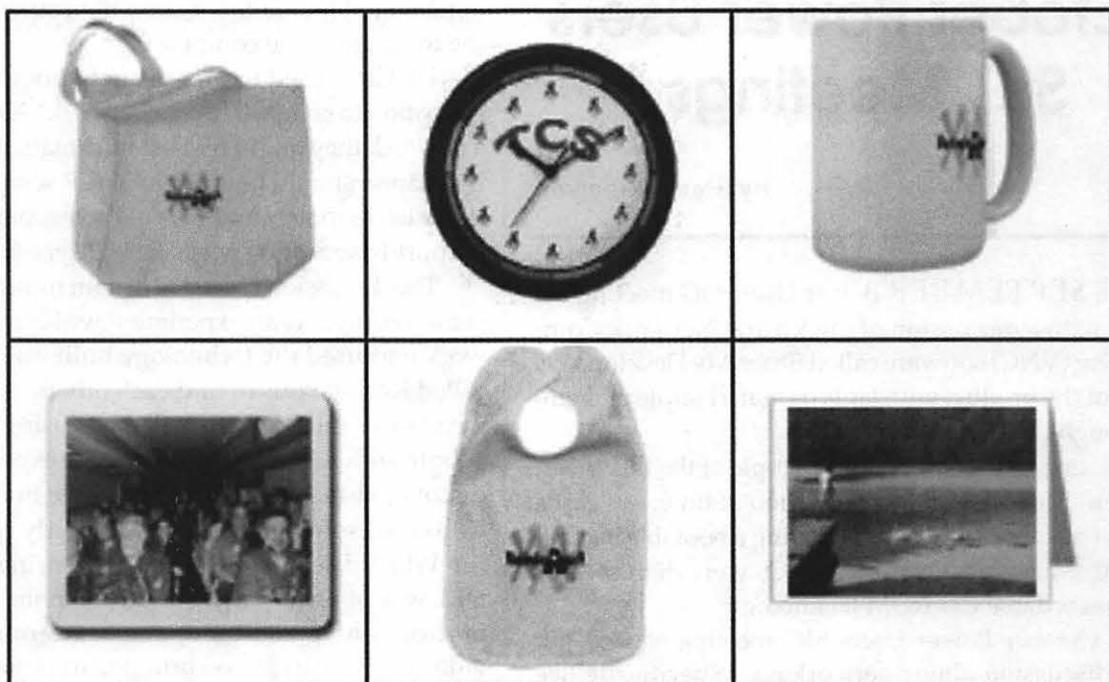
The Power Users SIG meets at the Washington Apple Pi office in Rockville on the first Monday of the month from 7:30 PM until 9:30 PM. Everyone is welcome. For more information or to join the mailing list visit the Power Users' Web page at <http://www.wap.org/power/> ■

GET GREAT WAP STUFF AT...

cafépress
.com

***CLOTHING *COFFEE MUGS *GREAT GIFTS
*ALL SALES HELP THE PI *ALWAYS OPEN
*GREAT PRICES! *SECURE PURCHASING**

WWW.CAFEPRESS.COM/WAP



**Just Some of the Great Stuff You'll Find at WAP's
New CafePress.com Web Site!**

WAP Introduces A New Store For Members at Cafepress.com

by Dave Ottalini

LOOKING FOR JUST the right gift to show off your pride in being a member of Washington Apple Pi? Well now there's a new option for you. WAP has a new online store at www.cafepress.com/wap. The products in this new store are different from the CDs and other items you can find at <http://store.wap.org/>.

The logo for Cafepress.com, featuring the word "cafepress" in a lowercase, sans-serif font with a small star above the 'e', and ".com" in a smaller font below it.

In fact, by using Cafepress, we can offer you a wide range of products that we could never have offered you before. We get a percentage of each sale and that helps the Pi grow and prosper.

Right now many of the offerings have the Pi logo, the 25th anniversary logo and the TCS logo on them. Plans are in the works for a contest to design a new Pi logo and I'd love to see some others - with a holiday theme or two - which we could offer on a seasonal basis.

We have shirts, hats, mugs, coasters, stickers, a bag and more. And I think you'll really like the additional products in the store - a 2004 calendar, cards and postcards with pictures taken by Pi members. We'll rotate these every so often so if you have a great picture (1024 x 768) you'd be willing to contribute for use on one of these products (as a donation to the Pi), please email them to: cafepress@wap.org.

Watch for a second 2004 calendar with pictures of the Pi as well.

So how do you order something? It's easy!

1) Go to <http://www.cafepress.com/wap> and be sure to bookmark it. (There is also a link on the front page of the

Pi Web site, <http://www.wap.org/>)

2) Scroll through the store and see what you're interested in.

3) Each product has a clickable link to provide more information, including a description, sizes, etc.

4) Note that each product has the price clearly marked.

5) Once you've chosen a product, click on the link, make any size choices if it's a piece of clothing and order. You can keep shopping or check out at that point.

6) At the point where you order with a credit card, the site becomes encrypted for your protection.

7) You can track your order by clicking on the link at the bottom of the www.cafepress.com/wap web site.

8) That's it! We'll look forward to seeing what you've chosen.

There are other products that Cafepress offers for us to sell, so if there's something you are particularly interested in, let us know by emailing cafepress@wap.org. ■

WAP Needs Experts and Speakers!

by Dave Ottalini,
Vice President, Publicity

ONE OF MY goals this year is to establish an "experts list" for the media to talk to about issues related to Macintosh computers, programs, and computing issues in general (digital photography, etc.). (Pi-specific issues are handled by your Pi leadership.). Everything would have to be with a Mac slant (we are a Mac group after-all!). If you would be interested in becoming an expert listed at www.wap.org please email vppublicity@wap.org with a short paragraph describing why you are qualified to serve as a WAP Expert. You must also include the following information:

Name

Expertise

Credentials

Contact Information (phone/email/pager)

Personal Web Page (if you have it)

Picture

"If you would be interested in becoming an expert listed at www.wap.org please email vppublicity@wap.org with a short paragraph describing why you are qualified to serve as a WAP Expert."

The WAP Publicity Committee will have the final say on each person interested in joining this list or the one described below. That means we may ask for more information from you before making a final decision.

We will compile this information and post it over time as we have the ability, and would hope to promote this as well to the media. Note that you may also be asked for a comment from time to time as specific issues related to your expertise - like Internet security - come up.

If you would like to be listed as an expert and have the ability to do so but don't feel comfortable talking to the press, I am willing to work with you to help you feel more comfortable.

We would also like to establish a speaker's bureau - folks willing to go out into the community and talk to groups about the Pi, or about computer issues in general (making videos, using computers for home security, etc.). If you would like to become part of that list, send the same information as above.

For contact information, think about what phone number you really want listed. Since WAP is not a business where you are working, a cell number might be the best solution but an email is mandatory. Think also that you may be asked to speak at any part of the day (breakfast, lunch, dinner or evening meetings) so be prepared should a request like that come in.

We will tell those interested to contact you directly for comment or speaking engagements. This makes it easier for all concerned and gives you more power over arranging times and dates. However, I would like to know when you are contacted and about what so that if we need to go over some talking points, we can do so before the interview or engagement.

I think this can be a fun and rewarding way to get the message out about Washington Apple Pi and its many resources. And it could also help us gain new members by generating publicity and interest. So don't be bashful - contact me at vppublicity@wap.org and we'll take it from there. ■

How To Get The Most Out Of The December Computer Show and Sale

by Dave Ottalini, VP Publicity

IT'S NEARLY DECEMBER again and that means it's time for another Washington Apple Pi Computer Show and Sale. As I mentioned in a previous article on this same subject some months ago, this is an exciting event in the life of our club and for the wider Macintosh using community throughout the Washington, DC region.

For one thing, we're the only Mac group in the area that puts on a show of this size. That means a better selection of items - at better prices.

And as a potential purchaser, the WAP Computer Show and Sale is great because you just never know what "must-have" item you are going to find. And while there are some great buys waiting for you, any good consumer needs to walk into these kinds of events having done a little homework ahead of time and a plan in mind.

What Is A Computer Show And Sale Anyway?

Washington Apple Pi has held flea-market style garage sales for years. Their primary purpose is to let people with great stuff sell it to people who are looking for great stuff. That could include a "new" used computer but it goes way beyond that. Look around and you'll see folks happily carting off monitors, games, business software, cables, inkjet cartridges, hard drives and more memory for their computers.

And lucky you, the December Computer Show and Sale is our most popular! That means more sellers - and more opportunities to find great stuff.

In fact, this is an event where you can find just about anything Macintosh you might want or need. But you have to come early to find the best stuff. And you have to be willing to negotiate - to "talk turkey" to get the best prices. Remember, this is a flea-market event - vendors bringing stuff to sell. They don't want to take it home. Your job is to offer a price that lets them go away happy with cash while

Garage Sale!

Computer Show and Sale

December 15, 2003

9:00 a.m. - 2:00 p.m.

Northern Virginia Community College (NoVA),

8333 Little River Turnpike (VA route 236), Annandale Virginia.

Twice a year Washington Apple Pi holds its Computer Show & Sale (known as a Garage Sale in honor of the origins of the Apple computer). This is the place to **buy, sell and bargain** hardware and software used with Apple and Macintosh computers. If you bring in your Mac system, you can have one of our skilled volunteers give it a checkup for a donation to Washington Apple Pi.

Coupon: for \$1.00 off admission, wap.org/events/gsale.html

Directions:

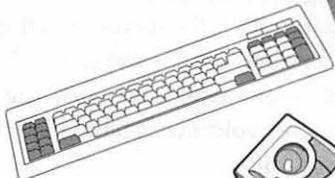
Northern Virginia Community College is 1 mile west of Beltway (I-495) exit 52, on Virginia Rte. 236. Coming from the Beltway on 236, turn left at the 2nd light into the campus. Follow the road to the left and around behind the buildings to the Ernst Community Cultural Center. Sale will be held in the Community Cultural Center Gymnasium, through the same entrance as the auditorium where the General Meetings are held; turn left instead of right after entering the Cultural Center. **Free Parking** (if you park in the right lot): Use the parking area that says Cultural Center Parking. It's across the road from the Community Cultural Center (but not in a straight line across). On Saturdays the lot has its entrance traffic arms in the up position. Use it.

Warning:

parking in the wrong place subject to fine. Anyone parking in other than the Cultural Center parking lot may be ticketed by NCVVA.

The Cultural Center will not be responsible for parking tickets received as a result of parking in an area other than the Cultural Center parking lot.

If you get a ticket, it is between you and NVCC.



For more information, including how to arrange to sell items at the Sale, send e-mail to: garagesale@wap.org

Admission: Members \$6.00 Non-Members \$7.00
Table rentals: Table without electricity - \$20
Table with electricity - \$30.00 (limited availability; get there early) Vendors must bring their own cords and power strips.

you go away happy with a great piece of Mac hardware or software.

And did I mention the fun of seeing old friends and the opportunity to talk everything Mac with total strangers? It's not uncommon to see folks pipe up and add their own two cents worth during somebody else's conversations. Everyone has an opinion about the Mac and the stuff that makes it go. At the Computer Show and Sale, you will have the wonderful opportunity to hear those opinions — sometimes whether you want to or not!

Once you've purchased your stuff you might need it checked out or need to have something installed. Washington Apple Pi's technical wizards are there to help you. They can take a look at that great computer buy to see if it really works, install memory in it or a new hard drive. They can even install software for you. You can also bring in your machine from home or work and get a "check up" to see if it is as healthy as you hope it is. They are also happy to give you their opinion about whether something is a good buy or not, or help you find something that you saw "somewhere on the floor." All these great services do come with a price — a donation to help the club keep doing good works for its members. You go away with a little piece of mind.

Finally, the Computer Show and Sale is a great place to renew your membership — or join the club. Memberships make great presents for Mac owners you know. You can also purchase a goodies-packed Pi Fillings CD-ROM or other treasures that might be on hand, including our newest offerings from the CafePress store.

Enough Already, I Want To Buy Something!

Please remember that as with any flea-market style sale like this, you should have a good idea of what you want before you shop. What exactly is it that you are looking for? What does it need to do? If you want a computer to surf the Internet you'll need a Mac capable of doing that. Does it have an Ethernet port or a PCI slot (an internal slot) for an Ethernet card so you can use a cable/DSL Internet connection? Read the Mac magazines, look at the catalogs, ask another Pi member and write things down. In fact, it's a good idea to bring a catalog or two with you to help do some comparison-shopping — especially if you're looking for more memory or hard drives.

If it's software you're after, know what you need to do with it. Can that version of the software handle the projects you need to complete? Will the kids play with the game more than just a couple of times? Can the educational software be both challenging and fun?

Ask lots of questions when you are considering a purchase, and make sure that what you want to buy works. Take it for a test drive if possible. Vendors at the Computer

Show and Sale may be individuals, or businesses that make the rounds of these kinds of sales or local computer stores. For the vast majority, you are taking a chance buying equipment because you are not dealing with an "established" business you can go back to. On bigger purchases, be sure to get the name, address and phone number of the vendor you are buying from and check to see if they will offer any warranty or be willing to switch out a defective piece of equipment with another one if necessary. I have found the vendors to be reputable, but always remember that most of the computer equipment is sold "as is" and all sales are usually final.

That said, these kinds of venues are great places to find inexpensive computer hardware, software and peripherals. I have shopped the Washington Apple Pi Computer Show and Sale for many, many years and have found some terrific bargains. Remember too, that many vendors only deal in cash so come with enough to handle what you want to buy. And don't be afraid to dicker. That's part of the fun.

So What Should I Buy?

The key here for Mac users looking for a "new" used computer is to only buy a Power PC Mac. Even the original Power Mac 6100s can do word processing and Internet by dial-up or cable/DSL (they do have an Ethernet port for high speed connections). The case for a newer model would be speed and the ability to handle more memory, as well as cheaper (and larger) IDE drives. We are starting to see more and more iMacs and other G3 Macs for sale. With some upgrades (usually memory is the focus here) they can even run Mac OS X. But be sure to ask! And remember that a Pi volunteer is almost always available to provide additional guidance and expertise. Volunteers have nametags or are wearing black Pi polo shirts.

If you need software, you should be able to find ClarisWorks or AppleWorks or an older version of Microsoft Word or Microsoft Office for word processing from many of the vendors on site. Note that you may need an older version of Netscape or Internet Explorer depending on which version of the Mac OS you are using. As mentioned earlier, the Pi provides volunteers, by the way, to check hardware and install software for you for a donation.

If you want to do email (and who doesn't these days!) there are many ways to go about it.

One great way is with a Pi membership — which includes one email address as part of the package. You can buy more email addresses inexpensively (\$20.00 per year). And best of all, members can now send and receive emails online from any Web browser and any machine anywhere on the Internet. You can also access our TCS — TeleCommunications System — discussion boards online

as well.

Finally

The December Computer Show and Sale is highly anticipated and frankly, it is just plain fun. Where else can you go and see old friends, get great bargains, renew your membership and eat a hotdog all at the same event? All the information you need is online at <http://www.wap.org>. That includes a coupon worth \$1.00 off your general admission — member or not!

Let me throw in one other way to really enjoy this event – volunteer! We need folks to do everything from take money at the door to set up and take down tables and everything in between. Send an E-mail message to garagesale@wap.org for more information and to volunteer.

Here are the actual prices (as of October 2003; check the web for any updates):

—Admission: Members \$6.00; Non-Members \$7.00

—Table Rentals: Table without electricity - \$20

Table with electricity - \$30.00 (limited availability; get there early)

All vendors must bring their own extension cords and power strips.

Finally, if you have any tips or suggestions about how to get the most out of a Computer Show and Sale let me know at vppublicity@wap.org and I'll update this article as possible. ■

Index to Advertisers

Absolute Mac	page 1
Bethesda Computers	C4
Cafepress.com	12
MacUpgrades	C2
Pi Fillings	C4
Presto Vivace	6
WAP Computer Show & Sale	15
Panther Palooza	30

Power Mac G5: First Look

© 2003 Washington Apple Pi Labs

SINCE IT WAS founded years ago, Washington Apple Pi Labs has been guided by a very simple principle: stay on the very sharp, pointy edge of the cutting edge, preferably using someone else's equipment. This frequently involves begging, but sometimes begging works. We asked, and someone actually loaned us a brand-new Power Mac G5 single processor 1.8 GHz computer. Yes, we were shocked, too.

Heavy, man, heavy

The first thing we noticed was the packaging. Remember the days when Apple shipped Macs in brown cardboard eco-friendly boxes with minimal printing and illustration on the outside? Those days are gone. The Power Mac G5 ships in a big, black box with a full-size illustration of the gleaming aluminum machine found inside. This is both good and bad. Good: when the UPS or FedEx man comes by and drops one off, you immediately become the focus and envy of all sexes, including some sexes not immediately classifiable. Bad: shippers report that the Power Mac G5 has a fairly high theft rate, brought on by technolust and, at least in the first months, scarcity.

Inside, the Power Mac G5 is nestled like a jewel, with all the various cables, and cords (and keyboard and mouse) neatly tucked away in foam compartments on an upper tray, and the Power Mac G5 cradled below. There is a presumably nice manual, but at Pi Labs we're Mac people, so we don't read no stinkin' manuals. We haven't a clue what it might or might not say since we wanted to preserve the swank shrinkwrap in pristine condition.

Uncovering the G5, we gazed on it with tear-blurred love, and gently removed it from the box. That didn't work, so we tried brute strength. This thing is a monster, at 39.2 pounds; it is virtually impossible to get it out of the box without someone holding the box down while another, heftier person lifts it out of its snug cocoon.

Weight isn't the only dimension of "bigness:" it dwarfs a Power Mac G4. A 1999 vintage Power Mac G4 tilts the scales at 28.7 pounds and stands 17" high and 18.4 inches deep; a Power Mac G5 is eleven pounds heavier and stands 20.1 inches high and 18.7 inches deep. Those who preferred to put a Power Mac G4 on top of their desks may find they have to re-think this choice with the G5, or get a bigger desk. The height also might present a problem if you want to put it under your desks, since there may not be enough clearance. On the other hand, it could make a cool room divider.

Metal plates

Naturally, the first thing we wanted to do was look inside, so we removed the cover plate. Yes, it is a cast aluminum plate, and it feels like a piece of armor compared to the thin, light covers used on PCs or the plastic

door on the Power Mac G4. You feel as if you could hold it in front of you in battle and bullets would bounce off, assuming you actually think aluminum armor is a good idea.

We were hoping the box was wrong and actually held a dual processor model but, alas, removing the cover confirmed there was just a single processor. It also revealed an amazingly clean layout, with no stray wires or cables dangling or odd little circuit boards glued to random places. The 1.8 GHz model, like the dual processor model, comes with eight memory slots, tucked away behind a fan (the low-end 1.6 GHz model has only four slots). We discovered that you can easily remove the fan — just pull it out, no tools required — to add more memory. Providing we had more memory. (Note: we must get the Pi Labs management to increase our budget by at least 1,000 percent.)

The cover plate held an interesting surprise: there are diagrams, on the inside of the plate, showing how to remove and replace the transparent plastic air dam used to control airflow within the machine, plus the fan blocking the RAM sockets. Naturally, we didn't pay attention to this until *after* we'd removed the air dam and fan, but since the process is pretty obvious no harm was done. The diagram could also come in handy if you were ever trapped in the machine and needed to know how to get out.

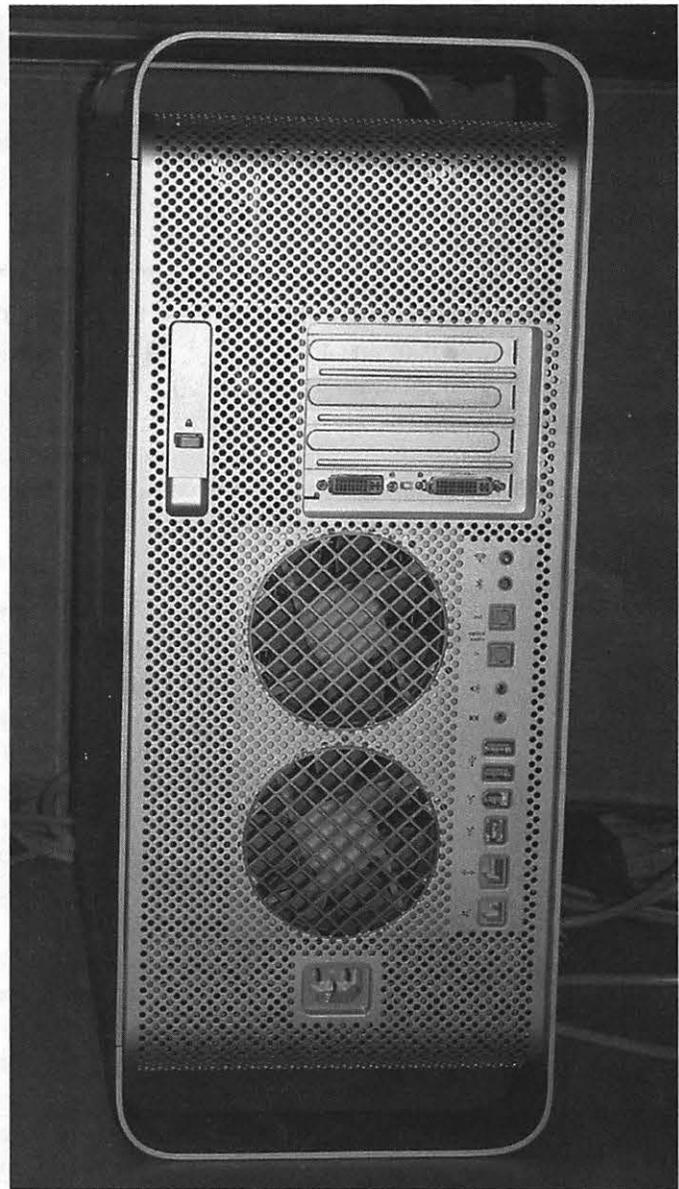
What we couldn't do

The G5 supports FireWire 800 devices, but Pi Labs doesn't have any. It supports 1900 by 1200 pixel digital monitors, but we don't have any. It supports AirPort Extreme and Bluetooth wireless devices, if you have the proper modules, but we lacked both the proper modules and appropriate AirPort and Bluetooth devices. It supports optical audio devices, but we don't have any of those, either. (Note: ask the Pi Labs management for a 10,000 percent increase in funding.)

We also couldn't test the altitude rating (it works up to 10,000 feet; can we borrow a LearJet from someone?), the temperature ratings (it works in areas with temperatures between 50 to 95 degrees Fahrenheit) or the 240-volt, 50 Hz electrical compatibility. Faced with such horrible barriers, there was only one thing left to try: speed.

Classic, just classic

The G5 came with 512 MB of RAM and Mac OS X 10.2.7. The first thing we did after turning it on was launch every application on the computer, which proved less interesting than we imagined. Everything launched fine,



The back of the Power Mac G5 shows the door latch on the top left, with the PCI slot covers to the right of it and the two video connectors below. You can also see two large fans through the vented cover, and to the right of them the various connectors. (Photo by Lawrence I. Charters, taken with a Nikon CoolPix 5700 digital camera)

but aside from launching faster than expected it wasn't very remarkable. On the old, slow-to-wake-up Sony 17-inch monitor we used during testing, the screen was very cluttered, but we can clutter the screen on an older Mac, too.

So we decided to download the ultimate test of computer horsepower: *SETI@home* (see sidebar). The *SETI@home* client is notorious for squeezing every bit of horsepower out of a computer, and starving all other ap-

plications. If *SETI* is running, everything slows down.

We used *SETI* 3.0.8 for all tests. And our first test failed, sort of: we weren't paying attention and downloaded the Mac OS 9 version and, when we double-clicked on the installer, Classic started.

"Oh, %*#@#&!" was the immediate response. Followed shortly by, "Oh. %*#@#&!" You see, it's like this: the Pi Labs gurus get annoyed if we launch Classic by accident, so on our machines we have checked the box in the Classic pane of System Preferences that says "Warn before starting Classic." But this wasn't our machine, and we hadn't checked that box, so now we were forced to wait, and wait, and wait for Classic to start. We don't like waiting.

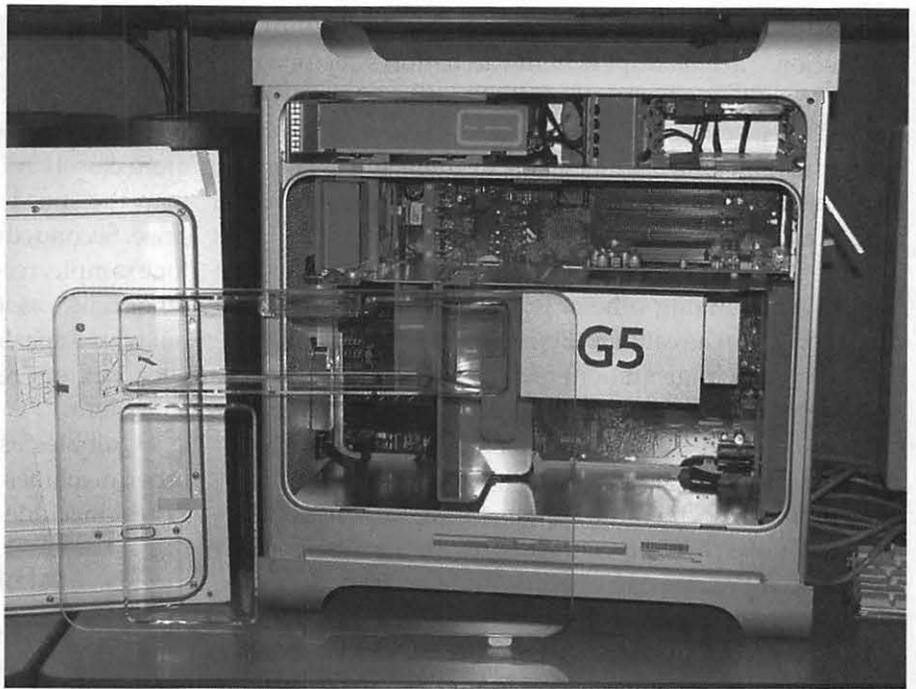
And we didn't: Classic seemed to start in about six seconds flat. Wow! Or, as another person said, "WOW!" So we immediately ran off to some other machines to check and —

On a Power Mac G4 dual 1000 GHz machine, double-clicking on the Mac OS 9 version of the *SETI* installer brought up Classic in 68 seconds. On a Power Mac G4/400, it brought up Classic in 81 seconds. So here was our first accidental test result: you can launch Classic a heck of a lot faster on a G5. We later learned that the launch time was closer to ten seconds than six (more on that later) but it was still impressive.

Finding Aliens Fast

Recovering from this distraction, we downloaded the correct, Mac OS X version of *SETI* and installed it. There are two versions of *SETI* for Mac OS X: a command line version (boring, but fast) and a "GUI" version with the same graphical look as the Mac OS 9 (or Classic) version. We opted for the GUI version, and we also opted to run it as an application, not a screen saver (see sidebar).

Some things to keep in mind: *SETI* is the client end of a valid, massive science experiment, and isn't really supposed to be a benchmarking program. It also doesn't produce consistent results; depending on the data it is processing, the time it takes to process a *SETI* work unit can vary from one work unit to the next. But it is also a nice, neat, pretty way to bring a computer to its knees, and it is free.



In the foreground you can see (maybe) the transparent air dam, used to divide the internal compartment into different cooling zones. The cover of the massive PPC970 processor (which Apple calls the "G5") is clearly visible. Immediately above the processor are the PCI slots, with the drive bays above them in the topmost section. In front of the processor, on the left, are the memory slots, partially blocked by the removable fan. (Photo by Lawrence I. Charters, taken with a Nikon CoolPix 5700 digital camera)

Keeping in mind that the times vary somewhat, here were our results:

Power Mac G4/400: 21-22 hours per *SETI* work unit

Power Mac G4/dual 1000: 11-11 1/2 hours per *SETI* work unit

Power Mac G5/1800: 5 1/2-6 hours per *SETI* work unit

We were impressed. While a Power Mac G4 with dual 1 GHz processors is not the fastest G4 ever built, it is still very fast, yet the single processor 1.8 GHz G5 was just short of twice as fast. Clearly, if you are looking for aliens, you'll find them faster with a G5.

In practical terms, this means the Power Mac G5 should excel at tasks that require floating point arithmetic. Mathematical modeling, CAD/CAM, and graphic arts all require very fast floating-point math, and at first glance, the Power Mac G5 is a winner, even when using software not specifically written for the G5.

Let a thousand windows bloom

China's Mao Zedong once said, "Let a thousand flowers bloom." This pretty sounding phrase actually has a

sinister history: Mao used it to launch China's "Cultural Revolution," a violent period in the nation's history in which learning, education, culture and history were trashed and millions of lives lost, setting back China's modernization efforts by a decade or more and doing irreparable damage to schools, libraries, museums and historic sites.

But the phrase has great lyrical appeal, and has been modified by, among others, Rob Terrell, who wrote a simple program he calls *Let1kWindowsBloom*. Rob noticed that he spent a huge amount of time every day opening and closing windows in Mac OS X, so he wrote a program to open up 1,000 windows as rapidly as possible. Since Mac users open a lot of windows, and since the program is free, it seemed like an ideal program for testing the G5. Unlike *SETI*, it can also provide results in seconds or minutes, instead of hours or days.

Pi Labs grabbed every machine in sight to use for our tests. The machines were equipped with varying amounts of RAM, and all machines were running Mac OS X 10.2.6, 10.2.7 or 10.2.8. (Yes, we know: this is poor scientific technique. But we had limited time, borrowed machines, and our usual generous Pi Labs budget.) Averaging from several tests per machine, *Let1kWindowsBloom* gave these results:

- Power Mac G3 B&W/350: 123 seconds
- Blueberry iBook/300: 109 seconds
- PowerMac G4/466: 90 seconds
- PowerBook G4/400: 85 seconds
- PowerBook G4/667: 59 seconds
- PowerMac G4 DP1000: 48 seconds
- PowerMac G4 MD/DP867: 46 seconds

- PowerMac G4 DP800: 44 seconds
- Power Mac G5/1.8 GHz: 22 seconds

A couple observations: first, the test results probably more closely reflect the speed of the video card installed than the speed of the processor, which is no great surprise. Second, the results varied. The Power Mac G4/466, for example, recorded times as slow as 96 seconds and, at other times, as fast as 89 seconds, and we couldn't figure out why. Repeated tests performed at the same time, however, without rebooting or making other changes, were consistent.

Quibbles aside: the Power Mac G5 eclipsed all the other machines. It was exactly twice as fast as the next fastest machine in this very simple benchmark.

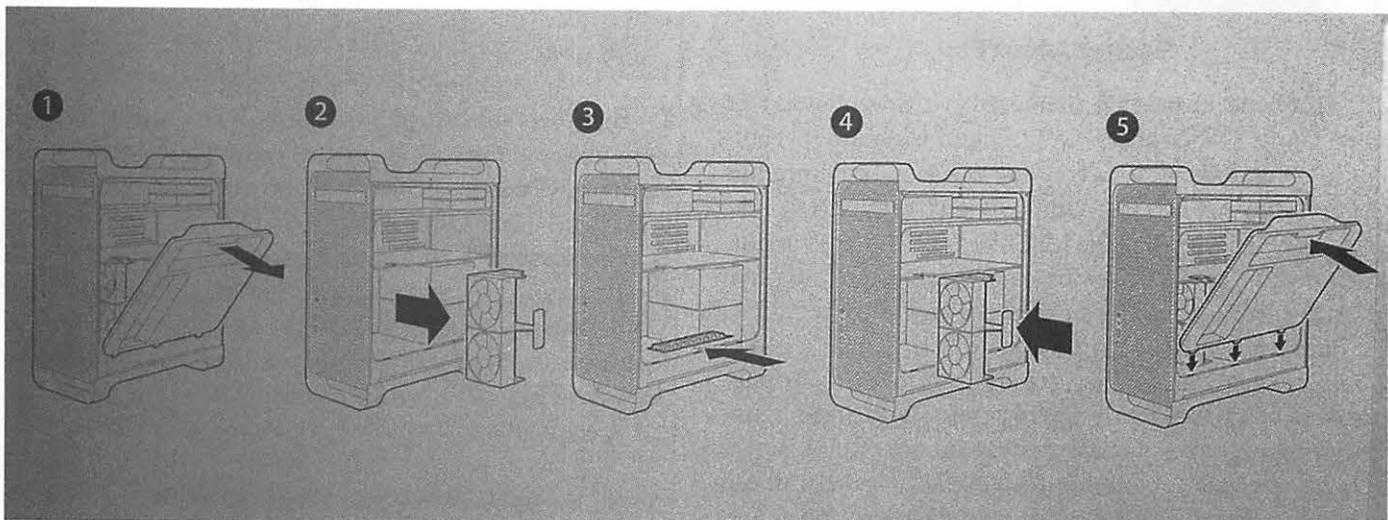
Let billions of bytes be crunched

It just so happened that we were doing strange things with Web log files when the Power Mac G5 appeared. Web log files tend to be quite large, especially if you have busy servers, and we had a large mass of 313 log files, totaling nine billion bytes (9,145,309,400 bytes, to be exact). To make managing the log files easier, the logs are compressed using *gzip*, an open-source compression utility that ships with Mac OS X. To use it, you must open up Terminal and type in appropriate commands.

We decided to compress all the logs using this set of commands:

```
date; gzip * ; date
```

This tells the Mac to display the date and time, right down



Inside the cover plate are a series of wordless diagrams showing how to remove the internal air dam and fan to get access to the memory slots. (Photo by Lawrence I. Charters, taken with a Nikon CoolPix 5700 digital camera)



When a Power Mac G5 and a Power Mac G4 are placed side by side, the difference in size is obvious. (Photo by Lawrence I. Charters, taken with a Nikon CoolPix 5700 digital camera)

to the second, then compress everything in the current directory (the * is a "wild-card" that means everything), and then display the date again. The semicolon is used to separate the commands.

We also decided to decompress everything with *gunzip*, and see how long that took, using this set of commands:

```
date; gunzip * ; date
```

These operations really don't tax the PC970 processor in the Power Mac G5. Mac OS X 10.2 doesn't know how to take full advantage of the 64-bit chip, and most of the time is spent simply reading in files from the hard drive or writing them back out to the hard drive. On the other hand, because Mac OS X gives us very exact time stamps, we know exactly how long it takes to do something. The results:

```
G5 gzip : 12 minutes, 45 seconds
G5 gunzip: 3 minutes, 23 seconds
G4/dual 1000 gzip: 13 minutes, 28 seconds
G4/dual 1000 gunzip: 5 minutes, 25 seconds
```

These times are actually quite impressive, for both

Aliens and Blooming Windows

Our two primary test programs were *SETI@home* and *Let1kWindowsBloom*. A good question to ask is: what are these?

SETI stands for "Search for Extra Terrestrial Intelligence." In an effort to take this concept out of the hands of the tabloids and turn it into a valid scientific effort, The Planetary Society (<http://planetary.org/>) and the University of California Berkeley (<http://www.berkeley.edu/>) have combined resources to support the world's most ambitious computer-based research project. After collecting radio telescope data from the massive Arecibo Observatory in Puerto Rico (<http://www.naic.edu/>), the *SETI@home* project slices up the raw data into digestible chunks and sends it out over the Internet to millions of computers worldwide.

These computers use the free *SETI@home* client to crunch the data down, looking for interesting patterns, and then upload the finished work back to the *SETI@home* data center in Berkeley, California. The finished work is called a "work unit," and the user's client keeps track of how many work units have been completed, how long the computer has been working on the current unit, and how many computer hours a particular user has devoted to the project. Launched on May 13, 1999, by October 2003 the project had received over a billion work units from 4.7 million users around the world. To read about the project, and get a copy of the free client, see the *SETI@home* Web site at <http://setiathome.ssl.berkeley.edu/>.

While *SETI@home* has not been tweaked to take advantage of the Power Mac G5' PC970 chip (the program has no clue it is running on a 64-bit processor, and probably doesn't know what to make of the twin AltiVec processors built in to each PC970), it seemed like a good candidate for tests. First, it is free. Second, it is familiar, with millions of users on Wintel, Macintosh, Linux and UNIX computers. Third, it is a known CPU hog: if *SETI@home* is running, everything else grinds to a halt.

(continued page 24)



On the front of the G5 is a power button, headphone jack, USB 2.0 jack, and FireWire 400 jack. (Photo by Lawrence I. Charters, taken with a Nikon CoolPix 5700 digital camera)

the dual-processor G4 as well as the single processor G5. We were still amazed, however, that the G5 was fully two minutes faster at decompressing the files than the G4.

Disc? What disc?

At one point, some adventuresome soul installed Adobe *Photoshop 7.0* on the G5, and then went to lunch. The rest of us, unaware the machine now had *Photoshop*, decided the G5 was a handy machine for duplicating some CD-ROMs. All Power Mac G5s come with a SuperDrive, and it burns CDs (and DVDs) faster than any previous Mac, according to Apple.

So we first made some disc images, and then started

"Inside, the Power Mac G5 is nestled like a jewel, with all the various cables, and cords (and keyboard and mouse) neatly tucked away in foam compartments on an upper tray, and the Power Mac G5 cradled below.

There is a presumably nice manual, but at Pi Labs we're Mac people, so we don't read no stinkin' manuals."

duplicating them. At some point the wandering soul returned from lunch, and launched *Photoshop*. We immediately heard "oohs" and "aaahs" as they took large photos and did bizarre things to them.

"This is much faster than a G4. This is *much* faster than a G4. This is *much* faster than a G4."

Suddenly, the drive door opened and a freshly-burned CD-ROM popped out.

"What I do? What I do?"

"We were burning CD-ROMs."

"What!?! You mean it is this fast, and it was burning CD-ROMs, too?"

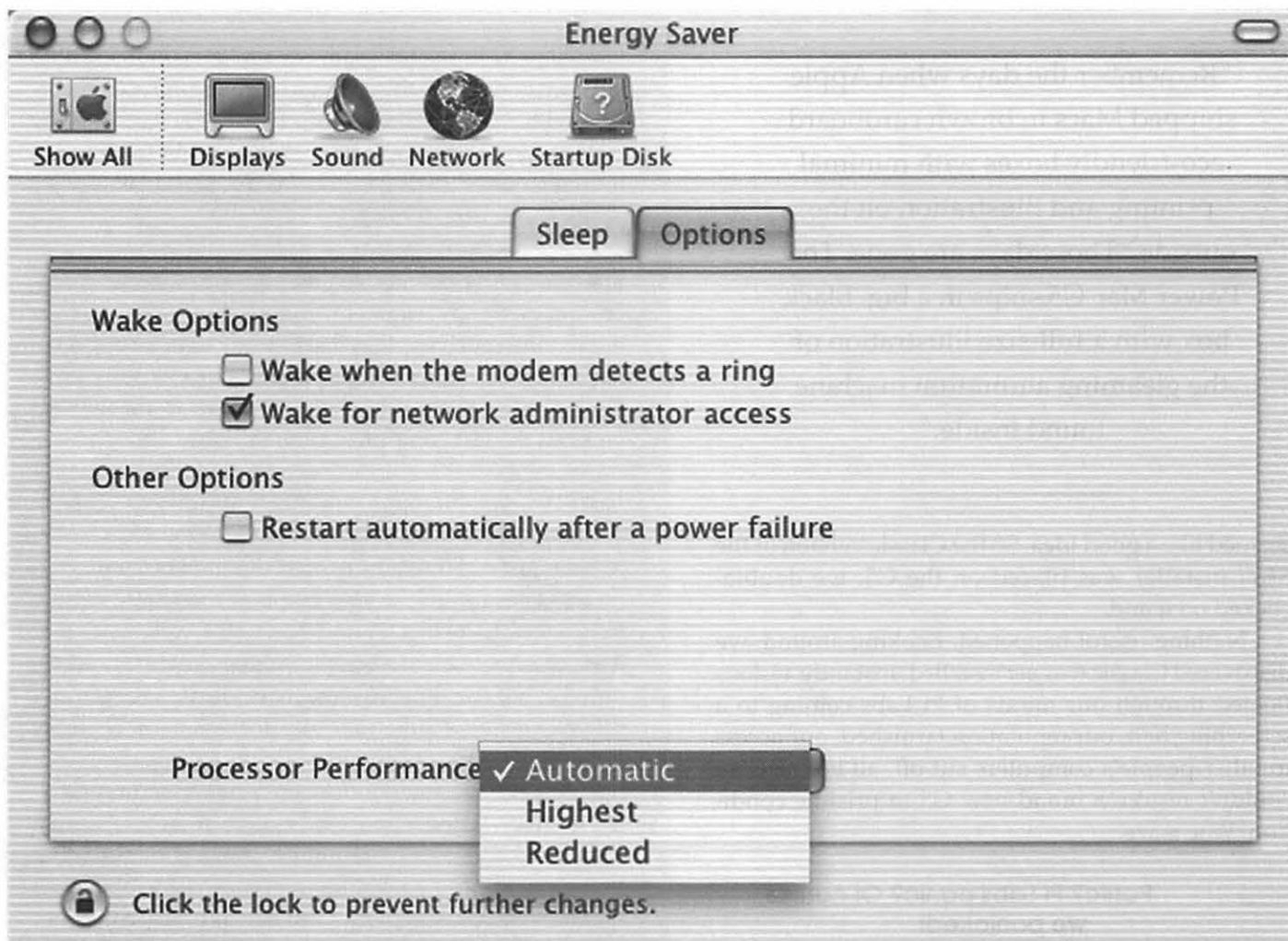
"We are also running *SETI*."

"No way! You are running *SETI*, and burning CD-ROMs, and *Photoshop* still flies? I gotta get me one of these!"

By the way: Apple is right. It *does* read and write CD-ROMs faster. We didn't have a chance to check DVDs.

Aliens and Windows

By this time, we were beginning to get the impression that, although the Power Mac G5 is definitely fast, that isn't the true strength of the machine. Yes, it is fast.



As originally shipped, the Power Mac G5 came with Mac OS X 10.2.7. This slight modification to Mac OS X had only one obvious modification for the G5: under the Energy Saver System Preference pane, there was an option to manually select different processor performances. Presumably, "Reduced" used less power and generated less heat, and "Highest" did the opposite. We left it at Automatic and didn't play with the settings. (Photo by Lawrence I. Charters, taken with a Nikon CoolPix 5700 digital camera)

But where it shines is in its ability to do multiple things at once, and provide enough horsepower to do them all — fast.

You really can have Classic running, find aliens with *SETI@home*, look up stuff on the Web with *Safari*, and do complex manipulations in *Photoshop* — at the same time. We were curious, so decided to do one more, very simple test: we'd fire up *SETI* on both a Power Mac G4/400 and the Power Mac G5. Then, while it was running, we'd launch *Let1kWindowsBloom* and see what happened.

On the Power Mac G4/400, *Let1kWindowsBloom* took 141 seconds to complete with *SETI* running, compared to 85 seconds when *Let1kWindowsBloom* ran by itself. As expected, there was a spectacular slowdown.

On the Power Mac G5/1800, the time was 22 seconds.

Yes, with CPU-hogging *SETI* running in the background, *Let1kWindowsBloom* ran just as fast as it did without anything else running.

Disaster strikes

We were out of time, and had to box the G5 back up. As a nice gesture, we decided to reformat the drive and reinstall everything so the owner didn't regret loaning it to Pi Labs. All the software for the G5 comes on a single DVD, so reformatting and reinstallation was quite easy. Or so we thought.

After everything was reinstalled, someone had doubts about the time it took to load Classic, and decided to try that test again. The first time through, the time estimate was made off the cuff, and a little more precision

“Remember the days when Apple shipped Macs in brown cardboard eco-friendly boxes with minimal printing and illustration on the outside? Those days are gone. The Power Mac G5 ships in a big, black box with a full-size illustration of the gleaming aluminum machine found inside.”

seemed like a good idea. So the Classic version of the SETI installer was placed on the G5, we double-clicked on it and...

Nothing useful happened. Looking around, we discovered Classic was *not* installed. Instantly, visions floated through our minds of Pi Labs coming to a screeching halt, our reputation tarnished, our access to other people's computers cut off, all because we couldn't restore a brand-new G5 to pristine condition. Woe is we.

Panic? Pi Labs panic? Of course we panicked!

But then we looked at the DVD again and noticed there was another installer. We had selected “Install Mac OS X,” but there was also “Install Applications & Classic Support.” This second installer rapidly put things back as they were.

We then clicked on the Classic version of the SETI installer and – Classic opened in ten seconds, not six.

Conclusions

We came to several conclusions:

- We need a bigger budget for memory, FireWire 800 devices, digital flat panel monitors and other goodies.
- We need a better monitor for testing. We were using an old Sony Trinitron that had great color, but it took about six or eight days to warm up. Tests were over often before the monitor was awake.
- The Power Mac G5 is big. And heavy.
- It is also fast.

It is one big, hunking bit-bashing machine. ■

For Mac OS X, the program comes in a command-line version, good for techies, and a more common GUI version with a graphical user interface. We always run the GUI version as an application, not a screen saver, since the screen saver tends to be too greedy and prevents other applications from working.

SETI@home “work units” require varying amounts of processing power. A relatively “quiet” chunk of data may not require much work, while a chunk with lots of varying data may require twenty to fifty percent more time. Despite the variance, it is a great program for helping pick out the fast computers from the slow.

Let1kWindowsBloom has a different purpose entirely. The same program can run in either Mac OS 9 or Mac OS X. It has just one function: to open exactly 1,000 windows on a Mac as rapidly as possible, and then tell you how long it took to do this. The author, Rob Terrell, notes that it really isn't much of a benchmarking program, and we noted in our test that the same machine can give slightly different results at different times, for reasons not entirely clear. But the results are *generally* the same. And, since opening and closing windows is a very common activity, it struck us as a good indication of the perceptual speed of a computer. Computer scientists might argue that determining computer speed calls for objective, quantifiable measurements, but in reality any computer user knows that the key factor is *perceptual* speed. A fast computer *seems* fast, a slow computer *seems* slow, and objective measurements aren't really relevant.

Another key consideration for us: *Let1kWindowsBloom* is free: <http://www.vgg.com/rob/WindowsBloom.html>

Most magazine reviews have concentrated on benchmarks done with Adobe *Photoshop 7.0*. Typically, a magazine review will state something like: “We took a dual-processor Power Mac G5 with 4 GB of memory and used *Photoshop 7.0* to manipulate a 120 MB CYMK image of a tufted puffin, applying a cubic hyperspheroidal filter to a truncated tessellated polytrophic ellipsoidal segment, extruding it through eye-of-the-needle Hessian FFT transforms into a RGB layered image (with sepia secondary sequences) of Catherine Zeta-Jones.” While this sounds fascinating, we have no idea what it means, much less how to do it. And unless you are a puffin or Michael Douglas, this isn't something that “normal people” are likely to do during an average day. ■

Tools to Distill Your Digital Collections

by Dennis Dimick

IT'S ONE THING to use graphics database programs to track your burgeoning digital picture collection. It's quite another to distill hundreds or thousands of images to the few you really like, the ones you want to print or save as key visual memories.

Software programs that offer large size views of each frame and let you quickly mark and sort your "keepers" aren't as common as those that just show thumbnails, or programs that let you present a slide show. But in fact these "distillation" programs can improve your slide shows by helping you quickly identify the best frames and eliminate similar, but lesser quality pictures.

I've lately used several native Mac OSX programs to "distill" picture collections to the few good ones. These include Apple's free iPhoto 2, two new offerings from a small British firm—iView Media 1.2 and the full-featured iView MediaPro 2.0, CameraBits' fast-operating Photo Mechanic, and the file browser window in Adobe Photoshop CS, the renamed successor to Photoshop 7. (CS stands for Creative Suite. It's really Photoshop 8. What will they name Photoshop 9? Photoshop CS II?)

I'll briefly discuss each program's virtues in this image selection arena, as each approaches this task a bit differently, and I'll also deal with some related features. This is not a comprehensive review of each program.

From Film to Digital Collections

Mac database programs that track image files have been around for about a decade; my first experience was via a program from Aldus called Fetch. (History: Aldus published PageMaker, the first Mac page layout program. Aldus, Pagemaker, and Fetch were all bought by Adobe Systems. Fetch later was sold to Extensis and renamed Portfolio. I'm not discussing Portfolio as it does not, in my view, offer selection tools with the flexibility of other programs to quickly or easily isolate images from large collections.)

Fetch created thumbnail directories of your digital image collections and let you easily find the originals,

"Software programs that offer large size views of each frame and let you quickly mark and sort your "keepers" aren't as common as those that just show thumbnails, or programs that let you present a slide show. But in fact these 'distillation' programs can improve your slide shows ..."

whether on a hard drive, floppy, Zip, or CD. In a time when most people shot pictures on film, digital scans of slides or negatives were more the exception than the norm. Digital image collections were small, as scanning typically was done after the slides or negatives had been distilled to the few best using a light table, or by examining small proof prints from negatives.

This has all changed as digital cameras have muscled into the marketplace. Now the premium is on tools that allow quick review, selection, and sorting of a few "keeper" frames. Whether you are a hobbyist or photo-journalist shooting digital images, these new sorting programs go far towards letting you control your image collections.

Free and Easy: Apple's iPhoto 2

What's not to love about a free program from Apple that comes installed on every new Mac sold, lets you create albums of your digital camera images, lets you sort pictures into any number of albums, allows you to select your prime images, lets you make QuickTime movies or slide shows (with music) from them, and even contains page design tools for a picture book that Apple will inexpensively print for you?

If you have a digital camera that produces small files (in the 2-to-3 megapixel size range,) all your images are in JPEG file format, and you typically use your digital camera for special occasions, trips, celebrations and the like, iPhoto may be all you need. It offers basic image enhancement tools, and for the most part is very stable.

That said, you get what you pay for. I spent a week in October using iPhoto2 on an 800mhz G4 iMac with 256MB RAM to review, organize, sort, select, and present digital

images from half a dozen photographers during a workshop. The JPEG files were quite small, about 300kb on disk per image. (These images had been downsampled from larger 3 MB size original JPEG files from professional cameras.)

By week's end iPhoto's library contained about 3,000 images. Most noticeable was iPhoto's glacial response rate. It often took a couple of seconds to drag an image from a window into an album library. Several times I had to force quit the program to clear system memory, as iPhoto would occasionally just quit responding.

If you have a speedier Mac with more installed RAM, and your image collections are modest, you may never see this accumulating sloth as image collections grow. But another option, or more specifically, a lack of option has always kept me away from iPhoto as a day-to-day tool.

When iPhoto creates image libraries it always makes copies of your original files, writing them into the "Photos" folder of your OS X startup drive user folder. This even if you already have the images stored on another drive or drive partition.

Unlike iTunes, which allows you to choose where your Music library will reside, iPhoto requires that copies of all images be written to your startup drive or partition. This may not be an issue for you, especially if you have only one big hard drive in your Mac. But I see this as a deal-breaker. I don't want my data files on my startup drive. I want them stored away from my system files, and always on more than one hard drive. Perhaps the next version of iPhoto will offer a preference option to allow keeping iPhoto libraries in alternate locations.

Basic Sorting Tools: Photo Mechanic

At \$150, CameraBits' Photo Mechanic accomplishes its tasks quickly and competently. That said, I've found it



iPhoto Selection: After you import a photo collection into iPhoto 2, stay in the "Organize" mode and slide the thumbnail size slider all the way to the right. Then you can page through images in your library and drag "selects" to a new album on the left side, in this case "ballet selects."

may be one of the least visually attractive Mac programs I've met, and for a program designed to handle pictures this seems incongruous. Photo Mechanic's thumbnail windows don't work the way other Mac programs work (they are fixed width, five images wide) and you can't resize them to fill your screen. You can't use the keyboard arrow keys to advance through selected image previews, instead you must hit on-screen "next" and "previous" buttons with your mouse pointer after selecting all thumbnails on a contact sheet.

Photo Mechanic just assumes you have Adobe Photoshop on your Mac, and if you need to color-correct or cleanup an image in an editing program, a "double-click" on a picture automatically sends the file to Photoshop. But what if, for whatever reason, you have both an older and a newer version of Photoshop on your Mac? There's no way of setting a preference so Photo Mechanic knows which editing program to use for images.

That said, once you get past the interface quirks—this program looks like some mutant descendant of early Windows parentage—it's quite fast and powerful. Photo Mechanic creates thumbnail libraries almost instantly,

faster than any program I've seen. You can rename photos quickly, and can create a library of "meta-data" stationery pads to quickly insert caption information into single images or selected groups of image files. Once you figure out how the program operates, you can page through images quickly and tag them using "Cmd-T" from the keyboard. You also can create slide shows of selected images.

Designed originally for news photographers needing to select digital images in the field and transmit or email them (with caption information inserted into the file,) Photo Mechanic does what it's designed to do. It supports review and selection of both JPEG and RAW files, and if you need an industrial-grade program that works fast, regardless of interface, this may be your option. Photo Mechanic offers no image enhancement tools, these must come from an external program such as Photoshop. Despite its utility, Photo Mechanic could use an interface overhaul.

Reviewing iView's New Views

I've been using iView MediaPro for about two years now, starting with version 1.4. This year iView released a \$30 Mac and Windows "consumer" version called "iView Media," and upgraded iView MediaPro to version 2 at \$160 (upgrades \$72).

Pro offers a number of new features, including tools for enhancing images, batch processing tools for file renaming, inserting "metadata," and new easy-to-use file and folder organization tools. You can produce web galleries, contact sheets, or QuickTime movies (with transitions and voice annotations) from catalogs created by iView MediaPro. Besides batch processing tools for still images, iView MediaPro also offers tools to batch convert sound files and QuickTime movies to other formats.

Unlike other programs discussed here, iView MediaPro allows viewing images full-screen (akin to a slide show) as you preview and sort them into select groups. You can create up to nine subsets of your catalog by using a "sort by labels" tool activated by hitting 1-9 on the keyboard.

"This has all changed as digital cameras have muscled into the marketplace. Now the premium is on tools that allow quick review, selection, and sorting of a few "keeper" frames. Whether you are a hobbyist or photojournalist shooting digital images, these new sorting programs go far towards letting you control your image collections."

Several colleagues use iView MediaPro for digital photography assignments—it's become a key tool for digital image review, selection, and presentation. Though not as fast at creating image catalogs as Photo Mechanic, iView MediaPro presents an elegant interface, easy-to-use tools for customizing how images are viewed, and multiple methods for tagging or selecting images that you want to keep.

The consumer version "iView Media 1.2" offers basic



Mechanic at Work: CameraBits Photo Mechanic offers a thumbnail view (background) akin to the look of transparencies on a light table. By selecting the little "iris" on a thumbnail, you get this large resizable preview window to review and page through your collections. Despite its unusual interface, Photo Mechanic allows quick work.

image cataloging, file selection, and renaming tools for formats supported by QuickTime, while MediaPro supports a wider variety of formats.

If you have a varied media collection beyond JPEG files that may include native Photoshop and RAW format images, Adobe InDesign documents, Acrobat PDF and Illustrator files, typeface collections, Quicktime movies, animations, varied sound files and text files, iView MediaPro offers tools to catalog, sort, and select the best from your collections.

File Browsing in Photoshop "CS"

Adobe Photoshop has become the prime tool for image enhancement, manipulation, and printing. Only in version 7 did it offer tools to view and sort pictures in folders of images. Photoshop 7 introduced a screen-size browser window that presents thumbnails, "meta-data," or information about the pictures, and a way to sort, label, and edit images. Though spare of features compared to say, iView MediaPro, the Photoshop 7 browser was a sea change over earlier versions.

Adobe Photoshop's latest iteration, known as CS, though really Photoshop 8, takes the file browser window to new levels. Photoshop CS also integrates and improves on the \$99 Camera RAW 1.0 plug-in released in early 2003. Depending on your requirements, you may not need anything besides Photoshop CS if you deal mostly in digital pictures, and your means are up to the \$650 price tag or \$170 upgrade price. As one who has not shot a roll of film in a couple of years, yet has accumulated 65 GB of digital image files from half a dozen cameras since summer 2002, this upgrade is a bargain.

The new Camera Raw plug-in in Photoshop CS is a big deal if you seek maximum quality from digital cameras. RAW now shows up as a file format option on "prosumer" and professional models. For example,



iView by Color: iView MediaPro lets you create up to nine "color-labeled" sets from a folder of images, and you can also custom resize thumbnails. iView also offers full-screen review of images (with the Media button at top center) as you label your selects, an attribute not offered by any other program discussed here.

Photoshop CS opens the RAW files from the popular Canon EOS D10 digital camera, where the earlier Camera RAW plug-in for Photoshop 7 did not. It also supports the revised NEF format in the new Nikon D2H camera. Suffice to say, if all you shoot are JPEG files in a consumer camera, sibling program Adobe Photoshop Elements may be all you need.

Photoshop Elements 2, the \$99 consumer version of Photoshop, also introduced a file browser window like that found in Photoshop 7. Adobe has not said it will release Photoshop Elements 3, but at a New York photo show in late October a book publisher was touting an April 2004 title on Photoshop Elements with the cover notice "Covers versions 1,2, and 3."

The Photoshop CS file browser window now lets you resize image previews so they dominate the screen, and you can "flag" images with a "cmd-comma" keystroke as you quickly navigate through thumbnail images with keyboard arrow keys.

The new "show-flagged" menu popup in the file

browser lets you see thumbnails of only the images you've selected, this without opening any images in Photoshop. It's also possible to batch modify the image "metadata," or keywords, for all images in a folder, or to batch color correct images in the file browser window. You also can create PDF presentations of your selected images, this all within the file browser.

An Increasing Range of Options

All these programs provide tools for reviewing, selecting, and presenting images. Your needs and pocketbook will dictate your choice.

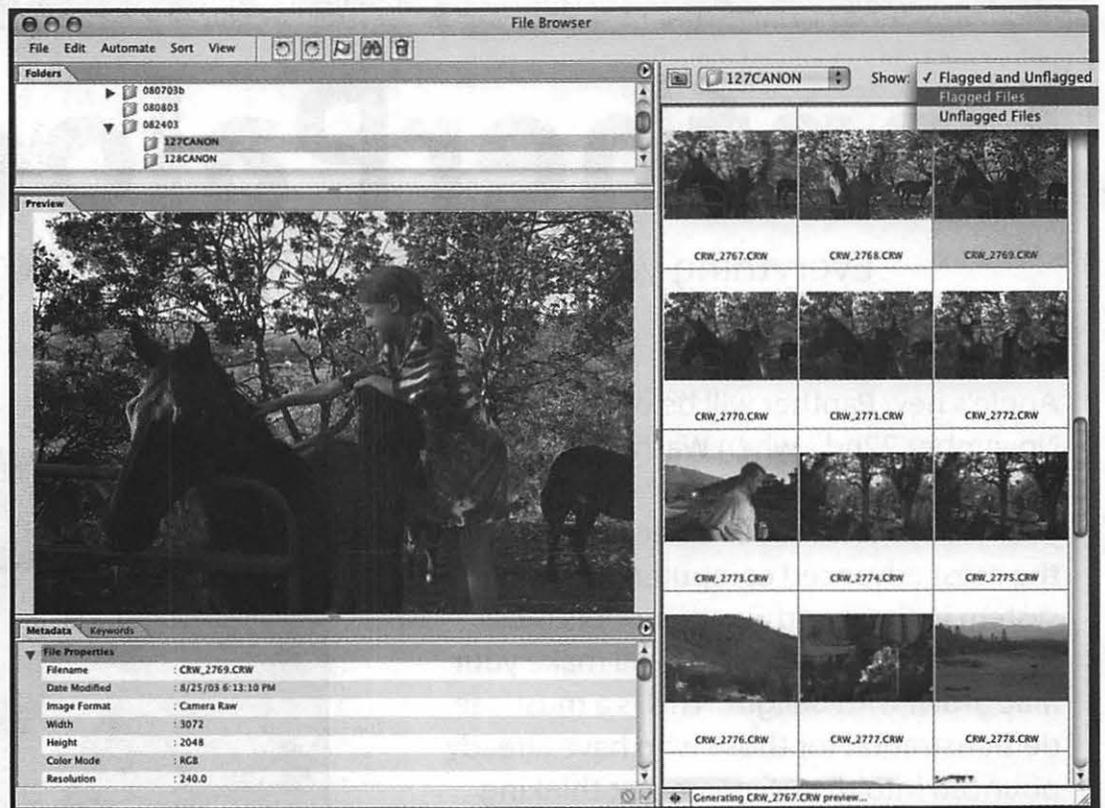
iPhoto certainly holds its own against the others as long as collections aren't huge. You may find that the inexpensive iViewMedia meets your needs. If you need straightforward tools for quick review and selection of images, PhotoMechanic may well meet your challenge.

For those familiar with iView MediaPro, version 2 offers a host of excellent features, elegantly implemented. And of course, if you like to live wholly in a Photoshop world, the file browser and Camera Raw plug-in in Photoshop CS provide ample tools to review and quickly select images from most consumer and professional cameras sold today.

iPhoto requires only a download from Apple.com if you don't already have it. All the other programs have full feature time-limited demo versions available from the company websites so you can see how well each tool meets your needs. (A tryout for Photoshop CS has not been posted yet, as the program shipped less than a week before this early November writing).

Websites for programs mentioned:

iPhoto2 (free)
<http://www.apple.com/iphoto>



Heavyweight Photoshop CS: The updated file browser window in Photoshop CS allows resizing any pane. In this case the preview window has been enlarged for easy image preview, and sorting occurs using a "flagging" option. This updated file browser offers a "Show Flagged Files" pop-up option (top right) to show your sorted selects.

CameraBits Photo Mechanic (\$150)
<http://www.camerabits.com>

iView Media (\$30) and iView MediaPro (\$160)
<http://www.iview-multimedia.com>

Adobe Photoshop Elements 2.0 (\$99)
<http://www.adobe.com/elements/>

Adobe Photoshop CS (\$650)
<http://www.adobe.com/photoshop/> ■

Pi member Dennis Dimick has been using Macintosh computers as a digital darkroom since Kodak introduced the PhotoCD in 1992. Professionally he works as a photo editor for National Geographic Magazine in Washington, DC. He can be reached via email: ddimick@aol.com.

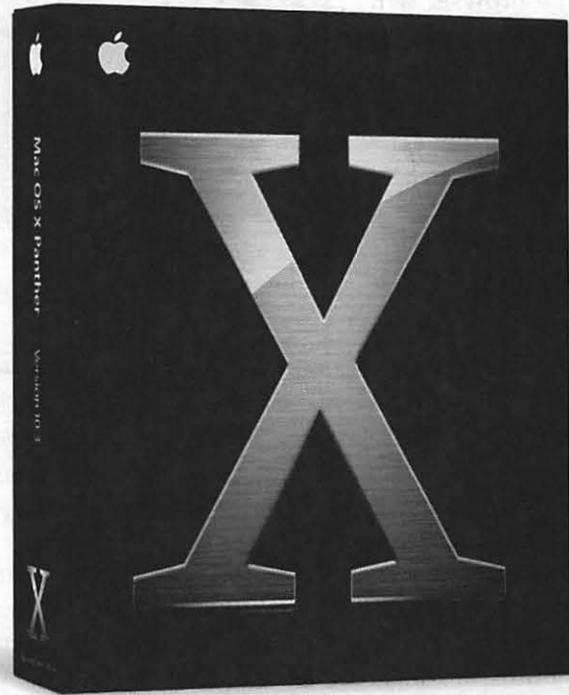
PantherPalooza

Everything you need to know about Mac OS X 10.3

Apple's new Panther will be on the prowl November 22nd - when Washington Apple Pi presents "PantherPalooza" - everything you need to know about Mac OS 10.3. Now the most advanced computer operating system in the world, Panther offers more than 150 new features that will make your Mac growl with delight. This is a must-see demonstration for those who have already pounced into the OS or are just thinking about it. Expect to hear some great Panther tips and tricks too, along with our usual question and answer session. We'll have door prizes, a raffle, Pi Fillings Monthly CD and maybe a surprise or two.

Saturday, Nov. 22nd, 2003
9AM - Noon

**Northern Virginia
Community College**
Annandale Campus
in the Cultural Center
8333 Little River Turnpike
Annandale, VA 22003-3796



Admission is free.
Everyone is welcome!

For more information:
**[http://www.wap.org/
vpvolunteers@wap.org](http://www.wap.org/vpvolunteers@wap.org)**

Washington Apple Pi is a community of people with a common aim: to improve their knowledge and enjoyment of Macintosh computers. We approach this through social interaction, sharing, fun, cooperative activities, mentoring and education. Organized as a non-profit social club, Washington Apple Pi is run by volunteers for the benefit of its membership. Together they produce a magazine, host on-line forums and services, and gather in regular and ad-hoc groups to exchange information, experiences and instruction.

Paper Modeling

© Pat Fauquet

PAPER MODELING? You remember that, don't you? Remember the books of card stock printed with pieces of buildings, ships, planes, even animals to be cut out and glued together?

I remember an Indian village I constructed for a school project in the fourth grade. While it was fun, I made a few mistakes in cutting out the pieces and so my mom dutifully taped the missing parts back together. I also remember that I needed a few more teepees. Short of buying another entire book, it could not happen.

So what does this have to do with a computer magazine? Paper modeling has gone digital and moved to the Internet. While Dover Press still publishes books of models, the range and number of models available on the Internet is far greater than has been available at any other time in the history of the craft.

Models purchased online are printed out on home ink-jet printers on paper of your choosing. Various colors, weights and even types of paper can be used. Parts that are cut improperly can easily be printed again. It is possible to re-size models easily. It is also possible to change colors and details using computer paint and draw programs such as AppleWorks or Photoshop. The models are relatively inexpensive and since they are stored as .pdf files, they are available to people with all kinds of comput-

This is a sample of some of the parts used to construct the Ambrose ship model.



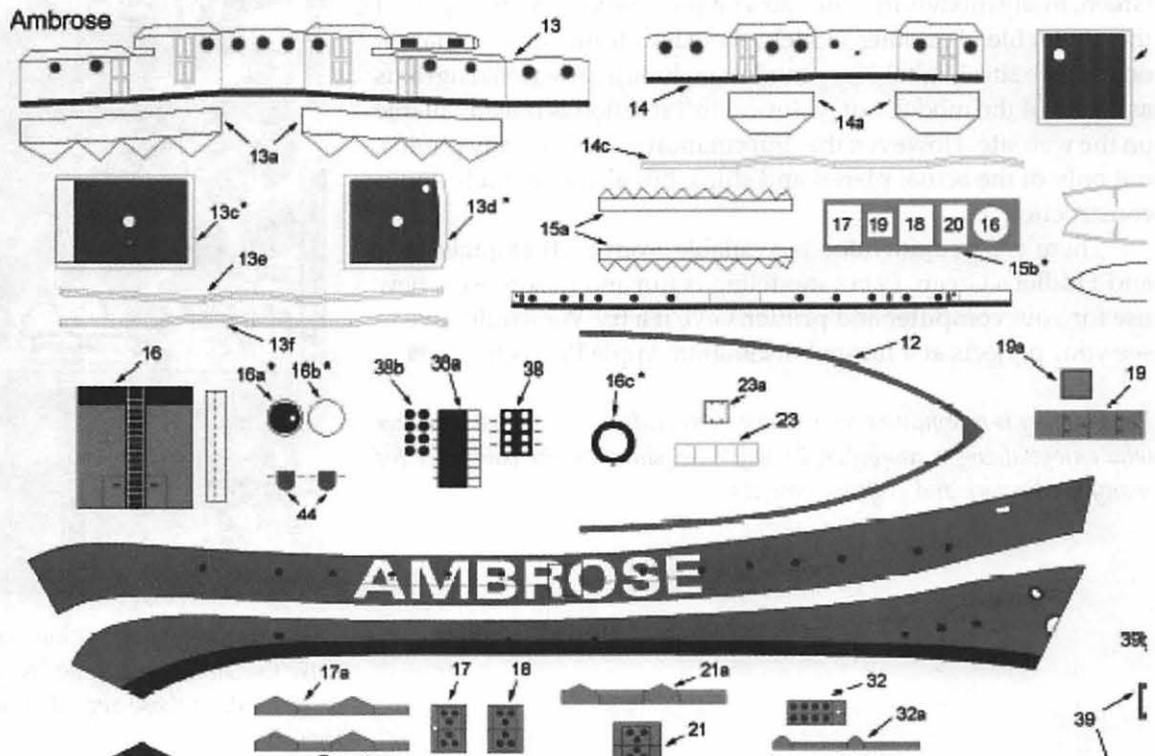
This is a photo of the completed paper model of the Ambrose. Additional photos are available at the Digital Navy web site.

ers. Many adults are participating in paper modeling and their finished models are showing up in museums, in community displays, model railroads, and wargaming. Children make their first models for school projects and some continue to make additional models as a hobby.

The best part is the price of the models. Many web site have models to download and try for free. Some sites allow you to download pur-



Lightship Ambrose was built in 1908 to guide ships through the newly opened deepwater Ambrose Channel, New York harbor's main entrance from the open sea. In 1936, she was transferred to the Scotland station off Sandy Hook and retired in 1968. In 1968, she was acquired by the South Street Seaport Museum where she is moored along pier 16 to this day as shown in the photo.





This is a photo of the Morane-Saulnier 'N' Bullet paper model from the Fiddler's Green web site.

would be my tools of choice, children of eight or nine could use scissors and glue to cut and assemble many of the models. However, there are many models that are far more intricate and more appropriate for teens and adults.

In contrast, the model of the Lightship Ambrose, a free download from Digital Navy has well over 100 parts to be cut out and assembled. A box-like appendage on the ship would be made of five separate parts. These models have no attached tabs. If they are needed in assembling a part, the modeler cuts the parts from scrap paper. The parts are assembled with Super Glue. When these models are completed, they can be museum quality. Assembly of these models could be accomplished by young teens and adults, but they are probably too intricate for elementary school age children. Both of these web sites often include detailed historical notes about the models. In the case of Fiddler's Green, many models include extra pages of notes that are a part of the model file. For other models, there is additional information on the web site. Digital Navy models include instruction diagrams as a part of the model, but historical information is only available on the web site. However, that information includes many photos, not only of the actual planes and ships, but also of models under construction.

There are free downloads available from both Digital Navy and Fiddler's Green. Paper modeling is fun and inexpensive new use for your computer and printer. Give it a try. We would love to see your projects at a future Washington Apple Pi meeting! ■

Pat Fauquet is a computer-user who enjoys crafting--or is that a crafter who enjoys using a computer. In any case, she uses her computer for many needlework and crafting projects.

chased models directly from the web. Other web sites allow you to choose and pay for the model online, but the files are sent on a CD. Many models are available for a dollar or two. Even the most expensive models, ones with hundreds of pieces that can be several feet long when completed, sell for less than \$35, including shipping charges.

My two favorite sites for paper modeling are Fiddler's Green <<http://www.fiddlersgreen.net/>> and Digital Navy <<http://www.digitalnavy.com/>>. The methods of construction and types of models available from these sites are completely different.

Fiddler's Green includes all sorts of models -- ships, airplanes, historical buildings, castles, lighthouses, trains, bridges and even some animals. Digital Navy has only ships and airplanes.

Fiddler's Green uses the tab method of construction. The models are also built from large parts. Paper scoring and bending are used to give the models dimension. A fairly intricate plane model has around 25 parts. Models are constructed with common white glue. Although Xacto knives and a metal straight edge



This page, to be printed out, cut, and assembled to make the Morane-Saulnier 'N' Bullet paper model is an example of those available on the Fiddler's Green web site.

Terascale Computing on a Pizza Budget

© 2003 Washington Apple Pi Labs

SPEED MAY kill, but it also thrills. At Washington Apple Pi Labs, we're always seeking the best, the brightest and the fastest, usually while munching on pizza. Sometimes our seeking has seduced us into strange speculations, such as our "Wall of Macs" idea, where we pondered taking 60-odd Power Mac 6100s stacked in the Pi office and turning them into a RAIC. Though a RAIC (Redundant Array of Inexpensive Computers) sounded like a cool idea, a few quick calculations revealed that even 60 Power Mac 6100s would be less powerful than a single Power Mac G4 running Mac OS X.

But let your mind roam free for a moment. What could you do if you had, say, 1,100 Power Mac G5 computers, each of them with twin two-gigahertz PPC970 processors? That would give you 2,200 total processors to work with, all running Mac OS X. Think of the power! Think of the pizza bill...

Dr. Srinidhi Varadarajan, an assistant professor at Virginia Tech (Virginia Polytechnic Institute and State University), didn't think of Macs at all. He'd never touched one prior to 2003. Varadarajan heads a team that was trying to put Virginia Tech on the map as a world-class computer science and engineering center, despite the fact that the state of Virginia, facing massive deficits, brutally slashed the budget for higher education. Varadarajan wanted to build a world-class supercomputer, on the cheap.

And he did. As this article goes to press, the final results aren't in; they will be announced in mid-November 2003 at SC2003, the annual supercomputing conference. But at the moment, "Big Mac," as the Virginia Tech's supercomputer is informally called, should break into the top 10 ranks of all the supercomputers in the world, possibly placing as high as 3rd or 4th on the list. It was built using 1,100 dual-processor Power Mac G5s, at a cost of \$5.2 million. It will certainly be the cheapest supercomputer on the list, and the first one built with pizzas.

The road to "Big Mac" was not a direct one, but it wasn't a particularly long road, either. The Virginia Tech team started working on a supercomputer proposal in March 2003, and started raising money in April and May.

"As this article goes to press, the final results aren't in; they will be announced in mid-November 2003 at SC2003, the annual supercomputing conference. But at the moment, 'Big Mac,' as the Virginia Tech's supercomputer is informally called, should break into the top 10 ranks of all the supercomputers in the world..."

At that time, they also started looking at the options. The team didn't even consider Cray, the company that virtually invented supercomputing, because their machines were too costly (and slow). Instead, they looked to Dell Computers and Intel, which offered cluster-style systems based on Itanium II processors; Advanced Micro Devices, which offered cluster-style systems based on their Opteron processors; Sun Microsystems, which offered cluster-style systems based on their UltraSPARC processors; and even IBM. IBM was, apparently, willing to offer something based on their new PPC970 processors – the same processors found in the Power Mac G5 — but not until 2004.

Even the cheapest proposals came in at between \$9 and 12 million dollars, and all were "too slow," according to Varadarajan. The team was pondering the options when, on June 23, 2003, Steve Jobs announced the Power Mac G5. This was a complete surprise to the Virginia Tech group (and most of the computing world). On June 26, after looking over the specs, Virginia Tech called Apple and said they were interested in placing a "fairly large order." On June 27, Varadarajan flew to California, to meet with Apple. Much to Apple's surprise, Varadarajan was not a long-time Mac fanatic; he'd never owned one. He just wanted to build a supercomputer. In a hurry. Within a day, Apple agreed, and Virginia Tech made a "fairly large order" through Apple's online store.

Starting September 5, Power Mac G5s started arriving in Blacksburg, Virginia. The "fairly large order" amounted to 22 tons of Power Macs, each shipped in the standard black boxes used for every other Power Mac G5. Virginia Tech did get an educational discount – the same as every other educational institution – but aside from that, the units were standard, off-the-shelf consumer

“Much to Apple’s surprise, Varadarajan was not a long-time Mac fanatic; he’d never owned one. He just wanted to build a supercomputer. In a hurry. Within a day, Apple agreed, and Virginia Tech made a ‘fairly large order’ through Apple’s online store.”

products, the same Power Mac G5s you can buy at MacUpgrades or CompUSA or Micro Center. Apple apparently did give Virginia Tech some engineering advice, and bumped their place to the front of the shipping queue. But aside from that, the “Big Mac” is the first supercomputer made from consumer computers, and purchased through consumer channels.

Dr. Varadarajan, by the way, now has two Macs: a 17-inch PowerBook and a Power Mac G5.

This isn’t the way supercomputers are normally designed, constructed, and built. For comparison, consider the Earth Simulator.

A joint project of three Japanese government agencies, the National Space Development Agency, Atomic Energy Research Institute and Marine Science and Technology Center, Earth Simulator is a massive custom-built facility in Yokohama, Japan. It uses 640 processor nodes, each with eight processors, custom-designed by NEC. Each of the 5,120 processors has a peak performance of 8 Gflops (8 billion floating point operations per second) and as of June 2003 had received the top benchmark rating in the world of 35.86 Tflops (35.86 trillion floating point operations per second). Designed to, among other things, do research on the international Global Change Prediction Plan, the Earth Simulator is hugely expensive, with an estimated cost of \$250-300 million.

Virginia Tech’s “Big Mac,” on the other hand, uses dual-processor Power Mac G5s. Each PPC970 processor has two double-precision floating-point processors, so there are four floating-point processors per computer. Each floating-point processor can perform two floating-point operations per cycle, so a dual G5 running at 2 GHz can provide a peak performance of 16 Gflops of double-precision performance (2 floating point processors times two CPUs times 2 flops per cycle times two billion cycles per second equals 16 billion floating point operations per

second). Given perfect efficiency, this translates to 17.6 Tflops (17.6 trillion floating point operations per second), but cluster computing has inherent bottlenecks to perfect efficiency. As of this writing, Varadarajan had managed to coax “Big Mac” to 9.55 Tflops, lagging behind only the Earth Simulator and ASCI Q, a massive supercomputer composed of Alpha clusters, based at Los Alamos National Laboratory.

Building “Big Mac” was also unusual. After refurbishing a building and beefing up the power and cooling (1,100 Power Mac G5s generate a lot of heat, and use a lot of electricity), Virginia Tech turned to volunteer labor. Free sodas and pizza were used to fuel student volunteers who worked setting up the Power Mac G5s. Varadarajan is quoted as saying the volunteers went through 600 to 700 pizzas. Virginia Tech President, Dr. Charles W. Steger, offered free football tickets to technicians who put in long hours on the project. If they get desperate, Virginia Tech can probably recover a few more bucks selling mice and keyboards, since they have over a thousand spares.

For Virginia Tech, “Big Mac” may be just the thing they need to enhance their reputation. Right now, they have a nationally-ranked football team, but “real tech” schools – California Institute of Technology, Massachusetts Institute of Technology, Carnegie-Mellon University, Rensselaer Polytechnic Institute – have nationally-ranked computer science and engineering departments. So how do you get nationally ranked, in a hurry?

They key may be fast food: Big Macs, sodas and pizza. Washington Apple Pi Labs understands, and approves.

References:

Virginia Polytechnic’s Terrascale home page:

http://www.computing.vt.edu/research_computing/terascale/

O’Reilly’s MacDevCenter article:

http://www.macdevcenter.com/pub/a/mac/2003/10/29/osxcon_g5cluster.html

Earth Simulator

<http://www.es.jamstec.go.jp/>

Top 500 list:

<http://www.top500.org/> ■

Mac Love Stories

by Sheri German

Love Story One: The Pi Reclamation Project

ONE WINTER NIGHT, not long after Christmas, I brought my PowerBook FireWire 400 to the Washington Apple Pi Tuesday Night Clinic to get new RAM installed. I can't remember now why my 10-year-old son was with me, but he was, and he had resigned himself to a very boring evening. I signed in with "traffic control," and sat to wait my turn in the queue. There was a great bustle of activity, and I noticed a gentleman I later learned was Lorin Evans, working on his Mac Reclamation Project. Old Macs, no longer of use to their original owners, get revitalized and matched up with new owners. Kind of like an SPCA for computers.

My son shuffled his feet, and wandered aimlessly around the room. I opened my PowerBook to get a little work done while I waited. It wasn't long before the evening took a very exciting turn for my son, and indeed, it turned into a fun time for a lot of the Tuesday Night Clinic crew who were there that evening. Lorin had taken notice of Scotty, my son.

"So you like your mother's PowerBook? What would you pay me for this one?" Lorin asked Scotty as he held up an old PowerBook 145. Scotty looked at me as if to say, this guy's pulling my leg, isn't he? To tell the truth, I thought he was kidding too, and was a little annoyed that he was teasing a 10 year old. Lorin was still waiting for an answer, however, so Scotty offered, "25 cents?" Lorin said simply, "A deal."

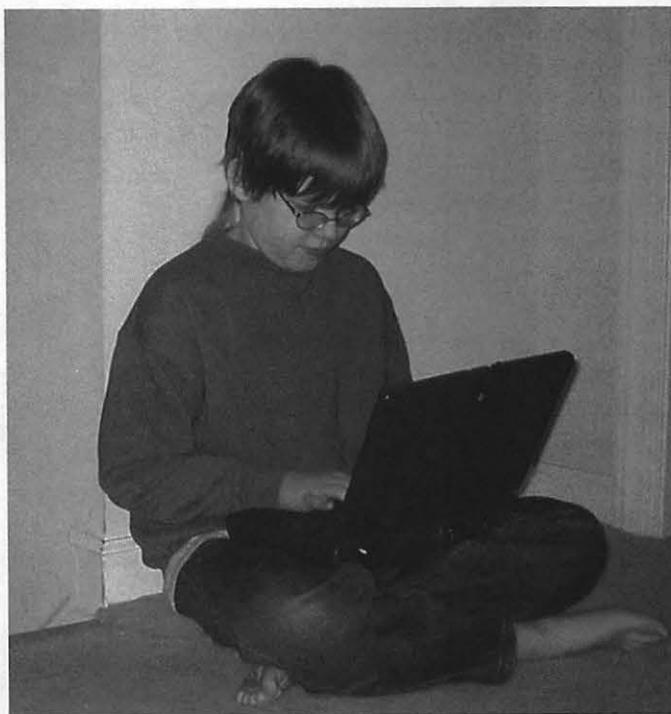
By now a crowd was gathering around, and Lorin opened up the PowerBook 145. We assumed this was an empty shell with no working CPU, but Scotty was getting excited anyway. At 10, pretend is almost as good as the real thing. He handed over various coins that added up to 25 cents.

And then the miracle happened. Lorin booted the computer. It worked! I recognized a look of incredulous amazement on Scotty's face. The guy wasn't actually going to give him this computer for 25 cents. Impossible! But it was true, and Lorin sat with him to check out software and specifications on the computer. He checked out

batteries in other donated PowerBooks till he found one that would work. Soon the PowerBook was perfect, and ready to go home with its new owner.

We live out in Howard County, so we had a good 45-minute trip home. Scotty marveled all the way there, pinching himself and still not quite able to believe it. Over and over he said to me, "Did I really buy a PowerBook for twenty five cents?" It was hard for him to get to sleep that night. When I got him up in the morning, he immediately looked for his new PowerBook 145. Spying it next to his bed, he was relieved that the magical evening had not been just a dream.

Every day for the next year or so, Scotty did his homework, played games, and happily learned all about the



Mac. One day I got an email from Lorin asking if Scotty would like to upgrade to a PowerBook 5300c. The condition was that he should give his current PowerBook to another child. Lorin prepared the 5300c with lots of education software and a few games too.

On yet another Tuesday night, Scotty and I got into our car to pick up the new computer from the Pi office. There was great excitement of course—we had already promised Scotty an Ethernet card for Christmas so that he could go on the Internet with his own PowerBook—but there was sadness too. He was getting a more capable computer, but the 145 was his first Mac love.

Recently our teenaged daughter, a PC person, got a

new laptop. She offered her brother her old one, a fairly modern machine. Scotty turned her down. He's holding out for my PowerBook FireWire 400 when I upgrade to a new PowerBook. He is a Mac man all the way. And the Mac Reclamation Project got him started in his love of the Mac.

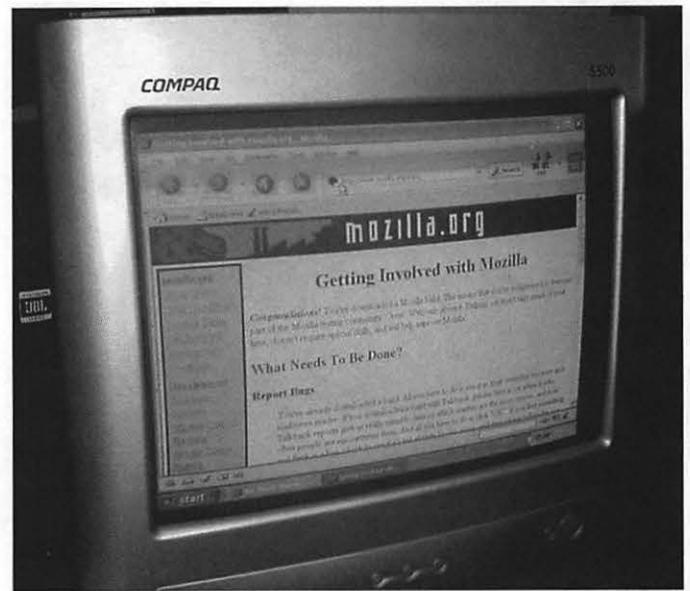
Love story two: a woman renews her Mac vows

Macromedia recently came out with a new version of *MX Studio*, its Web authoring system that includes *Dreamweaver*, *Fireworks*, *Flash*, and *Freehand*. *MX Studio 2004* adds lots of new features, and of course I wanted to buy it immediately. Not long after its release, however, the word came out that a lot of Mac users were experiencing loss of productivity because of sluggishness in the Mac version of the program. The weird part about it was that those experiencing the most sluggishness were not necessarily those with the oldest, slowest Macs. Someone with an old Power Mac G3 might fare better than someone like myself with a dual processor Power Mac G4. Macromedia denied, denied, then finally didn't deny. Mac users were encouraged to take a survey so that Macromedia could figure out why.

In the meantime, the *Dreamweaver* list to which I belong erupted into another of its platform wars as snide remarks from the PC users proliferated. "Solve the problem easily: switch to a PC." Though I never for an instant considered such a drastic measure, I did consider buying just this particular piece of software for the Compaq with Windows XP Pro we have on our home network. I couldn't bring myself to do this, and ended up with the sluggish Mac version. I had my doubts though. Maybe I should have given in.

In this state of waning of my absolute fidelity to the Mac, I worked for a week or two in *Dreamweaver MX 2004*. One night, my husband was sitting next to me rummaging around the eBay site. The Compaq with XP Pro had been gradually getting slower and slower in the last week. Now it refused to do anything at all. My husband called for help. I switched him to another user, and the computer worked—kind of. Endless popup ads kept appearing, however. Further, the page we set as the home page of *Internet Explorer* had been hijacked!

Yes, hijacked. Every time we launched *Internet Explorer*, we saw the brief flashing of a cgi (Common Gateway Interface) script in the address field of the browser. Immediately following that, a new default home page materialized. Next, a series of offensive popup ads assaulted our eyes. No matter how many times I went to "Internet Options" and changed the home page back to



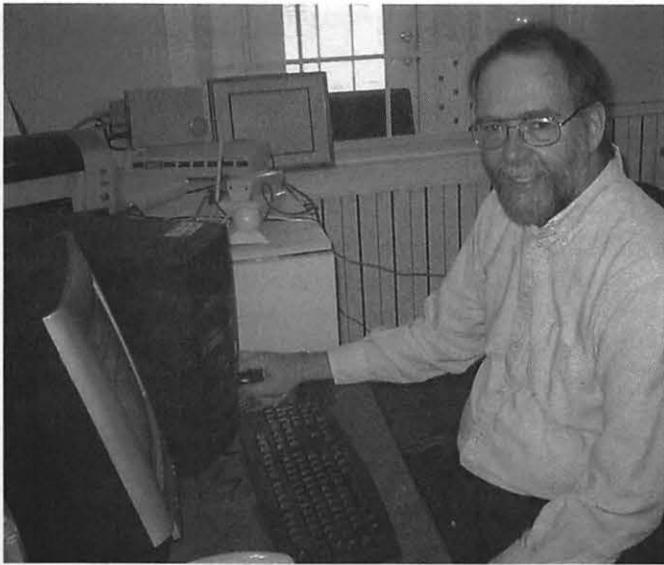
one of our own choosing, the insidious cgi script again hijacked the browser.

What was this? A virus? Was it a "Spyware" infection? (These are often contracted unknowingly when a user downloads something else or goes to certain Web sites and accepts cookies.) I tried the usual remedies: I ran a newly updated virus checker. It checked the computer out as clean. I ran various Spyware eradicating programs like *Adaware* and *Spybot*. These removed the cgi script, but the minute I launched *Internet Explorer* again, the hijacking was baccckkk.

I turned to my *Dreamweaver* Talklist listserv. The PC people on the list were eager to help. Everyone had a fix: run *MSCONFIG* and disable startup items. Run *regedit* and alter browser options. Run another virus check because it just had to be a backdoor Trojan virus. Just when I had tried all suggestions, and now considered my only option the reinstallation of the XP Pro system, a final list member came in with the winning entry: do a Google search on "Browser Hijacking."

What did I have to lose? I did the search, and followed numerous links to see what information I could ferret out. I tried the suggestions. Nothing worked till I came across a post in a newsgroup by someone who had "been there, and done that." His suggestion: use a little freeware program called *HijackThis* to get rid of the infestation forever.

It worked. It worked! About four hours later, my family regained control of its own computer. I shot off an email to my husband at work and let him know he could check his email at home once again. I downloaded *Mozilla* and informed the family that they should only use this browser from now on. I also downloaded the new *iTunes*



Crafting for the Grandchildren: Magnetic Paper Dolls

©Pat Fauquet

for Windows and deleted the Windows music program. I downloaded *QuickTime* and threw out *Windows Media Player*. My next task is to decide on an alternative email program to *Outlook Express*, the biggest virus villain of them all.

This exercise took its toll. How could anyone possibly extol the virtues of Windows over a Mac? How did Best Buy, CompUSA, Circuit City and any other retailer sell even one of these pernicious boxes? Who could want to go through this nonsense or live in fear of this nonsense every time the computer booted?

During the last new virus, my husband's office lost the use of its computers for a day. We all heard about how the Maryland Motor Vehicle Administration was brought down by another virus. These stories happen all the time, at a loss of billions of dollars in money and worse, time. When will the Windows users get it? And when will they stop ridiculing me for never letting anyone pry the Mac away except from my cold, dead body? Doubt is gone forever, and I have renewed my vows to the Mac. ■

WHILE SURFING the Internet recently I happened across Making Friends <<http://making-friends.com>>. This is a great site to find craft projects to do with children. Since the holidays are approaching, I have been looking for the "perfect" gift to make for my grandchildren. What caught my eye is an extensive collection of paper dolls to be printed on magnetic paper to attach the clothing.

I have two granddaughters, Kati, 9; and Anna, 6 and a grandson Jarod, age 3 who will be the beneficiaries of this project. While gifts to span so many years are difficult to find, I know these magnetic paper dolls will fill the bill. My young grandson will get dolls and clothes that have been printed in color. The six year old will get a combination of clothes to color along with some that have been already colored. The nine year old will get clothes that need to be colored along with several sheets of magnetic paper to design her own from scratch.

Because I suspect these paper dolls will be used as a car toy or one to be played with while waiting for a sibling to take a piano or ballet class, portability will be very important.

Since the clothes are to be printed on magnetic paper, also printing the dolls on magnets will cause problems. Just like bar magnets, there is the issue of magnetic polarity. If both the doll and the clothes are made of magnets, some clothes may not stick if we mix the positive and negative poles.

My first thought was to print the dolls on lightweight ferrous metal, but cutting metal without having to worry about



Figure 1.

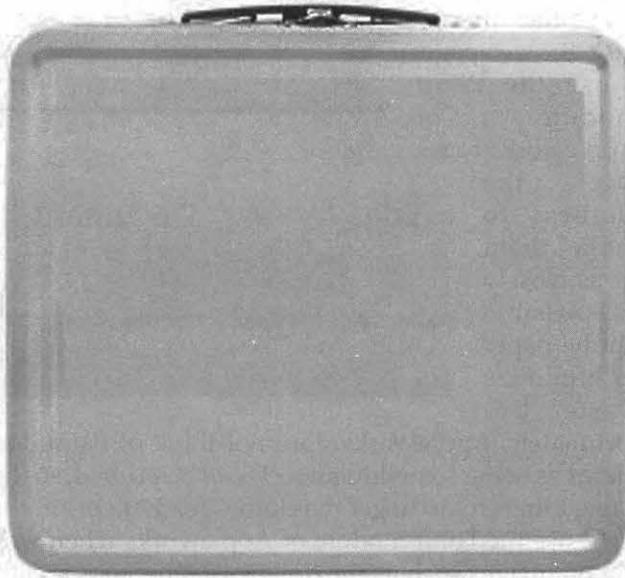


Figure 2.

bends in the dolls and sharp edges is a bit difficult. My next thought was to use the small magnetic boards used for cross stitch (Figure 1). However a trip to a cross stitch store, a craft store, and a fabric store convinced me that I would have to order the boards online or continue my search. I found a magnetic whiteboard, but at 10" X 14" it was a bit bigger than what I needed. It would be appropriate for play at home, but it was a bit large for taking it in the car and on errands.

Wandering the aisles of the craft store, I saw some small, white metal lunch boxes (Figure 2). After checking to make sure magnets would stick I bought three of them. I plan to paint a simple scene on the front and back of each of the boxes and write the child's name on the boxes. Kati will have an beach scene and a garden. Anna will have a stage and a forest scene. Jarod will have a stadium and a camping scene.

My first thought was to paint the dolls on to the boxes. However, they could also be printed on light paper, then passed through a Xyron <<http://www.xyron.com>> machine (Figure 3). This is one of those must-have items if you enjoy crafting, photo album making or scrapbooking. Xyrons use a variety of cartridges that allow you to uniformly apply acid-free adhesives to the back of paper and other thin items. The adhesive can be immediately permanent or it can be repositionable for several hours before adhering permanently. There are also cartridges which allow you to add either a magnetic backing or a laminated coating or both the magnet and the laminate at the same time. These machines come in a variety of widths from 1.5 to 44 inches. They range in price from \$10 to almost \$5000, but ones appropriate for crafting are in the \$50 to \$200 range. I have the Xyron 510. It can handle

items up to 5" in width and the replacement cartridges are available at local craft stores.

There are several doll patterns available on the Making Friends web site. Some are colored and ready to print while others can be printed on colored card stock or colored by the child. All of the dolls are bald, but there are numerous hairs styles that can be printed to add to the dolls. There are Caucasian, Black, Hispanic and Asian dolls as well as ones who are in wheelchairs.

Sheets of magnetic paper are available from a variety of different companies and they can be found in computer stores, in office product stores and in craft stores. Each sheet costs two to three dollars. The magnetic sheets from different companies also vary in thickness and stickability. I am usually quite pleased with the quality of Avery paper products <<http://www.avery.com>>. While less expensive (\$10.99 for 5 sheets), their magnetic paper is fairly thin. I have also used RoyalBrites Inkjet Magnetics paper <<http://www.theroyalstore.com>>. So far, I am very impressed with their product, but it is a bit more expensive (\$16.27 for 5 sheets). It is also possible to print the clothes out on regular printer paper and then laminate and apply magnets to the back using the Xyron machine, but at \$24.99 for a 7 foot by 5 inch magnet strip, clothes made in this manner would be the most expensive.

So where do the computers come in? Well, the dolls are on the web. To download them to your computer, several methods are available. You can simply drag the pictures off the page. This will download them to your desktop with whatever name the web page author gave them. Another method is to hold down the control key while clicking on the image. You will see a pop-up menu. Pull down to "Save Image to Disk." Another way to capture them is by using the "Save as PDF" feature of the Print dialogue box in Mac OS X. If you have a full copy of Adobe Acrobat, you can also download web pages as .pdf files.

If you go the .pdf route, be cautious as you are dealing with the images. In order for the clothes to fit the dolls, you must watch the percentage at which the image is being viewed and manipulated. On my 17" iMac, Adobe Reader usually opens the pages at 90%. However, some pages may open at a slightly



Figure 3.

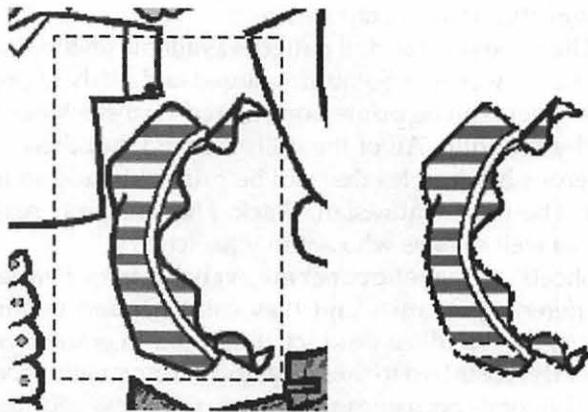


Figure 4.

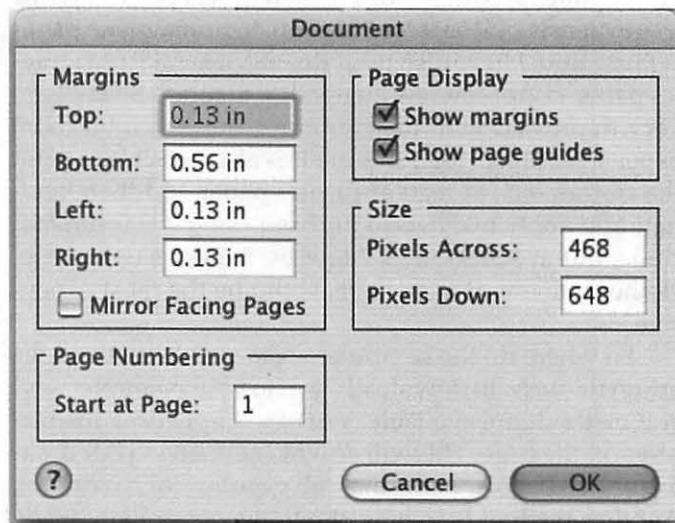


Figure 5.

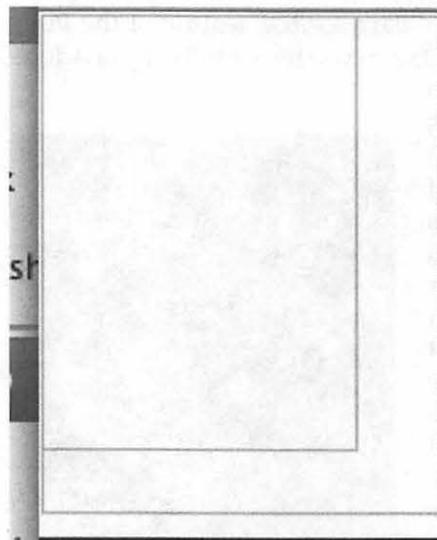


Figure 6.

larger or smaller magnification. For this project work properly, be sure that all dolls and clothes are set to the identical magnification settings. Opening the images in Apple's Preview program will allow you to print the images, but you cannot manipulate them. It is therefore, not suitable for this

project.

Because the magnet paper is fairly expensive, I usu-

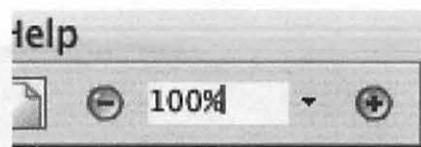
ally do not print the clothes directly from the web page. I use the Paint module of Appleworks to rotate the clothes to make them fit as closely as possible on the paper to minimize waste. Un-

fortunately, AppleWorks does not think of Paint documents as being something which will be printed, so there a few things to do to get the clothes ready to print.

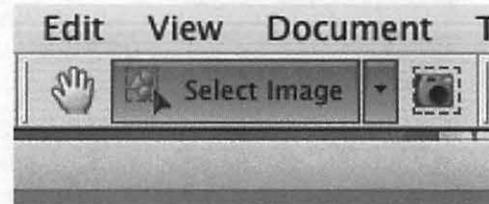
I use the Paint module of Appleworks when working on images such as the doll clothes because it allows me to work on the details of the clothing. I will be selecting individual items to place an rearrange in the document area. When using a paint program, you can select items with several tools. The rectangle selection tool is the one that people are most familiar with. However, when selecting individual items of clothing, the lasso tool is very useful. While the rectangle selection tool selects things within a box, the lasso tool is used to trace around the item loosely. When the tracing is complete, the selections shrinks around the object, leaving out the surrounding white space (Figure 4).

Draw programs bring images in as whole objects. There is no way to erase a part of the image, or change its color. The only changes you can make are resizing the object or putting a border around it. However draw programs allow you to make an item out of multiple shapes, and then group the shapes to make a whole item. Draw programs are very useful in drawing original images.

First, make a new Paint document in AppleWorks. Now go to the "Windows" menu and pull down to "Page View." By default, the borders on a new document are set at one inch on the top, bottom, and sides. This, again, wastes the magnet paper. How close can you print to the edges of your paper with your printer? Check the manual that came with your printer. If you cannot find it, check the web site of your printer's manufacturer for the information or download a .pdf of your printer manual. I use my Epson Stylus Photo 825 for color printing. Its minimum margins on the top, left and right sides are .12 inches. However, the minimum bottom margin is .55. The larger bottom margin is typical of most inkjet printers. Go to the "Format" menu and pull down to "Document . . ." to set the proper margins (Figure 5). At this point, you will see a smaller box inside the page margins (Figure 6). Now we need to enlarge the interior box until it is the same



Figures 7 & 8.



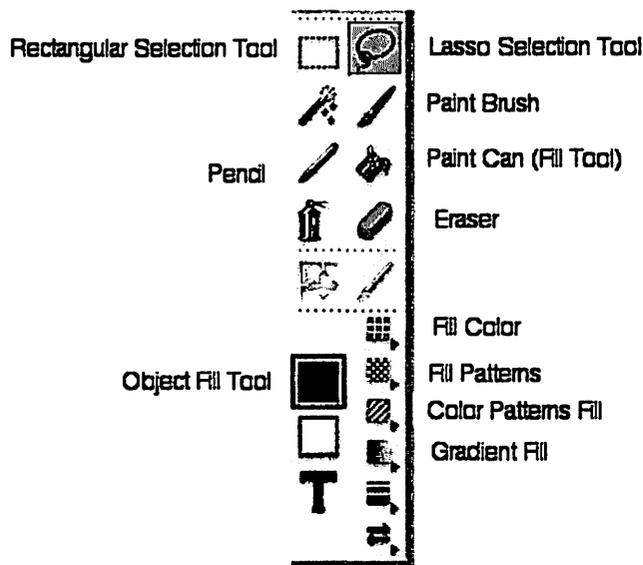


Figure 9.

size as the exterior box. This is done by going to the "Format" menu. Pull down to "Document . . ." Notice the box in the lower right hand corner with the "Size" label. In my case, the dimensions were 593 pixels across and 743 pixels down.

The last major revision to AppleWorks was made several years ago. Since then there have been a number of updates to correct bugs that have been found and to add a few minor features. If your version of AppleWorks for Mac OS X is less than 6.2.7, or in the case of AppleWorks running in an earlier operating system, if it is less than 6.2.5, some of the things I am doing may not work correctly. Download the updates from Apple to fix these problems.

If you downloaded the paper dolls as .gif files from the Internet, drag the image file into the Appleworks paint document you prepared earlier. If you saved the web page as a .pdf file, open it in Adobe Acrobat Reader. The latest version is Adobe Reader 6.0.

When selecting objects from within an Acrobat document, the image is captured at the magnification shown in the toolbar (Figure 7). Since the clothes will not fit the doll if they are printed at the different magnifications, make sure that you change the magnification to 100% in every Adobe Reader document you open for this project. In the toolbar at the top of the screen is a tool to select either text or images from within a .pdf document (Figure 8). If the text selection tool is the active one, click on the small triangle next to it to choose the image selection tool. This tool only selects rectangular areas and immediately sends the selection to the computer's clipboard. To have the image appear in your AppleWorks document, go to the "Edit" menu and pull down to "Paste." Note that you can also use the Command-V keyboard command.

Items pasted into the Appleworks paint module come in with the selection active. Notice what looks like tiny marching ants around the edge of the item. When these are active, clicking on a colored part of the image makes it possible to move the item around within the document. Move the item to the desired location. Clicking outside the selected area will cause the item to become a part of the background. Pressing the delete key when an item is selected will make it disappear.

It is now time to rearrange and eliminate items to make the best use of the magnet sheet. If your pasting of items has left you with unwanted bits of other items, these can be eliminated using several tools that can "erase" unwanted items. First, try the Eraser. The tool is square in shape. Sometimes it is too large to get at tiny pieces. In those cases, try the pencil tool. It can eliminate items one square at a time. I also sometimes use the paint brush tool. Double clicking on the paint brush tool will bring up a dialog box where you can edit the size and shape of the paint brush.

If you want to change the color of the clothes or color ones which are black and white, the fill tool, which looks like a paint can is very useful (Figure 9). Other tools that can be helpful are the tools to determine what a fill would look like. In addition to the choices in tool palette additional colors, patterns and gradients are available in the "Window." Pull down to "Show Accents to see the full range of what is available.

If you need to make the image larger to work on small details, use the mountain buttons at the lower left edge of the document window. The small mountain button decreases the magnification of the document while the large mountain button increases the magnification. You can also click on the number button that precedes the mountain buttons to either select a specific magnification or to type a number of your choosing in.

Sometimes it would be desirable to rotate an item. To do that, you must first select it. Choose it either the rectangular selection tool or the lasso selection tool. Then go to the "Transform" menu and use one of the three Rotate tools in the menu. My favorite is 'Rotate 90°'. Since all the clothes and dolls are bilaterally symmetrical, you could also use the "Flip Horizontally" or "Flip Vertically" command found in the Transform menu. This command is normally used to flip writing that will need to be printed backwards.

When your Appleworks document is full of clothes, it is time to print. Be sure to follow the directions in the magnet paper package to set your printer properly. Pay close attention to the ink settings.

I am looking forward to giving my grandchildren their paper dolls this holiday season. I am certain they will spend many hours playing with them. Later, we can make more dolls and clothes when they come to visit. ■

Interview with Aaron Adams, "Switcher" (Part 1).

© 2003, Craig K. Contardi.

IN THE summer of 2002, Apple Computer launched yet another groundbreaking ad campaign called, "Switchers". Often imitated thereafter by other companies trying to grab the same level of 'buzz', it featured a dozen testimonials from a cross-section of Americans about why they switched to Macintosh. Some participants met with more notoriety than others (but more on that later...), and one was gracious enough to meet with me on July 5, 2003 at the Dublin Pub in Dayton, Ohio.



Aaron Adams was arguably the first 'Switcher' to get his time in the limelight, by virtue of having his visage hanging on the exterior of the Javits Center during Macworld New York 2002 (again, more on that later...). The following are excerpts from our 90+ minute conversation. We were joined by Aaron's friend Todd, a convert to Macintosh thanks to Aaron's real-life experiences.

CC [Craig Contardi]: I think I found our first non-sequitor: this place is advertising free wi-fi access for laptops and PDF's!

AA [Aaron Adams]: (turning to Todd) Have you seen the Adobe commercial? First of all, don't call it Adobe Reader. Adobe validates the ignorance of users by renaming the program from Acrobat Reader to just 'Reader'. That's like someone telling me to "install Microsoft onto my machine". I hate that. The commercial makes it look like getting a PDF is like getting a present. Getting a PDF is not like getting a present, unless blasting your email space quota is your idea of a present.

CC: I was able to arrange this meeting because I began listening to the Your Mac Life internet radio show, for which you volunteer your expertise to administer the discussion

forums. I know that Shawn King [the host of Your Mac Life, and the guest speaker at the Pi's 25th anniversary celebration] has had you, Janie Porche and Jeremiah Cohick on the show. How did you become involved with Your Mac Life?

AA: Apple seems to like to give my name out when the media calls them looking for switcher contact information. I was first on YML a year ago and Shawn asked if I was planning to go to Macworld New York; he said it's always a good time. I called Apple and they weren't sure they could provide me any sort of complimentary pass. At the last minute Apple got me a VIP pass. I arrived on a Tuesday evening since the keynote was the following day, and met with Shawn and the others at the hotel. Up to this point, no one at Apple had said a word about anything at the convention center that I might have a passing interest in knowing about in advance.

CC: ...such as "the Poster".

AA: Exactly. So the next morning I take a cab to the Javits Center. The cab pulls up to the curb, I step out and am greeted by this enormous 30-foot tall picture of my head hanging on the side of the building. I have to tell you I think it's a horrible picture, I hate that picture. I couldn't believe it; nobody was going to tell me about this? Shawn made me stay out there and he took pictures of me standing in front of it. The Apple booth inside had a circular banner hanging from the ceiling, and the same horrible picture. They'd show the Switcher commercials in between product demos in the booth theater, and Steve Jobs showed my commercial during his demo of the Mail application under Jaguar. Despite all this, only three people recognized me on the convention floor and said hi!

CC: Where are you most often recognized?

AA: I'd have to say at Apple stores, certain Apple events, and sort-of at Macworld. But this is Dayton, Ohio after all, not a hotbed of Mac activity. The nearest Apple stores are in Cincinnati and Columbus. In New York my ad is at a bus stop, on a lamppost, in a CompUSA window, and so on. Here in Dayton? Nothing. Some friends of mine called a local TV station and newspaper to tell them about the fact I'm local, and they apparently couldn't have cared less. When a 2-foot alligator is found in the river it gets two nights of coverage. Other friends of mine went to Atlanta on vacation and when they came back they said it was like I was on vacation with them because my ad was everywhere down there. In Oklahoma one person allegedly had 6 pictures of my various ads in his cubicle at work. All this attention elsewhere, nothing at all in Dayton. What I wonder is, are you really 'famous' if you're not popular at home? What

does it mean in that case? Nothing.

CC: Not all of the great visionaries are famous in their own place/time.

AA: [laughs] If I was one of the world's great visionaries I don't think I'd be in TV commercials. I'd be living on a tropical island somewhere.

CC: Tell me what you can about the photo shoot for your ad.

AA: Apple had a web page in March 2002 asking for testimonials from people that had switched from Windows to Mac. I filled the form out and thought little more of it after that. I figured it was just for market research, and I might get a t-shirt or mug for my troubles. My wildest dream was that I'd get to be a beta tester for a new class of software. About two weeks afterward, I got a call from a lady at Apple, and we talked for about half an hour, expanding on the things I said in my original online submission. A few days later a second call came, and I started to catch on to what I thought Apple might be up to. Then I got a third call, and was told that Apple was shooting commercials in New York, Boston and Los Angeles, and I would be told only a couple days in advance when, and which location. They asked if I would like to do it, and I said sure. A week later I found out I was being sent to Boston two days hence. All I was promised up until then was a modest fee for the shoot and round-trip airfare. They ended up auditioning 80 people for the first round of commercials. For the entire shoot and a month afterward, none of the candidates knew their fate. We were told we might not be used at all, might be used only in print ads or on TV, only website, some combination of each. In fact my group in Boston included a lot of people that never were used. From my shoot they did use Dave Haxton, Patrick Gant, and Damon Wright.

There's a limit to what I can tell you about the shoot itself without exceeding my non-disclosure agreement, but basically I was in there for half an hour and instructed to just tell my story and talk freely. There were a couple people from Apple in there with me, plus the cameraman and the technical crew. It was clear these people were getting pretty weary of the whole process of listening to everybody drone on about their experiences. They looked like they just wanted to go home. While I was in there, a couple started nodding off, which did not inspire a lot of confidence in my oratory skills. When the camera needed fresh film, the makeup artist would come over and pat the sweat off my face. I'd ask if I was doing okay given that I was putting people to sleep, and was assured I was doing just fine. When the shoot was over, I went back to my hotel and flew

back to Dayton the next day. Every time I called anyone at Apple asking about the final result, I was told that they still had not made up their mind. I did get a couple of proof copies of the print ads they proposed using that featured me, all the while the official line from Apple was they weren't sure. Those proofs were the first time I saw my horrible picture; It's scary to think that might have been the best picture they had of me. It was June 10th when I flipped open my laptop, went to the Apple website, and saw me staring back. I found out about it the same time as everyone else. Then the TV ads began, and the phone started ringing from friends telling me they saw me. I still run into people every once in a while that tell me, "I was watching TV, and I saw your giant head, and I said to myself, 'no way' because that can't be real". People have to watch the whole thing and convince themselves of what they just saw. So within the first day someone had already claimed I was an actor from San Francisco; I've never even BEEN to San Francisco.

CC: Are you going to the San Francisco Macworld in January?

AA: I'd like to; I couldn't go last year because I had just switched jobs and did not have any vacation time saved.

Todd: You did a lot of 'switching' last year, huh?

AA: [smiling] That's not funny.

CC: Sure it is.

AA: [to Todd] Do you want to go to MacWorld Expo in January?

Todd: Sure.

AA: Initially I wanted to go back to New York again this year, but the more they changed the show the more I wasn't sure I wanted to go. I don't think of myself as a 'creative' person, I'm a technical person so it did not seem like the show had anything to offer me. Then Shawn invited me to go do radio bits for the show; I think it'll be a lot of fun. I've always wanted to do radio work, just to say I've done it.

CC: Have you seen any of the parodies of the Switcher ads?

AA: I think I've seen most of them, and didn't think they were funny. I've seen none that spoofed me though. I see that as a good sign; If my argument was weak or I had a personality quirk, I'd have been a target.

CC: I've got to bring up Ellen Feiss at this point.

AA: I KNEW you'd get around to that! Think about this: In her commercial, did she ever mention she owned

a Mac?

[Todd looks confused at this point]

AA [to Todd]: Did you ever see the ad with the 17-year old girl talking about her school paper?

Todd: No.

AA [to CC]: See, outside of the 'Generation Y' Mac teenage community, she's not known. Todd's been my friend since when this whole thing started, and he has no idea who she is. Any 17-year-old girl would have had the same impact. Her story was not convincing to me. It's a shame that in the end an ad campaign with a lot of very effective, persuasive, convincing stories gets remembered for a girl apparently loopy on something. I thought Dave Haxton's story was lost in the overall mix, compared to some of the other stories. Here is someone with a credible background and I saw his ad far less than almost every other.

Like I already said, when we shot these commercials Apple did not promise us anything, it was clear we were doing it for the greater good of Apple. I don't know anyone who has grown wealthy off this campaign. I was in a movie though.

CC: Anger Management?

AA: Yes, for maybe eight seconds. The receptionist at my job told me about it. She said my poster was in the background, at the point in the movie right after Jack Nicholson cries about his mom. A couple nights later I took Todd and another friend to see for myself. Todd promptly fell asleep, but I woke him right before my cameo. To tell the truth, we left the theater right after that. What I find neat is that when they make a movie, do you think there's any part of that movie that isn't planned to the minutest detail? It was obviously left in for a reason. Apple very rarely ever pays for product placement in movies or on TV, so I don't think it was Apple telling them to put it there. I'm especially confident they would not pay for my blurry head. Mac hardware is popular because it looks good on TV.

CC: Are you reading something into this?

AA[tongue in cheek]: I'm angry.

[Please look for the remainder of the interview in future issues of the Washington Apple Pi Journal.]

Craig Contardi is currently the Secretary of Washington Apple Pi. He is married, with three children between the ages of 3 and 8. ■

Apple iDisk Service Ideal for Creative Collaborations

WHEN APPLE announced iTools, way back when, the announcement caught my attention. When iTools became Dot Mac, I went along for the ride, knowing that as I learned more about the facets of this online service, its value for me would be revealed.

These days I'm a huge Dot Mac fan. One facet I like most might be overlooked by other Mac users. iDisk, part of Dot Mac, is a virtual hard drive you can use to back up files. It can also be used to share files with friends, colleagues and the general public – via the iDisk Public Folder. If you choose to give the public permission, they can also place large files in your iDisk Public Folder for you.

I like the general public. Many of my friends are members of the general public. By sheer coincidence I met most of them at public events. I owe a debt of gratitude to the general public, because almost all inventions and social advancements of the past 500,000 years are due to members of the general public. People sometime forget this.

To help bring you on board, let me explain some of the ways I use the iDisk service in Dot Mac. Last week a friend asked me to scan 4 color photos to appear in print. The purpose of the scanned photos was to raise money for a DC literacy fund that I care about.

So I scanned the photos at 150 dots-per-inch and saved them in TIFF file format. The combined size of the 4 scanned photos was 7 megabytes – too large to send as an email file attachment. How could I get these scanned photos across town quickly to the person who needed to use them? iDisk to the rescue.

I mounted my iDisk from the Go menu on my iBook laptop. (My iDisk login and password have already been entered and saved in my Internet System Preference.) I then opened my iDisk and uploaded the files to my iDisk Public Folder, telling my colleague across town how she could retrieve them on her I-wish-I-owned-one-too flat panel iMac. She has a DSL Internet connection in her home office and was able to download the files in a flash using the free iDisk Utility for

Mac OS X. (A similar free utility for Windows XP can be downloaded from the Dot Mac web site. You can get to the download screen for either of these free iDisk Utility programs by going to <http://www.mac.com>, clicking on the iDisk word near the top of the screen and then clicking on the iDisk Utility link at the bottom of the next screen.)

I choose to password protect my iDisk Public Folder, because much as I'm enamored with the general public, I really don't want just anyone downloading or uploading files to my Public Folder. How much hard drive space do I have in my Public Folder? I pay \$100/year for the basic Dot Mac service (a very good deal, in my estimation.) And then I pay an extra \$100/year for an additional 200 megabytes of storage space. So I own a total of 300 megabytes of Dot Mac web space.

Most of the time I have about 120 to 180 megabytes of free space that I can share files with friends and colleagues via my Public Folder. What kinds of files would someone share, you might ask?

I'm so glad you asked, you general public person you. I'm a multimedia kind of guy and love collaborating with others on web multimedia projects. So I often have the need to share audio files, photos and short QuickTime movies. My iDisk Public Folder then becomes my virtual sandbox. It's a play area.

Apple doesn't tell you any of this – at least not in so many words. You're supposed to figure these kinds of things out. In all truth, the average Mac user is intensely creative and is able to glean the best ways of using his or her computer and the associated services that Apple offers. Some folks remain ungleaned, though. I was thoroughly ungleaned myself until I became more gleaned.

Now that I'm very comfortable using my iDisk Public Folder, I'll be looking for more opportunities to use it. Now that I know how to use a hammer, the whole world becomes something to nail.

If you promise you won't nail me, I'll tell you how I use my iDisk Public Folder with some neat free and low-cost software for Windows XP. Skype is a free Internet phone service that works very well over high speed Internet connections. Using a \$15 program named Audio MP3 Sound Recorder (for Windows XP), I can record any phone conversation (i.e. interview) with someone I'm speaking to with Skype. I can then take that audio (recorded in very clear audio quality, in uncompressed WAV format) and marry it to digital photos that the person I'm interviewing sends me. There are many programs I could use to marry these audio and digital stills, including iMovie, LiveSlideshow, Macromedia Flash, QuickTime Pro and many other programs. For marry-

“These days I'm a huge Dot Mac fan. One facet I like most might be overlooked by other Mac users. iDisk, part of Dot Mac, is a virtual hard drive you can use to back up files. It can also be used to share files with friends, colleagues and the general public – via the iDisk Public Folder.”

ing purposes, I'm currently most intrigued with Flashpoint (for Windows XP), a \$44 program from Sausage Software (I'm not making this up) that lets you create Flash multimedia slideshow files without having to learn Flash. I own and like Flash, but let me tell you, it's not for the faint of heart. It's a program with amazing uses, but it almost has too many features for my liking. (Macromedia really ought to create a consumer version, Flash Express, that would be more easy to wrap one's arms around.)

So with a little iDisk Public Folder action and some Skype married to Flashpoint, I become a multimedia journalist on par in every respect (except talent, reputation, salary, fame, intelligence and other incidental matters) with journalists on 60 Minutes. As a matter of fact, I'm thinking of starting an Internet news show named 60 Megabytes, which will conclude each week with “A Few Megabytes from Andy Rooney.” I'm betting that Andy is just chomping at the bit to become the Digital Curmudgeon. ■

Phil Shapiro

The author works as a “literacy leader/lifelong learning coach,” one of 20 people hired to implement Mayor Anthony Williams' new literacy initiative in the District of Columbia.

He has been tasked with increasing the quality and quantity of learning in the District of Columbia. Contact info: pshapiro@his.com <http://teachme.blogspot.com> <http://www.his.com/pshairo/>

Injecting Playfulness into Computer Trainings

by Phil Shapiro

IN MY PREVIOUS job, working for the Arlington Public Schools, I was tasked with training elementary school teachers on computer and video technology. All teachers in Virginia are required to possess basic technology skills, or they can lose their teaching license. This is sensible regulation. Does it make sense for a teacher to be instructing future generations if he or she is unsure how to send an email or search the web? If they have no idea what the word HTML means? Most of the teachers I trained had decent technology skills and were eager to learn more.

What was particularly thrilling was seeing teachers teaching with technology skills I helped them acquire. At all times I made it clear to teachers that I wasn't "smarter" than them. "You're good at teaching and I'm good at computers," I would explain. "I sure could learn a lot from you about teaching."

One of my first goals was to get teachers comfortable using computer terminology. It's admittedly easy to mix up the unit size of kilobytes, megabytes and gigabytes. The way I explained this concept is that a single typed page of text is about 2 to 3 kilobytes. A medium length newspaper article or book review is about 10 to 15 kilobytes. A short paperback book contains about a megabyte of text. (1000 kilobytes of text.) Large graphics and sound files are measured in megabytes. Video stored on a hard drive is usually measured in gigabytes. (Each gigabyte holds about 4 minutes of DV video.) After I explained all this, many teachers' eyes still glazed over. So I resorted to Plan B.

In email exchanges I had with teachers, I started using the expression "Thanks a megabyte" whenever someone did something helpful for me. Teachers caught on. I also explained that "Thanks a kilobyte" is a virtually meaningless phrase, as a kilobyte is too small a unit to thank anybody about. I also pointed out that "Thanks a gigabyte" is an expression that should only be used if someone saves your life. Sure enough, about a month

after I explained all this to teachers, a smart-aleck teacher stopped me in the hallway to say, "Thanks a terabyte." Naturally, I looked at her as if she were completely nuts. "Do you have any idea of the giggerbish you're talking about," I said with a wink. "It's entirely inappropriate to say, "thanks a terabyte," because terabytes are too large a unit to thank anybody about. Now get back to class, and I don't want to hear another word from you," I giggled. Teachers quickly learned that I would resort to any devious means to help them learn and understand computers.

Along these lines, one of the most interesting experiences was when I taught iMovie to a small group of teachers. Using counter-psychology, I told the teachers, "You're elementary school teachers. You have no time for shooting or editing video in your classroom. Let me show this to you anyway, and you can decide if it has any use at all." To make the training more fun for me, I didn't plan the full details of the video we'd be making in the training. Why not use a little spontaneity? The most dreary of all trainings are the one's that methodical progress from Roman numeral 1 to Roman number 12, with all knowledge neatly aligned into headings and sub-headings. I knew that approach just wouldn't work for my teachers. So I told the teachers, "We're going to make a short commercial today. We'll choose an imaginary product and then write a short script, practice our lines and then shoot the commercial." I asked for a volunteer to be the camcorder operator. A brave teacher stepped forward. I then threw out some ideas for some imaginary products we could try and sell. We settled on creating a commercial for "motivation." Any other virtue or abstract concept would have worked as well.

Tasteful satire is always a great way of unleashing creativity and learning. Assuming the role of an "in charge" teacher, I started assigning lines for our script. I had the opening line for the commercial: "Does your life lack pizzazz? Have you considered motivation?" Then the camcorder panned over to one of the teachers who declared convincingly, "Did you know that motivation is free?" The camcorder panned to the next teacher who chimed in, "And you can get it anywhere!" The third teacher said, "And you can get as much of it as you want?" (For the QuickTime rendition, see <http://storymakers.net/motivation.mov>)

Admittedly, the lighting was about as bad as you can get — fluorescent lighting in a computer lab. And yet when I showed the teachers how they could quickly edit the video in iMovie, nearly all the teachers became quick converts.

"Would your students like to do this kind of thing?"

I asked with eyebrows raised and head tilted. All teachers nodded rapidly up and down. "Is there any way you can work video production into your curriculum to motivate students to be on task with their daily lesson?" More rapid up and down head nodding.

In a 20-minute training I had ignited an interest in using video in the classroom. I ended the training by letting the teachers know that I was available for one-on-one training for any of them that wanted to try using video production with their elementary school students. I could help ensure technical success, if they could bring a creative lesson plan to the table. It was a fair trade.

Another opportunity for me to inject playfulness into teaching occurred last summer was I was in charge of a summer camp for elementary school students. The camp was a small camp with about 10 to 15 students. Towards the end of the summer I brought my guitar to work. When the kids saw the guitar, they asked me to play a song. I happened to have the lyrics to "Unchained Melody" in my guitar case, so I sang that for them. I purposely played the notes slowly to show the students that it's possible to play nice sounding guitar without having a lot of skill. One of the students in 5th grade blurted out that she wanted to try playing the song on the guitar. I saw a teachable moment develop before my eyes, so I asked one of the other kids to shoot video of this girl playing the guitar for the first time in her life.

The girl chose to play the right hand part of the guitar, so I aligned myself on her left and offered to play the chords. Doing so required me to place my hand and arm in a rather uncomfortable position, but it was all worth it. This student was putting on her first guitar concert, without any practicing, and the entire experience was being videotaped no less. As you can imagine there was a lot of giggling as we all got in position for the video shoot. I happened to have a 500 watt standing utility light (you know those standing utility lights that are yellow or orange in color that you can buy at a hardware store?) So the lighting for the video was excellent. The audio for the video was also good, as we used an external microphone connected to my Canon camcorder.

One of the kids took charge of the audio. As it happened, my supervisor walked in as we were getting ready to perform and he quickly assumed a supportive role, gently coaching the kids on how to comfortably hold a guitar. I made a copies of the finished ideo to give out to the students at the camp, and asked permission of the parent of the key performer if he minded

"...one of the most interesting experiences was when I taught iMovie to a small group of teachers. Using courter-psychology, I told the teachers, 'You're elementary school teachers. You have no time for shooting or editing video in your classroom.

Let me show this to you anyway, and you can decide if it has any use at all.' "

whether I put the video clip up on the web (protecting his daughter's privacy by not mentioning her name.) He said that was fine. I uploaded this QuickTime to my Dot Mac account at <http://homepage.mac.com/pshapiro101/iMovieTheater16.html>

The girl playing guitar in this QuickTime wants to be a doctor when she grows up. Do you think she has the concentration skills? I do. There are countless other ways to inject playfulness into teaching. I'm hoping the ideas in this article spawn ideas for ways you can inject playfulness into any of the formal or informal teaching you do. Giggling allowed.

Phil Shapiro

The author works as a Lifelong Learning Coach at CitiWide Computer Training Center, in the Mt. Pleasant neighborhood of DC. He is one of 20 "literacy leaders" hired to implement Mayor Anthony Williams' new literacy initiative. He can be reached at pshapiro@his.com and <http://teachme.blogspot.com> and <http://www.his.com/pshapiro/>

This article, with associated internal and supplemental links, can be found on the web at <http://www.his.com/pshapiro/playfulness.html>

— 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.

Tutorial calendar dates:
<http://calendar.wap.org/>
 Tutorial class descriptions:
<http://calendar.wap.org/classes/>

November 2003

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
November 30						1
2	3 Power User SIG	4 Clinic	5	6 Columbia Slice (Call) Teen SIG	7	8 Graphics SIG Frederick Slice
9	10	11 Clinic	12 WAP BoD	13 i Movie SIG	14	15 Annapolis Slice
16	17	18 Clinic	19	20 Teen SIG	21 Retired SIG	22
23	24	25 Clinic	26	Thanksgiving 27	28	29

December 2003

WAP Office Phone: 301- 984-0300
 TCS 2400 bps: 301-984-4066;
 TCS 14400 bps: 301-984-4070

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2 Clinic	3	4 Columbia Slice (Call) Teen SIG	5	6
7	8 Power User SIG	9 Clinic	10 WAP BoD	11 i Movie SIG	12	13
14	15	16 Clinic	17	18 Teen SIG	19 Retired SIG	20 Annapolis Slice
21	22	23 Clinic	24	Christmas 25	26	27
28	29	30 Clinic	New Year's Eve 31			

Meeting Notices

Annapolis Slice

3rd Saturday; 9:30 AM; Severna Park Library on McKinsey Rd. (off Rt. 2), Severna Park, MD
Answering Machine: (410) 647-5605

Columbia Slice

1st Thursday; 7:00 PM. Call for location
BBS (410) 964-3706
www.wap.org/columbia/default.html

DataBases (Mac) SIG

Volunteers needed to restart this SIG

Frederick Slice

General meeting time, 2nd Saturday; 10:00 AM;
United Methodist Church; 22 Main Street in Walkersville.

www.wap.org/frederick/default.html

Genealogy SIG

Volunteer needed to restart SIG.

Graphic Arts SIG

2nd Saturday of the month, 10AM-12 noon, at Mac Business Solutions, 9057 Gaither Road, Gaithersburg

www.wap.org/gasig/default.html

iMovie SIG

2nd Thursday of the month, 7:00 PM, WAP office.
Contact: Hal Cauthen at ChgrHorse@aol.com

Power User SIG

1st Monday of the month, 7:30 PM, WAP Office
Contact: John Barnes at jdbsci@speakeasy.org
www.wap.org/power/default.html

Retired SIG

3rd Friday of each month; 9:30 AM till 12 noon normally at the WAP office. Each meeting will have a topic, but be run informally.

www.wap.org/retired

Teen SIG

1st and 3rd Thursdays of the month, 6:30 PM to 8:30 PM, WAP Office. Contact: Will Byrd at emacs_groks@yahoo.com

Virtual SIGs:

Apple II Information:

www.wap.org/aple2/forever.html

Apple III Information:

www.wap.org/aple3/default.html

iMac Information:

www.wap.org/events/imacinfo.html

WAP Garage Sale— June and December

WAP General Meeting

4th Saturday; 9:00 AM; Northern Virginia Community College, Annandale Campus, Community Cultural Center Auditorium.

Inactive SIGS

If you are interested in restarting any of these SIGs contact the office.

AOL SIG

Apple III SIG

Excel SIG

FileMaker Pro SIG

Game SIG

Mac Programmers' SIG

Newton Developers' SIG

NoVa Education (Ed) SIG

QuickTime SIG

Stock SIG

Telecomm SIG

Women's SIG

Notice: Plans change! Anyone with calendar information please call the Calendar Editor, Bill Wydro (301) 299-5267 or the WAP Office (301) 984-0300.

Default Folder X A Review

by Brian G. Mason

SOMETIMES YOU find an application or a utility that eventually becomes such an integral part of how you work with your computer that you just wouldn't have the same experience with your computer if you didn't have it. This is the case with me and *Default Folder X*. Frankly, getting around my Mac when trying to open or save files would be about twice as hard if I didn't have *Default Folder X*.

Default Folder X is technically a Preference Pane. After installing *Default Folder X*, you will see it at the bottom of your System Preferences. (See figure System Preferences). What *Default Folder X* provides is the ability to find the files you want to open or find the places where you want to save your files very quickly and easily.

You have a lot of flexibility with respect to how *Default Folder X* behaves. But very simply, it attaches itself to the right side of your open or save dialog window and gives you several options for locating a folder or a file available to your computer. You can get where you want to go based on the drives available to your Mac, the favorite folders you have defined, the latest places you've visited on your Mac, or the folders you currently have sitting on your desktop.

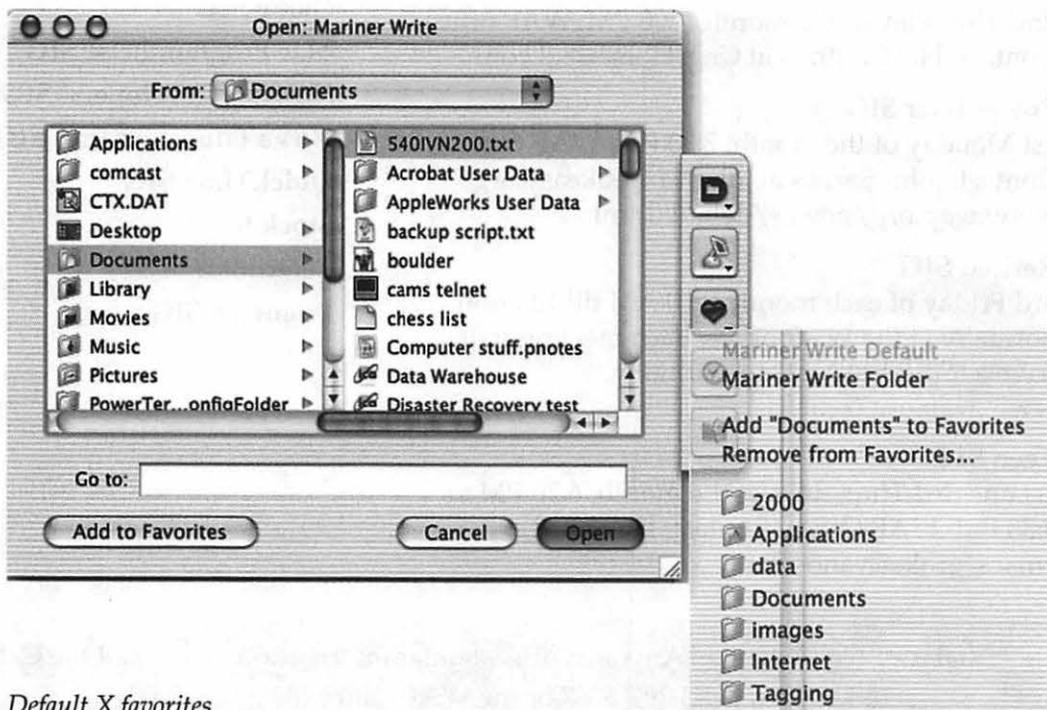
When you go to open or save a document a bar of five icons will appear to the right of the dialog box. This bar follows the dialog box around no matter where you move it. The first icon is the Default X

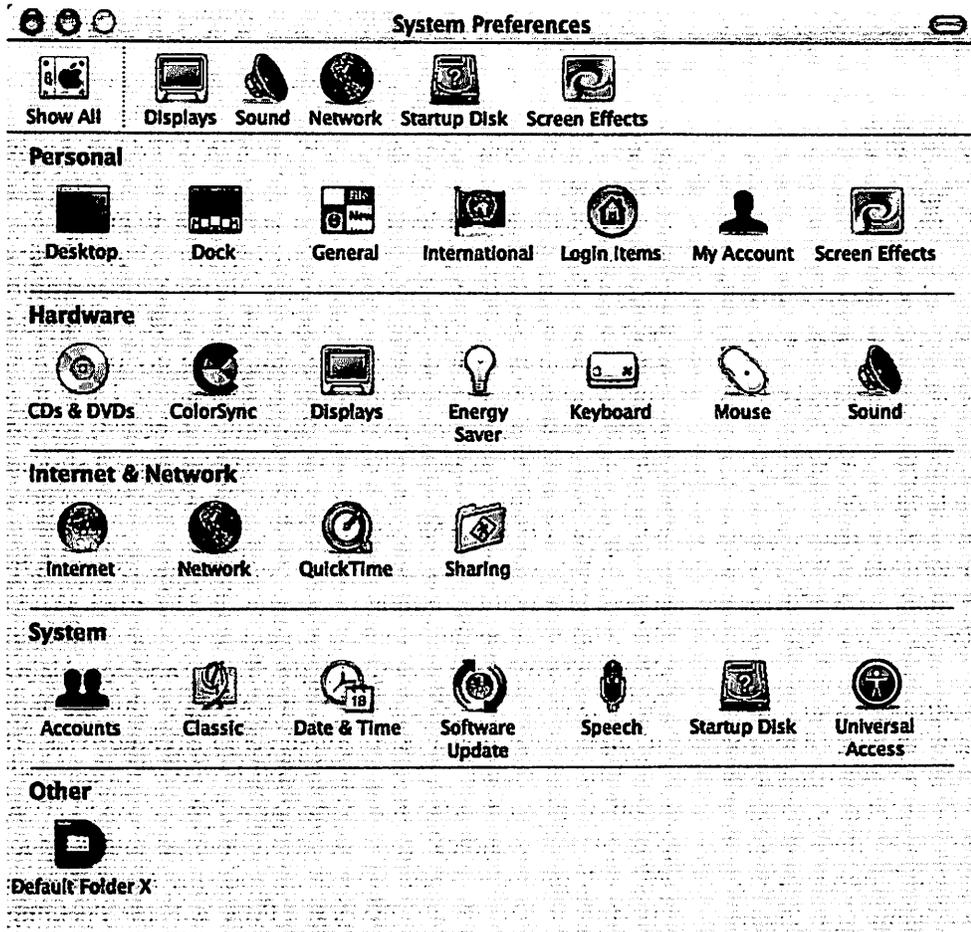
Default X favorites

"With all of these options, it is very rare that you have to dig through a whole bunch of folders to get where you need to go. Most of the time you can navigate directly to the folder you need by picking one of the options offered by *Default Folder X*."

Folder icon. You can accomplish several things by clicking on this icon. Besides "About *Default Folder X*", you can get to the *Default Folder X* preferences. But you can also define the currently selected folder as the default folder, open the currently selected folder in the Finder, or create a new folder within the selected folder. You can also rename the currently selected file, open the "Get Info" window for the file, or move the file to the Trash. I don't usually think of going here to accomplish these tasks, but these capabilities are here if you happen to be passing by.

The next icon is the one you select if you want to get immediately to the root level of the drives you have mounted on your desktop.





System preferences

The third icon is where you go if you want to navigate to your the folders you've set up as favorites. You also have the ability of immediately making the currently selected folder one of your favorites (see figure Default X Favorites).

The fourth icon lists the folders you visited last. You can have *Default Folder X* list up to 100 folders.

The final icon lists all of the folders you have open on your desktop. But in the latest versions of *Default Folder X*, you don't even need to use this icon. As long as you have the box checked in the *Default Folder X* preferences to display a folder in the file dialog by clicking on the folder's window in the Finder, you can navigate to the folder this way. If you have a lot of windows open on the desktop and you have the box checked in the preferences to show the gray outlines of folder windows when the mouse passes over the window, just by moving your mouse over the desktop, you can find the folder you are looking for even if it is hidden underneath another folder or another application, click, and the name of the folder appears in the file dialog.

Another great feature is the ability to tell *Default*

Folder X to go directly to the last file selected, or "rebound". This means that when you open an application and go to open a file, you are taken to the last file you were working on in that application. How sweet! For example, with communications programs, you usually want to open a settings file to start work. You never have to find it. It is always automatically selected by *Default Folder X* as the file to open.

With all of these options, it is very rare that you have to dig through a whole bunch of folders to get where you need to go. Most of the time you can navigate directly to the folder you need by picking one of the options offered by *Default Folder X*. If you install *Default Folder X* in your Dock, all of these navigational aids are available to you from there as well.

I have had very few problems with *Default Folder X*. But they are so rare and so easily

resolved, that I can't fairly report on any of them. I would definitely give this application 8 slices out of 8 of the Washington Apple Pi.

[Editor's note: make sure you upgrade to *Default Folder X* 1.9 if you plan on using Mac OS X 10.3. If you try to use an older version of *Default Folder*, all applications will immediately quit when launched. St. Clair Software has detailed information on the problem, and solution, on their Web site.]

Default Folder X
 Latest Version: 1.9
 St. Clair Software
<http://www.stclairsoft.com>
 Requirements: Mac OS X version 10.1.2 or higher
 \$34.95 shareware

Mac OS 8.1 to Mac OS X

by Stuart Bonwit

I BELIEVE that, if something works, do not mess with it; if it ain't broke, don't fix it!

That was my philosophy with my Power Mac 8600 and Mac OS 8.1. And it worked for a long time.

My main preoccupation with my computer is creating animations. My Power Mac 8600 with Mac OS 8.1 was doing fine making and playing the animations. It still does. I use an animation program called Poser 4 from Curious Labs.

I was reading on the Poser newsgroup about all the wonderful things people were doing with Poser 5 for the PC. A question to Curious Labs got the answer that they were "working on" Poser 5 for the Mac. Out of the blue I got a (broadcast) email from Curious Labs that Poser 5 for Mac OS X was available *for download*. Two reasons I did not download it: 1) I was still on dialup and the file was multimegabyte; 2) I wanted a physical thing such as a CD and (ha, ha) a printed user's manual. [Two more

things: 3) I have not yet bought anything on the Internet! 4) I didn't have Mac OS X.]

A subsequent Curious Labs email announced that the "boxed" Poser 5 for Mac OS X would be available in October 2003. Wow! As soon as it's available I'd get a new computer.

Well, things started falling apart (not with Poser). My system with Netscape 4.73 was having increasing troubles. I would download a Web page. Usually the banner would appear quickly. Then there would be lots of activity; I could see indicators of lots of bits coming into my computer. This would suddenly stop with a blank screen. The gurus at the Washington Apple Pi TCS (bulletin board) would tell me this is because I have that old Netscape; I should upgrade. It turns out that the latest Netscape that works with Mac OS 8.1 is Netscape 4.73!

In the meantime my wife is bugging me to get high-speed. She wants nothing to do with the Internet. When she wants something looked up, she asks me. She then sits next to me at the computer (in dialup) and complains that it is too slow. So, I got DSL. It was great. But the only difference was that those blank screens just came in faster!

I finally said, "The ___ with it. New computer!" Should it be an iMac flat panel or a Power Mac G5? A purely non-technical consideration pointed to the iMac: We will probably soon be leaving our big house for an apartment. The small size of the iMac was the deciding factor.

So, I got the iMac and bunch of other stuff. As of about



Tele-Communications System

Washington Apple Pi's 24-hour General Meeting

<http://webtcs.wap.org>

Open to all Pi members

And view your mail over the Web at <http://mail.wap.org>

System software & updates Questions & Answers Vendor Patches & Updates Macintosh Knowledge Publicly distributed software Information Apple II, III Announcements PowerPC Advice & Hints Newton Bad puns Hot Tips Usenet Juicy Rumors Washington Apple Pi Events Calendar Want Ads Special Offers Software & Updates Questions & Answers Publicly distributed software Announcements PowerPC Camaraderie Advice & Hints Hot Tips Usenet Newsgroups Repartee Help Juicy Rumors Washington Apple Pi Events Calendar Want Ads Vendor Demos & Special Offers System software & updates Macintosh Knowledge Publicly distributed software Information Apple II, III Announcements PowerPC Camaraderie Advice & Hints Newton Bad puns Hot Tips Usenet Newsgroups Repartee Help Juicy Rumors Washington Apple Pi Events Calendar Want Ads Vendor Demos & Special Offers System software & updates

3-1/2 weeks after the purchase, most of the "other stuff" is still in the boxes. My wife suggested that she inherit the Power Mac 8600 to replace her old beloved 75 MHz PC. Her reasoning: 17" screen vs 15"; 300 MHz processor instead of 75 MHz; and the paint program (Color it!) and the word processor (WordPerfect) were vastly superior to what she had on the PC. I then made the Big Mistake; I said, "Yes," (to her request). She installed a couple of her favorite PC/Mac programs. Now, I can't get her off the ___ machine!

So, I turn on the iMac. Read the ___ manual? Are you kidding? We're talking Mac! And I say, "What's all the fuss? This works just like my old 8600." All (most?) of the keyboard shortcuts are the same. Yes, some of the details of controlling displayed pages are a little different but they're obvious. I subsequently learned that there are *lots* of differences, many of which consumed much time corresponding on the Pi's TCS forums. For instance: In WAP Webmail for Delete, Purge, and Send there is no "are you sure" warning/button; there appears to be no alarm clock; the up/down and left/right arrows in windows are each close to each other rather than at ends of the scroll bars, a convenience (and a choice); the Empty Trash command is right above the trash can, another convenience; there is no listing of all open applications as on the 8600 in the upper right corner; and, boy, what security: you can even put passwords on individual files (could you do that in Mac OS 8.1?).

When I first fired up the DSL on the iMac [it worked right off; DSL was already working on the 8600], I was informed by Apple that there was an upgrade for Mac OS X 10.2.7 to 10.2.8. I downloaded and installed it. And for someone who stuck with Mac OS 8.1 for an eternity, I thought this early update was pretty cool!

One thing I noticed right off is that on the 17" wide screen, everything is squeezed over on the left side. On the other hand, I can have two word processing documents on at the same time at extreme left and right. I can even have a third page in the middle. If it is behind the others, it is still visible and can be easily brought forward with a click.

Mac OS X apparently assumes that the user is not well organized. The whole filing system is set up at the very first boot. And when you save something, it "knows" where to put it. You may disagree and change it.

So, there you have a greenhorn's early experiences with Mac OS X. Be sure to tune in for the next thrilling installment! ■

Impressive Apple Firsts

Microsoft and Intel may well have the upper hand in numbers out there, but Apple continues to be the leader in innovation. The company's ability to turn ideas into "insanely great" products gives it a leadership in the industry that Bill Gates can only wish for.

- Apple was the first personal computer company to use a mouse.
- Apple was the first personal computer company to ship a computer with a color screen.
- Apple was the first personal computer company to make a portable.
- Apple was the first to ship a personal computer with a floppy drive.
- Apple was the first to ship a personal computer *without* a floppy drive.
- Apple was the first to ship a personal computer with a CD-ROM drive.
- Apple was the first to ship a personal computer with a DVD-R drive.
- Apple invented the trackpad (PC users were using a trackball or red nubby).
- Apple invented FireWire.
- Apple was the first to offer wireless networking in a personal computer.
- Apple invented TrueType fonts (now a PC standard).
- Apple was the first to release a PDA (remember the Newton?).
- Apple was the first to allow use of multiple monitors.
- Apple was the first to use icons or pull-down folders.
- Apple was the first to do away with CRT's and use only flat panel displays.
- Apple was the first to release a 64-bit processor in a consumer machine.

Clone Wars

by Guy Serle

MOST OF US who have been around Apple computers for the last few years can look back at the chaos of the mid 1990s and hope that those circumstances never return. But there was some good in there with the bad. In the mid 90s, Apple finally decided to allow other manufacturers to build Macintosh compatible computers with the hope that it would build up the user base. With a larger user base, when people had outgrown their low-end Mac clones (I myself had a Umax C600, a 240MHz 603 PPC based machine that I was very fond of), they would purchase a higher end model from Apple.

At least that seemed to be the theory. What actually happened was that the Mac clone makers started to outdo Apple at its own game. Faster, cheaper machines started appearing in the major Mac reseller's flyers and almost none of them came from Apple. The real innovation was coming from companies like Power Computing, Umax, and even Motorola (and its sub-licensees). They didn't have to support huge research and development facilities. They didn't have to use proprietary peripherals. They used inexpensive standard PC hardware and were able to undersell Apple's line. Even the cases they used were regular PC computer cases. Usually nothing fancy. They got the job done and allowed for upgrades or additions as wanted or needed.

The point I'm trying to make here is that when the clones were around, we as Mac Users were not stuck with whatever Apple designed for us to use. Power Computing, Motorola, and Umax were putting Mac motherboards and power supplies into standard PC cases to keep costs down. Coolness was not even a secondary issue (though Umax's S900, a 604 processor based full sized tower, was a nice, easy to upgrade design). These machines may not have looked like Macs, but they acted like them. Let's face it; you buy a Mac (or even a PC) not for the way they look, but for what you can do with them. People who buy computers because of a cool looking case really should have their medications checked because I think it's time to up the dosage.

We all know what happened next (NeXT?). Steve Jobs returned and put the kibosh on the whole thing.

"Flash forward a few years.

Apple is back with cool hardware and software exclusively for us Mac users. There are still people using Mac clones out there, but they are starting to fade into the background as the individual machines fail and fewer components are available to repair or upgrade their machines."

Apple bought Power Computing outright and refused to allow the others a license for the Macintosh OS for their upcoming machines. Most of the Mac clone makers quickly went out of business. Umax is still around, but hasn't really recovered completely from the clone debacle. Unfortunately, with Apple bleeding cash out the wazoo, there were few alternatives. They could either bring the hardware back home or become a strictly research and software company. As 75 percent or more of Apple's revenue comes from hardware sales, what choice did they really have? Struck back the Empire did, and won. End of story. But is it? Ah, my young Padawah, *really* over, nothing ever is, heh heh (with apologies to Frank Oz and Yoda).

Flash forward a few years. Apple is back with cool hardware and software exclusively for us Mac users. There are still people using Mac clones out there, but they are starting to fade into the background as the individual machines fail and fewer components are available to repair or upgrade their machines. Of course if all they use their machines for is surfing the Web or writing letters, they're just fine. However, if they want to get into Apple's proclaimed "Digital Lifestyle," they are most likely SOL (Still Out of Luck). The Macs and clones from that era are cursed with relatively slow bus speeds (50Mhz or less), hard to find memory (some machines from that era max out at 128 megabytes or less), and no Mac OS X support. To all of you who are still using Mac OS 9 and earlier operating systems productively and without apology, I say this. *Fight the power! Don't give in to the man!* Add whatever counter-culture slogans you wish here. The future, however, is not in your favor. Don't shoot the messenger, that's just the way it is. Apple is going full bore with Mac OS X and that is not going to change.

Apple's new case designs for the post-beige G3 and

G4 processors are very nice. Pretty to look at, simple to open, and easy to add memory, PCI cards, or hard drives. But, what if you want more? What if you want front panel USB or FireWire ports? Unless you have \$2-3000 bucks for a new Power Mac G5, it's not going to happen. If you crave more than two internal hard drives or optical drives you're generally out of luck. Can't easily be done with an Apple case.

However if you're a little handy with tools, you can put your Apple motherboard in a PC ATX case and get all the expansion you'll probably ever need. Keep a few things in mind: this is not for the faint of heart, and be assured your Apple warranty (if any) will be blown clean out of the water by this. Also take into account that you are dealing with potentially lethal high voltages and if you're the type that doesn't pay attention to warning labels, *Don't Do This!* There is the possibility of electric shock and this is nothing to kid around about. Lastly, remember that once you start down this road, Apple (like the old *Mission Impossible Force*) will disavow any knowledge of you and your computer. I won't go into the "how-to's" in this article. That's not really the focus of what I'm trying to convey.

If this interests you in any way, go to <<http://www.xlr8yourmac.com>> and poke around in the "Systems" area; all kinds of case modifications with instructions are there for you to browse. There are also real world reviews of various upgrades by the people who actually own the computers the modifications were done to. This is much more reliable information than what you'll get from a typical Mac Magazine review. Do them a favor and support their sponsors too. This site is a wealth of information for those with older (and not so old) systems.

A Recap

So far we've gone over a little Apple history, talked about the clones, and briefly chewed the fat about case modifications. Where the heck am I going with all this? OK, I'll tell you.

While browsing some of the various Apple/Macintosh rumor sites (as I am prone to do), I came across an article about a man who was in the process of designing a pizza-box shaped case (similar to but larger than the old LC cased Macs) that an Apple Macintosh motherboard could be put in. The man's name? John Fraser of Core Computers.

His was definitely a bare bones kind of endeavor to keep it as inexpensive as possible. On the other hand, it was supposed to make use of the Gigabit motherboard

(used for the 733/867/933 G4 QuickSilver towers), so it was no slouch. Because of the shape of the case, you could only use one PCI slot, so large-scale expansion could only be accomplished through external peripherals. Sound familiar? Kinda like what I was complaining about with Apple cases earlier. The difference is that you would get a G4 based Mac at a bargain (compared to Apple's prices). As described, you could either get this as a low cost kit (add your own processor/memory/hard drive/optical drive), or fully assembled for a bit more. Either way, it was still cheaper than, say, an Apple eMac. It had front and rear FireWire/USB ports along with the usual ports typically seen on that era's Macintosh. The name it went by was the iBox. Concept drawings of the iBox can be seen at <<http://www.2khappyware.com/>>.

Unfortunately because of circumstances beyond John's control, the iBox never went much farther than the concept stage. In the process of putting the project together, however, John had found the significant resources necessary to put together as many Mac compatible computers as he probably would have found customers for. He had a source for Gigabit motherboards, power supplies, and processors. All he needed was a case to put them in. With John's experience in custom building PCs, this was not an insurmountable obstacle.

ATX case in hand, John starting building Mac clones. They had all the expandability of Apple's cases (admittedly not quite as easily accessible, though) and then some. Want three optical drives? How about four or more hard drives? Front panel USB and FireWire ports? Not a problem. Want to customize your case to fit your unique personality? MicroCenter and CompUSA all have customizing kits and parts for ATX cases and will be happy to satisfy your maniacal needs. Everybody's happy! Well, almost everyone anyway. Can anyone guess where this is going? Apple came down on John Fraser and without even needing their stable of hungry lawyers, shut him down. Rather than get even more long winded than I usually am, I decided to go right to the one person who had been there at the start with a dream of selling cheap Macs (and making at least a little profit along the way), John Fraser.

Apple Pi: Hi John. Thanks for answering a few questions.

John Fraser: No problem.

AP: How did you get started with computers and how old were you at the time? Not necessarily Macs, but in general.

JF: I was about 4 years old when my parents got an

Apple [Macintosh] 512KE (Note: The 512KE was the successor to the original 9 inch monochrome Mac. The biggest difference between them was mostly the amount of memory it came with). I started by playing *Early Bird Games* and *Number Munchers* and finally got into Microsoft's *Flight Simulator* for the Mac when I was about 6 years old. By the time I was between 6 to 8 years old, I started to spend time modifying programs to include my own text messages using a program very similar to ResEdit (Note: ResEdit was a program that allowed you to modify different parameters of Macintosh programs native to the Mac OS before the release of Mac OS X). My Aunt who was in college got me a copy of Microsoft Basic for the Mac OS and I began programming by looking at the past examples included on the disk. Simple ideas like graphics and screen savers were my specialties.

AP: So your first computer was a Macintosh.

JF: Yes, an Apple [Macintosh] 512KE was my first computer. It didn't have a hard drive, so the OS and bundled applications were all on 400K and 800K floppy disks. I still have the computer and it still works. I even acquired an original Apple 20MB hard drive for it though it is not currently in use. I didn't get into X86 PC's until well into the 1990s.

AP: I know your company previously made PCs. Are you still in that business?

JF: Yes, although I specialize in building custom high end PCs. There is no market left to compete with Dell and the other eMachines-type companies without using the cheapest and slowest computer components. That's a good idea for short-term profits, but warranty support would catch up to us in the future and cost more than it's worth.

AP: Where did you get the idea of building Mac based computers using PC cases?

JF: I wanted to build a headless iMac and prove that Apple could do the same close to the \$500-600 range. I found a person on eBay that was selling Blue and White G3 motherboards for \$100. It kind of started as a proof of concept to see if it was economical. All I needed was a case and it's pretty widely known that the B & W G3 series uses a similar power supply to a standard PC ATX based computer. From my PC business, I had plenty of cases so I started mounting the first G3 motherboard into a PC tower case.

AP: Had you built any Mac based computers just

for yourself prior to engineering the "Core Computer" cases?

JF: I built five or six different computers using the G3 and G4 motherboards. Some I still use and some I will be selling in the future on eBay.

AP: Did you own any of the previous (1996-1998) Mac based clones?

JF: I owned a UMAX C500 and a UMAX S900. (Note: The C500 was a 140-280 MHz 603 processor based desktop and the S900 was a 160-300 MHz 604 based tower.) Both were purchased after the clones had stopped being made and were great low cost machines that allowed for factory upgrades. They also offered the IDE bus and PCI cards that many of the Apple machines were missing until the G3 and above series came out. Their design using lower cost technology kept them as viable machines to upgrade until about 18 months ago.

AP: Let's talk about the iBox. Can you describe the iBox and what place it fits in the Mac hierarchy?

JF: The iBox was our name for the project before it became an attempt at profits. The iBox's original concept would be for Apple to design a case similar to ours using the older SDRAM memory and G4 processor technology, but limit the internal upgrades like PCI cards, optical drives, and hard drives. Basically, it would be like an iMac without the limiting built-in screen.

AP: Who would be the target market for this type of machine?

JF: I can think of two off the top of my head. Switchers from the PC side, for example. By placing a superior AGP video card in it but still keeping the cost down, switchers might feel comfortable moving to the Mac platform for the first time. Users who are used to paying \$500-800 for a desktop with all the expansion are typically scared to move to a limited monitor and absolutely no internal expansion of the consumer eMac or iMac. The iBox would allow them to choose whatever type of monitor (SVGA, ADC) they wanted and have dual monitor support. No low cost PC does anything like that. Gamers would like the iBox also. By keeping the machine fast but not using large PCI slots, huge hard drives, and other useless to them upgrades, the machine could target gamers. Those kinds of upgrades might be typical for graphic designers, DV video and audio users, but gamers want speed. The iBox allows gamers to get a fast Mac without worthless expansion (to them anyway). Currently, only Apple's high-end machines come with the high-end video cards and they start in

the \$2400 and above range. Even an iMac with an ATI 9800 chipset would make a very viable gaming machine but Apple will never make it.

AP: What kind of problems did you encounter in designing a case for the iBox? Which were you able to resolve and which ones turned out to be insurmountable?

JF: I really wanted a fanless case, but the issue of heat from the dual processors or even hot single processors made that impossible. The only issue we hoped to resolve but couldn't was not engineering, but business related in terms of supplies and parts. We needed to find a large enough supply of parts to make it worthwhile to produce the case, which had terribly high startup costs and was very expensive to create. In excess of \$100 per case.

AP: Is the iBox officially dead?

JF: I would hope not, but it's looking bad. The case design is expensive, we have no long term large supply of boards, and Apple seems unwilling to communicate with us on trying to work together to create a machine based on an old design. I have attempted to talk to Apple without a reply for over two months.

AP: I've seen the cases you were going to make Core Computer Mac Compatibles from. What were you going to call them and were there different types?

JF: The CoreBox was the original iBox design adjusted for us to be able to build it. It allowed for more expansion than a machine from Apple would want, but its small size was a nice change from Apple's larger tower designs. A design that hasn't been seen since the Cube.

AP: From what I've read in the various Mac-related forums, the people who have received Core Computer Mac compatibles are very happy with them. What did the customer get, how much was it, and what did the customer need to supply to finish the job?

JF: The beautiful part of our product was that the customer got to choose anything and everything. For \$379 the customers received an Apple power supply, motherboard, and a case with all these objects inside. Like a home built PC, they needed to purchase or borrow from older computers a processor, memory, video card, hard drive, and optical drive. This was the most popular option as many customers already had older beige G3s that they could pull memory, CD, hard drive, and video cards from, and put them into a newer com-

"I started by playing *Early Bird Games* and *Number Munchers* and finally got into Microsoft's *Flight Simulator* for the Mac when I was about 6 years old. By the time I was between 6 to 8 years old, I started to spend time modifying programs to include my own text messages using a program very similar to ResEdit..."

puter. For \$699-1199, it included a processor from GigaDesigns (single) or PowerLogix (dual). We even sold complete systems with 80 GB hard drives, 52X CD-RW, and even a few custom builds that included a dual 2X DVD-R, 2 GB of memory, and other high end features that would have cost them double on an Apple system.

AP: Can you give us a brief history of Core Computers?

JF: Core started as the concept of the iBox. Just to prove that Apple could build such a system. When *Wired* magazine got wind of the idea and ran their story (note: search the *Wired* website for the original story), we began getting 3000-5000 emails a day! I knew at this point that my idea and my good friend Mario McCheli's iBox design was a sure win business. We used the initial press and future press as advertising, and started to build and prove that it could be profitable. After 2-3 months of crazy 18-hour days without relief, we were able to build an inventory of all of our parts.

Unfortunately, just as we thought we were set to support our customers for a long time, our power supply supplier told us the day after our power supplies were to arrive that they couldn't sell to us anymore because of a legal contract they have with Apple. This left us with more than \$10,000 in inventory of cases, motherboards, processors, video cards and more, but no power supplies to give the customers their orders. After explaining the details to our customers, their response was understandable but unfortunate for us. Massive refund scares locked in our only finances, and the rest was in inventory. After this complete business breakdown, SPAM and other things filled our mail-

boxes. This scared us and left many customers with unanswered support questions, unanswered emails, and full answering machines.

This also caused a personal financial breakdown. After regaining my feet with the help of my wife and family, I got to work on repairing lost communications with past customers. We are now in the process of clearing our inventory on eBay to gain money to offer refunds or ship what we can to past customers. I'm happy to say that most of our past customers have been very understanding and have been very communicative. It makes the process much easier for everyone.

AP: Have you managed to complete all the orders from your customers who were willing to wait?

JF: We are actively working to repay past customers and fill orders as soon as possible. To be honest, not all the issues are resolved and the situation was escalated by certain customers who thought they would get a faster answer if they spammed my voice and e-mail. That month, my e-mail account kept filling up and my cell phone bill was over \$1000. As most of my customers would say, we are now keeping in good communication, and with a new source of income selling just the modified cases, all customer issues should be solved quickly.

AP: How did you get the parts you needed to complete the orders?

JF: I found what we thought might be a new supplier that didn't have a contract with Apple. They also told us they would be able to get a large quantity of boards. As it turned out, they had some parts, but not enough to cover the final orders. They were our last hope of continuing Core Computers as it had been.

AP: Are you going to continue to try and make Mac compatible computers from Apple motherboards and ATX cases? What's next for you?

JF: We are starting to work out the details of producing cases similar to ours, but not selling motherboards or any Apple parts in them. Apple parts and motherboards are easy to find one or two at a time from local dealers, eBay, and even directly from Apple itself. This will allow us to expand our line beyond the G4. I've already had requests for our cases to be compatible with the older Power Mac 7500, 9600, and even iMac motherboards. I am still hoping for a way for Apple to work with us or at least respond to requests to start a conversation.

AP: I'm sure you must be peeved (to put it mildly) at Apple for stopping you from what could have been a very lucrative business. What was your reaction to the news that Apple was going to prevent your supplier (and any others) from selling you motherboards and power supplies?

JF: It was something I really didn't see coming. I thought people installing the Mac OS on non-branded Apple hardware would be an issue before using 3-year-old motherboards. Instead of protecting their property and their software, I found them sticking it to me and any similar business by trying to protect 3-year-old hardware designs.

AP: What advice would you give to anyone about to attempt to make a Mac compatible computer from PC standardized cases and parts?

JF: Research. 90% of the Core business was research. Can it be profitable? Is it quick and easy to do? Sure, you'll find someone who wants to spend 40 hours on sticking an iMac into an old wooden record player, but the vast majority are looking for something not only different, but also quick and low cost.

AP: Did you see the submissions in xclr8yourmac.com about people putting Apple motherboards into PC cases and the horror stories about trying to fit Apple's style of motherboards and plugs?

JF: Yes I did, and I have direct experience with this. I had created a conversion adapter that allowed posting a Gigabit Ethernet board using a standard \$14 PC ATX power supply. The time involved in making the adapter and its lack of reliability forced us to purchase a much more expensive Apple power supply.

AP: Speaking of plugs, do you have any plugs or accolades to give out to any of the people who helped get you started?

JF: First and foremost to Mario McCheli. He was the person who took my words and description of the iBox and turned it into a real live picture. It was his design that got people interested and my hardware design that got people hooked. Without Mario, Core would never have been more than a "case mod" on xlr8yourmac.com. Everyone at dealmac.com and forums.dealmac.com. All the hotline chat community (a select group of dealchatters).

AP: Thanks for taking the time to answer a few questions, John.

JF: My pleasure. ■

Low-Cost Gifts For Macintosh

WASHINGTON APPLE Pi's Power User SIG (Special Interest Group) had a brain storming session in October, and came up with the following ideas for low-cost gifts for a Macintosh – your old Macintosh, your new Macintosh, or someone else's Macintosh.

Griffin Technologies PowerMate

The PowerMate is a rotating button that plugs into the USB port, with a glowing blue ring around the base when it is on. Even not doing a thing, it looks cool, but it comes with software allowing it to be added as a control for games, Web browsers, word processing software, and dozens of other uses.

Adobe Photoshop Elements

This low-cost version of the most commonly used functions in Photoshop is also easier to use than the full version.

Memory

Memory prices have continued to drop. When the Apple II was first released, memory was close to \$1,000 for 1K of RAM. Now you can get a 512 MB DIMM for a Power Mac G5 for under \$90 – 500,000 times as much memory for 9% of the price.

QuickTime Pro

For \$29.99, you can upgrade from the regular version of QuickTime to QuickTime Pro, which allows you to play movies using your full screen, prepare clips for streaming, import and export a vast variety of still and video formats, create slide shows, edit QuickTime clips, save QuickTime clips from the Web, and create MPEG-4 clips.

.Mac account

Apple's .Mac service gives you 100 megabytes (or more) of on-line storage for Web pages, photos, music, calendars, backup and other purposes, plus access to a

wide variety of utilities to make your Mac happier, plus IMAP-based E-mail and Web mail, and other goodies. The new, seamless integration with Mac OS X 10.3 makes it even more attractive.

Mac OS X Disaster Relief, by Ted Landau

A massive, well-indexed and well-organized book that tells you not only how to recover from Mac OS X disasters, but how to avoid them, too.

Washington Apple Pi apparel

Available from <http://www.cafeshops.com/wap/>, there are a wide variety of shirts, caps, clocks and other items that not only have a functional purpose but also help support a wonderful computer user group.

Belkin iPod Media Reader

This clever little device allows the iPod to store photos from your digital camera on your iPod, which is much easier (and lighter) than carting around a laptop computer to "burp" your camera.

Belkin iPod Voice Recorder

Another clever iPod accessory, this gizmo allows an iPod to be a portable voice recorder for storing brainstorms, memos, notes and interviews.

iTunes Music Store Gift Certificates

Available in amounts ranging from \$10 to \$200, you can offer the gift of music in a whole new way.

Apple clothing

The Missing Bite (<http://missingbite.com/>) offers clothing, watches, pens and other stuff with the famed Apple logo. (Technically, this is not a Macintosh gift since your computer probably can't use most of these items.)

Washington Apple Pi membership

One of the best bargain gifts is a Washington Apple Pi membership. Of course. ■

Macintosh Web Browsers

by Darrel E. Knutson

[Editor's Note: Darrel Knutson maintains a website that strives to document all known Mac web browsers past, present and future. We appreciate his willingness to share his findings with WAP members. We have compiled a Mac OS 7/8/9 and Mac X combo CD-ROM containing many of the browsers listed below – see the "WAP CD" note next to each setting. Some programs require Internet access to download the full program. The CD-ROM will be available at the monthly meeting, and from the office for \$10.00.]

This list (found at <http://darrel.knutson.com/mac/www/browsers.html>) contains only browsers that work on Apple Macintosh hardware running any version of any Macintosh operating system.

I have been maintaining this selection of Mac browsers for years. All entries made in the past few years are dated, with newer updates listed first. This means that more frequently updated browsers will often appear at the top, but what the heck, it's just a silly list. You can read the comments to find out what I think about each browser.

All opinions expressed are my own.

Mozilla.org (WAP CD)
Mozilla

Versions: 1.0 , 1.1, 1.0.1, 1.2b, 1.2, 1.2.1, 1.3a, 1.0.2, 1.3b, 1.3, 1.3.1 (PPC/OSX), 1.4a, 1.4b, 1.4fc1, 1.4rc2, 1.4rc3, 1.4, 1.5a, 1.5b, 1.5rc1, 1.5rc2 (OSX)

[27 September 2003] Mozilla is the basis for the latest versions of Netscape and runs reliably on multiple operating systems. This browser has almost complete support for Web standards and has excellent page rendering, but it is unfortunately very slow to start and doesn't respect the Macintosh user interface - the scroll bars for instance. Mozilla code is the basis for lots of other browsers on other systems and for Chimera/Camino (and a port of Phoenix, now called Firebird) on Mac OS X. Strangely enough, the final version of 1.1 was released

before the final version of 1.0.2 and *after* 1.3a. As of 1.4a support for systems older than Mac OS X has been dropped, although 1.3.1 is a bug fixed version for PPC.

The Omni Group (WAP CD)
OmniWeb

Versions: 4.1.1, 4.2b1, 4.2b2, 4.2, 4.2.1, 4.5b1, 4.5b2, 4.5b3, 4.5rc1, 4.5 (OSX)

<http://www.omnigroup.com/products/omniweb/download/>

[30 August 2003] Considering the news that Microsoft will no longer be releasing new versions of Internet Explorer, my default browser under Mac OS 9 and X, and that OmniWeb 4.5 now uses the WebCore foundation from Safari, I think OmniWeb is one of the best browsers ever made available on the Macintosh platform.

OmniWeb is Safari done right. It provides options for features I am familiar with in Internet Explorer and that I found missing in Safari. I can better control the presentation of images, plug-ins and pop-up windows with OmniWeb and take control over my browsing experience rather than wonder why Apple didn't include features that I think are vital for a browser.

Safari users (and users of Internet Explorer looking for a future alternative) should take OmniWeb for a spin. OmniWeb's feature set blows Safari completely out of the water and \$29 is not much to pay for a product that is closely integrated into Mac OS X and provides a richer experience on the Web.

After switching to Internet Explorer 5 from Netscape 4 many years ago, I am now changing my default browser to OmniWeb.

AppMac (WAP CD)
wKiosk

Versions: 1.0, 1.0.1, 1.1, 2.0b1, 2.0, 2.1, 2.1.1, 2.2 (OSX)
(website update: 2.2.1, 2.3 preview)

[21 August 2003] A commercialized Mozilla clone for kiosk systems, based on the Gecko engine. Version 2.1.1 was released for a short time and then pulled from the site.

Opera Software A/S (WAP CD)
Opera

Versions: 5.0tp1, 5.0tp2, 5.0tp3, 5.0b1, 5.0b2 (PPC),

5.0tp1.315 (OSX), 5.0b1 (OSX), 5.0b2 (OSX), 5.0b3 (PPC), 5.0b4 (PPC), 5.0b5 (PPC), 5.0b3 (OSX), 5.0 (PPC), 5.0b4 (OSX), 6.0b1 (OSX), 6.0b2 (OSX/PPC), 6.0b3 (PPC/OSX), 6.0 (PPC/OSX), 6.02 (PPC/OSX), 6.0.3 (PPC/OSC)

[20 August 2003] This is the fastest browser I have yet seen on Mac OS. It's also not bad on BeOS, Linux and Windows. Opera clearly demonstrates that improvements to a satisfying Web experience don't depend on the size of the company that produces it. Version 6.0 provides nearly full support for CSS, but handles some things differently from other browsers. Personally, I prefer this browser to any of the browsers based on Mozilla code. According to Opera, version 6.0.3 is an update to provide support for Mac OS X 10.3 (Panther) before version 7.x is released later on this year.

iCab Company (WAP CD)
iCab

Versions: 1.0p1, 1.0p2, 1.0p3, 1.0p4, 1.0p5, 1.0p6, 1.0p7, 1.0p8, 1.0p9, 1.0p9a, 2.0p1, 2.1p, 2.1ap, 2.2p, 2.3p, 2.4p, 2.5p, (68k/PPC) 2.5.1p, 2.5.2p, 2.5.3p, 2.0p6, 2.7p7, 2.8p, 2.8p1, 2.8.2, 2.9, 2.9.1, 2.9.5 Preview (68k/PPC/OSX)

[9 August 2003] iCab, available in beta versions for years now, is fast, flexible and takes very little RAM. It runs well on MHz-challenged Macs and is one of the nicest browsers currently available for Mac OS X. To my knowledge it is the only Mac browser that runs on every environment: 68k, PPC and Mac OS X. Support for CSS1 is currently being integrated. Version 2.9.5 includes dozens of new features and what is being promised for the final 3.0 version should be able to make iCab one of the top Macintosh browsers. (As of version 2.5.2 you can actually pay for using this fine program. I suggest that thousands of us do exactly that!)

Mozilla (WAP CD)
Mozilla Firebird
Versions: 0.6, 0.6.1 (OSX)

[1 August 2003] A new entry to the list. Version 0.6 was the first version of Firebird (formerly Phoenix) for the Macintosh from Mozilla.org. There is another Firebird build available from Kevin Gerich and then there's always Camino (formerly Chimera). Including Mozilla, there are now 4 browsers using the same base code.

WaMCom.org (WAP CD)

WaMCom Mozilla

Versions: 1.3.1 [2003-03-10], 1.3.1 [2003-06-13], 1.3.1 [2003-06-24], 1.3.1 [2003-07-10], 1.3.1 [2003-07-21] (PPC/OSX)

[21 July 2003] This is an attempt to build a "stable" version of the Mozilla browser for both Mac OS 9 and Mac OS X.

Microsoft (WAP CD)
Internet Explorer

Versions: 2.0.1, 3.0, 3.0a, 3.0.1, 4.0p1, 4.0, 4.0a, 4.0.1 (last 68k), 4.5, 4.5.1, 5.0, 5.01 (PPC), 5.1b1, 5.1.1 (OSX), 5.1.2 (OSX), 5.1.3 (OSX), 5.1.3 (PPC), 5.1.4 (PPC), 5.1.4 (OSX), 5.1.5 (PPC), 5.2 (OSX), 5.2.1 (OSX), 5.1.6 (PPC), 5.2.2 (OSX), 5.2.3 (OSX), 5.1.7 (PPC)

[14 July 2003] Originally based on Mosaic code licensed from the University of Illinois. Versions later than 5.0 are real Macintosh programs. In fact, this is the best full-version browser I have ever used on any OS. Version 5.1 is for Mac OS "Classic" and versions 5.1b1, 5.1.1, 5.1.2 were Mac OS X only - there was no beta version for Classic PPC. Versions for both PPC and OSX were back in synch for version 5.1.3, but 5.2, 5.2.1 and 5.2.2 are Mac OS X only and 5.1.5 and 5.1.6 are the PPC versions. Oddly enough, you can download all PPCs version directly, but you had to use Software Update to get the Mac OS X version from Apple for versions older than 5.2. All newer versions are available directly from Microsoft. As of versions 5.2.3 and 5.1.7 further development of my favorite browser has been discontinued.

Wazilla (WAP CD)
Wazilla
Version: 1.3f (PPC) (Editors Note: v. 1.1 only one listed for Mac)

[14 July 2003] This is a Japanese project to produce a version of Mozilla 1.3.x for Mac OS 9. (also see Unofficial Mozilla for Mac OS 9)

Eharunaga
Unofficial Mozilla for Mac OS 9

Version: 1.3.1 (PPC)

[14 July 2003] This is a Japanese project to produce a version of Mozilla 1.3.1 for Mac OS 9. (also see Wazilla)

Netscape (WAP CD)
Navigator, Communicator

Versions: 0.9b, 0.93b, 0.94b2, 0.96b, 1.12, 2.0, 2.02, 3.0, 3.01, 3.04, 4.01, 4.0.3, 4.03.1, 4.04, 4.04.1, 4.05, 4.06, 4.07, 4.08 (last 68k, PPC), 4.5, 4.6, 4.7, 4.72, 4.73, 4.74, 4.75, 4.76, 4.77, 4.78, 4.79, 4.80, 6.0, 6.01, 6.1pr1 (PPC), 6.1, 6.2, 6.2.1, 6.2.2, 6.2.3, 7.0pr1, 7.0, 7.0.1, 7.0.2 (PPC/Mac OS X), 7.1 (Mac OS X)

[1 July 2003] The former king of Web browsers. I personally prefer other browsers based on the Gecko engine (Mozilla project) such as Chimera and Phoenix, but if you really need e-mail, news reader, Web page editor and browser all in one program, buy more RAM and use Netscape. It can take a while to start, but provides a very compatible and feature-rich browsing experience. This is probably the best and most secure Macintosh browser to use in a corporate environment. The last version for 68k Macs is 4.08 and for PPC the last version is 7.0.2.

Apple
Safari

Versions: 1.0pbv48 [0.80], 1.0pbv51 [0.8.1], 1.0pb60 [0.8.2], 1.0b2 [v73, 0.9.0], 1.0b2 [v74, 0.9.0], 1.0 [v85] (OSX)

[24 June 2003] Safari is Apple's first browser since OpenDoc died and took CyberDog with it. It's also not the first Macintosh browser to be called "Safari" (see "Internet Safari" below). Based on KHTML source code used for the Linux KDE browser "Konqueror", it may become a worthy competitor to Camino (also open source) and is the obvious replacement for the discontinued Internet Explorer. There are three reasons why I don't particularly care for this browser: 1. The "chrome" interface. What's wrong with Aqua? 2. Graphics loading can only be either turned on or turned off. Individual images can't be loaded only as needed. 3. No support for "shared menus", meaning that I can't use it with Alco Blom's URL Manager Pro. I will never, ever entrust my precious bookmarks to a single browser. Considering that this is a 1.0 release, it's not too bad, but there is lots of room for improvement.

Lynx
Lynx

Versions: 2.8.4-10.2, 2.8.5d16 (OSX)

[4 June 2003] A text-based browser that runs in the Ter-

minal. OSXGNU provides the Macintosh port as a package for easy installation. I personally prefer the links text-based browser.

Mozilla Firebird

Mozilla Firebird (formerly Phoenix) 0.40, 0.50 (1.3a), 2003-04-04 (1.4a), 20030430 (1.4a)
mozilla.gif <http://www.kmgerich.com/misc.html>

[7 April 2003] Firebird (formerly Phoenix) is supposed to be the light-weight version of Mozilla/Netscape for Windows PCs. It's counterpart in the Mac world is Camino. That still didn't stop someone from porting it to Macintosh and the program is actually quite good.

Mike Coffey (Bahamas) Ltd. (WAP CD)
PT Browser

Versions: 1.0, 3.1415 (OSX)

[17 April 2003] It had to happen. Someone took the time to create a browser (bruiser?) as a joke. This browser will only load the PerversionTracker home page. If you type in another URL you see an error message and are automatically redirected to PT. Mike Coffey is certainly trying to get the PT award for the worst Macintosh program to come out this year. And if they don't have such an award, there's a good reason to come up with one now. Update: So, you thought it couldn't get worse? Version 3.1415 was released the same day as 1.0 and is an extremely misbehaved application - chrome look, where none is called for, windows that go from normal to translucent to transparent to invisible and back, etc. A great joke, but I don't know if I can keep up with the updates while maintaining a semblance of sanity.

Camino Project (WAP CD)
Camino (formerly Chimera)

Versions: 0.1, 0.11, 0.12, 0.13, 0.20, 0.21, 0.22, 0.23, 0.24, 0.25, 0.26, 0.27, 0.28, 0.30, 0.40, 0.50, 0.60, 0.60 [20-12], 0.70 (OSX)

[7 March 2003] Formerly known as Chimera (up to version 0.60) and also known as "Navigator". This beast is a Cocoa port of Mozilla for Mac OS X. This is one of the most promising new browsers for the Macintosh and development is continuing at a rapid pace. If you like living in the fast lane, grab a recent "nightly build" from their FTP server.

W3C's Editor/Browser
Amaya 7.1 (OSX+X11+X11SDK)

[6 March 2003] A graphical browser that runs in Apple's X11 environment. I haven't found the time to install this one yet, but from reports it seems to run. This editor/browser is from a project run by the W3C (World Wide Web Consortium). I wasn't too impressed with the versions for Windows and Linux, so I'm not holding my breath with this one.

Dillo Project
Dillo

Versions: 0.6.5a2 (OSX+X11)

[6 March 2003] A graphical GTK+ browser that runs in Apple's X11 environment. OSXGNU provides the Macintosh port as a package for easy installation - make sure to also download and install the "dlcompat" files, otherwise the browser won't launch. This is not such an exciting browser as support for many modern features (CSS, frames) is absent. At least it is really fast.

AppMac (WAP CD)
wDesk

Version: 1.0 (OSX)

[27 February 2003] A new Mac Web browser based on the Gecko engine. This browser offers protected preferences and many other options.

AppMac (WAP CD)
wKids

Version: 1.0b1, 1.0 (OSX)

[27 February 2003] A new Mac full screen Web browser for kids, based on the Gecko engine. [Link updated as requested by AppMac]

Beonex (WAP CD)
Beonex Communicator

Version: 0.8.1 (PPC/OSX)

[19 February 2003] Amazing. Another Mac browser based on the Gecko engine. This is a new addition to the list, although the browser was released in October, 2002.

David T. Pierson (WAP CD)
WannaBe

Version: 1.0b14 (68k, PPC)

[22 October 2002] An extremely fast, text-only browser. This is definitely the one to use when 'Net traffic is heavy and you just want to read without fiddling with cryptic commands in MacLynx. At the current beta release rate we should be seeing a 1.0 final soon...unless the developer decides to go to b38 or something!

Mikulas Patocka (WAP CD)
links

Versions: 0.96, 0.98 (OSX)

[21 September 2002] A new addition to this page. links is a terminal-based text only browser that is surprisingly intuitive and extremely fast. It's also very capable because downloads can be done in the background and frames and forms work perfectly. Links can also perfectly display tables. The latest binary version for Mac OS X is 0.96 (see link above).

MSN TV (WAP CD)
WebTV Viewer

Version: 2.0 build 551

[23 July 2002] The viewer application for the WebTV system. Mainly intended to be a viewer for page developers, it can also be used as a Web browser. WebTV was bought by Microsoft and the Mac version hasn't been updated in ages. The link on this page, however, has been updated.

CERN (WAP CD)
MacWWW

Versions: 1.0, 1.0.3

[4 June 2002] AKA Samba, very primitive, but what can you expect from the first Mac Web browser?

AOLpress
AOLpress

Version: 2.0

[3 June 2002] I found this program on an old backup CD.

It was originally designed as a Web page editor *and* Web browser, although I never used it much back in 1997 (the last time it was updated) and I had forgotten about the browsing features. This is a new addition to the collection.

Heartsoft (WAP CD)
Internet Safari?

[9 Feb 2001] Internet Safari is a new browser meant for children. It limits access to most sites on the Internet - except for those "appropriate for children". The demo installer downloads approx. 3 MB from the Internet to complete the installation.

Beta9 (WAP CD)
ICE Browser for Mac ?

<http://www.ping.be/beta9/products/ICEBrowserForMac/ICEBrowserForMac.sit.hqx>

The ICE browser is written completely in Java and supports HTML 3.2. The versions for other operating systems support HTML 4.01, CSS and XHTML 1.0. I guess we'll have to wait just a bit longer. The ICE Browser is surprisingly fast and weighs in at 128 kb.

Sun Microsystems (WAP CD)
Hot Java

Version: 3.0

The HotJava browser from Sun requires Macintosh Runtime for Java (minimum MRJ 2.14) (Editor's Note: Sun is preparing to stop supporting this product.)

Pygmy Softwyr
MiniWeb

Version: 0.6r3

<http://www.pygmysw.f2s.com/MiniWeb0.6PPC.sit>

[16 Feb 2001] A text-only browser written in RealBasic. (Editor's Note: Link dead)

Xeosoft Corporation
InstantSpace

Version: 1.0.0

<http://www.apolloii.com/instantpace.htm> (dead links)

<ftp://ftp.cs.tu-berlin.de/pub/mac/incoming/ISEE.sit.bin> (dead links)

[16 Feb 2001] A highly-customized version of Internet Explorer 2.01 from the "keepers of OpenDoc". They have an announcement on their Web site that version 2.0 should be appearing in March or April 2000, but I couldn't find it anywhere and it seems that their site has been shut down.

AOL
AOL Browser

Versions: 1.1, 3.0

<http://www.aol.com/tryaol/download.html> (link no longer valid)

[17 October 2002] AOL figured they needed to add a browser to their proprietary software. I'll try to be polite: It's not very good. Other versions of AOL software have included Internet Explorer 4.01 and the most recent versions a switching back to Netscape Navigator again. The download link no longer works (thanks, Malinda!).

Kantara (WAP CD)
Blake

Version: TR2

<http://www.kantara.com/blake.html> (dead link)

"Blake is a replacement web browser for Cyberdog." The Web site has not been updated since 1998 and since Apple's OpenDoc technology is no longer a component of Mac OS, it looks like this browser had a short history and no future.

Apple (WAP CD)
CyberDog

Versions: 1.1, 1.2, 1.2.1 PPC, 2.0

68k/PPC. This is Apple's discontinued "OpenDoc" browser. It is no longer available directly from Apple, but cyberdog.org has permission to make it available for download. It can also possibly be found at TUCOWS.

Apple

eWorld Browser 1.02

no download link

This is the browser that Intercon made for Apple's now defunct eWorld online service. It worked only in conjunction with the eWorld client software.

Oliver Gutknecht
MacLynx

Version: 1.0a3, 1.0b1

Based on Lynx 2.7.1. This browser is fast, but text only. NOTE: Oliver's Web pages seem to have been removed. I have found some alternative download URLs: mac-lynx-b1-fat.bin (HTTP, California) and mac-lynx-b1-fat.bin (FTP, Australia)

CNRI
grail

Versions: 0.3b3, 0.3

grail is a Python-based browser which required tcl/tk for the GUI. It requires Tcl from Sun Microsystems and Python, a development system. Information about these products can be found on the grail pages.

Netmanage Chameleon
WebSurfer

Version: 3.6.1

This product has apparently been discontinued.

EINet
MacWeb

Version: 1.00ALPHA3, 1.00ALPHA3.2, 1.1.1e

ftp://mirrors.aol.com/pub/info-mac/comm/tcp/web/mac-web-111e.hqx
ftp://mirrors.aol.com/pub/info-mac/comm/tcp/web/mac-web-111e-ppc.hqx
68k/PPC.

This product is no longer being developed, but is still available.
(Editor Note – ftp sites no longer work).

TradeWave
MacWeb

Versions: 1.1.2, 2.0

This product has been discontinued and is no longer available. A few sites have the 68k version available. The 2.0 versions are commercial software! I should know, I was a beta-tester.
(Editor note – link broken).

NCSA (WAP CD)
Mosaic

Versions: 1.0, 1.0.1, 1.0.2, 1.0.3, 2.0.1, 3.0B4

NCSA Mosaic is no longer under development, but is still available.

Spyglass
Mosaic

Versions: 2.1.1
No longer available.

SPRY
Mosaic

Versions: 1.0.2.0

PPC only - it seems that this one is also no longer available. Sprynet offers only their own version of Internet Explorer 3.x. Sprynet is a CompuServe company. (Editors Note – No longer available).

Intercon
NetShark

Version: 1.1.3

ftp://ftp.cs.tu-berlin.de/pub/mac/incoming/NetShark_1.1.3_Installer.sit.bin

Intercon has been sold to Ascend and Netshark is a dead project. Intercon also offered a package with integrated browser called tcpCONNECT4, but this has also been discontinued.

VOL
Tiber 1.0

Teknama Internet Browser. This was the browser used in the discontinued "world wide" Video On Line provider program. Prone to crashes and very limited. (Editor's Note – link works but file is corrupt).

Standard Help Me Out Plea

If you find any broken links here, please let me know. And if you have any information about publicly released (i.e. they can be downloaded and/or purchased) versions of browsers that I don't have I'd appreciate an e-mail with a tip.

I am still looking for information about some phantom browsers:

DaniBrowser/1.0 (Macintosh; I; PPC) - I can find no references to this beast, except in log files
Enhanced_Mosaic/2.01 Mac_PowerPC PSI/1 - who made this one? ■

What's On This Disk?

by Dave Ottalini

THIS IS A catalog of "A CD Full of Browsers," a CD-ROM available at Washington Apple Pi General Meetings]

This CD-ROM is a companion to the article "Macintosh Web Browsers" – originally a web page produced by Darrel Knutson at <http://darrel.knutson.com/mac/www/browsers.html>.

He granted Washington Apple Pi permission to reprint his web page and we decided to go one step further and help readers by providing many of the browsers he lists on one CD-ROM. There are browsers here for both classic (68K and PPC) and Mac OS X users – though some are so old they are of historical interest only. Please read all the documentation before installing. Note that some installers will need Internet access to complete their work.



ARTICLES AND INFO

Macintosh Web Browsers (Word)
Macintosh Web Browsers (PDF)
Read Me First! (Word)

Read Me First! (PDF)
What's On This Disk? (Word)
What's On This Disk? (PDF)

Mac OS 7-8-9 BROWSERS

AOL
AOL 2.4
AOL Universal Installer – v. 3-4&5
Blake Technical Release 1
Cyberdog
Cyberdog- 68k
Cyberdog – PPC

iCab

iCab 2.0
iCab 2.4
iCab_Pre2.95_English_68k Folder
iCab_Pre2.95_English_PPC Folder
ICE Browser for Mac
InstallHotJava
Internet Explorer
IE v. 3.01

IE v. 4.5

IE v. 5.1.7

Internet Safari Demo

MacWWW

MacWWW V1.03

MacWWW_V1_03

Mosaic

Mosaic

Internet Config 1.2

Mozilla 1.3.1

Netscape Navigator

Versions from 2.02 up through 7.0 for 68K and PPC

Netscape (and IE) History Offline Browser

Netscape Plugins

Wannabe

wannabe.68k.1.0b14

wannabe.PPC.1.0b14

WebTV Viewer

Mac OS X BROWSERS

AOL for Mac OS X 10.2.1

beonex-communicator

Camino 0.7

iCab_Pre2.9.5

Internet Explorer 5.2.3

Links-0.96

lynx-2.8.4-10.2

Mozilla 1.4

Mozilla Firebird

Netscape 7.1

OmniWeb 4.5

Opera 6.03

ptbruiser3

thunderbird-0.2-

macosx

wazilla-mac-1.1-trial9

wKiosk_US

wKids_US ■

Installing Classic Applications with Mac OS X

by Guy Serle

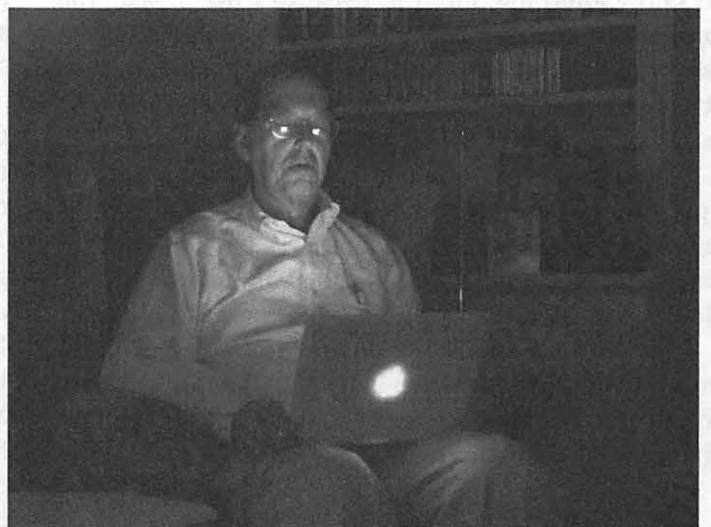
CONGRATULATIONS! You are now running the world's most advanced and user friendly operating system currently available for consumers, Mac OS X. I'll pause for a moment while the Mac OS 9 die-hards clean up the coffee they have undoubtedly spewed all over this magazine. I know there are excellent reasons why many do not use Apple's latest OS (hardware won't run it, software used daily not supported, plug-ins for favorite applications not available, sheer unadulterated stubbornness), but for those of us that do, the number one problem many seem to have is using what is known as "Classic" applications. Classic applications refer to programs that have not yet been converted to run natively under Mac OS X. Apple has done a pretty decent job in Mac OS X for allowing older applications to be used. You double click the program's icon, a Mac OS 9 emulator boots up, and voila! Your older program is up and running almost transparently under Mac OS X. That's the theory anyway.

Reality sets in

To be honest, I have not had many problems dealing with Classic mode. It usually just works and that's what I expect from my Macintosh. On some applications though, the programs just refuse to open for one reason or another. I've had two different programs that just refuse to operate in Classic mode. One was a game (*Driver*) and the other was a photo manipulation program that I needed for an old IXLA digital camera (*Corel Photosuite*) that *iPhoto* refuses to recognize. I installed the game while in Mac OS X and after installation when I tried to run it, I got this weird error message saying that this control panel/extension is not supported in Classic mode. I couldn't even install the photo program. The publisher (MacPlay) of *Driver* doesn't seem to be in any hurry to release an Mac OS X friendly version and Mac OS X so far absolutely will not see my camera. I can certainly go out and buy an *iPhoto* friendly camera, but that's not the point of this exercise. If the program in question ran fine under Mac OS 9, then I should still be able to use it right? Yes, you should. You have to be sneaky about it, though.

Same as it ever was

First off, if a Classic program you have installed will not operate under Mac OS X, your first move should be to uninstall it. Once it has been eliminated, go to your "System Preferences" and select Startup Disk. Once Startup Disk comes up, all available installed System folders will appear within the window. Select your Mac OS 9 system file to be the default start-up OS. Restart your Mac and soon the friendly Mac OS 9 face will appear. Once the system is fully loaded and you have control, install the program in question. You may need to reboot after the installation is complete and this will more than likely reboot into Mac OS 9. Any control panels or extensions required by the program should load during the reboot. Try the program in question while running natively in Mac OS 9. Does it work the way it did before? If yes, go back to Startup Disk and reselect your Mac OS X system. Restart the computer and try the program under the Mac OS 9 emulator. If it operates normally, you are good to go. If not, then you may be stuck rebooting into Mac OS 9 whenever you need this program. Remember that Apple's new machines will *not* be able to boot into Mac OS 9. Looking into the future, the time will come that Mac OS X, XI, or whatever they call the next major upgrade, may not support Classic applications at all. Those people that insist on being cutting edge will have to replace any Classic apps before then. ■



Lights Out

*'Twas the night of Isabel,
and all through the house
Not a light was lit,
Except by a mouse.*

(Photo by Marty Ditmeyer of her iBook-lighted house during the Hurricane Isabel blackout of September 2003. Bad poetry courtesy of Washington Apple Pi Journal, not Marty.)

The Marvels of Cyberspace

by Joseph "Scotty" German

WHEN BABBAGE made the first computer, it was a great stride for technology when he received the first error message. So Babbage picked up his phone (a loaner from Bell) and called Tech Support. They, in the polite and helpful manner they often exhibit, told him he was an idiot.

But this is only one of the wonders of the modern computer. You can also get viruses via the Internet. What I'm thinking of is this new virus that's going around, which is actually what is called Spyware, or browser hijacking. It bombards you with pop-ups as soon as you turn on your browser. (It's not all that different than normal, really.)

But something must be done about it. Don't ask *me* what to do; I have no idea. But then again, I don't *have* to know anything about it, because I use a Mac, the preferred computer all over the galaxy, as illustrated in *Independence Day*. The humans used PCs, probably, so it's no wonder that they thought flying up an alien exhaust pipe would save the world.

But the reason I don't have to worry about this virus is that Macs are very secure. I would not be surprised if there are security lasers and silent attack cyber dogs in there. It is as well guarded as the Mona Lisa, only you're allowed to take flash photographs of a Mac.

So we can see that computers are wonderful things, equipped with the Internet and spell-checker, which is important. I'm going to use it right now, to make sure there are no errors in this artikul. ■

By Joseph (Scotty) German, as typed on his PowerBook 5300cs. Joseph is 12 years old and a 7th grader at Elkridge Landing Middle School in Elkridge, MD.

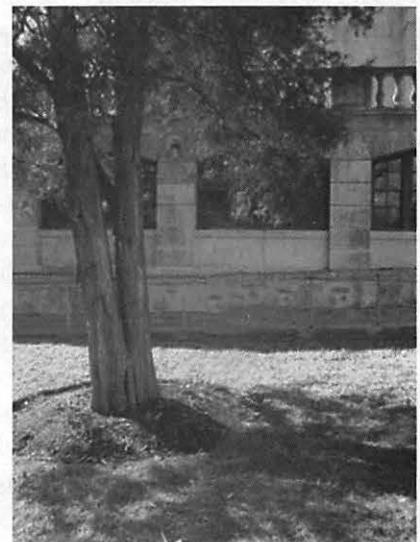
The Next Generation of Teachers Or how Trinity College is using a Mac lab to train teachers

by Sheri German

WE NOW HAVE a generation of kids who grew up with computers. But what of the teachers who are running the classrooms? How many of them have the skills they need to make the best use of technology in the classroom? Often they are totally lost, and many schools' tech support people are too stretched to assist in a timely manner. Sometimes the children can help, though.

The importance of providing these skills has entered the radar screen of the government. Federal grants for teacher technology training have been given to many colleges and universities in the Washington, DC region. Trinity College, where I teach, has received such a PT3 grant. We provide workshops for faculty and staff in everything from *Dreamweaver* and HTML to *iMovie* and *Photoshop*. We have also devised a class that is now part of the standards for education department accreditation.

This semester I have been teaching a group of 14 graduate students in our Mac lab. Another instructor has been teaching 20



graduate students in a PC lab. (Next semester I will also teach a class for undergraduate education majors.) We had 14 weeks to take a whirlwind tour of Everything a Teacher Needs to Know to Master Technology. What is on every teacher's list of must-have knowledge?

Here is the list on the syllabus:

- Software evaluations
- *Kidspirations* activities
- *PowerPoint* presentations
- Web pages with a free account at Scholastic.com
- WebQuests
- Excel line and bar charts
- *iMovies* of the students teaching, turned into QuickTime movies
- CD burning to create an ePortfolio of all projects
- Smart Board presentations of select projects from the CD

Additionally, I gave an optional extra credit project for anyone who wanted to enhance their ePortfolio by including a resume to turn into a PDF in Mac OS X. Pictures from my digital camera, processed in Photoshop enhanced the resume.

If you think this is a lot to cover in 14 weeks, you are absolutely correct. It takes a very organized and focused plan to carry this out successfully. The complicating factor was that none of the students knew how to use a Mac, let alone Mac OS X. First up was a quick tutorial in the basics of navigating around the file system and an understanding of the multi-user system. "Why are there so many desktops?" the students lamented over and over.

Once everyone got reasonably comfortable in the Mac OS X environment, we moved on to software evaluations. The students had to pretend they were charged with purchasing software for their schools. What criterion is essential in making decisions? The most important, of course, is making the determination of whether the system is modern enough, and the computer robust enough, to run the software. If the software requires at least Mac OS 9.2, and the school computers are still running Mac OS 8.5, there is no point in investigating further unless the school plans to also upgrade the operating system as well. Further, checking RAM, required amounts of hard drive space, processing speeds, and other physical aspects of the computer are essential to ensure a worthwhile purchase.

The students are also taught to categorize software. Is it productivity? Administration management? Is it CAI (Computer Assisted Instruction) software? Is it an

"...what of the teachers who are running the classrooms? How many of them have the skills they need to make the best use of technology in the classroom? Often they are totally lost, and many schools' tech support people are too stretched to assist in a timely manner."

authoring system like *Dreamweaver*, the Web design program? What are the standard and respected software packages in each category?

Next up we learned how to use a popular education program called *Kidspirations*, which is for elementary students. There is a companion program for grades 6 and above called *Inspirations*. Essentially an outlining and brainstorming program, it allows teachers to create activities for students. Montgomery County's school system has bought unlimited licenses so that all of its teachers will have copies in their classrooms. Each student was required to create an activity in an academic subject such as science, writing, or social studies. The students collected images that are related to the topics, and learned to create their own image libraries to support their lessons.

PowerPoint is introduced as the second hands-on project. I demonstrated a *PowerPoint* lesson that introduces children to the school orchestra and its instrumental program. This allowed me to insert lots of bells and whistles into the *PowerPoint* lesson, such as movies, sound, and charts. The students then had to create their own lessons. Students created everything from "Rain Forest" presentations to "How to Develop Good Study Skills."

What's really hot in education right now is for every teacher to have his or her own Web site as a way to communicate with students and keep them up to date on assignments and announcements. My son's middle school principal made having a Web site for each teacher a goal within the first few weeks of school. TeacherWeb is a famous provider of teacher Web sites, but they just started charging a nominal fee (\$25 a year) for their service. Scholastic.com still provides free teacher Web sites, so that was our choice. Each student went through a wizard to easily put together a series of pages that gave students a way to find out about homework, class an-

nouncements, book lists, Internet resources, and other "must know" information. My students were most delighted when I showed them how to encode their email addresses so that spam bots couldn't extract them from the new Web pages.

The big project of the semester, 25% of the semester grade, was a WebQuest. Created by Bernie Dodge of the University of San Diego, a WebQuest uses Web resources to take the children through an Internet resource enriched learning quest of some kind. Typically a quest is constructed as a "whodunit" and has an element of suspense about it. Here is one such quest called "Billy, the Builder." (Example taken from the samples page at <http://webquest.org/>)

"Billy the Builder wants to build a bookstore on I-35 between Austin and SanAntonio.

Ellen the Environmentalist sent some mail to Billy about the water cycle, erosion, and the Edwards Aquifer so Billy could make a good choice about... Should he build it? If so, where?"

The introduction is followed by the task (same example.)

"Your teacher will decide if you will work with a partner or not. You will help Billy make a good choice by reviewing the mail that Ellen sent. Color and label your own picture of the water cycle. Describe what an aquifer is. Complete an experiment about erosion, take notes, and draw pictures. Give a presentation about pollution to your [subject matter] class. Then: You will write a letter to Billy telling him why you think he should or should not build his bookstore on the Edward's aquifer."

Next comes a section about the process the students should take; then an evaluation that includes a rubric of how the students will be graded on each step; a conclusion that summarizes results and what the students have learned; credits and resources used in creating the quest; and finally, a teacher page that has notes for other teachers who may want to use the quest in their own curriculum. The quest should also include lots of links to resources that will teach the students more about their topic, and also help them "solve" the quest along the way.

I prepared my students to create the best quests possible by teaching them the basics of HTML. We used standard WebQuest templates and brought them into a visual Web editor called *Dreamweaver*. Still, it made the entire process easier to understand exactly how the templates were constructed. The students were delighted that HTML is really not that hard.

I also prepared the students by teaching them how

"The big project of the semester, 25% of the semester grade, was a WebQuest. Created by Bernie Dodge of the University of San Diego, a WebQuest uses Web resources to take the children through an Internet resource enriched learning quest of some kind. Typically a quest is constructed as a 'whodunit' " ...

to conduct productive Internet searches. We spent a good part of one class learning about search engines, metasearch engines, directories, Boolean operators, wildcards, advanced searches, and other concepts that would help them find the best Web addresses to include in their WebQuests.

Seven classes into the semester we had the midterm. This was based on everything we had covered so far, as well as the class text. We used a class text that was mandated by the Education department administration, *Teaching and Learning with Technology* by Lever-Duffy, J., McDonald, J., and Mizel, A.P., (2003).

Line and bar charts in *Excel* formed the focus of a quick and dirty *Excel* tutorial. Teachers have to know how to make charts for everything from grades and attendance to charts that are actually part of a lesson. I was surprised to learn that most of my students had never used Excel, so we really had to start at the beginning by creating basic spreadsheets that we could easily turn into the required charts.

The real fun began with the video module of the course. The students had to get someone to video tape them while teaching in the classroom. I reminded them weekly that they had to discuss this with their host schools. Students were in schools from Montgomery and Prince George's counties, as well as the District of Columbia. Of course the students in the Bethesda schools had a digital camcorder at their disposal, while the students who were teaching in the DC public schools had zip. And I don't mean zip drives!

We had to arrange for students to at least have access to an old fashioned video camcorder. Fortunately,

the PT3 grant money had bought us conversion equipment so that we could insert tapes and output digital formats.

Probably "the best time was had by all" during the *iMovie* tutorial lab. I gave the students some digital video footage and taught them to use all of the intuitive features of *iMovie* 3.03. Pretty soon students were adding titles, transitions, and effects as well as editing footage to remove unwanted sections.

The time had come to take all of these projects and burn them to a CD. The Trinity Mac Lab (also known as B-9) has a CD/DVD burner with Roxio *Toast*, so this was extremely easy. Students had been saving projects to Zip cartridges. Trinity's LaCie external FireWire hard drives provided a portable means of bringing the video footage, now converted to 5-minute QuickTime videos over to the Power Mac G4 that runs the burner. The queue formed, and slowly we "cut" our media.

Class fourteen, sweat pouring from the brows of exhausted students, left us with one important task left. We had to use one of the Trinity SmartBoard rooms so each student could perform a 5-minute presentation of selected projects. It was party time, with popcorn and soda, and students enthusiastically encouraging each other.

I never thought it would happen, but we did it. We successfully got through all of the projects, and each child in these new teachers' classes will get a curriculum that is a little more enriched and a little more exciting than it might have been had there not been such training on the Macs.

Resources:

WebQuests: <http://webquest.sdsu.edu/>

Bernie Dodge: <http://edweb.sdsu.edu/People/BDodge/BDodge.html>

Kidspirations and Inspirations: <http://www.inspiration.com/home.cfm>

Free teacher Web sites: <http://www.scholastic.com/>

SmartBoard: <http://www.smarttech.com/>

Excel Charting Tutorials: <http://www.geocities.com/jonpeltier/Excel/Charts/> ■

Extensis Portfolio 6

review by Veda Lewis lap@vom.com
North Coast Mac Users Group

IF YOU HAVE accumulated a large collection of images, you can relate to the need to put them in a database so you can retrieve the ones you want to use later. Database programs of my own design have missed the mark in ease of use, so I was happy to give Extensis' Portfolio 6 a spin. I had seen this program demonstrated at MacWorld numerous times, and actually tried out a much older version when I had only a few digital images, not the thousands now floating on my drive.

Keywords-

I took a disk full of images of a field biology training course and loaded it to my hard drive. I was able to drag the folder containing 121 images over into Portfolio, initiating a window requesting a description of the images, a tab for keywords, and sort fields to enter. I started entering keywords and realized that they were not transferring over to what is called the master keyword list. Fearing duplication of work, I searched the online help manual and learned the path to access the master keyword list (Catalog>Administration>Keywording). The help feature is in a manual format, not as handy as the indexed or contextual help you will find in many other programs. However, it does the job after some searching through Adobe Acrobat for keywords.

I can lock down the keywords if I want and limit them to those on the master list. Knowing how easy it is for me to make up slight variations, this will be a convenient feature.

With my master keywords set, I continued on with selecting which keywords would be assigned to this catalog of images. Time out. All of the keywords were assigned to every image in the catalog. Since that was not what I wanted, I thumbed through the manual again (this time the hard copy) and learned quickly that I needed to select the files that I wanted to assign to a particular keyword, then go into Item>Edit Keywords to make the keyword assignments. That done, and a quick find results in a window with just my selected images in that category. Now we're making progress.

I was surprised that the master keyword list is associated with the catalog in which it is created. If you want to use it in another catalog, you must export it as a text file and import it into the new catalog. Initially, I thought this was a negative feature, but found it a positive, because I can avoid going through a huge list of terms that may not apply when I'm logging classroom images, for example.

The field option is another way to manage the images. I have

“One reason I wanted to play with this software is to recommend a server software for the large office where I work. Many of us are generating loads of images that we need to make available for others.”

several instructors shown in the field class photos and I would like to avoid having a single keyword for the names of each person who may request a photo of them teaching a group of students. So, I used a field and called it Person. I can use the value of the field to insert the person's name. For example, Monique is in three shots, so I selected those images and attached her name to them. Later, I did a find for Riparian (it means stream-side vegetation) and Monique. I was able to use a keyword feature, click “more choices” and select the field value equals “Monique”. Portfolio retrieved the one photo of Monique that was taken in the riparian area. I am also using this feature for photo location and photographer. Now this is computing. Portfolio 6 allows me to create a separate palette from the master palette that contains predefined fields. This is handy to have on the desktop in Portfolio.

Next, I brought in some images to the catalog that I had processed in Adobe Photoshop and assigned keywords to the files. Just as the manual stated, the keywords were then associated with the files in the Portfolio catalog.

Sorting Views

I have to admit that even before I got into the keywords, I clicked on the sorting option. There are over a dozen options! Sort by date, time created, image orientation, filename, resolution, thumbnail size, and more. My favorite is the time created, because it allows me to keep together the numerous panoramic sequences I take in natural settings.

Managing files

One of the neatest features is the ability to drop images into Portfolio from the browser

Distribution

Portfolio works to create catalogs that are like point-

ers to your images on your hard drive, or on a separate medium, such as a CD. The collect feature allows for a variety of ways to give your images to others, email, create CDs, web publish, upload to a server, even timed slide shows that can be exported as Quicktime movies. I tried the CD option on a Windows machine to make a Mac/Win version CD. I need to clarify whether the settings were correct in the CD burning software that I used. The first try from Win to Mac/Win was unsuccessful. EZ CD Creator 5 on the PC asks for 8+3 filenames in order to assure compliance with ISO 9660 protocols to produce a Mac/Win readable version from the Win machine. The documentation for Mac to Mac CD burning is extensive. It is on the software CD.

Server options

One reason I wanted to play with this software is to recommend a server software for the large office where I work. Many of us are generating loads of images that we need to make available for others. In my training work, I need access to a variety of technical images. I can now go to our server and click through folder after folder. However, I look forward to using Portfolio Server in the near future. All I need to do is to keyword my photos and load them to the server. I can create my own catalog pointers to retrieve certain types of images, while everyone else does the same.

No more naming files; with all the search capabilities, the important information is in the keywording.

Recommendation

With all of the features offered, too many to cover them all here, Portfolio 6 is a very powerful database tool. All you really have to be careful about is finding a permanent location for your images, since the catalogs in Portfolio are essentially shortcuts. Portfolio manipulates thumbnails of your original images. You can move, copy, delete and rename files from within the program to keep things in order.

The software box from Extensis states “We Create Order. You Create Art.” I can be much more confident now that I will be able to find the art I've created, now that I have a tool for doing so.

System Requirements:

Macintosh Mac OS 8.6 or higher including OS X
PowerPC 32 MB available RAM

Windows Windows 98 and higher, Windows NT Service Pentium 32 MB available RAM

Price: \$189.95 \$2399 Server with 5-user ■

DoubleClick

Dear Dave and Derek:

From: bellis william <wdbellis@yahoo.com>

I have a 2002 i book 500 mhz with 256 MB ram which I would like to boost to 640k. My question is does it matter whose memory I buy so long as it meets Apple's specs? I see that there are a number of suppliers of memory for Apple computers on the web selling various brands at various prices. If it does make a difference from whom I buy, would you recommend a store and/or manufacturer of memory chip? Thanks much in advance.

Dave: Bellis is asking a question many of us have asked over the years. We're told that increasing memory is one of the best ways to improve performance in a computer. But whose memory do you buy? And can you mix and match them? Manufacturers give you some guidance in terms of what kind of memory your computer uses. Bellis' iBook, for example, uses a type of memory called a SODIMM ("small outline" Dual Inline Memory Module). He wants to increase his memory from 256 to 640. Since his iBook has 128 MB onboard, he currently has a 128 MB module in the single memory slot. That will have to come out and a 512 MB memory card installed. 640 MB, by the way, is the maximum this version of the iBook can use.

There are some excellent manufacturers of memory out there so the best suggestion I can give you is stick with a known quantity. How do you do that? Look at what is being sold by major Macintosh vendors or local Mac stores. Ask members of Washington Apple Pi (or your own user group) what they are using. Apple (in this case) also sells memory online or at its stores but I've found that their prices are higher than what I can get from companies like Memory To Go or others. I've purchased memory from many sources over the years and never really had a problem. Some will argue that the best solution is to use memory made by the same manufacturer as comes with your PC. But quality control is such that that is not an issue. The only thing I would add though is that if you are going to add more than one memory module, buy it all from the same manufacturer - for insurance more than anything.

Derek, there are lots of great reasons to increase the memory in your computer, including increased performance, improved life of your hard drive, ability to run more programs, etc. I just don't see a downside given the fact memory also costs so little these days.

DEREK:

Dave, you're so right. We now recommend that all PCs come with a minimum of 256MB and preferably 512MB of RAM. We're now selling file servers with 1 GIGABYTE of RAM!!! This kind of memory was unheard of only five years ago. With the advent of Windows XP and the Mac OS X operating systems, the more memory the better. We're doing so much more with our computers. The faster processors and screaming fast hard drives are allowing us to use our machines as multimedia tools and home entertainment centers. Having gigabytes of photos or music files on your computer requires tremendous hard drive storage. But if you want to edit and manipulate these files, you'll need a fast processor and lots of RAM.

So if you're running Windows XP and you have less than 256MB of RAM. Go buy some. You'll be amazed at how much faster your PC seems. ■

DoubleClick

Dear Derek and Dave,

Thank you for publishing and addressing my question about the difficulty I had mounting on my iMac the DVD created on my friend's PC. The information you presented was useful, I think, for your general readership, but unfortunately, did not resolve my dilemma. Your article raised several questions regarding specificity which I can answer for you.

To minimize any confusion about my problem, I'll add to my original letter that my friend's PC and my iMac G4 have the identical DVD drive, a Pioneer Model DVR-104. I went to the Web site that Dave recommended and confirmed what my Apple System Profiler indicated about my SuperDrive using a DVD-R disk. The disk we used for our test of compatibility was, in fact, a DVD-R made by Pioneer. I also confirmed that my firmware was up to date. I took Derek's suggestion and checked whether a DVD written on my Mac could be read on my friend's PC--and sure enough, it could be mounted and played, creating an even greater puzzle in my mind as to why his disk wouldn't mount on my computer. I'll reiterate that I've had no problem mounting other DVD-Rs on my computer. I'll add a reminder too that his DVD played fine on my DVD player attached to my TV.

Dave was generous enough to request feedback from me and offered to put it past the gurus at Washington Apple Pi. I am myself a member of WAP and have published a question or two on the WAP TCS. But I'm sure an

inquiry from Dave would draw more attention than one from me.

*Thanks again,
Paul Silverman
Rockville*

Dave:

Paul is a member of Washington Apple Pi, and was kind enough to bring the DVD in question to a recent meeting so I could see what was going on first hand. It was a Pioneer branded DVD (minus) R DVD. In other words, it was manufactured to be burned using the DVD-R format. As Derek and I have mentioned in the past, DVD's come in many flavors and the formats available remind one of the old VHS- Beta wars of years past.

This disk was not created as a stand-alone DVD but rather had a movie file saved to it as a data file. I tried in all my Macs at home with Apple's "Superdrive" and it would not mount on any of them. As Paul found, Roxio's Toast (EZ CD & DVD Creator to you PC folks) showed that there was a DVD in the drive but could not even read the format. Curious since the Pioneer drives on both Paul's PC and our Macs are the same and are designed to use the DVD-R format.

I then took it to the Pi office during our Tuesday night clinic and a member tried it in his PC laptop's DVD player. It worked just fine and was able to play the movie that had been saved on the disk! So after some discussion, we think the answer to Paul's problem is that his friend burned the DVD using a PC-specific format and not one that is cross-platform. This was a movie file saved on a DVD disk - not a DVD burned like you would find in the store (which iDVD on the Mac and other programs on the Mac and PC can make).

So the answer is to go back to your friend, Paul and find out exactly how he burned the file onto that DVD disk. You'll need to do a little research to make sure that the format he uses is compatible on both platforms. The manual that came with that program should have that information or it would likely be available online.

Derek, these kinds of problems show that even though progress has been made, there are still cross-platform problems that are still hard to overcome. Of course if everyone just admitted that Macs were better and made the switch, we wouldn't have these hair-pulling troubles, would we?

DEREK: Yes, these problems do cause headaches. But formatting issues happen on so many levels that it's easy to get frustrated. Try moving from WordPerfect to Word, or from one graphic program to another. When you add on

the media problems of trying to read a mac disk in a PC then there are more problems. It can be very frustrating. One little tool out there for those that want to convert documents and files from a Macintosh over to the new PC they just bought because they finally have realized which one is better is Conversions Plus from Dataviz. This program converts Mac documents over to Windows equivalents and it even reads Mac disks! You can get info on it at www.dataviz.com ■

DoubleClick from July

Dave and Derek:

Macworld is coming again to New York next week and I can hardly wait to see the new Macintosh G5 computers that were announced at the World Wide Developers Conference. They are truly droolworthy for us Mac users. But the question I have concerns just how much computing power users like me really need? Apple's CEO, Steve Jobs says these new Macs are the most powerful PCs out there. But I don't do a whole lot more than surf the Internet, write a few emails and listen to music. Are these new Macs too much for me?

John in Alexandria

DAVE

John has a right to drool over the new Macs. They are fantastic machines. But he's also correct to wonder just who they are being targeted towards. Apple has a strong base of users like John and myself, but the Cupertino company is increasingly going after higher-end niche markets. That includes audio and video professionals, as well as their long-time supporters in the graphics and design world. For these folks, the new G5s mean that they can do their work quicker and that means they can be more productive.

If you are a game player, you want the absolute fastest machine you can get with the best graphics. Game designers are already thrilled that these machines push the envelope so that they can jump the performance of their games. PC folks know this is true as well - some companies make nothing but PCs that are tweaked for speed and graphics to provide the best possible game playing.

So the question comes down to us "regular" folks. I admit I do some heavier lifting because I enjoy making iMovies and iDVDs on my current Mac - a 933 G4. A faster Mac means the time it takes to render (that is create) transitions and other effects is shorter and I can get my work

done more quickly and creatively because I don't have to wait due to processing time. Others like John may not really see much change in their experience save for things like loading web pages, etc. if you have broadband.

As much as I love the Mac, for someone like John, the new G5 is probably going to be way too much computer for what he needs. An iMac would likely take care of business without breaking the bank.

Derek, the speed wars are heating up again on both platforms. And while manufacturers say they must continue to innovate to sell computers, we are getting to a real point where we could literally have a supercomputer in the home being used for Pocket Tanks, Works and burning a CD or two.

DEREK:

Dave, I don't think computers will be fast enough until they can complete the task I want them to before I'm done with the thought. You can never really have too fast of a machine, however you do have to balance power with price. We all will be using much faster computers over time. Just look at the computer speeds over the last 10 years.

As the operating systems on both PCs and Macs become better, they require faster machines to operate. Voice recognition and handwriting recognition are coming of age and these require lots of horsepower. In addition as Dave mentions, video and gaming require high end processing power. However, if all you do is surf the Internet and write a letter and an E-mail or two, get the cheaper ones now. They'll work perfectly fine and as the capability and applications become available that you want for the higher end stuff, then buy. Never buy hardware today that you plan on using with tomorrow's applications. You'll pay too much, it will be slower than the current crop of machines at that time, and it probably won't be compatible anyway!

A good resource for you PC motor heads that gives you reviews, news and lots of tips on the hardware side of the PC, check out: <http://www.tomshardware.com/> ■

Our thanks to the Journal newspaper for their permission to reprint these DoubleClick columns.

DoubleClick

Dear Derek and Dave,

I have occasionally posted problems on the Apple Web site with good and helpful results. The mystery described below, however, received not a single response, So I'll be very impressed if you can solve, or even speculate, about this one. A friend of mine has a PC with the identical model Pioneer DVD-RW internal drive as I have in my iMac G4. He wanted to compare his DVD

software against mine and used Cleaner XL to compress a video file I made and he burned a DVD-R. My DVD player had no problem playing his disk on my TV, however the DVD could not be mounted on my desktop when

I inserted it into my SuperDrive. Roxio Toast recognized that a DVD was inserted, however I couldn't play or copy it if it wouldn't mount. He burned a second DVD-R from the same source, this time as an MPEG-2 data file rather than a video. Still no luck in mounting the DVD. My SuperDrive otherwise has had no problem recognizing DVD-Rs, even when they're blank. Any thoughts about what the problem is and how to overcome it will be appreciated. Thanks,

*Paul Silverman
Rockville, MD*

>

Derek: Paul, the obvious thing that comes to mind is the fact that the disks are written in a different format. There are three formats for writing DVDs each with different levels of compatibility between them. Now if the drives are truly the exact same model, this may not be the case, but I'm guessing there is a slight difference in either the drives themselves or the format written using the software. You didn't enclose the drive models so I can't tell you for sure, but here's some basic info on DVD formats.

DVD's are in a format war (like the old Beta, VHS tapes) and come down around three format and several densities. The main one is DVD-RW which is the first encoding method. Disks made by this format can be read by most stand alone DVD players and most DVD computer drives.

DVD+RW (notice the plus instead of the minus) can also be read by most DVD players and computers. But not necessarily the ones that will read the DVD-RW! DVD RAM is not compatible with most computer drives or stand alone players.

In addition to the actual format, we've seen media cause problems on being read on certain drives. This has been a problem since CDRWs were introduced. Sometimes, a particular brand of media just can't be read in another drive.

You may want to see if it works in reverse. If your Mac can write a disk and be read by the PC. This may confirm our formatting problem. One other thing, I know that Apple has introduced a Sony drive on today's macs that read and writes both of the main formats (the +RW and the -RW). For more information on formats, see: <http://www.dvdrhelp.com/dvd.htm> Dave, what do you think? ■

Special Offers— Apple User Group Bulletin

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.

1] - ZBeterscan

Many people use Adobe Photoshop to retouch their scans so they match their originals. Getting a decent color match can be time consuming and frustrating. Now you can use Photoshop to create a scan with better color matching from the start.

The ZBeterscan Method explains how to calibrate your scanner's interface to make a better scan than the "out-of-the-box color" obtained from commercial scanners. Now you can use Photoshop to create a better scan from the start. Includes a scanning book (PDF) and a custom printed custom color chart.

Regular price \$39.95 (US) plus shipping and handling User group price \$34.95 (US) plus shipping and handling

For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. After you sign in using the login and password that were printed on your membership card, select the link for the Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

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

2] - Grip-It Strips

Grip~it Strips are a set of high-tech

slip resistant textured strips that attach to the top and bottom of your laptop to provide an incredible better grip.

Insurance studies show 3,800+ laptops a day are damaged from handling accidents, and with increased handling in hotspots and airport security there is added risk that your laptop will be dropped.

Grip~it Strips provide the BEST protection against dropping the most expensive item you carry around, your laptop.

Exclusive MUG offer: one free pack of Grip~it Strips (a \$6.65 (US) value) with purchase of 3 packs for \$19.95 (US).

For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. After you sign in using the login and password that were printed on your membership card, select the link for the



The screenshot shows the Apple website's navigation bar with links for Store, iPod + iTunes, .Mac, QuickTime, Support, and Mac OS X. Below the navigation bar, there is a large advertisement for iTunes for Windows. The ad features a screenshot of the iTunes application interface and the headline "Hell froze over." The text below the headline reads: "Introducing iTunes for Windows. The best Windows app ever. Download iTunes with the new second generation Music Store. Download now" with a button icon. At the bottom of the ad, it says "For Mac and Windows."

Hell Froze Over

Much to the surprise of theological weather forecasters, Hell froze over on October 16, 2003. This unexpected development seems closely tied to Apple's release of iTunes for Windows. The free application, which has the look and feel (within the limits of Windows) of Apple's famed iTunes music jukebox software, came bundled with QuickTime for Windows, and fully equipped to preview and purchase songs from the iTunes Music Store.

Over the next three days, over a million copies of iTunes for Windows were downloaded from Apple's site, and over a million songs were purchased from the iTunes Music Store. Meteorological reports from Hell indicate a gradual thaw for the next few days after the Chicago Cubs and Boston Red Sox failed to make the World Series, though they gave it a good try. Things got quite a bit chillier again on October 24, 2003, with the release of Mac OS X 10.3, code name Panther. With the ability to seamlessly work within a Windows network, or seamlessly provide services to Windows users on a Macintosh network, the new operating system is sending chills down the backs of network managers everywhere.

Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

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

3] - MacWarehouse: Brian Caputo Account Rep

MacWarehouse account rep Brian Caputo is pleased to announce a new MUG member discount from MacWarehouse in time for the new G5's. He's offering user group members a 5 percent discount off most Apple products (discounts may be higher on non-Apple products).

If you were thinking of buying the new G5, now is the time. The sooner you reserve your new 64 bit G5, the sooner you will be envy of your group--and you'll have paid a great price, too!

The discount is available exclusively through Brian Caputo at MacWarehouse. For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. After you sign in using the login and password that were printed on your membership card, select the link for the Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

This ongoing offer is available worldwide. *For MUG Members ONLY*

4] - CodeTek VirtualDesktop

Special 30 percent savings for Mac user group members! CodeTek VirtualDesktop is the number one virtual desktop program available for Mac OS X. If you need better productivity and multitasking functionality on your Mac, you need CodeTek VirtualDesktop. Add up to 100 virtual desktops (each with its own set of windows) on your monitor when you purchase the registration code. CodeTek VirtualDesktop has many special features including HotKeys, Focus-Follows-Mouse, assigning apps to specific desktops, and much more. It's a great value for only \$21 (US)! Available for download only.

For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. After you sign in using the login and password that were printed on your membership card, select the link for the Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

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

5] - Digi-Elements

Bring Sunny Skies to Photoshop

Have you ever wished you could add a cloud to a picture? Add water with reflections? Wouldn't it be great if you could do all that in Photoshop without learning 3D modeling?

Aurora 2 is a Photoshop plug-in that adds 3D clouds, skies, sun, moon, stars, water, and more in Photoshop. Aurora makes creating 3D nature easy and offers a lot of power.

Normally \$179 (US) for the download version, MUG members can get Aurora for only \$135 (US) -- that's 30 percent off. For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. After you sign in using the login and password that were printed on your membership card, select the link for the Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

This worldwide offer expires March 31, 2004.

6] - Live Oak Hosting

Live Oak Hosting offers personal, reliable service for all of your hosting needs. If you are tired of being "just another customer" or getting the run-around by your current web host, give Live Oak Hosting a try.

- Webmail
 - MySQL Database
 - IMAP & POP Email
 - PHP & ASP
 - Web-based Domain Manager
- Prices starting at \$45 (US) per year!

We are extending an additional 10 percent discount on all of our annual plans until 12/31/04.

For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. After you sign in using the login and password that were printed on your membership card, select the link for the Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

This worldwide offer expires December 31, 2004.

7] - Nova Development

The ultimate Macintosh greeting card software allows you to make beautiful store-quality greeting cards for every occasion in minutes! With millions of unique pos-

sibilities, 3,000+ greeting cards, 45,000+ sensational graphics, and over 500 color photographs to choose from, Greeting Card Factory for Macintosh is the easiest and most complete software of its kind.

Regularly \$49.95 (US), this product has a limited-time introductory special offer price of \$34.95 (US), a 30 percent discount EXCLUSIVELY for Macintosh User Group members. Limit one per household.

For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. After you sign in using the login and password that were printed on your membership card, select the link for the Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

This offer is available to members of U.S. user groups and expires January 31, 2004.

8] - The Omni Group

.....

The Omni Group develops beautifully designed, powerful productivity applications. OmniWeb is a feature-rich web browser designed to put you in control, OmniGraffle is an intuitive diagramming and drawing tool, and OmniOutliner is an indispensable program for outlining and organizing information. Get all of these Mac OS X apps and more at a great price!

User group members are now eligible for a 40 percent discount on ALL of Omni's products.

For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. After you sign in using the login and password that were printed on your membership card, select the link for the Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

This worldwide offer expires January 31, 2004.

9] - The MUG Store

.....

The MUG Store has a huge assortment of great deals right now. Check them all out. Examples include:

- Factory refurbished and new iPods starting at only \$199 (US)
- iMacs from \$599 (US)
- eMacs from \$699 (US)
- iBooks from \$788 (US)
- Brand new LCD iMacs from \$999 (US)
- Brand new G4 PowerBooks from \$1,349 (US)
- A great selection of blowout accessories and closeouts

Remember, UPS freight is free on all orders, and your

group gets one percent in credit for every order your members place.

Place Your Orders.

<http://www.applemugstore.com>

For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. After you sign in using the login and password that were printed on your membership card, select the link for the Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

This offer is available to members of U.S. user groups.

10] - Freeverse Software

.....

Freeverse Software is pleased to offer Mac user groups special discounts on the following titles:

- 3D Hearts Deluxe (retail box), the number 1 Hearts card game for the Mac.
- Burning Monkey Puzzle Lab (shareware), a wacky, falling piece game in the tradition of Tetris.

Demos can be downloaded from the Freeverse web site.

Place Your Order (Enter the appropriate discount coupon.) at <https://store.freeverse.com>

3D Hearts Deluxe special \$10 (US) off and Burning Monkey Puzzle Lab special \$10 (US) off, both using the special user group coupon numbers.

This offer is available worldwide.

For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. After you sign in using the login and password that were printed on your membership card, select the link for the Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

Offer Expires: June 30, 2004

11] - TimeSlice® Time & Billing from Modesitt Software

.....

TimeSlice from Modesitt Software is an easy-to-use time-tracking and billing application for Mac OS 8.6 through Mac OS X. TimeSlice is used every day by small and large businesses, consultants and contractors to track billable time spent on clients, business projects, specific jobs and more!

25 percent off for user group members worldwide.

Regular price: \$49 (US),

special MUG price: \$36.75 (US).

This offer is available worldwide.

Normal Price: \$49

UG Price: 25% off

For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. After you sign in using the login and password that were printed on your membership card, select the link for the Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

Offer Expires: February 29, 2004

12] - Ultra Image from LumiQuest

Ultra Image is a suite of actions that automates image enhancements in Photoshop. Camera specific software enables the user to maximize image quality with regards to noise, color, sharpness and tonal range in seconds. Simply select one of the several subject-specific action sets and Ultra Image will automatically apply the right series of actions to maximize image quality. Images can then be quickly resized and prepped for web or print use. Ultra Image can be used as formatted or customized to the users' preferences.

This offer is available worldwide.

Normal Price: \$79.95

UG Price: \$59.95

For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. After you sign in using the login and password that were printed on your membership card, select the link for the Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

Offer Expires: February 29, 2004

13] -Dynamic Graphics • Training

Good design is not a fine art--it's a science. Dynamic Graphics Training teaches you the rules and helps you gain the confidence to produce great visual communication. Learn design, typography, print production and more in classes like Advanced Design, OS X Transition and Digital Photography, taught by experts in their fields. Two-day classes are regularly offered in many major U.S. cities.

For more information on locations, courses, dates, registration deadlines and catalog orders, call 888-698-8545 or visit online.

This offer is available to members of U.S. user groups only.

Normal Price: Varies

UG Price: 10% Discount

For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. After you sign in using the login and password that were

printed on your membership card, select the link for the Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

Offer Expires: March 31, 2004

14] - ThinkFree Office

A Compelling Alternative to Microsoft Office for Just \$39.95 (US)

ThinkFree Office is a full-featured productivity suite that includes word processing, spreadsheet, and presentation applications. Its powerful yet easy-to-use applications can seamlessly open, edit, and save directly to their corresponding Microsoft Office file formats like .doc, .xls, and .ppt.

Normal Price: \$49.95

UG Price: \$39.95

For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. After you sign in using the login and password that were printed on your membership card, select the link for the Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

Offer Expires: December 31, 2003

15] -PhotoSpin.com

Free Images and Discounts for Mac User Group Members

PhotoSpin is pleased to offer a free Featured Image of the Week subscription for user group members. This program provides you with a new PhotoSpin image each week in both high and low resolutions. Each image is a \$49.95 (US) value and is ideal for print and presentation projects.

User group members may also subscribe to PhotoSpin's Professional subscription for \$199 (US) --- regularly \$249 (US).

Take advantage of the free images and check out the discounts.

This worldwide offer expires December 31, 2003.

Normal Price: \$49.95 each and \$249

UG Price: Free and \$199

For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. After you sign in using the login and password that were printed on your membership card, select the link for the Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

Offer Expires: December 31, 2003

16] - Aladdin Systems

.....

Aladdin Systems announces three new releases, all with great worldwide user group discounts that never expire! Internet Cleanup 1.0 puts you in control by removing spyware and providing selective banner ad and pop-up blocking. Ten for X Utilities Volume 2, a \$170 (US) value, delivers eleven cool OS X utilities that help you block spam and much more. Spring Cleaning 6.0 has many improvements that make it easier than ever to sweep away clutter to regain disk space and boost performance.

Get 40 percent off retail price with this MUG offer.

These ongoing offers are available worldwide.

Normal Price: Varies

UG Price: 40% off

For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. After you sign in using the login and password that were printed on your membership card, select the link for the Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

Offer Expires: December 31, 2003

17] - Circus Ponies NoteBook

.....

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).

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

Normal Price: \$49.95

UG Price: \$29.95

For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. After you sign in using the login and password that were printed on your membership card, select the link for the Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

Offer Expires: December 31, 2003

18] - Hemera Technologies

.....

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.

This worldwide offer expires December 31, 2003.

Normal Price: \$149.99

UG Price: \$25 off, and \$25 additional off if you own another art collection

For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. After you sign in using the login and password that were printed on your membership card, select the link for the Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

Offer Expires: December 31, 2003

19] - liquidlibrary

.....

Complete your design projects quickly and efficiently with this exclusive offer for Mac user groups in the U.S. Get liquidlibrary for ONLY \$79.95 (US) a month (\$125 (US) value).

Get over 150 royalty free photos, illustrations and media elements on a double CD, along with time-saving ideas and inspiration in a 68-page monthly magazine. Plus, you get free online management of all your purchased content and discounted access to over 65,000 images at www.liquidlibrary.com.

To order, go to <http://www.liquidlibrary.com>, call 800-255-8800, or e-mail sales@liquidlibrary.com and use the special MUG VIP Code.

Visit www.liquidlibrary.com/freesample and enter the special MUG VIP Code to get FREE access to 150 sample images. Take a look and you'll see liquidlibrary has all the tools you need to be the best designer you can be.

This is an ongoing offer for members of U.S. user groups.

Normal Price: \$125

UG Price: 79.95

For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. After you sign in using the login and password that were printed on your membership card, select the link for the Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

Offer Expires: No Expiration

20] - O'Reilly

.....

User group members can receive a 20% discount on any O'Reilly book purchased directly from O'Reilly's website, including upcoming additions to the Missing Manual series. Members are also eligible for a 20 percent discount on all O'Reilly conferences. To receive your discount, use the special MUG Discount Code.

This ongoing offer is available to user group members worldwide.

Normal Price: Varies

UG Price: 20% off

For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. After you sign in using the login and password that were printed on your membership card, select the link for the Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

Offer Expires: No Expiration

21] - Asante Technologies

.....

Asante Technologies is the leading provider of Mac networking solutions. The company's products are known for their ease of use.

Asante is offering great discounts to MUG members on wireless routers, switches, and more. For example, the FriendlyNET FR3004FLC DSL/cable modem router with built-in 4-port 10/100 switch, serial port, and LPT port is \$59 (U.S.), regularly \$99 (U.S.), and the AeroLAN 1211 802.11b Wireless pc Card for laptops is \$49 (U.S.), regularly \$95 (U.S.). To get the discount, MUG members should obtain the special order URL and/or Asante contact information.

There is a limit of one of each item per person within the U.S. and Canada while supplies last.

Price: Varies

UG Price: Varies

For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. Af-

ter you sign in using the login and password that were printed on your membership card, select the link for the Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

Offer Expires: While Supplies Last

22] - MacPhoneHome

.....

MacPhoneHome is the pre-eminent computer tracking and theft recovery software for Macintosh computers.

If your Mac is stolen, MacPhoneHome sends a stealth e-mail message containing its exact location to an e-mail address set by you, and Brigadoon Software works with law enforcement to get it back.

Worldwide tracking and recovery. Highly tamper-proof. Both Classic and OS X included at no additional cost.

Normally \$29.95 (US) per download/license. MUG members order through a hidden webpage and pay only \$19.95 (US), a 33% savings. Enter the MUG Code and the price is changed to \$19.99 (US).

Offer available worldwide.

Normal Price: \$29.95

UG Price: \$19.99 (33% off)

For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. After you sign in using the login and password that were printed on your membership card, select the link for the Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

Offer Expires: December 31, 2003

23] - Copper.net Inc.

.....

Copper.net Inc. offer: First 3 months of Internet service for only \$5!

Copper.net provides fast reliable connections, virus and spam filter, no annoying ads, no setup fees, no contracts, over 3400 access numbers Nationwide, toll free technical support, and a great referral program.

After 3 months of service, your credit card will be charged our normal Low rate of \$9.95 a month. Please call or email us if you would like to Take advantage of our annual rate of \$99 (US). That's only \$8.25 (US) per month.

Normal Price: \$30 (for 3 months)

UG Price: \$5 (for 3 months)

For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. After you sign in using the login and password that were

printed on your membership card, select the link for the Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

Offer Expires: December 31, 2003

24] - Macaroni

.....
Macaroni: Automated System Maintenance for Mac OS X

Why should you have to remember to clean up your Mac once a week, or once a month? Shouldn't a computer be able to remember for you?

Macaroni is a tool which handles regular maintenance for Mac OS X, including Unix and Mac OS X maintenance tasks, and offers special scheduling features for Powerbook and iBook users. Normally, these tasks run on a regular schedule, in the middle of the night. However, if you don't leave your Mac on all night, they never run. Your Mac won't wake from sleep to handle this.

Macaroni solves the problem. If a scheduled maintenance task is not run when it's normally scheduled, Macaroni automatically ensures that it's run at the next opportunity, whenever the Mac is on.

The normal price of Macaroni is \$7.99. MUG users can get a 10% discount by entering the MUG Discount Code.

Normal Price: \$7.99

UG Price: Save 10%

For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. After you sign in using the login and password that were printed on your membership card, select the link for the Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

Offer Expires: No Expiration

25] - WiebeTech

.....
WiebeTech produces FireWire storage devices which are small, lightweight, transportable and available in bus powered configurations. WiebeTech also produces FireWire DriveDocks, which allow direct attachment from FireWire to hard drives. These products are available for notebook and desktop drives.

WiebeTech is pleased to offer permanent discounts to MUG members. Discounts vary widely by product, but are always better than retail prices.

For example, MicroGB+, FireWire portable storage enclosure, is available for \$84.96 (regularly \$99.95) and FireWire DriveDock with AC adapter, is available for \$117.56 (regularly \$139.95).

This is an ongoing offer with no expiration date. Of-

fer is open to MUG members worldwide. Shipping costs will be higher outside the U.S.

Normal Price: Varies by product

UG Price: Varies by product

For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. After you sign in using the login and password that were printed on your membership card, select the link for the Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

Offer Expires: No Expiration

26] - MacAddict Magazine

.....
User Group Offer

Special MacAddict Subscription and Renewal Offer for MUG members

MacAddict for only \$20.95...that's 78% off the basic rate and \$3.05 off of the lowest published rate!

Award-winning MacAddict magazine launched in 1996 as the ultimate hands-on guide to anything and everything Macintosh. Its mission is to provide readers with the most comprehensive range of Mac product and how-to information possible. MacAddict packs each issue with in-depth how-to articles, fact-filled features, expert reviews, and up-to-the-minute news and analysis. MacAddict is justly famous for its eye-catching design and irreverent wit. It is the only magazine for Mac enthusiasts and professionals that offers its readers a compete multimedia experience: a monthly print magazine; a companion CD-ROM packed with software, demos and updates; and the MacAddict.com Web site

Normal Price: \$26.85

UG Price: \$20.95

For the necessary URLs, codes and/or passwords, go to the Washington Apple Pi, <<http://tcs.wap.org/>>. After you sign in using the login and password that were printed on your membership card, select the link for the Classifieds Conference and choose "More Member Specials. Full details for each offer can be found there.

Offer Expires: No Expiration

27] - Audible.com

.....
Listen To The New York Times Every Morning

Audible, the source for great audio information and entertainment, brings you over 20,000 great audio programs. You simply download them and listen on your computer, MP3 player, Pocket PC, iPod or on CDs you burn yourself.

Listen to the best audiobooks from top authors like

Tom Clancy and Stephen King. Or listen to audio editions of Macworld, The Wall Street Journal or The New York Times.

Join Audible now and you'll get A FREE one-month subscription to the audio version of The New York Times PLUS 3 bonus gifts:

- 10 FREE blank CDs--burn and listen to great Audible programs on any CD player.

- A FREE subSPECIAL OFFERS - APPLE USER GROUP BULLETIN

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. ■

Apple Offers Free Online Seminars From the MacTerp Discussion Group

(as relayed by Apple Engineer Aaron Davis)

<http://seminars.apple.com/seminarsonline/>

Current Free Apple Online Seminars:

These online events are available 24 hours a day, 7 days a week from any computer with internet access. They are designed to be no more than 30 minutes in length and offer a wide variety of resources and information for your review. Topics cover solutions using Apple and partner products and technologies.

(Editor's Note: These are the seminars offered in early October, 2003. Check Apple's website as listed above



for the latest offerings.)

Biotech is in our DNA. Michael Athanas, Ph.D., of The BioTeam will show how to install a fully provisioned informatics cluster on one or more Xserve servers using iNquiry.

Break Through the Barriers to Digital Photography Success. Digital photography provides exciting ways to deliver new content and gain greater control over the finished product, while saving time and money.

Color Management for Your Digital Workflow. This free online seminar helps demystify color management and gives you the knowledge you need to incorporate it into your workflow.

Communicate Your Creativity. This seminar will show you how to make document-sharing with Macintosh, Windows, UNIX, and wireless users easy using Adobe Acrobat and PDF running on Mac OS X.

Digital Imaging in Your Medical Practice. Digital Imaging in Your Medical Practice. Learn how to use digital imaging in your practice by taking this online seminar.

How to Promote Your Small Business. How will customers know your business exists? Learn how the design & creative strengths of easy-to-use tools like iDVD & .Mac help build effective promotions.

Integrate Your Business Operations. Get an overview of how to organize your business operations, with an integrated workflow, to achieve a smooth organizational flow and lower costs.

Keynote: Presentations that Meet your Creative Standards. Take this free online seminar and find out how Keynote allows you to create superior presentations you would expect from a professional creative tool.

Mac OS X : The New Desktop for UNIX Users . This seminar will show you how Mac OS X represents the future of the UNIX-based desktop.

Organize, Analyze, and Communicate with Office v. X. A more detailed look at how to use MS Office v.X to organize, analyze, and communicate; based on the overview Online Seminar: Integrate Your Business Operations.

"These online events are available 24 hours a day, 7 days a week from any computer with internet access. They are designed to be no more than 30 minutes in length and offer a wide variety of resources and information for your review. Topics cover solutions using Apple and partner products and technologies."

Page Layout in Mac OS X - featuring Adobe InDesign. Learn how Apple's leading-edge technology and Adobe's design tools combine to deliver a high-performance base for page layout creation.

Perfectly Focused - Digital Photography on Mac OS X. This seminar will show you why you should take the plunge to digital—and how to get started with your own digital photography workflow on Mac OS X.

QuickTime Streaming & Broadcasting. Whether you produce video streaming now or want to start, this rebroadcast of the 3-27 webcast will show you how to take advantage of this powerful new medium.

The Pros say "Go" to Mac OS X. Take this free online seminar and discover why prominent experts agree: The time is now for creative professionals to move to Mac OS X.

UNIX power. Apple ease of use. The server you need. Xserve is an affordable, powerful cross-platform server with a stable UNIX-based operating system. Find out how it meets the enterprise IT challenge.

Unwire Your Business. Take this free online seminar and find out how Apple's wireless and mobile solutions let you take your computing environment with you wherever you go.

Web Design in Mac OS X - featuring Adobe GoLive. Learn how Apple's leading-edge technology and Adobe's design tools combine to deliver a high-performance base for website creation and maintenance. ■

WAP Computer Classes—November and December

The Basics

Mac OS X New User Series

- Mon, Nov 3, 2003 Wed, Nov 5, 2003 Mon, Nov 17, 2003 Wed, Nov 19, 2003 from 1:00 PM to: 4:00 PM or
- Mon, Dec 1, 2003 Wed, Dec 3, 2003 Mon, Dec 8, 2003 Wed, Dec 10, 2003 from 9:30 AM to: 12:30 PM or
- Mon, Jan 12, 2004 Wed, Jan 14, 2004 Mon, Jan 19, 2004 Wed, Jan 21, 2004 from 9:30 AM to: 12:30 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 Prerequisites: None

Mastering OS X

Wed, Nov 12, 2003 Thu, Nov 13, 2003 Thu, Nov 20, 2003 from 9:30 AM to: 12:30 PM (Pat Fauquet) or Thu, Dec 4, 2003 Thu, Dec 11, 2003 Thu, Dec 18, 2003 from 9:30 AM to: 12:30 PM (Jim Ritz) or Thu, Jan 8, 2004 Thu, Jan 15, 2004 Thu, Jan 22, 2004 from 9:30 AM to: 12:30 PM (Jim Ritz) or Mon, Jan 12, 2004 Wed, Jan 14, 2004 Mon, Jan 19, 2004 from 1:00 PM to: 4:00 PM (Pat Fauquet)

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 application and Unix commands are NOT

covered in these classes. This course consists of a series 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

Maintenance and Troubleshooting for OS X

Thu, Nov 20, 2003 from 1:00 PM to: 4:00 PM *or* Thu, Dec 18, 2003 from 1:00 PM to: 4:00 PM *or* Thu, Jan 29, 2004 from 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 Prerequisites: Mastering OS X

How to Open Almost Any File

Thu, Dec 4, 2003 from 1:00 PM to: 4:00 PM *or* Thu, Jan 8, 2004 from 1:00 PM to: 4:00 PM

All of us get files that we cannot open. In this course students will learn a variety of techniques to open those files and convert them to a usable format. They will also learn how to prepare and send files so that others can read them. Instructor: Jim Ritz Member Cost: \$50.00, Others: \$100.00 Prerequisites: Mastering OS 9 or Mastering OS X

Lets Burn Some CDs

Wed, Jan 28, 2004 from 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 Titanium 6 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 Prerequisites: Mastering OS 9 or Mastering OS X

Productivity

FileMaker Pro Preliminaries

Tue, Nov 4, 2003 from 9:30 AM to: 12:30 PM *or* Tue, Dec 2, 2003 from 9:30 AM to: 12:30 PM *or* Tue, Jan 13, 2004 from 1:00 PM to: 4:00 PM

This three-hour session will cover database basics, terminology, planning, creation, and processing (editing, searching, sorting, and output, including the use of scripts). Students are encouraged to have a project in mind for which they would like to create a database.

Instructor: Dick Nugent Member Cost: \$50.00, Others: \$100.00 Prerequisites: Mastering OS X

FileMaker Pro, Next Step

Tue, Nov 18, 2003 from 9:30 AM to: 12:30 PM *or* Tue, Dec 9, 2003 from 9:30 AM to: 12:30 PM *or* Tue, Jan 20, 2004 from 1:00 PM to: 4:00 PM

This second-step three-hour session is intended to cover, at a minimum, layouts and reports, related files, database protection, use of formulas and functions, and the expanded use of customized scripts. Specific content will be tailored to student interest and questions. It is recommended that students have a database, at least in the design stage, for which they could use help in developing. Instructor: Dick Nugent Member Cost: \$50.00, Others: \$100.00 Prerequisites: Mastering OS X and FileMaker Pro Preliminaries

Putting AppleWorks to Work

Thu, Dec 11, 2003 from 1:00 PM to: 4:00 PM *or* Thu, Jan 29, 2004 from 1:00 PM to: 4:00 PM

AppleWorks does far more than word processing. Learn how to use it to make flyers, databases, spreadsheets, slideshows, graphs and charts and mail merge letters. This course is six hours long. It will be taught either as an all-day class or in two three hour sessions. Instructor: MWF—Pat Fauquet, TTh—Jim Ritz Member Cost: \$100.00, Others: \$150.00 Course Prerequisites: Mastering OS 9 or

Mastering OS X Introduction to Spreadsheets

Thu, Jan 15, 2004 from 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 spreadsheet 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: MWF—Pat Fauquet, TTh—Jim Ritz Member Cost: \$50.00, Others: \$100.00 Course Prerequisites: Mastering OS 9 or Mastering OS X

AppleWorks Word Processing

Thu, Jan 22, 2004 from 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

Digital Images

Fun With Your Scanner

Mon, Nov 3, 2003 from 9:30 AM to: 12:30 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 .

Introduction to iPhoto

Wed, Nov 5, 2003 from 9:30 AM to: 12:30 PM or Mon, Dec 1, 2003 from 1:00 PM to: 4:00 PM or Wed, Jan 21, 2004 from 1:00 PM to: 4:00 PM

Users of OS X can use iPhoto to import, organize, edit and share their digital images from cameras, scanners and Picture 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

Mon, Nov 17, 2003 from 9:30 AM to: 12:30 PM or Wed, Dec 3, 2003 from 1:00 PM to: 4:00 PM or Mon, Jan 26, 2004 from 9:30 AM to: 12:30 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

Wed, Nov 19, 2003 from 9:30 AM to: 12:30 PM or Mon, Dec 8, 2003 from 1:00 PM to: 4:00 PM or Mon, Jan 26, 2004 from 1:00 PM to: 4:00 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

How to Make Great Prints

Wed, Dec 10, 2003 from 1:00 PM to: 4:00 PM or Wed, Jan 28, 2004 from 9:30 AM to: 12:30 PM

Bring your printer, its software and some digital photos to class. We will explore how to get great results and how to choose the best paper for your project. 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, Others: \$100.00

Prerequisites: Mastering OS 9 or Mastering OS X and How to Fix a Bad Photo

Washington Apple Pi Tutorials

*A great gift idea for
friends or family. Sign
up today for an
experience that will en-
rich your computer life
in the future.*

WASHINGTON APPLE PI, LTD. BYLAWS

[These Bylaws are current as of October 8, 2003. The Bylaws originally appeared in the WAP Journal in October, 1982. Issues of the Journal giving notice of amendment, adoption or repeal of particular sections are indicated in brackets.]

ARTICLE I - NAME

The name of the corporation is Washington Apple Pi, Ltd. (hereinafter referred to as "WAP" or the "Corporation").

ARTICLE II - PURPOSES

WAP is formed to function as a charitable and educational computer club organized exclusively for pleasure, recreation and other non-profitable purposes within the meaning of section 501(c)(7) of the Internal Revenue Code of 1986, as amended (or the corresponding provision of any future United States internal revenue law). More specifically, such purposes include, but are not limited to, mutual learning and education of members of the public who share an interest in computers. Substantially all of the activities of the Corporation shall be for pleasure, recreation and other non-profitable purposes. [Amended June 1994.]

ARTICLE III - PROHIBITED ACTIVITIES

No part of the net earnings of the Corporation shall inure to the benefit of its members, directors, officers, or other private persons, except that the Corporation shall be authorized and empowered to pay reasonable compensation for services rendered and to make payments and distributions in furtherance of the purposes set forth in Article II hereof. No substantial part of the activities of the Corporation shall be the carrying on of propaganda or otherwise attempting to influence legislation, and the Corporation shall not participate in, or intervene in (including the publication or distribution of statements), any political campaign on behalf of any candidate for public office. The Corporation shall not carry on any other activities not permitted to be carried on by a corporation exempt from federal income tax under Section 501(c)(7) of the Internal Revenue Code of 1986, as amended (or the corresponding provision of any future United States internal revenue law).

No member, director or officer of the Corporation shall be financially interested, directly or indirectly, in any agreement relating to the operations conducted by the Corporation, nor in any transaction for furnishing services, facilities or supplies to the Corporation for compensation, unless the fact of such interest be known to the Board of Directors and unless such agreement or transaction shall be authorized by the Directors who have no interest, direct or indirect, in such agreement or transaction. [Amended June 1994.]

ARTICLE IV - OFFICES

The address of the principal office of the Corporation is 12022 Parklawn Drive, Rockville, Maryland 20852. The Corporation may maintain additional offices at other places as the Board of Directors chooses to designate. [Amended May 1983, August 1989, March 1998.]

ARTICLE V - MEMBERSHIP

SECTION 1. CLASSES OF MEMBERSHIP.

There shall be three types of membership: regular, associate and guest. There shall be three classes of regular membership: family, student and life. Any member of the immediate household holding a family membership shall be entitled to all privileges of membership, except that the family membership is entitled to a single WAP Journal and a single vote. Additionally, individuals seeking offices covered by Article IX must each have a membership card in their own name. Student membership may be held by individuals, under the terms and conditions set by the Board of Directors, for less dues than a family membership. The Board of Directors may award life memberships. The Board of Directors may create one or more classes of associate membership. Associate membership may be offered to members of other groups and include a limited number of benefits of full WAP membership. Associate members have no voting rights and may not hold office. The Board of Directors may create one or more classes of guest membership to enable other persons to attend an individual WAP function. Guest members have no other rights or privileges. The Board of Directors may prescribe the other rights, privileges and qualifications of all classes of membership. [Amended July 1986, February 1994, June 1994, March 1998.]

SECTION 2. ELIGIBILITY. Membership in WAP is open to any person interested in computers of any manufacturer, size or kind and who satisfies the Corporation that he or she is willing to participate constructively in the Corporation's activities. New members shall be required to pay an initiation fee under the conditions prescribed by the Board of Directors. [Amended July 1986, February 1994 and June 1994.]

SECTION 3. DUES. The annual dues for each class of membership shall be determined by the Board of Directors. For a member to remain in good standing, renewal payment is due and must be received at the Corporation's Office by the end of the month in which the membership expires. [Amended March 1993.]

SECTION 4. LIMITATION OF AUTHORITY.

Except as otherwise specified in these Bylaws, no member shall act in the name of WAP or take any action that would bind WAP. [Amended July 1986.]

SECTION 5. RESIGNATION. Any member may resign from membership in the Corporation by submitting a written resignation to the Secretary of the Corporation, but members shall not be entitled to a refund of any portion of the annual dues paid prior to such resignation.

SECTION 6. EXPULSION. A member may be expelled from membership in WAP for (a) failure to pay the annual dues for more than seven (7) days after the due date thereof, or (b) engaging in activities prohibited by these Bylaws or any rule or practice adopted by the Board of Directors of which notice has been given to members. Damaging WAP property or disrupting WAP services shall be ground for expulsion. Before any member may be expelled for engaging in prohibited activities, written charges specifying the alleged cause shall be filed with the Secretary and a copy thereof shall be served on the member charged. The member charged shall be given notice of the meeting of the Board of Directors at which the member's expulsion is to be considered and the member charged shall be allowed a hearing before the Board. If the Board determines that the prohibited activities are correctable, the member charged may, at the discretion of the Board, be given an opportunity to correct such conduct. The member charged may be expelled by the affirmative vote of two-thirds of those Directors present and voting at the Board of Directors meeting of which the member charged received notice, a quorum of Directors being present. The member charged shall receive prompt written notice of the Board's action. A person expelled from membership by virtue of (b) above may be reinstated as a member by a majority vote of the Board. [Amended March 1986, July 1986, August 1989 and March 1993.]

SECTION 7. QUALIFICATIONS FOR OFFICERS AND DIRECTORS. All officers and Directors must be regular members in good standing in WAP. Notwithstanding Articles VII and VIII of these Bylaws, an officer or Director who ceases to be a regular member in good standing shall

be deemed to have vacated the office or the directorate effective as of the date he or she ceased to be a regular member in good standing. [Added March 1987, and amended March 1993 and February 1994.]

ARTICLE VI - MEMBERSHIP MEETINGS

SECTION 1. REGULAR MEETINGS. Regular Membership Meetings shall be held on the fourth Saturday of each month, unless otherwise determined by the Board of Directors. Notice of these meetings, stating the date and hour of the meeting and the place where it is to be held, shall be by publication in the WAP Journal.

SECTION 2. SPECIAL MEETINGS. Special Membership Meetings may be called by the President, the Board of Directors or a signed petition of fifty (50) regular members. Notice of a Special Membership Meeting, stating the date and hour of the meeting and the place where it is to be held, shall be given by publication in the WAP Journal or by a mailing to all regular members and shall state the purpose of the meeting. No business other than that stated in the notice shall be transacted. [Amended February 1994.]

SECTION 3. QUORUM. [One hundred regular members in good standing must be present at a Regular or Special Membership Meeting in order to conduct business.]

Strike Through the above bracketed words

Revision:

For Regular Meetings, the Regular members in attendance shall constitute the quorum in order to conduct business. For Special Meetings, fifty regular members in good standing must be present in order to conduct business. [Amended February 1994 and November 2003.]

SECTION 4. PROXIES. No member may vote by proxy at a Regular or Special Membership Meeting.

ARTICLE VII - BOARD OF DIRECTORS

SECTION 1. POWERS. The business and affairs of WAP shall be managed by its Board of Directors, which may exercise all powers of the Corporation and perform all lawful acts and things which are not by law, the Articles of Incorporation, or these Bylaws directed or required to be exercised or performed by or are conferred upon or reserved to the members.

SECTION 2. COMPOSITION. The Board of Directors shall be comprised of Directors elected annually by the membership pursuant to Article IX hereof. Eight Directors shall be elected as Director-at-Large. Additional Directors are

elected as President, Vice-President for Programs, Vice-President for Membership, Vice-President for Volunteer Services, Vice-President for Publicity, Secretary and Treasurer. An officer who is also a Director does not cease to be a Director if removed or replaced as an officer, and a person appointed by the Board to be an officer does not become a Director by virtue of this appointment. [Amended April 1984, February 1987, June 1988, August 1989, June 1990, March 1993, March 1999.]

SECTION 3. TERM. Directors shall serve until the next annual election and until their successors are elected and qualify. [Amended January 1992 and March 1993.]

SECTION 4. REMOVAL. A Director may be removed at any time, with or without cause, either at a Regular Membership Meeting or at a Special Membership Meeting called for such purpose. A quorum being present, a Director may be removed by the majority vote of regular members in good standing present and voting. [Amended March 1993 and February 1994.]

SECTION 5. VACANCIES. Upon the resignation or removal of a Director, that Director position shall be declared vacant. If the number of Directors falls below 15 for any reason, the Board of Directors may, by majority vote, appoint an eligible member a Director. [Amended March 1993.]

SECTION 6. REGULAR MEETINGS. Regular meetings of the Board of Directors shall be held monthly, unless otherwise determined by the Board of Directors. Regular meetings shall be held, at such time and place as may be determined by the Board of Directors, without further notice.

SECTION 7. SPECIAL MEETINGS. Special meetings of the Board of Directors may be called by the President, a Vice-President or two or more Directors on seven (7) days notice to each Director, if such notice is delivered personally, by telegram or by telephone; or on fourteen (14) days notice if sent by mail or published in the WAP Journal. No business other than that stated in such notice shall be conducted. [Amended June 1988 and March 1993.]

SECTION 8. CONDUCT OF MEETINGS. The Board shall by a simple majority at its first meeting of its term elect a presiding officer from among its members who shall preside at meetings of the Board of Directors for the balance of the term. In the absence of the presiding officer, the Board may elect a temporary presiding officer from among its members by simple majority vote for the duration of the meeting or until the presiding officer assumes the chair. By

a two-thirds majority vote, the Board may permanently remove a presiding officer for the balance of the term. A simple majority is then sufficient to elect a new presiding officer. The Secretary of the Corporation, or such other person as the presiding officer may appoint, shall act as Secretary of the meetings. A majority of the Directors currently in office (not counting vacancies) shall constitute a quorum. Meetings of the Board of Directors shall be open to the Corporation's regular members, except that upon majority vote, the Board of Directors may enter executive session to transact business which the Board determines to be confidential. [Amended June 1984, August 1989 and February 1994.]

SECTION 9. ACTION BY CONSENT. Any action required or permitted to be taken at any meeting of the Board of Directors may be taken without a meeting if a written consent to such action is signed by all members of the Board of Directors and such written consent is filed with the minutes of the proceedings of the Board. [Amended July 1991.]

SECTION 10. PROXIES. Participation in a Board of Directors meeting requires personal attendance. No Director may vote by proxy at a meeting of the Board of Directors. [Amended July 1991.]

ARTICLE VIII - OFFICERS

SECTION 1. DESIGNATION AND TENURE. The elected officers of the Corporation shall be the President, four Vice-Presidents, the Secretary, and Treasurer. The appointed officers of the corporation shall be one or more Editors of the Journal, one or more Librarians, the Telecommunications System Operator and one or more Tutorial Directors. The President shall not concurrently hold the office of Vice-President, Secretary or Treasurer. An election shall be held annually, pursuant to Article IX of these bylaws, for the President, the four Vice-Presidents, the Secretary and the Treasurer. The Board of Directors shall have the power to appoint all officers not chosen by election. An officer shall serve a term of one year and until a successor is appointed, or until a successor is elected and qualifies before the Board. The Board of Directors may by majority vote remove any officer of the Corporation if the Board finds in its judgment that the best interests of the corporation will be served by doing so. The removal of an officer does not prejudice any of his or her contract rights. If any office becomes vacant for any reason, the Board of Directors may appoint an eligible member to fill that vacancy. [Amended June 1984, June 1988, June 1990, March 1993, February 1994 and March 1999.]

SECTION 2. PRESIDENT. The President shall, subject to the Bylaws and control of the Board of Directors, have general charge of the business, affairs and property of the Corporation with general supervision over its other officers and agents. Subject to the Bylaws and the control of the Board of Directors, the President shall oversee and coordinate such programs, activities and other duties as may be delegated to the President by the Board of Directors. The President shall submit an annual report to the Board describing the past year's activities of the Corporation. [Amended August 1989 and June 1990.]

SECTION 3. VICE-PRESIDENTS. There shall be four elected Vice-Presidents: Programs, Membership, Volunteer Services, and Publicity. In addition, the Board may appoint additional vice-presidents from among the directors to fulfill any other positions they deem necessary. The Vice-Presidents shall serve as assistants to the President and shall oversee and coordinate such programs, activities and other duties as may be delegated to them by the Board of Directors or the President. From time to time, the President shall designate one of the Vice-Presidents elected by the membership who shall in the absence of the President or in the event of the President's disability perform the duties and exercise the powers of the President. [Amended June 1984, July 1988, June 1990 and March 1999.]

SECTION 4. SECRETARY. The Secretary shall give, or cause to be given, notice of Special Membership Meetings and of Special Board of Directors meetings. The Secretary shall keep the minutes of the meetings of the members and the Board of Directors. The Secretary shall send copies of the minutes of all meetings to the Board of Directors and shall also see that the books, reports, statements and all other documents required by law are properly kept and filed. The Secretary shall perform such other duties as may be delegated by the President or the Board of Directors. The Secretary may appoint one or more assistants. [Amended June 1990.]

SECTION 5. TREASURER. The Treasurer shall have custody of the corporate funds and other valuable effects, shall keep full and accurate accounts of receipts and disbursements in books belonging to the Corporation and shall deposit all monies and other valuable effects in the name and to the credit of the Corporation in such depositories as may be designated by the Board of Directors. The Treasurer shall have the authority to disburse checks as provided in Article XII hereof. The Treasurer shall maintain a system of internal fiscal control and shall report regularly to the Board of Directors on the expenses and financial condition of the

Corporation. The Treasurer shall perform such other duties as may be delegated by the President or the Board of Directors. The Treasurer may appoint one or more assistants. [Amended June 1990.]

SECTION 6. EDITORS OF THE JOURNAL. The Editors of the WAP Journal, shall, subject to the general policy direction of the Board of Directors, be responsible for the Journal's editorial and advertising content and its publication on a regular basis. The Editors may appoint one or more assistants. [Amended August 1989 and June 1990.]

SECTION 7. LIBRARIANS. The Librarians shall organize the Corporation's collection of computer programs, computer media, books and periodicals, subject to the general policy direction of the Board of Directors. The Librarians may appoint one or more assistants. [Amended August 1989 and June 1990.]

SECTION 8. DIRECTOR OF GROUP PURCHASES. [Repealed March 1993.]

SECTION 9. TELECOMMUNICATIONS SYSTEM OPERATOR. The Telecommunications System Operator shall chair the standing Telecommunications System Committee. [Amended June 1986 and June 1990.]

SECTION 10. TUTORIAL DIRECTORS. The Tutorial Directors shall, subject to the general policy direction of the Board of Directors, arrange for and coordinate tutorials for the purpose of providing education and instruction in computer-related subjects. The Tutorial Directors may appoint one or more assistants. [Amended June 1984, July 1988, August 1989 and June 1990.]

ARTICLE IX - ELECTIONS

SECTION 1. SCOPE. An election shall be held annually for eight Directors-at-Large, the President, the four Vice-Presidents, the Secretary and the Treasurer. Each person who is a regular member in good standing on April 8 shall have a ballot mailed or made available to him. The election shall be concluded, to the extent possible, by May 31 of each year in order to allow those elected to begin their terms on June 1. The newly elected Board of Directors may, at their first regular meeting of the term, appoint any qualified members to fill any vacancies remaining after the election, including Director and officer vacancies separately, pursuant to Articles VII and VIII. [Amended February 1994 and March 1999.]

SECTION 2. DELEGATION. The Board of Directors (the Board) shall appoint an Election Committee composed of at least three members in good standing who are not candidates in the election. This committee shall be charged with conducting a fair, impartial and timely election. Within rules, policies and procedures established by these Bylaws and the Board, the Election Committee shall have discretion to conduct the election as it sees fit. The Board shall appoint an Election Review Committee composed of at least three members in good standing, none of whom is a candidate, an Election Committee member or a Board member, to hear and resolve protests that might arise during the course of an election. The Election Review Committee acts pursuant to Section 7 of this Article. Any dispute regarding the eligibility of a candidate or voter shall be resolved by the Board.

SECTION 3. NOMINATIONS. Nominations for Director-at-Large positions and officer positions must be made at the February regular membership meeting or received by the Secretary through the Corporation's office by that date. Candidates for office must be regular members in good standing from the time of their nomination until the conclusion of the election. Regular members in good standing may nominate themselves or others. A single nomination for each nominee is sufficient for any position. It is the responsibility of the nominator to provide sufficient information to identify and locate the nominee, who may be known to the Corporation under another name or through another family member. [Amended February 1994.]

SECTION 4. SUBMISSIONS. As soon as possible after the conclusion of nominations, the Election Committee shall ascertain which nominees wish to stand for election as candidates. An individual may accept nomination and be a candidate for more than one position, except that no one person shall be a candidate for both President and another officer position. The Election Committee shall apprise the candidates of the rules and timetable for the election, and shall solicit from the candidates whatever declarations, certifications, statements, disclosures or other information as may be permitted or required by the Election Committee, the Board or these Bylaws. This information shall be held in confidence by the Committee until the deadline for its receipt or until all such information is received. A candidate for more than one position shall designate the one contest under which any candidate statement or background information concerning the candidate shall appear.

SECTION 5. BALLOTING. The Election Committee shall supervise and have responsibility for the production, distribution, collection and accurate counting of election ma-

terial. The Election Committee shall, subject to the instructions of the Board, set a time in the month of May by which ballots must be received to be valid and counted. The Election Committee is authorized to rule on the validity and intent of each returned ballot. Each ballot may contain one vote for each office, except that up to eight votes (noncumulative) may be cast for Director-at-Large. [Amended March 1999.]

SECTION 6. RESULTS. For each officer position, if any one candidate receives both (a) more than one half of the votes cast for that position and (b) votes for that position on more than one tenth of all valid ballots returned, then that candidate shall be certified by the Election Committee as being elected to that position. Otherwise, the Election Committee shall certify no winner. A person elected to an office also becomes a Director by virtue of such election. In the event that any candidate for Director-at-Large is elected as an officer, such candidate shall not be eligible for election as a Director-at-Large. The eight or fewer (in the absence of eight) eligible candidates for Director-at-Large with the greatest number of votes and the votes of at least 3% of all eligible voters shall be elected Directors. The Election Committee shall certify the results of the election of Directors to the membership as quickly as possible but no later than ten days after the deadline for the receipt of ballots. The Election Committee shall present to the new Board at its first regular meeting of the term the results of the election of officers. The Election Committee shall apprise the Board of anyone elected by the membership who declined to accept election or who appears not to be eligible to serve, so that the Board may declare their positions vacant. [Amended March 1999.]

SECTION 7. PROTESTS. Any candidate for any position that believes that a specific fault in the election caused, or would cause, him or her to lose the election may petition for review. Petitions must be submitted immediately upon discovery of the fault so that timely corrective action, if warranted, may be taken. The Secretary and the Board shall promptly forward such petitions to an Election Review Committee (ERC) formed pursuant to Section 2. The ERC shall render an opinion as to whether or not such a fault exists, and, if so, what an appropriate remedy for the fault shall be, if any. Before votes are counted, the ERC may instruct the Election Committee to (a) extend any deadline by up to one month, with or without further notice, notwithstanding any other provision of the Bylaws, (b) report "no winner" in any officer race, or (c) certify fewer than eight Directors-at-Large, provided that at least 13 Directors total shall be elected from among the officer and Direc-

tor-at-Large contests, combined. The ERC may not spend or cause to be spent more than \$100 without concurrence of the Board of Directors. In the absence of protests, the ERC dissolves at the first regular meeting of the term of the new Board. [Amended March 1999.]

ARTICLE X - SPECIAL INTEREST GROUPS AND SLICES

SECTION 1. FORMATION. The Board of Directors may establish special interest groups (SIGS) to provide a forum for exploring topics of special concern to a portion of the membership. Among the factors to be considered by the Board of Directors in recognizing a new special interest group are: whether the group conducts regularly scheduled meetings which it announces in the WAP Journal and whether it has at least five members.

SECTION 2. ORGANIZATION. Each special interest group shall elect from among its members a Chairman and Journal Columnist. The election of special interest group officers shall be conducted annually during the month of October, under the supervision of the Board of Directors. Each special interest group shall publish an account of its activities in the WAP Journal. [Amended November 1983.]

SECTION 3. LIMITATION OF AUTHORITY. No special interest group shall act in the name of or take any action which would bind the Corporation.

SECTION 4. DUES. No special interest group shall collect dues or contributions without the permission of the Board of Directors. [Amended December 1982.]

SECTION 5. SLICES. The Board of Directors may recognize groups of WAP members outside the Washington, D.C. area as "Slices" of WAP. Slice members shall be entitled to the full benefits and privileges of membership in WAP. In all other respects, the Board of Directors shall have the power to regulate by resolution the formation, activities and dissolution of Slices. The officers of a Slice shall be given notice whenever feasible of any action to be taken by the Board or the membership involving the activities of the Slice. No Slice shall act in the name of or take any action that would bind the Corporation. [Adopted July 1986.]

ARTICLE XI - COMMITTEES

SECTION 1. AUDIT COMMITTEE. The Audit Committee shall be appointed by the Board of Directors to select the Corporation's accounting firm and to review the financial records and reports of the Corporation. The President,

Treasurer, or any other member receiving or disbursing funds of the Corporation may not serve as a member of the Audit Committee. [Amended March 1993.]

SECTION 2. TELECOMMUNICATIONS SYSTEM COMMITTEE. The Telecommunications System Committee shall be a standing committee established by the Board of Directors. The Telecommunications System Operator shall chair the Telecommunications System Committee and shall appoint such additional committee members as necessary to conduct the business of the Telecommunications System of WAP. The committee shall establish policy for and operate the Telecommunications System subject to the general policy directions of the Board of Directors. An operating budget shall be prepared by the committee and submitted annually to the Board of Directors for review and recommendation to the membership. [Adopted June 1986.]

SECTION 3. OTHER COMMITTEES. The Board of Directors may appoint other standing or special committees.

ARTICLE XII - FISCAL CONTROL

SECTION 1. DISBURSEMENTS. Disbursements over \$25.00 shall be made only by check. Any disbursement over \$5.00 shall be supported by voucher or receipt. All checks, drafts, notes and evidence of indebtedness of the Corporation shall be signed by the Treasurer and either the President or one of the elected Vice-Presidents. However, checks in an amount not to exceed \$6,000 may be signed by either the Treasurer or by both the President and one of the elected Vice-Presidents. Designated staff shall have the authority to sign checks in an amount not to exceed \$6,000.00 from an imprest fund established by the Treasurer or from such other accounts as the Board of Directors may by resolution determine. [Amended April 1983, June 1983, January 1984, October 1986, February 1987, March 1993 and March 1999.]

SECTION 2. ANNUAL BUDGET. Prior to the commencement of each fiscal year, The Board of Directors shall prepare an estimated budget for the following fiscal year for the approval of a majority of those present and voting at a Membership Meeting.

SECTION 3. FISCAL YEAR. The fiscal year of WAP shall be from June 1 to May 31. [Amended March 1986.]

SECTION 4. CAPITAL EXPENDITURES. Capital expenditures in excess of \$1,000.00 must be approved by a majority of those present and voting at a Membership Meeting. Approval of a line item in the annual budget shall constitute membership approval of a capital expenditure.

ARTICLE XIII - NOTICE

SECTION 1. FORM OF NOTICE. Whenever under the provision of law, the Articles of Incorporation or these Bylaws, notice is required to be given to any Director or member, such notice may be given by publication in the WAP Journal or in writing, by mail addressed to such Director, officer or member, at his post office address as it appears on the records of the Corporation. Such notice shall be deemed to be given at the time it is deposited in the United States mail. Notice may also be given personally or by telephone or telegram.

SECTION 2. WAIVER. Whenever notice is required under the provision of law, the Articles of Incorporation or these Bylaws, a written waiver of the notice, signed by the person entitled to the notice, whether before or after the fact, shall be deemed to be the equivalent of such notice. Any member or Director who attends a meeting, without protesting the commencement of the meeting or the lack of notice shall be conclusively deemed to have waived notice of such meeting.

ARTICLE XIV - INDEMNIFICATION

The Corporation shall, to the extent legally permissible, indemnify and hold harmless any person serving or who has served as a director, officer or duly authorized agent of the Corporation against all liabilities and expenses, including amounts paid in satisfaction of judgments, in compromise or as fines and penalties, and counsel fees, reasonably incurred by him in connection with the defense or disposition of any claim, action, suit or other proceeding whether civil or criminal, in which he may be involved or with which he may be threatened, while serving or thereafter, by reason of his being or having been such a director, officer or agent, except with respect to any matter as to which he shall have been adjudicated in any proceeding not to have acted in good faith in the reasonable belief that his action was in the best interests of the Corporation.

Expenses, including counsel fees, reasonably incurred by any such director, officer or agent in connection with the defense or disposition of any such claim, action, suit or other proceeding may be paid from time to time by the Corporation in advance of the final disposition thereof upon receipt of an undertaking by such individual to repay the Corporation the amounts so paid if it ultimately determined that indemnification of such expenses is not authorized herein. The right of indemnification hereby provided shall not be exclusive of or affect any other rights to which any such director, officer, or agent may be entitled. As used in this Article, the terms "director," "of-

ficer" and "agent" include their respective heirs, executors and administrators.

The Corporation may, at the election of the Board of Directors, purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the Corporation or who is or was serving at the request of the Corporation as a director, officer or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him and incurred by him in or arising out of his position, whether or not the Corporation would be obligated or empowered to indemnify him against such liability under this Article XIV.

ARTICLE XV - AMENDMENT

[The Board of Directors or the membership may amend these Bylaws at any Regular Meeting by an affirmative two-thirds majority of those present and voting. Notice of all Bylaw amendments shall be published in the WAP Journal.]

Strike through the above bracketed text, Revision:

The Board of Directors may call for amendments to these Bylaws at any Board Meeting by an affirmative vote of two-thirds of the Board of Directors. The membership may call for the amendment of these Bylaws at any General Meeting or at a Special Meeting called for that purpose in accordance with Article VI, Section 2, by an affirmative vote of two-thirds of those Regular Members in good standing present and voting. Notice of the proposed Bylaw amendments shall be published 14 days before the next General meeting on the TCS and by electronic announcement. The vote for ratification of the amendments shall take place at the next General Meeting. The quorum is established in accordance with Article VI, Section 3. The complete, amended Bylaws shall be published in the next Washington Apple Pi Journal following the change. A current version of the Bylaws shall be posted on the Washington Apple Pi web page.[Amended November 2003.] ■

Statement of Ownership, Management, and Circulation

1. Publication Title <i>Washington Apple Pi</i>	2. Publication Number <i>1056-7682</i>	3. Filing Date <i>9/10/2003</i>
4. Issue Frequency <i>Bi-Monthly</i>	5. Number of Issues Published Annually <i>Six (6)</i>	6. Annual Subscription Price <i>24.00</i>

7. Complete Mailing Address of Known Office of Publication (Not printer) (Street, city, county, state, and ZIP+4) <i>12022 Parklawn Drive Rockville MD 20852</i>	Contact Person <i>Richard Sanderson</i> Telephone <i>801-984-0300</i>
---	--

8. Complete Mailing Address of Headquarters or General Business Office of Publisher (Not printer)
same as #7

9. Full Names and Complete Mailing Addresses of Publisher, Editor, and Managing Editor (Do not leave blank)

Publisher (Name and complete mailing address)
*Washington Apple Pi, Ltd
12022 Parklawn Drive, Rockville MD 20852*

Editor (Name and complete mailing address)
*Kathryn Murray
Washington Apple Pi, 12022 Parklawn Drive, Rockville MD 20852*

Managing Editor (Name and complete mailing address)
same as Editor

10. Owner (Do not leave blank. If the publication is owned by a corporation, give the name and address of the corporation immediately followed by the names and addresses of all stockholders owning or holding 1 percent or more of the total amount of stock. If not owned by a corporation, give the names and addresses of the individual owners. If owned by a partnership or other unincorporated firm, give its name and address as well as those of each individual owner. If the publication is published by a nonprofit organization, give its name and address.)

Full Name	Complete Mailing Address
<i>Washington Apple Pi, Ltd</i>	<i>12022 Parklawn Drive, Rockville MD 20852</i>

11. Known Bondholders, Mortgagees, and Other Security Holders Owning or Holding 1 Percent or More of Total Amount of Bonds, Mortgages, or Other Securities. If none, check box None

Full Name	Complete Mailing Address

12. Tax Status (For completion by nonprofit organizations authorized to mail at nonprofit rates) (Check one)
The purpose, function, and nonprofit status of this organization and the exempt status for federal income tax purposes:
 Has Not Changed During Preceding 12 Months
 Has Changed During Preceding 12 Months (Publisher must submit explanation of change with this statement)

13. Publication Title <i>Washington Apple Pi</i>	14. Issue Date for Circulation Data Below <i>Sep 2002 - Aug 2003</i>
---	---

15. Extent and Nature of Circulation		Average No. Copies Each Issue During Preceding 12 Months	No. Copies of Single Issue Published Nearest to Filing Date
a. Total Number of Copies (Not press run)		<i>2900</i>	<i>2900</i>
b. Paid and/or Requested Circulation	(1) Paid/Requested Outside-County Mail Subscriptions Stated on Form 3541. (Include advertiser's proof and exchange copies)	<i>1220</i>	<i>1183</i>
	(2) Paid In-County Subscriptions Stated on Form 3541 (Include advertiser's proof and exchange copies)	<i>519</i>	<i>500</i>
	(3) Sales Through Dealers and Carriers, Street Vendors, Counter Sales, and Other Non-USPS Paid Distribution	<i>0</i>	<i>0</i>
	(4) Other Classes Mailed Through the USPS	<i>60</i>	<i>58</i>
c. Total Paid and/or Requested Circulation (Sum of 15b. (1), (2), (3), and (4))		<i>1799</i>	<i>1741</i>
d. Free Distribution by Mail (Samples, complimentary, and other free)	(1) Outside-County as Stated on Form 3541		
	(2) In-County as Stated on Form 3541		
	(3) Other Classes Mailed Through the USPS	<i>100</i>	<i>100</i>
e. Free Distribution Outside the Mail (Carriers or other means)		<i>800</i>	<i>900</i>
f. Total Free Distribution (Sum of 15d. and 15e.)		<i>900</i>	<i>1000</i>
g. Total Distribution (Sum of 15c. and 15f.)		<i>2699</i>	<i>2741</i>
h. Copies not Distributed		<i>201</i>	<i>159</i>
i. Total (Sum of 15g. and h.)		<i>2900</i>	<i>2900</i>
j. Percent Paid and/or Requested Circulation (15c. divided by 15g. times 100)		<i>66.65%</i>	<i>63.51%</i>

16. Publication of Statement of Ownership
 Publication required. Will be printed in the *Nov-Dec 2003* issue of this publication. Publication not required.

17. Signature and Title of Editor, Publisher, Business Manager, or Owner
Richard L. Sanderson, Treasurer Date *9/10/2003*

I certify that all information furnished on this form is true and complete. I understand that anyone who furnishes false or misleading information on this form or who omits material or information requested on the form may be subject to criminal sanctions (including fines and imprisonment) and/or civil sanctions (including civil penalties).

Instructions to Publishers

- Complete and file one copy of this form with your postmaster annually on or before October 1. Keep a copy of the completed form for your records.
- In cases where the stockholder or security holder is a trustee, include in items 10 and 11 the name of the person or corporation for whom the trustee is acting. Also include the names and addresses of individuals who are stockholders who own or hold 1 percent or more of the total amount of bonds, mortgages, or other securities of the publishing corporation. In item 11, if none, check the box. Use blank sheets if more space is required.
- Be sure to furnish all circulation information called for in item 15. Free circulation must be shown in items 15d, e, and f.
- Item 15h. Copies not Distributed, must include (1) newsstand copies originally stated on Form 3541, and returned to the publisher, (2) estimated returns from news agents, and (3) copies for office use, leftovers, spoiled, and all other copies not distributed.
- If the publication had Periodicals authorization as a general or requester publication, this Statement of Ownership, Management, and Circulation must be published; it must be printed in any issue in October or, if the publication is not published during October, the first issue printed after October.
- In item 16, indicate the date of the issue in which this Statement of Ownership will be published.
- Item 17 must be signed.

Volunteer!!

Make a difference WAP's future.

Write for the journal. Share your computer experiences!!!

Part of a SIG? Write up your meeting.

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

—Macintosh House Calls—Upgrades, Repairs, Maintenance, Tutoring.

Contact John Barnes at 301-652-0667 or jdbscience@mac.com. Discount for Pi members.

—Mac Tutoring and troubleshooting help.

Washington DC area. \$50/hour. Phil Shapiro. Contact pshapiro@his.com

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

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 page@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. ■

Membership Application **New Member** **Renewal**
 Please print or type:
 Name _____ Company _____
 Address _____
 City _____ State _____ Zip _____ Email _____
 Home Phone _____ (Must have for the TCS) Work Phone _____
 Occupation _____

Please answer a few questions for us regarding your computer use. Check the computers/equipment that you use on a regular basis.

- | | |
|---|--|
| <input type="checkbox"/> Apple II or III | <input type="checkbox"/> PowerMac |
| <input type="checkbox"/> Apple II GS | <input type="checkbox"/> IBM, PC clone |
| <input type="checkbox"/> Apple III (SARA) | <input type="checkbox"/> PowerBook |
| <input type="checkbox"/> Pre PowerMac | <input type="checkbox"/> iMac |
| <input type="checkbox"/> Other _____ | <input type="checkbox"/> G3 or G4 |
| | <input type="checkbox"/> G5 |

WAP has many Special Interest Groups (SIGs) and Regional Groups (SLICES). Please check each group you would be interested in.

- | | |
|---|---|
| <input type="checkbox"/> Annapolis Slice | <input type="checkbox"/> Graphic SIG |
| <input type="checkbox"/> Columbia Slice | <input type="checkbox"/> NOVA/Educators SIG |
| <input type="checkbox"/> Delmarva Slice | <input type="checkbox"/> Game SIG |
| <input type="checkbox"/> Frederick Slice | <input type="checkbox"/> QuickTime SIG |
| <input type="checkbox"/> Disabled SIG | <input type="checkbox"/> Retired SIG |
| <input type="checkbox"/> Excel SIG | <input type="checkbox"/> Stock SIG |
| <input type="checkbox"/> FileMaker SIG | <input type="checkbox"/> Women's SIG |
| <input type="checkbox"/> Genealogy SIG | |
| <input type="checkbox"/> I can serve as a Hotline contact for _____ | |

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.

- 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
- 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



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

Bethesda Computers and Networks, Inc.

4931 Cordell Avenue, Bethesda MD 20814
Phone: (301) 652-5108, Email: bcnt@erols.com
www.bethesdacomputers.com

•••

Rated by Consumer Checkbook and featured on Channel 4 News
as a top computer service company!

•••

Call for information about current Apple promotions!

••• We Match Mail-Order Prices! •••



Drop by and order your Power Mac G5!

Washington Apple Pi, Ltd.

12022 Parklawn Drive
Rockville, MD 20852

November/December 2003

Periodical
Postage rates
paid at
Rockville, MD