

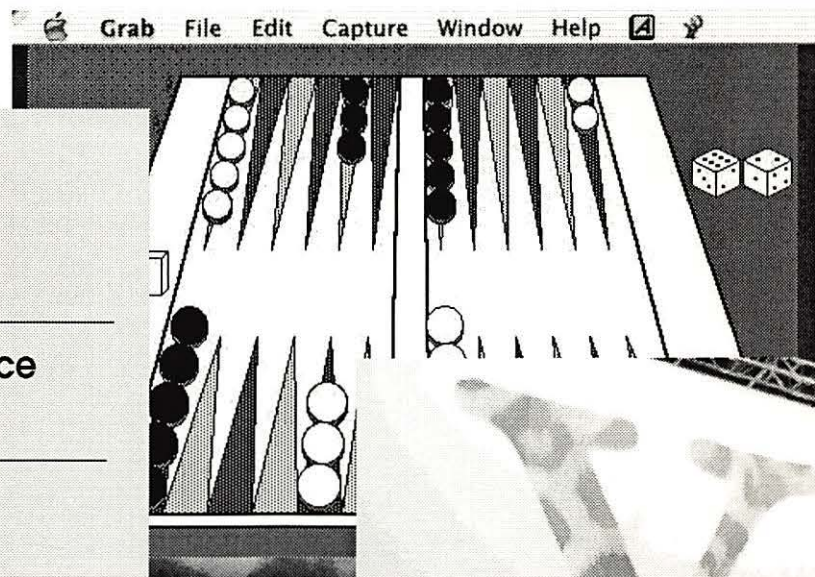
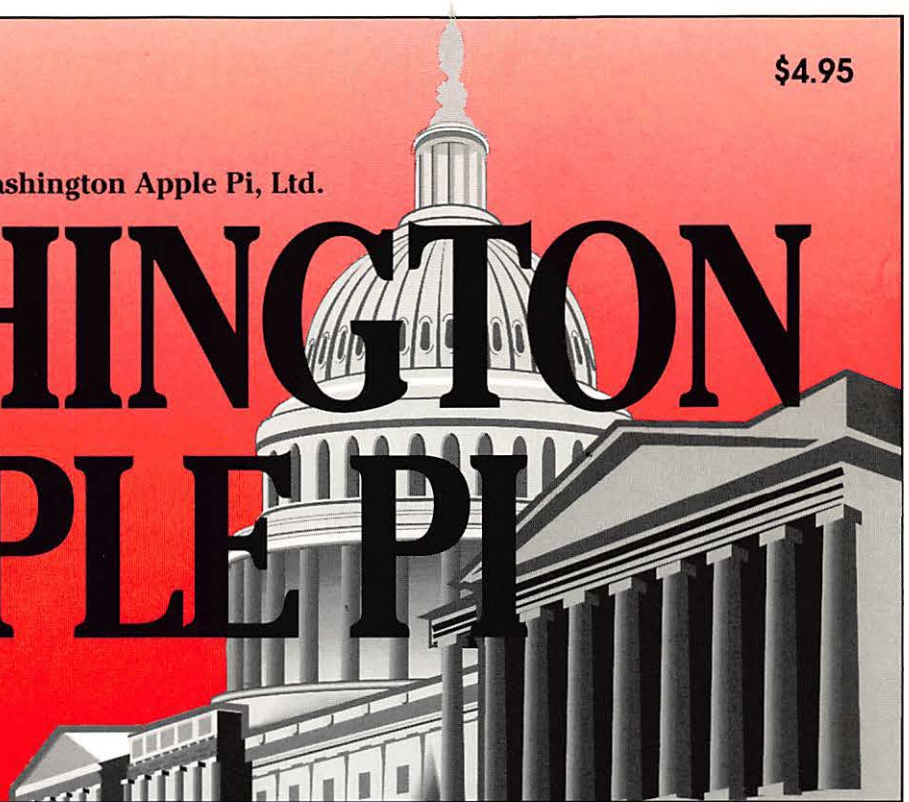
September / October 2002

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The Journal of Washington Apple Pi, Ltd.

WASHINGTON APPLE PI

Volume 24, Number 5



The Electronic Journal—a
success or failure?
& Things change—5

Proprietary vs. Open Source
Software —16

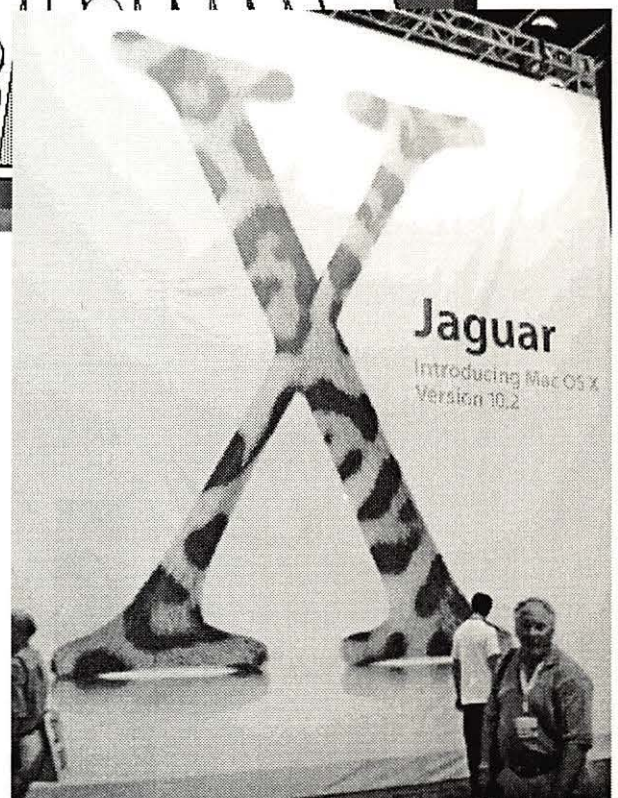
MacWorld New York City
2002—27

Review of Starry Night Pro—42

Hands-On Report: Mac OS X
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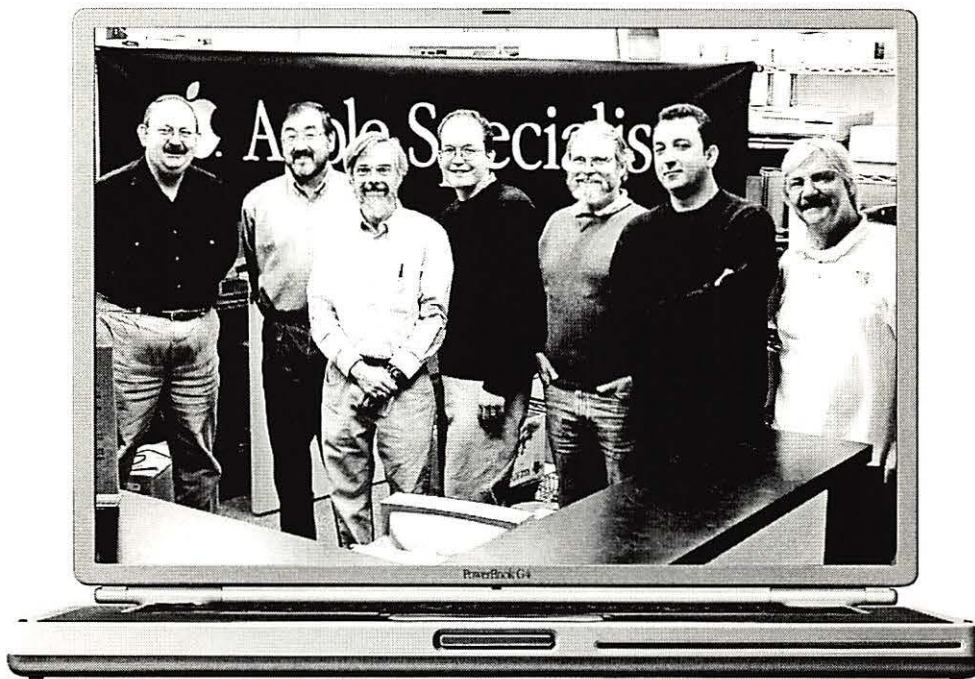
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Oct. 26, 2002
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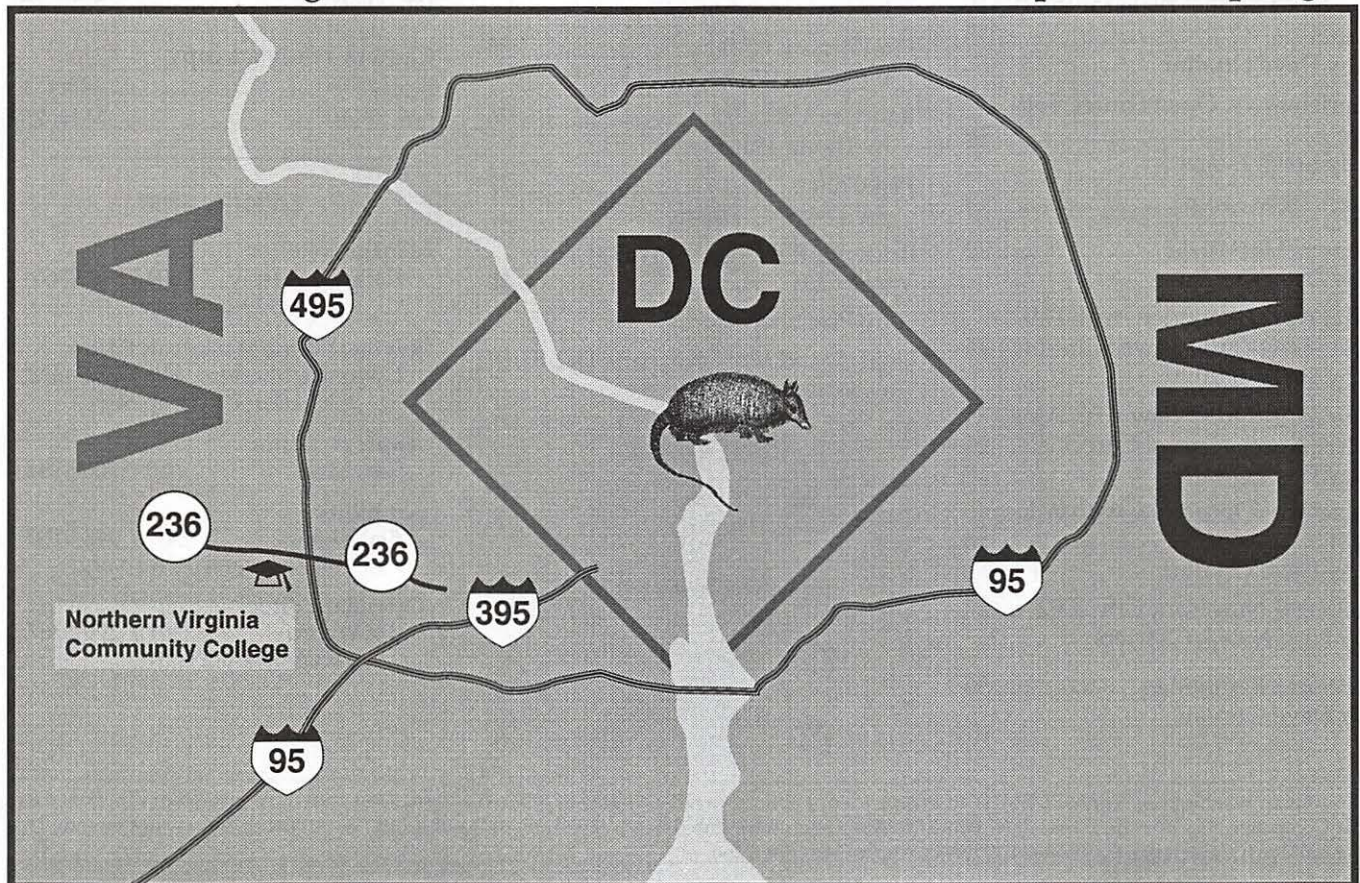


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Apple III (SARA)

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Jan./Feb.	Nov. 25

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Washington Apple Pi

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

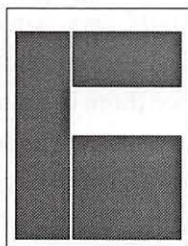
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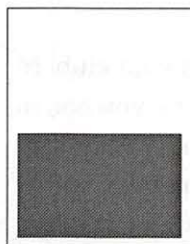
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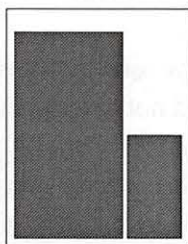
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Third Page	\$225	\$191	\$169	\$135
Sixth Page	\$125	\$106	\$93	\$75

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 below for your convenience.

Copy may be received as traditional mechanicals, rc-paper, velox prints, or film negatives. Negatives will incur an additional \$15.00 strip-in charge.

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

Welcome to WAP!

By Dave Ottalini

OK, Don't get mad at me. I won an iPod at Macworld. And I won a copy of File Maker Pro 6.0. But that was it. Nothing else. Cross my heart. The thing you need to understand is that I never win *anything* at these events. But to win two of the Apple products I most coveted (Final Cut was the third but no one was giving it away) on the same day was really something.



So what does that have to do with my little "Welcome To Wap" column? Everything of course. As a member of a user group, I was attending a MacWorld UG event when I won that iPod. And I was gathering free FM Pro 6.0 CDs when I (just for the heck of it) took that ticket that brought home the bacon.

So you see there is a reason for everything. Just like there was a reason you joined WAP. Not to win an iPod, I suspect. But to learn about how to make an iMovie, read about the latest hardware, send an email. Or maybe even meet some folks with similar interests at a SIG meeting.

As a new member or old, this club is your club. In fact, it could not exist without you because you are, in fact, *the* club. That's why you are our best advertisement. We need you to bring in one new member by the end of the year. Make it your early holiday gift to the club. Imagine if every member brought in a new member. We would double in size just like that. Double the folks reading this great magazine. Double the number of potential volunteers. Double the trouble for our Tuesday Night crew (sorry Lorin).

So make us all proud and help your club at the same time. It could bring you the luck needed to win an iPod at MacWorld. Nah. But it will make you glad to have helped your Mac UG just a bit.

Oh and by the way. Welcome to WAP! ■

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The Electronic Journal— a success or failure?

THE LAST ISSUE of our Journal was presented in a new way. It was posted to the TCS, our members only bulletin board. Did you see it? Did you read it? So what did you think?

In order to prepare for our bold experiment, several things had to happen. First, it took an action by the Board of Directors to make changes in our dues structure. In the past, members who wanted to have access to the TCS paid an extra \$20.00 fee per year. The board decided that everyone needs to be able to read the TCS since it is a wonderful treasure trove of help and advice on a wide variety of topics. We therefore changed the membership structure to include the TCS as a membership benefit for everyone. To do that, the volunteers who maintain our database at Washington Apple Pi needed to make a login and temporary password for all members who had not paid for TCS access in the past. We then mailed every member a new membership card. We enclosed a letter with each card that told each of you that the July/August Journal would be an electronic .pdf and we told you how to find it and download it.

The great experiment was on! Some of our members, mainly those who use the TCS on a regular basis, downloaded the Electronic Journal. Some of those people read

the Journal, and comments about it began appearing on the TCS. Some readers loved it, some hated it, and there were a number of good suggestions about how to make it better. However, the group making the comments were the "choir." You know them, the people who are up on the latest technologies, the experimenters, the geeks.

But did you read the Electronic Journal? I began asking that question to every Pi member I ran into. I asked for a show of hands at the last General Meeting. Less than 10 percent of our members downloaded the issue. Of the group who did, less than 50 percent actually read it. So let's talk about what you do with the paper edition of the Journal. As I visit client homes, I see the Journal on kitchen tables, on coffee tables, in bathroom magazine racks, in people's cars, beside their computer, in their bag. All these places we tend to read the Journal do not lend themselves to the electronic format.

Normally, I flip through the Journal the day it arrives, read a few articles that catch my eye, and then I put it in a place where I will be able to go back at my leisure to read more for the next few months. After the new Journal arrives, the older issues go to a stack that I flip through to reread articles. I read the Electronic Journal in one sitting—and since it is not lying around, I never went back to it. We need you to read the Journal and then refer back to it for the calendar, the class schedules, the meeting notices, the Hotline section. We need you to use the Journal. So, even though I love the color pictures, love the active links to web sites, love the small amount of space it would take to store old Journals long after the old issues have been discarded, I see the Electronic Journal as a bold attempt that failed.

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I need you to see the article I wrote last month, so you will know why I am writing to you in Lorin's space, so I have asked Kathryn Murray, our editor to reprint it. Look for the rest of my article to follow it.

Article from July/August Journal

Things Change

I HEAR THAT phrase so often, but some things don't change. The sun comes up, we get hungry, bills have to be paid and D.C., in the summer, gets hot. Add to that that Lorin Evans is the President of Washington Apple Pi. Well, that has changed. After 11 years of dedicated service to the Pi, Lorin has stepped aside and left it to the rest of us to find a way to fill his shoes.

So, just what do the President and Office Manager of the Pi do? Well, Lorin and Beth Medlin have done far too much for far too long and we have taken far too much advantage of a good situation. Beth and Lorin were a team. They ran the office, organized the Computer Shows and Sales, and did anything else that no one would do to keep Washington Apple Pi running.

Both Beth and Lorin came to the Pi about the same time, each for a different reason. Beth was hired to bring order to the front office of the Pi. Lorin, who was our Apple II Vice President, was asked by the directors to serve as President. Together they changed the course of the Pi, straightened out the finances, increased the membership and in the process they brought the Pi to a place of national prominence among Apple user groups.

As the years followed, things began to change again. Fewer and fewer people volunteered to serve on the Board of Directors, we lost interest in having a real membership drive, and as people who had volunteered for many years got tired, Beth and Lorin had to take on more and more responsibilities.

Finally, Beth had to make a very hard decision. Washington Apple Pi could not afford to pay her the salary she deserves. We also cannot afford to provide medical and retirement benefits. So, effective January 1, she left our employ.

That left the Board of Directors and Lorin to take

over Beth's duties. We have not done such a great job and we relied far too much on Lorin to run the day-to-day operations. Well, contrary to popular opinion, Lorin has a life outside of Washington Apple Pi and running an office is not something he enjoys doing. The board was helpful at first, but as time passed, Lorin was forced to shoulder more and more of the load alone. He said he was not good at and had neither the interest or the time to be both the President and the Office Manager, but only a few board members pitched in to take on long term office duties.

The board was even more unsuccessful at finding a replacement for Beth. We have not been able find someone who will do all that Beth did for what we can pay. We got behind on the paperwork (but not the bills). We have left the phone unanswered far too often and have been terrible at taking messages off the answering machine and returning phone calls.

Then we had an election. Everyone was sure Lorin would run for President again. He didn't. We thought he would stay on if he won the write-in vote. He won, but he declined. In June we had a meeting of the new board and almost half of the fifteen positions were left unfilled due to resignations after the election. By Maryland law we had to fill the position of President that night. We sat around and stared at each other, explained why each of us could not take the position of President and stared some more. Our choice was to disband the organization or someone had to step forward and serve as President.

Washington Apple Pi is too vibrant a group to close the shop. We have new members signing up ever month. Most of our members send in their membership renewals each year. Our programs like the Reclamation Project bring us local and national recognition. Our Tuesday Night Clinic is the model for programs being started by other groups. Our Pi Fillings CDs are sold around the world. Our two Computer Shows and Sales are well known throughout the region. Our MacWorld bus trip is being copied up and down the East Coast. Our Slices and SIGS are used as the models for other groups around the world. Our tutorial program also brings us new members and recognition. We have an award winning Journal. These are not the activities of a dying users group

It was never my intention to serve as your President. I love running the Tutorial Program and that is

where I would like to stay. However, Washington Apple Pi needs a President. We have too many good things going on in the club to let it die so I will tackle the job for a year as we "grow" new leaders. So, now that my last child of five is leaving for college, our grandchildren are moving to the area, and my consulting business has really taken off, I have taken on a huge job that I cannot handle in the same way that Beth and Lorin did it. However, I don't believe it will be necessary.

Our board has 15 positions. It has been several years since we have had a full board. However, Lorin spoke to the members at the March General Meeting and we had more nominations for Director at Large that I can ever remember. But, we had fewer people run for specific positions than I can remember in recent elections. Since taking over as president two weeks ago, I have been working hard to make sure that every position is filled. I have accomplished that task and now the Board will begin the real work.

We will be meeting next weekend to divide up all the things that need to be done to run Washington Apple Pi. We will be meeting with program and committee chairmen to learn what other tasks need to be tackled and then we will be asking the general membership to serve on committees and work groups to do all that is necessary to run Washington Apple Pi without a paid Office Manager.

We already have people taking care of memberships and renewals, CD sales, the bus trip and the heading the committee for our December Computer Show and Sale. We have several members who have volunteered to come in and answer the phones and we even have a person who is going to organize clubhouse cleaning days.

Of course there

are many more volunteers needed to back those people up and to take on further duties. We need to run a membership drive. We need people to write articles and reviews for the Journal. We need club liaisons to each store in the area that sells Macintosh computers. We need more Show and Sale volunteers. We need additional members for the TCS and Web Page groups. It would also be nice to have one or two social events each year.

It is difficult to move from a manager-run office to one manned by volunteers. But, I suspect we will be a better club for having done all the work ourselves. After we get everything back under control, and increase our membership, the luxury of an Office Manager once again would be really nice, but for now, in addition to being members helping members, our club needs to be made up of members who are involved in running the oldest and largest computer group in the world — Washington Apple Pi.

So where are Lorin and Beth? Well, Lorin plans to remain active in the Pi and its activities. In particular, he will help with the Reclamation Project, the Tuesday Night Clinic and CD creation. However this time he wants help — your help. Beth still is available to us as an advisor. In fact, she was recently at the office helping the Finance Crew learn how to do more with the books. We are sure to see her at future meetings and



Members of the Washington Apple Pi Board of Directors prepare mailing materials during the August 2002 Board of Directors meeting. (Photo by David Harris)

activities.

If you would like to help us make YOUR club even better send an e-mail to office@wap.org and tell us how you can help.

—Pat Fauquet

President's Corner continued

Moving Forward

Now that Lorin and the Board of Directors have placed the running of the world's oldest and largest computer user group squarely on my shoulders, and now that I have had two months to learn my job, it is time to let you, the members in on a few secrets.

First, we have a birthday coming up next year. We will be 25 years old and that calls for a celebration.

Second, we will lose our title as the largest if we don't work to maintain it. It has been many years since Washington Apple Pi had a new member campaign, and frankly just how to run one is wrought with problems. We could put ads in the local papers. Have you ever looked at the cost of an ad in the Washington Post, or even the Journal Newspaper? We could try to get our name in front of the public more often. Do you read the Fast Forward column in the Journal Newspaper? Have you seen how often someone from the Pi is quoted in the Washington Post, or on one of the technology related radio shows? Those things are happening, but they are not bringing us lots of new members.

We could put Journals and flyers in the local computer stores. MacUpgrades has our literature out. Mac Business Solutions provides meeting space for our Graphic Arts SIG. MicroCenter also has our literature available. The Apple Stores, by company policy, do not have our literature on the counter, but the certainly have it under the counter and do hand it out to some customers. CompUSA's corporate policy is even stricter against handing out literature.

We ask you to tell others about us, but that does not get something into people's hands. The solution is YOU. Do you see that stack of old Journals that are about to be sent to the trash heap? Instead, how about taking them to the doctor's or dentist's waiting room the next time you go. How about leaving a Journal in every public space that has a magazine rack. However, there are a couple of things you need to do before passing them on. Tear out the center pages that contain our Hotline phone numbers and scratch out your address label. Our Journal is the best advertisement we have. We need you to help get it out.

The next thing is public bulletin boards. If you see

one, check to see if there is a WAP business card on it. If not, please put one there. So now you think I have gone crazy. You don't have any WAP business cards. Well, they will be available at all the general meetings from now on, and in case you don't make it to our meeting, you will find a page of "cards" to cut out and pin up. The best way to do this is to carry a stapler. Cards that are put up with tacks and pins get taken down when the next person needs one. If you would like a few more cards, photocopy the page before you cut it up.

In order for people to join us, we need for them to know about us. You are the key. We need you to help advertise for us. If you can think of other free ways to get out the word about Washington Apple Pi, send me an e-mail at president@wap.org. I am looking forward to seeing new members at our meetings, in the classroom and at other WAP activities in the coming months.

The other thing we need to do is to make a greater effort to encourage people to renew their membership. We mail out three notices to everyone whose membership is about to expire, but we do not reach out to members who have not renewed. That is the next challenge.

—Pat Fauquet

Check Out Our New SIGs

SPECIAL INTEREST Groups or SIGs are said to be the lifeblood of computer user groups. While the General Meeting topic is often a vendor presentation and the forum may be quite large, SIGs are smaller groups of members who share a specific interest. Of course, having SIGs implies that someone within that group is willing to take over the planning and setup of those meetings. So, after a time, SIGs tend to stop meeting and then new ones form to meet the newer interests of another small group. Some WAP members attend the general meeting and two or three SIG meetings each month. They not only learn more about a specific topic, but they also get to know more of their fellow members and develop a network of people who can give them help with specialized questions. Many members of WAP are enthusiastic and consequently we are seeing a resurgence in new SIGS.

iMovie SIG

The iMovie SIG will meet for the first time on Thursday, September 12 at 7:00 pm. in the Washington Apple Pi tutorial room. They plan on meeting on the second Thursday of each month at 7:00 p.m. The group leader is Hal Cauthen. At this time he is planning a short presentation on VCDs along with discussion about the particulars of setting up and running the group. The meeting is open to all Washington Apple Pi members. Everyone who is interested in iMovie is welcome to attend. Contact Hal Cauthen at ChrgrHorse@aol.com for further information.

Teen SIG

The Teen SIG met for the first time in July. They discussed future plans and set their meeting date as the third Thursday of each month. They will meet from 6:30 to 8:30 p.m. in the WAP tutorial room. The next scheduled meeting is Adult sponsorship, being provided by Grant Peacock, James Kelly and Will Byrd. At their first meeting they worked with 3D modeling programs such as Vue d'Esprit and Sketch Up. In the coming months the meeting topics will evolve as the group grows, but they hope to delve into Unix, programming, graphics and video production. Contact Pat Fauquet at president@wap.org for further information.

Power Users SIG

This SIG formed in May. The leader is John Barnes. He says "The group is aimed at those who do not mind an occasional bit of heavy lifting to expand the capabilities of their systems." "Heavy Lifting" can include simple programming using Graphical User Interfaces, AppleScript, and simple UNIX command line operations. Meetings always consist of free-form tech support, the Topic of the Day, SIG business, and discussion about general interest issues. Contact John Barnes at jdbsci@speakeasy.org for further information. Their meetings are scheduled for the first Monday of each month at 7:30 p.m.

Retired SIG

The Retired SIG meets from 9:20 to 12 noon on the fourth Wednesday of each month. They normally meet in the WAP tutorial room. They try to help our members get more enjoyment out of their Macintosh computers by providing simple tutorials, help with operational issues, and fellowship. This SIG is also headed by John Barnes. Check <http://www.wap.org/retired/>

"Special Interest Group or SIGs are said to be the lifeblood of computer user groups. While the General Meeting topic is often a vendor presentation and the forum may be quite large, SIGs are smaller groups of members who share a specific interest."

for further information.

Graphic Arts SIG

The Graphic Arts SIG is presently our largest SIG. They meet on the second Saturday of each month at Mac Business Solutions, 9057 Gaither Road in Gaitersburg MD from 10 a.m. to 12:00 p.m. Members of the SIG are professionals, students, hobbyists, fine artists, printing graphics artists, photographers, webmasters, T-shirt artists, font designers, technical illustrators, sign makers, scientists, video producers, and more. They have varied interests and varied abilities, and welcome all to join them and expand the horizons of the group. Blake Lange is the SIG Chairman. He is assisted by Lila Bednar. Check <http://www.wap.org/gasig/> for more information. While we have had more SIGS in the past, for the present, these are our only active SIGS. It is easy to form a SIG. Contact Pat Fauquet, or the WAP Board of Directors.

The formation meeting can be scheduled at Washington Apple Pi on an open date, or you can find another location. We will then announce your meeting at the General Meeting, in the Journal, in the WAP listserv messages, and on the TCS. In order to become an official SIG of Washington Apple Pi, you must have at least 5 dues paying members in the group and be open to all interested WAP members. After three meetings you are expected to apply to become a formally recognized WAP SIG. The Board of Directors votes on the application. All Washington Apple Pi SIGs are expected to send monthly meeting summaries to be printed in the Journal. They are also encouraged to set up a SIG web page on the Washington Apple Pi web site. ■

Board of Directors Meetings June 12, 2002

Vice President for Publicity — Dave Ottalini
Vice President for Membership — Jim Ritz
Vice President for Programs — Jack McCalman
Treasurer — Richard Sanderson
Secretary — Craig Contardi

SALIENT EVENTS of the first convening (under the departing slate of officers and at-large board members):

The Directors at Large:

- 1 Carol Weikert
- 2 Robert Carmen
- 3 David Harris
- 4 Nancy Little
- 5 Cheryl Parker
- 6 Len Adler
- 7 Jim Little
- 8 [unfilled at that time]

For the benefit of those newly elected/appointed members of the Pi board that had never served before, Beth Medlin, the retired office manager, discussed the duties associated with keeping the Pi operating (processing membership renewals and CD sales, answering the office phone, etc.). Pat Fauquet solicited volunteers to coordinate the performance of these minimum duties. Mahmoud el-Darwish volunteered to do order fulfillment; Dick Sanderson and David Harris will jointly maintain the membership database; Jim Ritz will keep the online FAQ updated; Nancy Little will check the Pi office answering machine and route the calls as necessary; Jim Ritz will monitor the office@wap.org email address; Dick Sanderson, and David Harris will comprise the office committee to make sure bank-related transactions and paperwork take place; Cheryl Parker will ensure the custodial tasks are taken care of, provided she was given a key to get into the office spaces.

Ned Langston provided a status report on the Pi Summer Garage Sale, which was taking place the coming Saturday (15 June).

Jim Ritz gave an update on the Macworld NY bus trip, stating that 98 people had signed up with only two yet to pay. He recommended a third bus be chartered from Rockville to cover pent-up demand between now and the 18th of July. No one objected to this idea.

John Barnes was nominated by the members of the Retired SIG as their chairman, and the Pi board approved the nomination unanimously.

The meeting was adjourned at shortly after 10 pm. ■

The prior board certified the results of the election, as announced by Steve Fink, the election committee chair. Listed in descending order of the number of votes received, and receiving at least ten votes, the results were:

- President: Lorin Evans, Pat Fauquet
- VP Publicity: Dave Ottalini
- VP Membership: [No candidate received more than one vote]
- VP Volunteer Services: Laura Leigh Palmer
- Secretary: Needham Langston, Nancy Little, Craig Contardi
- Treasurer: Charles Froelich

At-large directors (In Alphabetical Order)

- Ken Clare
- Pat Fauquet
- David Harris
- Needham Langston
- Nancy Little
- Jim Ritz
- Richard Sanderson
- Carole Weikert

The meeting adjourned at 8 pm, ending the term of the departing Board.

Minutes for the 13 June Board of Directors meeting, second iteration.

The meeting was immediately called back to order under the new Board. Some of the individuals elected to the board as write-in candidates declined to accept, and after several minutes of offering positions to runners-up, the board stood as follows:

- President — Pat Fauquet
- Vice President for Volunteer Services — Laura Leigh Palmer

Board of Directors Meeting July 10, 2002

Meeting came to order at 7:30pm. Present were:

Jon Thomason	Nancy Little
Carole Weikert	Jack McCalman
Dick Sanderson	Lou Dunham
Lawrence Charters	Robert C. Carman
Laura Leigh Palmer	David Harris
Craig Contardi	Len Adler
Cheryl Parker	Pat Fauquet
James Little	

Minutes for the 12 June Board of Director's meeting were reviewed, changed and approved as amended.

Pat Fauquet announced the need for a person to chair the meeting and an alternate. Pat was herself nominated, seconded, and approved. Jim Ritz was nominated, seconded and approved as the alternate.

Ned Langston arrived at 7:40pm.

Treasurers report: Richard Sanderson talked about the expense report for the first month. He proposed submitting a budget in the near future.

Ned Langston spoke on the results of the June Garage Sale. Total revenues were \$5700, expenses were \$2127. Ned suggested a more concerted contact info collection effort from the vendors for December, to allow them to get follow-on business from attendees apart from the garage sale. The next sale will be 14 December in the same location. Ned suggested a 7/6/5 price structure for entry to the December garage sale. Having the coupon saves a dollar, and being a Pi member saves another dollar. The motion seconded and passed. The board also voted to raise the table space rental fee by \$10 for both electrified and non-powered tables. The new rate is \$20 without electricity, \$30 with.

Ned, who is remaining the Garage Sale coordinator, wants to sign volunteers up for 2-4 hour shifts well in advance of the sale itself. No one objected to this idea. Announcements will be made at each general meeting.

Finally, Ned mentioned that there was a backlog of customers prior to the opening of the doors, and no means to pre-register people and give them proof of purchase so they can enter as soon as the doors opened. Something akin to a handstamp would solve the problem for the December show.

No one was sure if the previous board ever formally approved the current membership dues pricing structure, so as an administrative formality the board motioned that new and renewal memberships be \$49, student memberships be \$42, Initial TCS Explorer accounts be \$171, and TCS Explorer renewals be \$96. The motion was seconded and approved.

Pat Fauquet announced the appointment of Herb Block as office committee chairman. Herb asked for three more volunteers, to augment Bob Mulligan, John Barnes and himself.

Committee Reports

TCS – Lou Dunham reported that the TCS committee met on 29 June, and re-appointed him as chairman. He asked for board confirmation of his appointment, and received it. Lou requested approval of the purchase of a Powerkey Pro, a device that will enable the TCS staff to perform remote reboots, saving travel time and trouble. Pat motioned that Lou be granted authority to purchase directly from the manufacturer. Craig suggested that Pat approach the company at MacWorld New York and see if we can receive a discount as a user's group. Pat agreed to this, but again motioned that barring success at Macworld, Lou was free to buy it and would be reimbursed.

Pat suggested demonstrating the TCS at a future general meeting. Lawrence Charters commented this was a half-meeting program, and he could conduct the demo in September or October. Pat agreed, without board objection. Pat asked Lawrence and Jon to acquire an Airport Base station to enable the demo to take place.

Web – Lawrence Charters mentioned that he was sorely in need of an artist and could also use a website indexer. The Pi's 25th anniversary was fast approaching, and could use commemorative art, programs and 'stuff'. There is currently no artist for the Pi Journal.

Volunteers – VP for Volunteer Services Laura Leigh Palmer asked Jim Ritz for the current Macworld bus attendance list. She is coordinator for bus #3.

Pat asked for the membership level to be provided at each Board meeting. She then made the executive decision that there will no longer be free WAP Journals available at the general meetings. If someone joins at the meeting, they will get one, but renewals and 'comps' are furthermore not permitted.

Pat talked about the large amount of publicity for the Pi in the last month. She stated that Dave Ottalini is the man for traditional public relations channels, and either Lawrence Charters or David Harris are the POCs for our webpage.

Pat asked for everyone having various and sundry keys to WAPi office doors to turn them in. Those needing access to particular areas in the office will be re-issued appropriate keys.

A volunteer, ideally two, is needed to coordinate the new Pi Fillings CD. The person(s) will do the database entries and start scouring the Internet for cool freeware and shareware tools.

Store liaison reports.

Craig Contardi reported a positive reaction from the staff of the Apple store in Clarendon to the idea of handing out Journals to selected customers. Carole Weikert agreed to take on Mac Business Solutions as her store. Ned mentioned that the Columbia Slice has flyers at the Columbia store, and we should get some Pi literature in there as well. Lawrence Charters asked for copies of all the membership forms in PDF format.

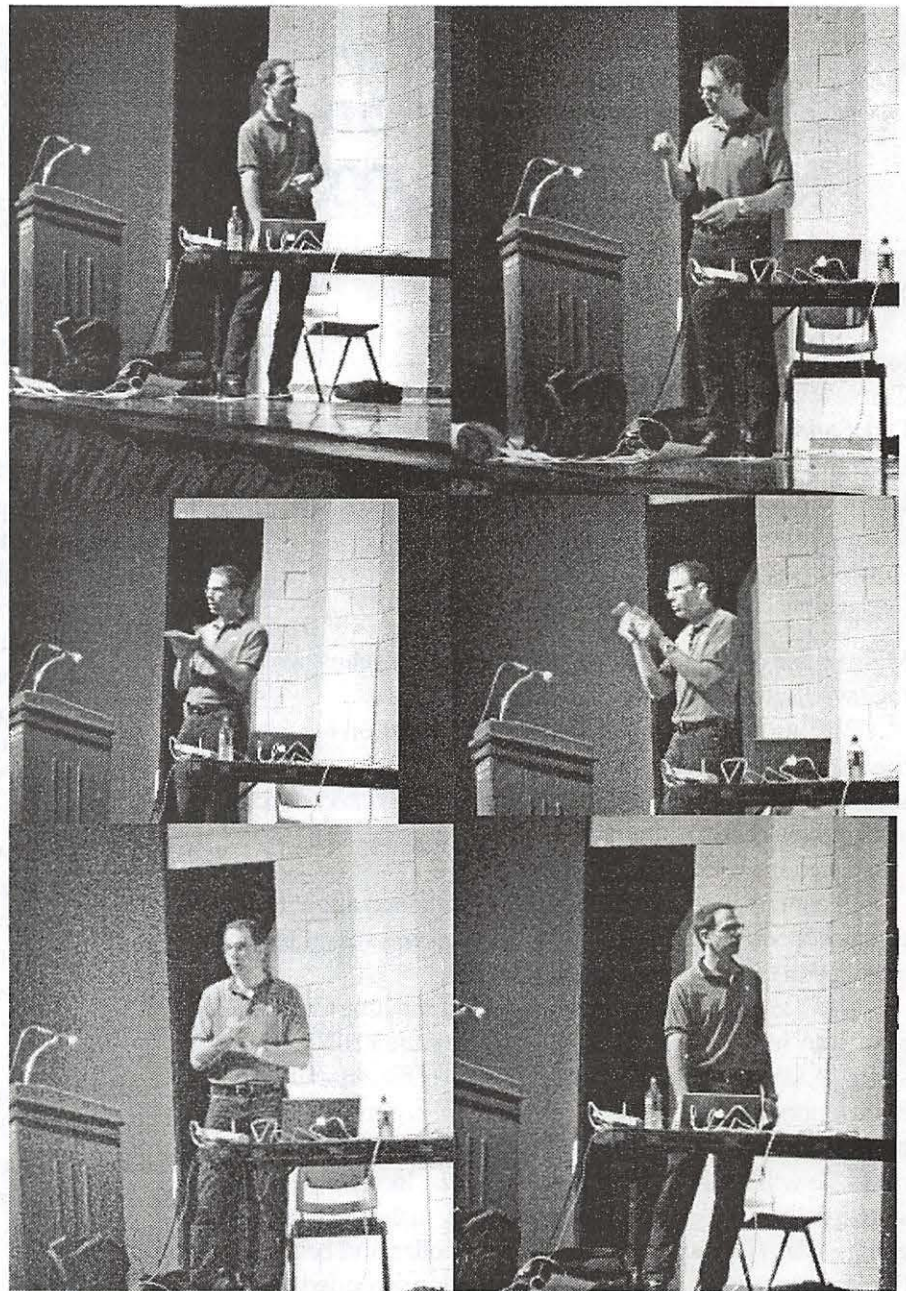
Pat called again for people to write Journal articles, and that they be forwarded to Lawrence Charters. The deadline for the next issue is the end of July.

Ned reported that we are on the NVCC calendar for 2003 as follows:

25 Jan	Theatre
22 Feb	Forum
15 Mar	Theatre
26 Apr	Forum
24 May	Theatre
13-14 June	Gym 6am-6pm
19 Jul	Theatre
24 Aug	Theatre
27 Sep	Theatre
18 Oct	Theatre
22 Nov	Forum
13-14 Dec	Gym

8:45-11:45 will be the rental time from now on, so we will need to move meetings along to ensure we do not get charged for an extra hour.

The meeting was adjourned at 10:55 pm. ■



Take a darkened theater, with walls painted black, and a black-draped stage. Add a figure dressed (usually) in black, early on a sleepy Saturday morning. Mix them all together and you would expect to have a crowd lulled into slumber by the early hour and dim light. But for several years now, Apple Senior Engineer J.D. Mankovsky has managed to keep many a Washington Apple Pi General Meeting crowd wide awake with his entertaining, enthusiastic, and informative presentations on Apple hardware and software. The July 2002 General Meeting was no exception: dim lights, dark theater, early hour, and vintage J.D. style and substance. J.D.'s singular success may be a Washington Apple Pi loss: due to recent promotions, he may not be visiting much in the future, and we'll miss his French-accented look at Cupertino technology. (Very dim photos by Lawrence I. Charters)

Retired SIG

By John Barnes

AT ITS MEETING on May 29th the Retired SIG heard a presentation by John Barnes on "Ten Ways to Save Time and Money on Tech Support." A .PDF version of the presentation is available upon request to John at jdbsci@speakeasy.org.

Chuck James indicated that he had been planning for some time to step down as leader of the SIG. Chuck then anointed John as the new leader with the unanimous assent of the ten or so members present.

A scheduling conflict with the Pi's Camp program forced the SIG to hold its June meeting at the Leland Recreation Center. The Topic was "The Why and How of Adobe Acrobat." The fact that the ability to create .PDF files is built into Mac OS X means that this very civilized method of exchanging nicely formatted documents is available and easy to use.

The July meeting, likewise displaced by a scheduling conflict with a Camp session, is to be held at the Holiday Park Senior Center with "Alternatives to iPhoto" on the menu.

The Retired SIG is focusing on "community building" with the goal of providing technical assistance and fellowship for its members in near real time. We view communications as the key to this. A new set of web pages at <http://www.wap.org/retired> is the starting point. There is also a dedicated message topic on the TCS and a dedicated listserv to help keep members posted regarding current activities.

Details for making use of these facilities are posted on the SIG's web pages. Persons who lack web access but who nonetheless wish to participate in SIG activities should call John Barnes. His phone number is listed in the front matter of the Journal. You can also leave a message at the Pi office if you wish.

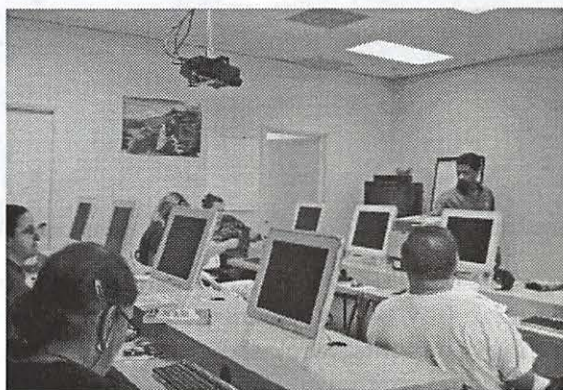
The SIG expects to expand its membership to the point where the Pi classroom space would no longer be adequate. We are open to suggestions for other meeting places, perhaps even one in Virginia and one in Maryland or DC. A suitable place would need to have broadband Internet access and classroom space for up to 50 people. Links to established senior education and recreation programs would be a plus, as this would enable us to reach out and help bring the larger community some of the empowerment that computers provide.

SIG members are hereby asked to go on the prowl for suitable space and to let John know what you find. ■

Graphic Arts SIG July meeting

WASHINGTON Apple Pi's SIG (Special Interest Group) structure is constantly evolving. Once upon a time, there were SIGs devoted to "breadboarding" electronic components for insertion into Apple II computers and programming in 6502 machine language. Today, there are SIGs devoted to groups ranging from retired members to those interested in the graphic arts.

The Pi's Graphic Arts SIG makes a point of leaving the term "Graphic arts" loosely defined. The SIG attracts Mac users interested in digital photography, digital video, page layout, prepress, digital audio, and specific software packages ranging from Adobe Photoshop and Adobe Illustrator to Quark Xpress. Members range from those relatively new to the Mac to some Photoshop mavens who seem to be unaware that you can use a Mac for anything except Photoshop.



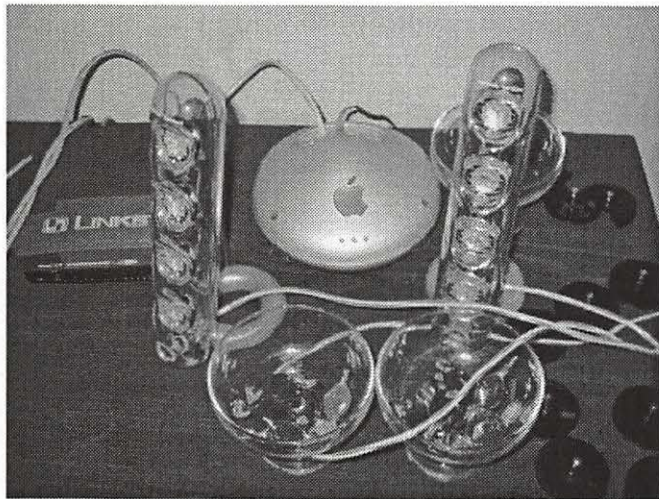
The July meeting, where these photos were taken, was devoted to a lively discussion of graphic arts in Web site production, including the SIG's own Web site (<http://www.wap.org/gasig>), and a viewing of an excellent commercial video tape on Adobe Photoshop tips and

tricks.

The GA SIG meets at Macintosh Business Solutions in Gaithersburg, which has a well-equipped classroom. The SIG used the ceiling-mounted video projector to show a tape on Adobe Photoshop tips and tricks. (Photo by Lawrence I. Charters)



This may look like a mild-mannered Apple Pro Keyboard, but the pastel-colored keys (they look unexceptional in black and white) have special functions when used with Apple's Final Cut Pro digital video editing suite. (Photo by Lawrence I. Charters)



At the Graphic Arts SIG (Special Interest Group) meeting in July, SIG members were greeted with this blending of delights: wireless digital networking, digital sound and candy combined for a feast to the ears, the taste buds, and the electromagnetic spectrum. The market for wireless delivery of candy is unknown at this time. (Photo by Lawrence I. Charters) ■

Does the Pi Need a Power Users' SIG?

by John Barnes

THE PROPOSED Power Users' SIG held its "inaugural meeting" in the Pi classroom on 1 July 2002.

The 15 people at the meeting represented a very diverse range of interests. The definition of "What constitutes a Power User" is a tough issue. I offer the following: "A Power User is one who solves problems using approaches that she/he finds by independent study." MacHack or WWDC denizens, serious A/V producers, and conscientious home hobbyists can all be embraced by this definition.

There is a knack to this and most people of this ilk that I have met seem to enjoy sharing their experiences with others.

The consensus among those present on 1 July was to move forward. It was determined that, for the time being at least, the first Monday of the month is as good a day as any. If the first Monday does not work, as with Labor Day in September, we will shift to the second Monday. We do not intend to skip months, as this is too disruptive. We will seek calendar listings for August, September, and October. Keep your eyes on calendar.wap.org for specific dates, times, and locations.

As a starting point, one goal of the SIG is to nurture a community of Pi members who want to acquire the tools and skills needed to get the most out of their Macs. Communication is the essence of this kind of activity and we will need to take concrete steps to promote as much of that as possible in as many ways as possible. I expect this group of people to come up with some very bright and novel ideas.

A listserv has already been established, with a volunteer to run it. There is also a volunteer for a SIG web page, and we intend to petition the Pi webmaster for the means to build and run that. Every SIG member is encouraged to post to Conference 3 Board 3 of the TCS for real time help or comments. The subject of dedicated Message board space is under negotiation

with the TCS authorities.

Art Boudreau has assumed responsibility for the August meeting. AppleScript was proposed as a topic, but that could be subject to change. We gave a little demonstration of the Terminal application as a means of accessing the account management tools of the TCS via Telnet. There was considerable discussion of the features of "Jaguar".

Anticipated future meeting topics include:

- Enhance your Life with AppleScript
- Using the Terminal
- Open Source Software via fink

Each meeting is expected to include 45 minutes or so of "free form" Tech Support, 45 minutes or so devoted to a theme topic, and however much time people want to spend schmoozing about the latest from Apple or other issues.

The experience of the first meeting (which did not have a theme topic) indicates that some people are so enthusiastic that we will have to work to keep the discussion "on thread."

All told I am very gratified by the response to this initiative. I want to thank those who came and those who helped, particularly Dan White, whose assistance in using Robustus to get the word out was very material to our success. ■

How to Write an Article for the WAP Journal

WHETHER A short time WAP member or longer-lived one like me, the WAP Journal has hope fully become one of your best "friends." Every other month, the Journal brings you great articles, reviews and information about your club.

But unless you are one of a small group of people, there is one thing you won't see in the magazine—an article by you. The Journal is driven by material written by volunteers. One of its biggest strengths over the years has been the wonderful contributions by members. The vast majority of material came from within.

Today, the mix has changed—it's still 96 pages, but we are using more and more outside material, articles by folks who are not WAP members. The magazine is still a good one—our Editor Kathryn Murray does an outstanding job. But it could be so much better with contributions from our own folks.

We're all busy—believe me, I know that. Juggling your time between family and work is a never ending battle. But I'd like to put a challenge before you. Instead of watching TV for an hour this weekend, use the time to write an article for the Journal. Write 500 to 750 words. Tell us what you do with your Mac. Why did you buy it? What do your kids use it for. What is your favorite web site? I suspect that once you get going, you'll find that the words come easily. After all, you're talking about one of your favorite appliances, your Macintosh computer.

If every member of the club wrote just one article of 500 to 750 words, we would have more material than we could use in a year's worth of magazines. And once you've written one, I suspect you'll find that you can offer something more, a review, say, of your favorite program.

And if you have trouble putting together a complete article, how about doing this, write me three sentences each (where applicable) to the following questions and email them to dave.ottalini@wap.org and I'll do the rest.

My Name Is: I've Been a WAP member since: I Work As A: I Have This Kind of Mac: I First Found Out About the Macintosh By/From I Bought a Mac Because: The Best Thing about my Mac Is: I would recommend a Mac to others because: I Use My Mac Primarily For: My Favorite Software Package is: It's My Favorite Because: (If you have kids) My Kids like the Mac because: Their favorite games are:

That's all there is to it! Answer the questions, send them to me and I'll turn them into an article for you. You'll get final approval before its submitted to Ms. Murray for publication. But better yet, just turn everything into your own article and submit it to our editor directly. You'll get a thrill seeing your name in print and the knowledge that you're helping make the WAP Journal a better magazine for all our members. ■

Proprietary vs. Open-Source Software

by Lorin Evans

I AM WRITING this article using a (now) unsupported \$15.00 shareware word processor called Hermes. Should I be concerned because I am not using a commercial product from a company still selling retail stuff like Microsoft's Word [\$400 retail] or Apple Computer's AppleWorks [\$80.00]? The operating system in this computer, Mac OS 8.6, is the exclusive property of Apple Computer. It cost me \$90.00 to acquire. I am told that I should upgrade to Mac OS X 10.2 for \$130.00. However, I can replace my present OS with a version of a Unix-based operating system that will give me similar functionality, but whose ownership is in the public domain. The Unix OS will cost me zilch. Will my system become any more unreliable because I acquire and use applications from 'them' rather than from 'them'?

How do I go about thinking through the questions raised here? And, if you believe the stakes are too low—me being that low stake—how about pretending that you are the State of New Hampshire, or the country of Norway or the government of the United States. You need to decide among similar applications to perform office work or run websites, or power your networks. Should you consider Brand X applications or limit your search to applications from 'established' companies? Should the company you select support open standards and specifications or be one that is open to all that support its standard? Do you want to see the decisions left to free market competition, decided by people who write procurement regulations, or have your legislature codify a "competitive environment"? Now are you interested?

I am not making any of this up. There is a quiet little war going on out there between the folks who bring you known-name proprietary applications and those who offer no-name applications with equivalent capabilities. The story you are about to read is only slightly more convoluted than a diagrammed sentence in Mrs. Wormwood's English class. This is all about whether the applications you use have a pedigree and whether that should make any difference to anyone. Is the product of some producer of proprietary applications inherently more stable, more secure, more supported, or just plain more better than one assembled from code available to you and me? Does the

higher price you pay for a proprietary product convey more 'value added' than comes from software with a multi-cultural heritage? Sounds like "Trivial Pursuit"? Don't believe it. Millions of dollars are at stake in this story—some number of which will come out of our pockets.

I am going to sort through the different kinds of pedigrees out there; then look to see if that measure makes much of a difference. Finally, I will take a peek into the icky subject of managed or ersatz competition among application vendors versus that much sought after thing called a level playing field.

English 101

First, I need to get some English out of the way. Commercial software is the stuff you buy in stores or on the web. What you really purchase is a right to use the software in the box. The company that created the program owns all the rights to the program and, depending on the terms they put in the warranty, can require you to stop using that application if you are not nice or use it to make nuclear weapons. You may not reverse engineer (work backwards to uncover how the program was created so as to make one like it) or otherwise modify the application. You accepted all those terms, whether you read them or not, when you clicked on the "agree" box of the software license screen. What you actually own is the media on which the program resides: the CD or the floppy disks. For the moneys you expend, you get some number of days of free help, plus lots more at some dollar rate. When the company decides to stop supporting the applications you purchased, or goes poof, tough. Join a users group. Examples would be Microsoft Office, AppleWorks, Photoshop or Macintosh OS System X.

If you use a shareware program, you are asked to pay a small fee to the author who holds title to the application you are using. Again, you don't own the program. Because a shareware author does not have a large overhead: staff, packaging costs, warehousing, retail distribution, etc., the fee to you is considerably less. The author may or may not answer your e-mail pleading for assistance. And, if the author moves or changes e-mail addresses, it is sort of the equivalent of poof. Graphic Converter, Print to PDF, and Memory Mapper are examples of shareware programs that many of you have in your computers. Down in the land of freeware, the author does not ask for a fee. And, like the shareware author and the big-name folks, he typically claims a copyright on the work and does not allow outsiders to otherwise modify the item.

Finally we have the public-domain author. A public-domain program is one upon which the author has deliberately surrendered his copyright rights. It can't really be

said to come with a license; you get to use it as you see fit. Because you can treat it as your personal property, you can do what you want with a public-domain program. You can even re-license a public-domain program, removing that version from the public domain, or you can remove the author's name and treat it as your own work.

Note that an author can issue a program with more than one license. There are a number of examples where an author [individuals and universities] offers one version as shareware while selling another version of the same program with a commercial, non-open-source license.

So, what happens when we get some collaboration going. That is, you write some code that (hopefully) does something useful, and you put it out to the community to use as it wishes. That piece of code, if added to my piece might actually result in something useful. None of the collaborators lays claim to the individual pieces, nor to the collective that is the evolving application. We each allow modifications and the derived works should be distributed under the same terms as the original software. It is plain and simple free software. The goal is for the community of programmers and users to collaborate such that an application, built from many disparate parts, is the best it can be. If you need help getting it to work in your set-up, you write to the group that has coalesced around this application and voila. True, it sounds a little loosey-goosey, but it does work. There is a paradigm shift going on as to where mainstream applications are to be found. That shift is into open-source land; it is comfortable to some and an abomination to others.

Free software has been popularized by a former MIT professor, Richard Stallman. He has been at it since 1984 when he formed the Free Software Foundation and its GNU Project. Debian, an early Linux system and one still popular today, was built entirely of free software. When Netscape decided to place the underlying code that is the application Netscape into the public domain, they modeled their release around this concept. Mozilla is one of the by-products of that release. StarOffice, a suite of office productivity applications originally developed by Sun Microsystems, is another.

It is the conflict between the established sources of proprietary software and the expanding and maturing open-source community that is at the heart of this story. Are you willing to allow your website to be run on software created by a bunch of e-mail addresses or do you want to operate on software from someone listed on the NASDAQ? The dollar difference between the choices confronting you is not insignificant.

Watch Your English

Did you note that catchy throw-away line in the previous paragraph? "...created by a bunch of e-mail addresses." It sure does not sound like a place to go to get software used to run your business, and it is not an accurate representation of companies like IBM, MandrakeSoft and Linux International. But, it's a good sound bite. Much of the rest of this story now shifts from the (maybe) quantifiable to the catchy and buzz-phrase world that is the language used to lobby for one's cause. You need to look behind that buzzy stuff to understand what is going down.

The Cheerleaders

Now, no snickering! The organizations that represent these two groups are the Initiative for Software Choice <www.softwarechoice.org> and Sincere Choice <www.sincerechoice.org>. OK, guess which one is rooting for proprietary applications and which one represents all those e-mail boxes? You're Right!

Software Choice is the creation of companies with a serious investment in proprietary software. Its biggest members are Microsoft and Intel; the rest are a smattering of world-wide software companies and trade groups. They want you to believe that they support multiple software development and licensing models wherein all compete on their merits. That, they offer, is the best way to promote software innovation, and ensure that customers—both private and public—have a range of choices in their software procurement decisions. Software Choice is part of an industry group called the Computer Technology Industry Association (CompTIA), <www.comptia.org>.

If you visit the website of Software Choice, it tells you that:

"All software products offer varying benefits and costs. Public entities should procure the software that best meets their needs and should avoid any categorical preferences for open source software, commercial software, free software, or other software development models.

"Policymakers should not make rigid intellectual property licensing choices a precondition for eligibility for procurement, nor should they discriminate between developers that choose to license their intellectual property on commercial terms, and developers that choose not to charge licensing fees."

I like this one:

"For many years, governments have made important contributions to technology by funding basic software research. When public funds are used to support software research and development, the innovations that result from this work should be licensed in ways that take into account both the desirability of broadly sharing those advances as well as the desirability of ap-

plying those advances to commercialized products."

Think about what happens if you changed the venue to pharmaceuticals, biomedical or making jet transport planes? The text of those paragraphs is crafted to oppose something without ever really mentioning what it opposes. Maybe you have to live in Washington, DC to appreciate this stuff. If only I could copyright the alphabet.

Sincere Choice also wants you to believe that there should be a fair and competitive market for computer software. They argue for choice through interoperability. [that's a barb at You Know Who]; that software vendors should compete fairly on the merit of their products, rather than by attempting to lock each other's products out of the market; and, that since you and I paid for that government-funded research, its fruits should be available to all of everyone equally. Oops. They sort of view Software Choice as an oxymoron.

So Where's This Going

Right to the legislature in your state or country. You see, legislatures passed laws that empower bureaucrats to procure stuff. But, typically such laws are sweeping generalizations. Procurement wizards write procurement regulations and it is here that the your product can be in the running or get left behind. What you do is pick some facet of a product that one company includes that another does not and you are either in or history.

Why do you think a large ADB keyboard with those F-keys was created for the Macintosh? Because the IBM keyboard had F-keys and English was written into the bid specifications such that those keys had to be included on a keyboard or that model computer would not be considered. Why did all Apple IIGS computers sold to the military for its schools include the Applied Engineering DOS emulator? Because some procurement person wrote into the specifications that all student computers had to be DOS compatible. Otherwise, only Apple Computers would be considered since that was the software most schools used. Add in a DOS emulator and the cost of the Apple computer goes up and . . . well you get the picture. There are no laws mandating F-keys. People who implement the law do that. Want another example? Watch what happens when the bureaucrats at the Federal Election Commission (FEC) "explain" what Congress meant to say when it passed The Bipartisan Campaign Reform Act. You may know it by its sponsor names: McCain-Feingold/Shays-Meehan.

The open-source proponents are well aware of all this. They know that their products will not get out of the start-

ing gate if the description of a level playing field is left to others to define. Governments in France, Germany, Peru and other countries have passed or are considering bills that would encourage the use of open-source software in the public sector because otherwise open-source will be defined out of the equation and not get considered.

European governments see open-source as a way of reducing costs and reducing their dependence on a single supplier [read Microsoft]. You can read the EU take on this story at <http://europa.eu.int/ISPO/ida/export//files/en/1115.pdf> . The French government is using MandrakeSoft, a vendor of Linux, to provide open-source software and support to government agencies. In the UK, the government is supporting open-source development so as to reduce its dependence on proprietary applications. Her Majesty's Office of Government Commerce said that where interoperability is an issue, it will only use products that support open standards and specifications. Norway is making noises about canceling its contract with Microsoft to be the exclusive supplier of system software.

In Sacramento, open-source advocates introduced a legislative proposal to prohibit the state of California from buying software from any company that doesn't allow for open source code or licensing. It goes by the name "Digital Software Security Act." Its sponsors are taking the "security" tack; that is, proprietary software creates security risks and is more costly to acquire and support. Therefore, state agencies should buy software only from companies that do not place restrictions on the use of, or access to, the underlying source code of the application. Other opening arguments they could have made include an "open competition" or "interoperability and open standards" approach. Those could be coming later. For a list of other states that might be open to similar legislative offerings, look at the names of states not willing to sign on to the proposed agreement between the Department of Justice and Microsoft.

So?

Sorry, this story has not ended yet. And, even though the initial battle ground is California, that does not mean that the Law of Unintended Consequences has been suspended. But now you have a better idea of the mix of players. You can also see that all do not wear one colored hat. Like the other mind numbing story I wrote concerning the Department of Justice vs Microsoft — and one whose glacial pace I continue to track — this one, too, is a work in progress. Just remember, if you let your eyes glaze over, hold onto your wallet. ■

Letters from camp

Tuesday in August 2002 (actually August 6)

Dear Richard,

We just finished our second day at camp and I have learned many things. Some will cost you money.

The first day was not the best for me. The morning was note taking and compiling a reading list of all the books our instructor Pat brought for us to browse while our projects rendered. We had lunch and I was ready to accomplish great things. But first I borrowed photos from Pat (night shots of the streets of New York during her trip to MacWorld last year) since I hadn't brought any work of my own. We were to construct a slide show using iPhoto. When I finally got to put theory to practice my machine kept freezing on the third slide. It was also an enhanced computer trouble experience because the reboot button also kept jamming and had to be dug out of the case with a fingernail. I got very good at that by the end of the day.

I accomplished nothing while almost all those around me had great little slide shows running. Great little slide shows with music that comes with the program. Great little slide shows with music borrowed from CDs. I tried to view the successes of my fellow campers and not harbor any ill will towards them as they accomplished what I could not. I was partially successful at that.

I never got a chance to browse the books or stare at my screen in a hypnotic trance (at least not the first day). Paige (a fellow camper) was also experiencing problems similar to mine but minus the button thing. Other people's misery has never brought me any comfort at all so I hoped that for both of us the next day would be better.

The next day was much better, the weather was even great. It is hard to believe that Monday I could have baked cookies in my car and Tuesday, it was as if autumn was in the air. I like weather when it allows me to wear long sleeves and a hat. Pat moved around machines for both Paige and I so I was able to practice, practice, practice. At one point I had so many programs open I did run out of memory but experienced no crashes. My notes are much better on the first day since I was sitting around but the second day was a lot more fun.

Dear Want-To-Be Digital Photographers,
As a wife, mother and working General Contractor, I have the opportunity to be so completely ego-centric and please! Camp is wonderful! How can three days have gone on our own photographs turning them into slide shows to make INTERESTING home movies (YES, it is movies!) and just generally learning from one another a variety of techniques, software, hardware and a wonderful learning experience. My only regret

August 9, 2002

Dear Laura Leigh,

I just have to tell you how amazing Adult Video head is still spinning. I just don't know why it is was just 2 days.
The camaraderie between the students was electric.

Tuesday in August 2002
Dear Richard,
We just finished our second day at camp and I have learned many things. The first of is that trying to saddle your grandchildren with a first generation iMac to use with iMovie is probably fraught with more peril than you want to deal with. iMovie runs on OS X only and it needs lots of resources which means an old Macintosh G4 is probably not the best solution but the first day was not the best. I got a computer that was not the best. I should have kept the books.

by Lonely
& Faupel
mail to ron
Teen Video Co
he to come.
ble week! I can't wa

When I arrived everyone was viewing DVDs done by our more experienced attendees. Deb brought a DVD of her grandchildren playing in the leaves. It was great. Then we watched a family archive DVD with several films on it done by Chuck. Pat showed us one that she had done when she was at MacWorld in San Francisco, it also had several movies on one DVD. The movies are not about MacWorld but activities that she and her family were involved in while in the city, like going to the aquarium and the Maurice Sendak Museum. There was a very engaging piece on how to jump on a bed— actually jumping from one bed to another— which looked like a possible hospital visit considering the size of the demonstrator and the space between the two pieces of furniture. We then got to see what Teen Summer Camp did. Our project needs to be if not better at least as good. I feel a little overwhelmed since by that point I had only managed to get to picture three in

my slide show in iPhoto. Yeah right, Pat as good as the teens. It was finally time to get to work, but first lunch. I like being with a group that believes in food.

The first thing we learned on our second day was how to steal music from the Internet. Napster may be gone but now Limewire is out there ready to aid and abet. My new knowledge will surely impress my nine-year-old niece Storm and probably appall her grandfather. This lesson was a great sequel to the day before when we learned how to steal music from a CD. I downloaded some really odd stuff and the music industry may be correct in believing this could hurt business in a try before you never buy scenario.

We were to use iMovie but I didn't make great strides with it because I needed to do stuff to my files first. Two programs that I had only been able to witness others using the day before—Photoshop Elements and Graphic Converter 4.x—were put to work on the first photos from my digital camera.

The photos were taken in very low (almost no) light situation at a May Day Eve celebration. This was a dance where some are outfitted in outrageous costumes and most of the participants danced till dawn. As a matter of fact the attendees seemed genuinely concerned with my welfare due to my preference to photograph events rather than take part in them. I took lots of shots and got some great compositions but most were too dark to see or flat. Even the photos with the woman in the white dress (great to bounce the flash off of) were uneven quality, she looked good but the rest of the scene suffered at times.

I have not used Graphic Converter in years but it quickly added viewable headers to my jpegs. After first importing it into iMovie I went back to Graphic Converter and rotated the images. Rotation occurs without opening the file—big big time saver. I gotta get me this program again and it is a not too expensive shareware. I think the book on how to use it is higher cost than the shareware fee.

I then switched to Photoshop Elements, which I didn't even know existed until the day before camp. I had called Adobe to upgrade my Adobe essentials: Photoshop, Illustrator and Acrobat and they asked if I wanted Elements. I said no since I didn't have a clue what they were talking about. The next day in camp I found out what it was/is—a Photoshop lite that accomplishes very specific tasks that people need to do. It has a nifty filter that I love (a very strong sentiment from me concerning software) called fill flash. The soft-

ware can illuminate all those photos that were dark because my flash hadn't reset. I corrected several pictures and cropped to size. Most of this work was done in the last hour and a half of the day.

A couple of people in the class are experienced iMovie users so I learned from them while spying over their shoulder some of the time. You can tell when a class is successful because we went a half hour over and my fellow campers didn't notice or were afraid to mention the fact because they were not ready to leave for the day.

There are seven of us in the class plus our instructor, three men and four women. The range of experience is wide. Our video lighting instructor/guest speaker can't come until Thursday since he is on assignment. We all hope he doesn't get any work for Thursday, which is a little mean spirited on our parts. We were told to get some video footage for tomorrow and as the only camper without a video camera the instructor took pity (again) and was going to loan me one of her video cameras. Chuck (a camper who is a fugitive from the law, an x-lawyer but still a nice guy) was kind enough to let me borrow one of his cameras. I wouldn't let him leave without basic instructions since this is only the second time I have ever videoed anything. The first time you may recall was when I borrowed your cameras to tape the fire burning at Page Hines hearth in Baltimore. I love that tape—I play it during cool weather when I read.

Chuck asked me if I had any little ones and I said no but I do have a dog. He advised me to film the dog which is what I did after I left class. Well that is enough for now. I'll let you know about the last days of camp later.

Take care and stay in focus,
Laura-Leigh Palmer

P.S. Buying your grandchildren a first generation iMac to use with iMovie is probably fraught with peril. I realize that anytime you ask my advice and guidance about machine purchases we quickly get to the point that you will need to spend more money than any of your other advisors say you need to spend. In my own defense I ask how well (in years and reliability) has the front end (the Mac) for your Media 100 served your business? iMovie runs on 9.2 but things like iPhoto (I believe) will run only with OS X and the newer versions of iMovie will probably prefer OS X as well. OS X needs lots of horsepower, which means an older cheaper machine is probably not the best solution.

Dear Laura Lee,

Camp is great! There are eight of us, more or less, as well as our fearless leader, Pat Fauquet. We are graphic artists, retired professionals, and doting grandparents. Some are experienced photographers and some of us are at square one, but enthusiasts all. Everyone showed up with a camcorder or a digital camera and we've been comparing notes on equipment and know-how.

On day one, Pat brought a large collection of books that she found at MacWorld in New York and we discussed the current and up-coming technology in equipment and software. We talked about camera care and camera gadgets and tripods and memory cards.

On day two we started out to create slide shows from photographs that all of us have. First we used i-photo, adding music from i-tunes. We learned how to look for tunes on the web and paste them into our slide shows. Questions were flying around the room and Pat gallantly multiprocessed them all. So far we are using i-movie, i-photo, i-tunes, Graphic Converter, Photoshop Elements and Photoshop.

Sooner or later someone says, "Is anyone hungry?" and we take five minutes to order sandwiches from Armand's. Only three days left! Tomorrow we learn about videos.

I'll write again soon.

Gene

Wednesday

Dear Laura-Leigh,

Send money—please! I can't live without an i-Mac with superdrive so that I can burn dvds. I'll need a dvd player at home, just to be up-to-date. And now that I see what everyone is doing with a camcorder, I know I'll have to have one of those. With all of these grandchildren, I can take movies and edit them to be short and interesting, and burn them on dvds, and send them around for all to see.

Right now, I'm still making a slide show. Pat keeps giving us tips on how to get more from the applications. Today we learned about Apple's legal stash of music for all of us to use—1.3 gigabytes.

Friday

Today we are cleaning up our slide shows and adding music to them. Pat is transferring pictures from all of our computers to one file on hers so that we can each take home a CD of camp pictures.

Yesterday Grant Peacock came with so much light-

ing equipment that we had to clear out the lunch room in order for him to set it up. We learned heaps about lighting and about how to plan a video story.

One of the best things about camp has been picking the brains of the others in the class.

Must go. Time to order lunch!

Gene

August 9, 2002

Dear Laura Leigh:

I just have to tell you how amazing Adult Video Camp was this week. My head is still spinning. I just don't know why it is only a week. It felt like it was just 2 days.

The camaraderie between the students was electric. We all fed off of each other's brains relentlessly. I am going to feel very lonely with my Mac next week. If we could only find a way to Target Pat Fauquet's brain!!!!

I am already anticipating my next Apple Pi journal to scour through for the next camp.

EXACTLY how old do you have to be to be in the Teen Video Camp :)

I will be dreaming about my new ideas for months to come.

Thanks so much to Pat Fauquet for an unbelievable week! I can't wait to go again!!!

Deborah J. Ward

Dear Want-To-Be digital photographers,

As a wife, mother and working General Contractor I have rarely had the opportunity to be so completely egocentric and play for a whole week! Photography Camp is wonderful! How can three days have gone by already?! We have been working on our own photographs turning them into slide shows. Mixing video clips with still shots to make INTERESTING home movies (YES, it is possible to make interesting home movies!) and just generally learning from one another and, of course, Pat Fauquet about a variety of techniques, software, hardware and digital "toys." It has been great fun and a wonderful learning experience. My only regret is that here are only two days left!

Paige Counts

A Jaguar MacWorld

By Dave Ottalini

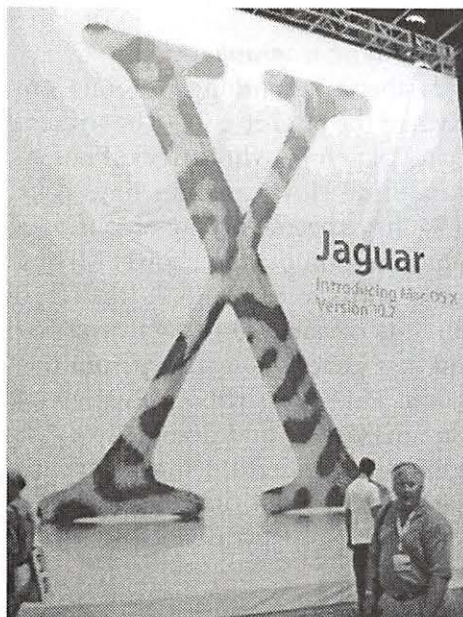
MACWORLD New York and July just seem to go together, especially if you're a WAP member and Macophile like me. Walking the Expo floor once again, it's fun to see what Apple and all its developers have come up with. As the OS X train continues to pick up speed, more and more vendors have come on board. By the time you read this, the much-anticipated OS 10.2 upgrade will have arrived. At MacWorld, there was a great deal of anticipation about "Jaguar"—tempered by Apple's decision to charge full price for the upgrade to all users. More on that later.

Hardware News

Apple did make some hardware announcements at this MacWorld. The most notable is that the very popular iMac is now available with a 17" screen. I had a chance to try one out and it improves the Mac computing experience considerably—especially with a newer NVIDIA GeForce4 MX chip on the motherboard (read that better screen resolution and faster graphics for games and graphic design). The 15" model is also

cheaper by \$100.00—back to its original price of \$1799.00. The new 17" iMac costs \$1999.00.

The iPod MP3 player also got an upgrade. Apple announced a slimmer 10GB model for \$400.00 and a new 20GB model



that retails for \$500.00. Oh, and you Windows users now get Apple support too using MusicMatch software! But that was about it. Apple has increasingly cut back making all its product announcements at these twice-yearly events. Some are saved for other Mac Expos in Japan or Europe. Others are just announced when the company thinks it's appropriate. That's why you'll probably see new speed-bumped G4 towers next month. Beyond that, MacWorld San Francisco in January may be your next chance to see any hardware announcements.

And that's OK. The lineup Apple offers right now (and this is being written before their expected late August hardware announcements) is excellent—from the low-end eMac, consumer iMac and professional G4 Towers, to the iBooks and TiBooks, we have a wide range of choices and price points. Yet there are not so many choices that users have trouble figuring out exactly what it is that they might need.

Is Jaguar worth the upgrade price?

So this MacWorld turned out to be one that revolved much more around Apple's Unix based OS and the continued push to get current users to accept it. Unfortunately, Apple made it much more difficult for those of us with current machines running OS X to get Jaguar when it was released August 23rd. During the Keynote, Apple CEO Steve Jobs announced it would cost \$129 for the software—with no upgrade path unless you purchased a new Mac after July 17th. That hurts folks like me, who purchased a new G4 just a few weeks before MacWorld. And I can tell you it caused a considerable amount of dismay among current OS X users including members of the user group community. Apple's VP of World Wide Marketing, Phill Schiller told Business Week Online that the upgrade fee is a standard for Apple—for example, the same amount was charged for the original 10.0 version of OS X in May of 2001.

And that may well be true. But I can also tell you that as I attended meetings with Apple reps, many users were vocal in their disapproval over the fact that there was no upgrade path. It's not that folks are unwilling to pay something for Jaguar (Apple is, after all, a business and we understand that) but rather a perception the company is taking advantage of those who have made the plunge and are using the new operating system now.

There were some cracks in the Apple armor here.

Amazon.com offered a \$50.00 rebate for awhile in late July/early August. But it was quickly withdrawn. Hopefully something else was worked out so we current OS X users could get a better deal upon release.

A Major Upgrade

So what will Mac users get with the "Jaguar" upgrade? A host of 150 new features it turns out. The wonderful Sherlock search engine goes to version 3 and now includes its own browser. If you're looking for a restaurant for example, tell it the zip code and the type of food you want to eat and Sherlock will give you not just choices, but a map showing how to get there. iTunes hit Version 3 and is already available for a free download. It offers smart playlists, lets you rate your songs, provides better sound effects and even supports Audible.com — a website with spoken word offerings. Of course it's *the* program to use with the iPod.

Graphics performance gets a boost with what Apple calls "Quartz Extreme." The Mac's built in graphics engine is tweaked to make the desktop more responsive. You should also see better 2D, 3D and Quicktime performance.

AOL gets its hooks into the Mac OS with the new iChat application—Apple's version of Instant Messenger. The Mail application moves into the Actually Useful stage with junk mail filters, sophisticated searches and multiple mailboxes. The Address Book is considerably improved and available system-wide to any application that can use it, including Bluetooth enabled cellphones.

In fact, support for Bluetooth, and the new "iSync" application included with Jaguar, may be the major highlight of the entire upgrade. Bluetooth is a short-distance wireless technology that Apple hopes to make a standard much like it has with Firewire and Airport (WiFi). Small \$50.00 transmitters plugged into a USB port are all that's needed (along with OS 10.2 of course on the Mac side. PCs need their own drivers). Apple demonstrated how you could sync your address book with a Bluetooth-enabled cell phone and it worked without a hitch. Neat.

If you have a need for handwriting recognition, you get that with InkWell (from the old Newton) and OSX will be able to "see" devices on a network automatically now thanks to its Rendezvous technology—a god-send for those of us on Windows networks. iCal is a new calendar program that handles multiple schedules and can be published on the web. And iDVD goes to

version 2.1 with advanced scripting support.

Beyond that, Apple announced Quicktime 6.0 is now available for download. It includes MPEG-4 support (translation, better on-line video streaming, as well as improved video and audio quality). And yes, the full "Pro" version is available at an additional cost. The decision to charge \$129.00 for Jaguar may have caused considerable disappointment, but Apple reaped some real consternation by announcing it's popular - and free - online service called "iTools" would also be changing. Starting September 30th, iTools will officially become .MAC (dot-Mac), and will cost \$99.00 per year. Current users get the first 12 months for \$49.00. "The world," Steve Jobs told his listeners at the Keynote, "has changed."

I know of one Washington Apple Pi member who has already quit the service because he did not want to pay. I suspect many more will follow. That said, I would consider a subscription. .Mac offers users an extended group of upgraded services that might be hard to find for a little more than \$8.00 a month. It works seamlessly with the iCal application, offers a new backup service, virus protection from McAfee, email and 100 MB of storage. Web hosting continues as well. Apple CEO Jobs says more services will follow. But I think Apple could have kept the email free and reaped some continued goodwill from many users.

So this MacWorld was not without its controversies. But it was significant in that it showed OS X is finally becoming more sophisticated and is growing in acceptance. Apple says there will be some 5 million OS X users by the end of July. There are now 3500 OS X applications, including many of the major software packages like FileMaker Pro, Illustrator, Maya and more. And its SWITCH campaign aimed at Windows users is apparently reaping some dividends.

This MacWorld also brought home the reality that Apple too is changing. Its business model is adjusting to the realities of the computer industry. One painful result is that we users will not be able to have access to as many "free" applications as before. If we do, there will be additional costs for "full" functionality. And while we might not like that, paying for what we use will help ensure that there will be an Apple Computer around for us in the future. ■

A MacWorld Interview with Del LaCommare Interactive Solutions (MovieWorks Deluxe)

By Dave Ottalini



INTERACTIVE SOLUTIONS makes the popular MovieWorks application for the Mac. A few years ago, when Del LaCommare showed off an earlier version of the program to WAP members at a general meeting, he sold out of CDs! The company is hoping this latest version - now called MovieWorks Deluxe - will be as big a hit with the Mac Community as its predecessors were. His young son certainly had fun showing it off to lots of interested Mac users!

Dave: Tell me about this latest version of MovieWorks.

Del: MovieWorks Deluxe is the first multimedia works product. It has an authoring presentation tool, a video editor that captures from both analog and digital. It's got a paint program with some basic photo editing. It's got a sound editor and a 2D animation program all seamlessly integrated together. It's kind of like the AppleWorks of multimedia. People are doing slide shows, web movies, they're authoring fully interactive CD ROM titles these days.

Dave: Where do you see this program in relation to iMovie or Adobe Premier, for example?

Del: We'd like to think of MovieWorks first and foremost as an authoring presentation program that happens to allow you to capture and sequence video clips. Those are specifically targeted at video editing. If that's all you want to do, those are great programs, the iMovies, the Premiers, the Final Cut Pros. This is a much broader program that lets you create Powerpoint-like presentations with much more multimedia capabilities inside of it. We kind of call it "PowerPoint on multimedia steroids."

The advantage of our technology is that we're using Quicktime to bring everything in and play everything back. Programs like PowerPoint page everything in and out of RAM so when you try to do things like multiple audio tracks and a lot of video, you really bring it to its knees. We just use Quicktime to handle all the playback issues. Plus you get all the cross platform benefits. Whatever you create on MovieWorks can easily be played back on Mac or Windows.

Dave: I notice you've been giving this young man (Del's son) some basic lessons on how to use it. He seems to have picked it up pretty easily.

Del: Yah, I really haven't tried to push MovieWorks on Steven. I've wanted him to focus on sports and other things and last week he said, "Dad, I'm coming to New York with you. Can you show me a couple of things in MovieWorks?" And I was shocked. So in about two hours, he was literally doing everything in the MovieWorks tutorials. Now we have him here doing a reasonable demo on the show floor. I can take a break and go have some lunch!

Dave: A question a lot of our WAP members would have is, is MovieWorks OS X native?

Del: It is definitely OS X native. We have two versions. We have a Mac Classic/Windows hybrid CD and we have an OS X version. It's \$49.00 for an upgrade to the OS X version. We spent about a year and a half doing this. We didn't expect it would take this long, so we have about 10 programming man-years into it to get it up to OS X so we're trying to recoup some of the investment so we charge a small upgrade for that.

Dave: How about special deals for UGs?

Del: Well we've always offered a great discount, about 25% when we present to user groups and could consider some kind of a discount for the entire user group program if we can get the collaboration between all the user groups.

Dave: For more information, where do you go?

Del: On the Internet, goto www.movieworks.com. Everything you could ever want to know about MovieWorks and a lot more is up there including a FAQ about how to use MovieWorks and sample files in the MovieWorks Gallery to see projects that people have created. ■

A Macworld Interview with Alan Miller

Worldwide Account Manger for Apple Iomega Corporation

by Dave Ottalini

I OMEGA is a long-time Mac supporter and continues to offer a wide array of products for our computers. In fact, they support Macs running OS 8, 9 and 10 so most of us are pretty well covered. And as I found out at MacWorld New York, there may be no one better to explain Iomega and its great line of storage products than Alan Miller. He's been with the company for 16 years and knows what he's talking about!

Dave: How is Iomega Doing This Year?

Alan: We've just introduced our new HDD line so we have a line of slim and desktop hard disk drives in Firewire and USB 2.0 versions. We have 20 GB to 120 GB. We also offer our bellweather product, which is our Zip Drive as everyone knows. We have the 100 MB

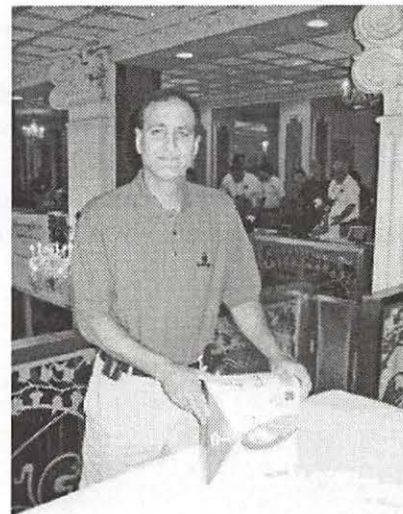
vesion and the 250. In the 250 we have our USB bus powered version that seems to be a standard now. They're also available inside the new Macs, the G4 Towers. And we're obviously looking at higher capacities for the Zip to continue the line as well as looking at new types of storage for the future, increasing speeds and capacities. We're looking at the digital video market for example.

Dave: It seems like the technology is just racing forward, especially with Firewire. It's almost overwhelming in some ways.

Alan: In this industry, you can never have too much storage, you can never be fast enough or cheap enough (laughing). The last one kind of hurts after awhile. So right now, our latest is Firewire 40X CDRW and with our new hotburn software and again, we're also looking at optical area. We're looking at different versions and flavors of DVD and DVD-R to see what emerges. There are a lot of standards out there and sort of fighting for top billing. So when we come out with one, we want to make sure it meets most people's needs.

Dave: How do you find the Mac Community in terms of support for Iomega?

Alan: I love the Mac Community. Obviously, I handle Apple world wide. I have ever since I've been with Iomega and I came to Iomega from Apple so I have my love on both sides of the table. But I found that the Mac community embraced the idea of removable storage really before everybody else. Back in the days when we first came out and Syquest came out, the PC world didn't quite get removable storage but the Mac community embraced it right away. And I think with the Mac Community's focus on other than just plain word processing, when you're looking at graphics, when you're looking at digital files, photography - all the really cool stuff. People really



needed more storage to go and I think their work product was more valuable to them. It was really important that they saved it after you worked all night on a Photoshop document, you didn't want it to disappear tomorrow. You want to be able to take it somewhere and print it out. We've done very well in that community. It's been a natural match from the start.

Dave: How would you rate this MacWorld?

Alan: It seems to me that every MacWorld gets a little more focused. I think it gets more focused into the heart of what makes a Mac a Mac, from the suite of applications and certainly with OS X. There seems to be fewer and fewer fly-by-night sort of things to some real meat there that addresses what the Mac Community is looking for. I think one of the key things vs. the PC is the focus on what you can do with it as opposed to how fast is it or how big is the box. It seems to focus on what you want to get done rather than on a box or a piece of hardware. And I like that attitude.

Dave: PC Folks still don't quite get what Macs are.

Alan: Actually I think they do get it in a way. But I also think they're in their milieu they have and they have to pitch what they have. I wouldn't underestimate that they don't get it. It's just that they're not there and they have to address what they have. And unfortunately for them, it's "we're \$10 cheaper" or "we're a little bit faster." They just don't seem to address what people want to do and it's funny because if you look at what Apple is doing, what the Mac Community is doing, if you look a couple of months down the line it's what the PC Community will try to do. It's funny, it used to be "You can do that on a Mac" and now I feel its sort of shifted the other way and PC folks say "We can sort of do that on our system also." So in a way, I think they do get it, at least the brighter ones do, but they're really not there so again, they have to focus on what they have and the strengths they have.

Get more information about Iomega and its great product line at : www.iomega.com ■

A MacWorld Interview with Adam Engst Author—iPhoto 1.1 for Mac OS X

By Dave Ottalini

Adam Engst is the editor and publisher of TidBits - one of the best known online Apple Newsletters. He's also one of a stable of Mac authors who just seem to churn out one great how-to book after another. MacWorld brings many of these authors together - not only to sign books, but to teach classes as part of the Conference. We caught up with Adam during a book signing event on the Expo floor. He was promoting his newest offering - iPhoto 1.1 for Mac OS X.

Dave: As a new user of iPhoto, what are some of the things I need to know?

Adam: The main thing to say about iPhoto is that it doesn't give you a lot of features because Apple very intentionally said you don't need to learn all this stuff. You don't have to be a graphics wiz. You can just be a normal user and put your photos in, organize them, edit them a little bit - no Photoshop here - and then share them in a lot of different ways. You can do print, you can do books, you can do slide shows. Lots of cool stuff.

Dave: Would you describe it as a low-end photo editing program?

Adam: It's hard to say. It is a low-end photo editing program. It's also a low-end photo management or photo cataloging program. And perhaps low-end isn't quite the right term. I would say it's aimed at consumers. Because the high-end programs, the Canto Cumulus and Extensis Portfolio and those sort of things are just way overkill for what most people need. And the same thing on the editing side. Photoshop - and even Photoshop Elements - can do wonders. But for most people, you need to rotate, you need to crop, you need to make it black and white and maybe fiddle with con-

trast and brightness. That's what iPhoto can do and that's what maybe 95% of the people need to do.

Dave: It's interesting that even Adobe now has Elements (in the 2.0 version) import pictures through iPhoto.

Adam: It turns out that iPhoto is a good place to just stuff things. You don't have to think about ways to organize your photos in the Finder, should you name them all and should you put them in folders, etc. iPhoto helps you do all that cleanly and with an efficient interface.

Dave: Is there one or two Really Good Tips you can give our readers?

Adam: The first Absolutely Essential Tip is when you're creating books, work left to right. The second tip, when you import photos into iPhoto, and you want to delete a bunch of them, go to Edit Mode so you can see the big photos, then use the arrow and the delete key. They don't tell you you can do this, but when you hit the delete key, the photo goes away. And so you just delete, move on to the next one, delete, etc. That's much faster than trying to muck around in other views where you can't see quite enough to see if it's a good picture or a bad picture.

Dave: The hardest thing for people is to do that - delete pictures they've shot.

Adam: When in doubt, I mean, I probably delete 75% of the photos I shoot. People should not feel badly about that. Professional photographers take hundreds and hundreds of photos and throw out probably 95% of them. So, that's the way photography works. You probably can't get the perfect photo on the first try. You shouldn't feel bad if you don't.

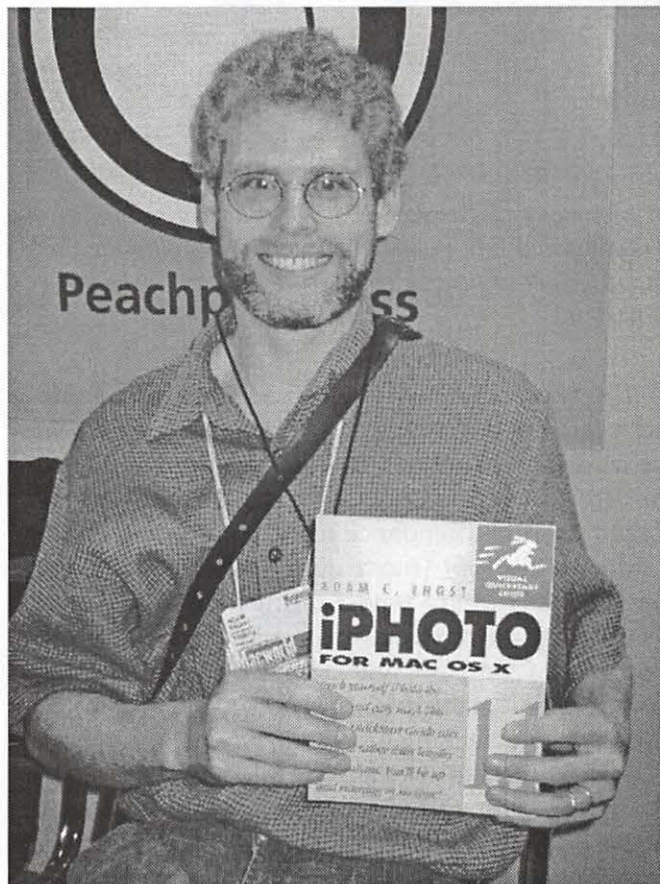
**iPhoto 1.1 for Mac OS X
Visual QuickStart Guide
Publisher: Peachpit Press
ISBN:0321121651
Price: \$19.99
136 pages**

Macworld New York City 2002

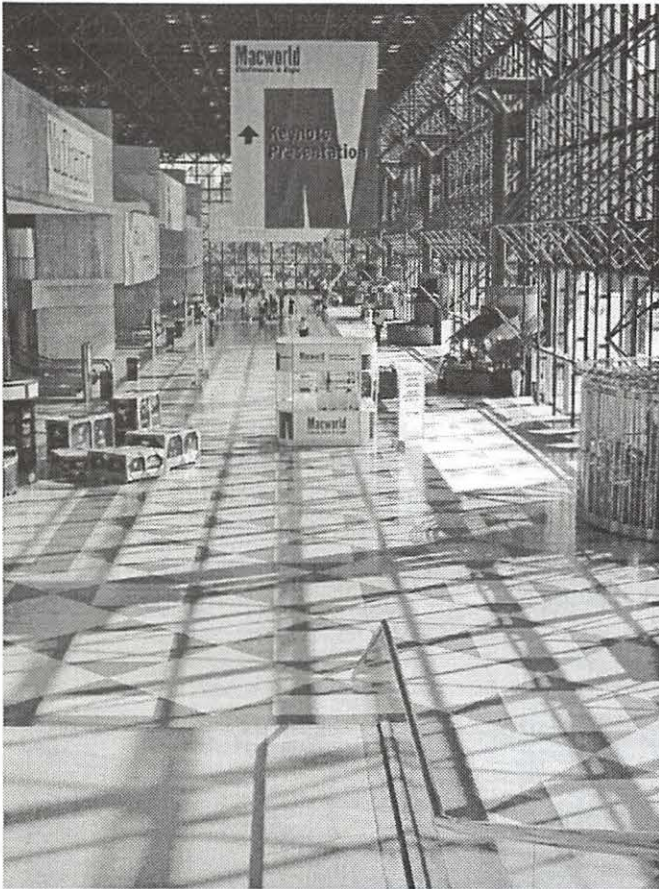
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Rebuilding Year

SPORTS TEAMS refer to transition years as "building years." Either they have the proper elements in place (players, coaches, schedules) and just need to refine them, or they are working at collecting the proper elements. Macworld Expo New York, in 2002, was a "building year," for the Expo, for New York and for Apple.



Long-time Mac author Adam Engst, best known for his "Tidbits" electronic newsletter, had a new book out on iPhoto. (Photo by Lawrence I. Charters)



On Monday and Tuesday, Macworld hosted a number of workshops that kept people inside all day, leaving the Convention Center hallways all but deserted. (Photo by Lawrence I. Charters)

The Expo organizer, IDG World Expo, had a difficult year. Their flagship exhibitions, LinuxWorld, Macworld, and Comnet, saw attendance level off or even drop. Macworld New York, while successful, had a slight drop in attendance from last year, and some regular exhibitors (most noteworthy, Adobe and Macromedia) didn't attend. Adding to IDG's woes, the Jacob Javits Convention Center, site of the New York Expo, hit the company with a large labor rate increase two weeks before the Expo opened. As this article goes to press, IDG is leaking hints that, while the San Francisco Expo will take place as scheduled (Jan. 6-10, 2003), next year's summer Expo may move back to Boston. The date (July 16-18, 2003) may also change. Or it could be nothing more than a hardball negotiating tactic.

New York City is rebuilding both physical things damaged or destroyed by terrorists as well as economic and psychological things destroyed by inept, corrupt,

or just plain greedy corporate executives. The Yankees have been (somewhat) humbled by Arizona, some CEOs, CFOs and other TLEs (Three Letter Executives) have been humbled by handcuffs, and insufferable snobs on Wall Street have been humbled enough to learn some manners or, in some cases, simply shut up. Regular New Yorkers lacking boardroom keys or sports contracts are quietly going about their jobs, doing the necessary, vital and unglamorous things to make the city shine again.

Apple was definitely in a "rebuilding year." With their sexy new operating system, Mac OS X, installed on all new machines, with new "iApps" catching the attention of fans and press, and openly subversive products, such as the iPod, sneaking into anti-Apple companies and organizations, it has managed to hold its own in a bad year. Corporate spending on information technology has plummeted, and in turn battered sales at hardware and software companies around the world. Apple's sales managed to dance at the border of profitability, with gains in some areas offset by declines in other areas. It managed to do this dance and still keep huge cash reserves in the bank, still release new products, and still collect an amazing amount of mostly positive press attention.

What did "rebuilding" mean in the context of Macworld Expo? It means there were a great many new products, but they weren't necessarily new to Expo visitors. A tidal wave of new Mac OS X applications and peripherals swamped the Expo but, since many of these were previously available for Mac OS 9, Expo visitors didn't necessarily appreciate these as "new." This tended to mask a major milestone in both Apple history and the history of personal computers: Apple is now the largest provider of UNIX-based computers on the planet. Apple is also the first computer company to successfully market UNIX-based computers to the general public, despite more than 30 years of effort by dozens of companies, most of them long dead.

New Fanatics

You could see the breaking wave of the future at the Expo. In addition to the usual Mac stalwarts – home hobbyists, graphic artists, musicians, publishing professionals, photographers and videographers – there were many new faces. Linux and UNIX gurus were everywhere, enthusiastically promoting the Mac as a UNIX platform to old-time Mac users. This is hilarious to watch: Mac fanatics are famed evangelists, and were



Before the exhibits opened on Wednesday, workers were busy turning a vast, open space with concrete floors into a carpeted, booth-packed hall. The large semi tractor trailer rig shown on the floor is actually an exhibit. (Photo by Lawrence I. Charters)

bewildered to find themselves evangelized on the merits of a Mac by UNIX people who seemed to speak a multitude of strange, almost incomprehensible languages.

Sybase was showing Sybase ASE 12.5, an enterprise-level database system often found on IBM mainframes, but now available for Mac OS X. The idea of putting such an exotic package on a mass-market machine apparently greatly appeals to Sybase; at the show, if you met certain conditions, they would provide you with a Sybase license for free.

In a similar fashion, ESRI (Environmental Systems Research Institute) was giving away evaluation copies of their Java edition of MapObjects. MapObjects is the premier GIS (Graphical Information System), widely used in government and private enterprise, and moving it to Mac OS X is a milestone for mapmaking and environmental charting.

But First

For all that was new, there were also old themes and familiar faces. Since his return to Apple, Steve Jobs has been the master of ceremonies at Apple's opening keynote address, and he continued this tradition in New York. With two noteworthy exceptions, it was a classic Jobs presentation, and it met with the usual cheers and applause. He announced a few new products:

■ Apple's iPod line grew to include a new 20-gigabyte model, which also includes a new remote control. The two existing models (5 and 10 gigabytes) dropped in price. Also new was iPod for Windows, an Apple-labeled package with software designed specifically for Windows users. This last introduction is openly subversive, intended to get Apple technology into previously Windows-only environments. The new 20-gigabyte model is also increasingly attractive as a compact, portable network management tool.

■ The iMac line added a new 17" flat-panel iMac with SuperDrive, 80 gigabyte hard drive, NVIDIA GeForce 4 MX graphics card and 800 Mhz PowerPC G4 processor. About the only improvement would be to add more memory; while 256 MB is good, adding another 512 MB should turn this into a real monster. All the iMacs in Apple's booth were equipped with Mac OS X 10.2, which definitely help showcase the new machine's capabilities. The 17" display (1440 x 900 pixels) shows



How big are the new larger-screen iMacs? They're really, really big. (Photo by Lawrence I. Charters)

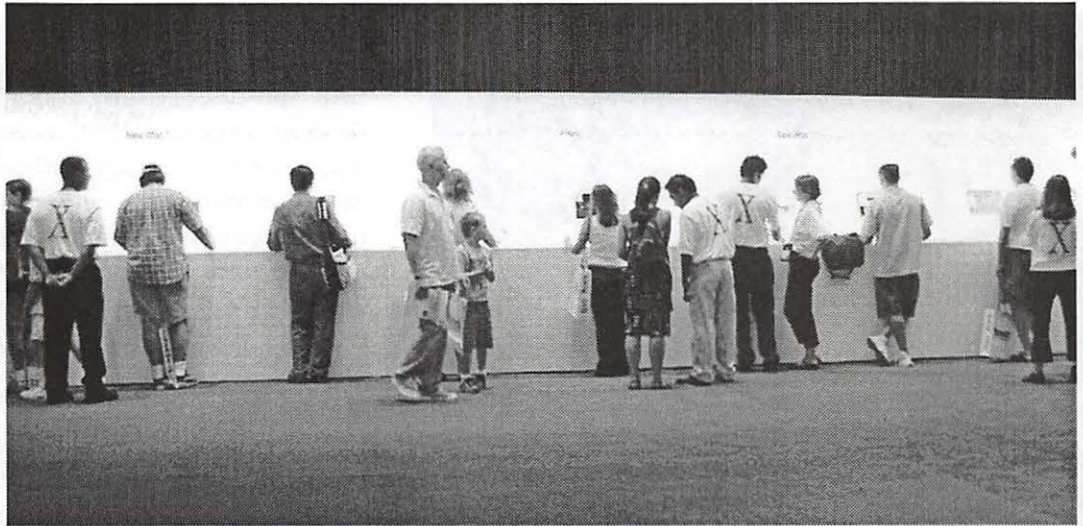
quite a bit more information at once than the 15" model (1024 x 768 pixels).

■ iTunes 3 made its debut, sort of. This new version of the world's best MP3 player is still free, but it is also Mac OS X-only; if you are still using Mac OS 9, you have to stop at iTunes 2. New in version 3 are Smart Playlists, which can automatically build playlists according to genre, frequency of play, ratings (you can now rate a track and assign it up to five stars), and other criteria. New tags also allow you to sort music by composer, a boon to classical music fans in particular. Sound Check allows iTunes to scan your library and optimize volume levels. Finally, you can purchase audio books from audible.com and play them via iTunes and iPod. Unfortunately, firmware updates to make some of these new features work on iPods were not yet available.

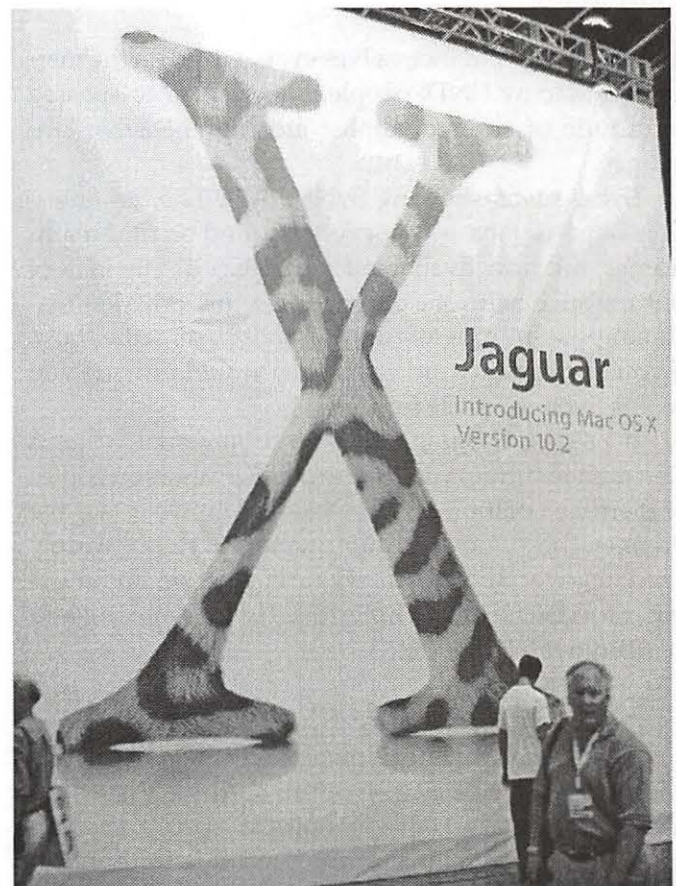
■ QuickTime 6 was released the week of Macworld, and in fact was used to stream the keynote address to over 25,000 live sites. While there wasn't much talk about it at Macworld, QuickTime 6 is now a solid, international standards-based technology that extends far beyond Apple. Expo goers were distracted by a controversy about MPEG licensing, which is not controlled by Apple but which is one of the key features in QuickTime 6. Those not distracted were treated to a large section of the Macworld exhibit floor devoted to vendors showing an incredible range of QuickTime products.

High Cost of Free

Jobs showed a fair amount of courage in personally announcing the end of Apple's free iTools Internet service in his keynote. He could have delegated the task to some flunky, but he didn't: he delivered the news that the service was coming to an end as we know



Apple had the new iMacs everywhere in their booth. A constant stream of visitors circled the exhibits, waiting for an opening at one of the machines. You had to be quick to be successful. (Photo by Lawrence I. Charters)



As expected, Mac OS X 10.2, code named "Jaguar," was really, really big. (Photo by Lawrence I. Charters)



The line for Steve Job's keynote on Wednesday morning snaked back and forth inside the convention center, and even spilled outside, running the length of the building. (Photo by Lawrence I. Charters)

it on Sept. 30, 2002, to be replaced with a subscription service, .Mac (pronounced "dot Mac"). For \$99 (\$49 the first year if you are an existing iTools user) you get 100 MB of on-line disk space, a mac.com E-mail address that can accumulate up to 15 MB of E-mail at any one time, accessible via a Web interface, POP mail client, or IMAP mail client; the ability to publish some or all of your on-line disk space as Web pages; a limited backup program (called "Backup") that can back up select portions of your hard drive to CD, DVD or iDisk; and virus protection via McAfee's Virex anti-virus software. Taken as a whole, it wasn't a bad package but, while the faithful applauded almost everything Steve said in the keynote, this met with complete silence: not even one hand was clapping.

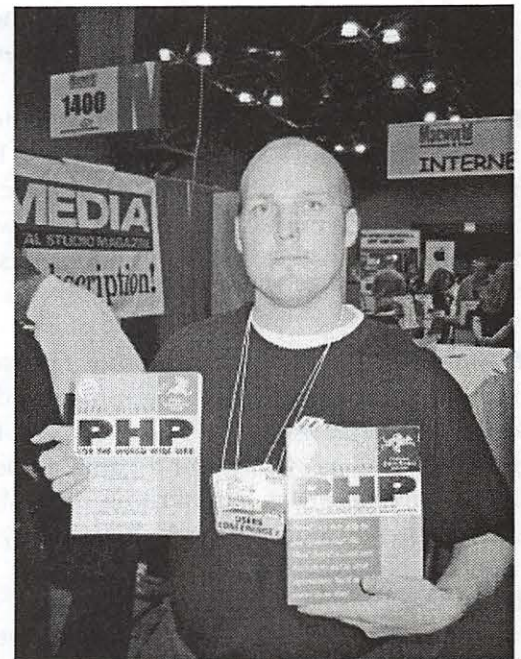
Jaguar Pounces

Jobs also formally announced Mac OS X 10.2, better known by its code name of Jaguar, set for release on August 24. Jobs announced it would be \$129, and the keynote audience then waited several seconds for him to announce some kind of upgrade discount for existing Mac OS X users. Their hopes unrequited, the announcement was swallowed by silence.

The Mac OS X 10.2 demonstration, on the other hand, was a hit. By the time you read this, the software should be available, along with lots of comments and commentary. There is much to like (and many of us went out and placed orders for copies right after the keynote, not worrying about upgrade price squabbles):

- iChat, a clever instant messaging client compatible with AOL, comes built-in. While many people find instant messaging obnoxious, the way iChat works, allowing you to build impromptu workgroup chat sessions on your local area network, may actually be useful.
- Mail has been drastically overhauled with a variety of new features, the most prominent of which is a clever junk mail filter.

■ The Address Book now allows you to add LDAP services as directories; while this may not mean much to some people, this is a huge boon to large organizations. Address



Larry Ullman, a Washington area resident, had two new books on PHP. The fact that there is a market for PHP books among Mac users is another sign of how the world of the Mac is changing. (Photo by Lawrence I. Charters)

Book is also now a system-wide resource, and can be used with other programs to update Palm PDAs, cell telephones, iPods, and other applications and tools.

■ Sherlock 3 has been dramatically revamped into an Internet tool. Click on Movies, type in your zipcode, and it shows listings for local theaters, complete with times, and the option of buying tickets online. Click on Yellow Pages and you can search for local schools, restaurants, and other businesses, and get a nice map and directions to your destination. Flights presumably helps with booking airline reservations, Dictionary gives access to online dictionaries, eBay continues to allow you to fritter away money on legalized gambling, and Stocks and News provide access to online quotes and news articles for other forms of gambling.

■ The Finder in Mac OS X 10.2 is multi-threaded, so you can now do something else while the Finder is engaged in time-consuming tasks. There is also a Search box right in the Finder window; you no longer use Sherlock to find things on your computer.

■ Rendezvous will be a blessing to network managers, large and small, even though it is a bit hard to describe. In essence, it allows the Mac to go out and discover, automatically, other devices on a network, be they computers, printers, Palm PDAs, servers or things not yet invented.

■ Quartz Extreme, although highly touted, will be invisible to most users. In essence, Apple has greatly improved the speed of graphics under Mac OS X 10.2, particularly if you have graphics cards with lots of memory, but most people won't notice this as a separate benefit; instead, they'll just think that Jaguar is "faster."

■ Inkwell, the automatic handwriting recognition built in to Mac OS X 10.2, will be appreciated by graphics; most mortal users will find it useless. But sooner or later someone will invent a game, or some clever little utility that uses handwriting recognition – and the millions of mouse users will suddenly think it is cool. The Newton lives on.

■ Mac OS X 10.2 offers improved Windows interoperability. As it is doubtful Microsoft will work on improving Windows compatibility with Mac OS, Apple has taken the lead in making it easier to exchange information with Windows computers through a variety of tweaks large and small. As Jaguar already has excellent UNIX compatibility – it is running on UNIX



Maxtor, the drive manufacturer, gave away drives several times during the Expo, but with a catch: you had to be present to win. As a result, their booth resembled a rugby scrum as the drawing time neared. (Photo by Lawrence I. Charters)

– a lowly Mac iBook or a high-end dual-processor G4 tower will be able to talk to almost anything except maybe a rock.

■ Prompted no doubt by federal Section 508 guidelines, Mac OS X 10.2 offers a greatly improved "user experience" for those with vision or hearing limitations through its Universal Access features. A new, global "Zoom" feature allows the user to enlarge any portion of the display to improve visual clarity; since it is done at the operating system level, it is compatible with all programs. Speech recognition has also been improved to allow you to simply talk to your Mac to launch programs and do various tasks. Jaguar also has improved text to speech capabilities.

■ Spring-loaded folders are back. Apple thought these weren't necessary, since you can do the same sort of thing, in a different way, using Mac OS X's "column" view in the Finder. But Mac fanatics told Apple they were wrong.

■ Several new screen savers come with Mac OS X 10.2. In fact, it is no exaggeration to say that even the current version of Mac OS X is the world-leader in cutting edge, high-tech, stunningly beautiful screen savers which, as always, have no real purpose other than to be cutting edge, high-tech, and stunningly beautiful.

■ Jaguar will allow you to mount FTP servers directly in the Finder (whee!). Given that you can directly



While their exhibit was neither the largest nor the loudest, Maya managed to pack in a steady crowd to see their incredible suite of high-end computer animation tools. (Photo by Lawrence I. Charters)

mount Windows volumes, AppleShare volumes and WebDAV volumes, mounting FTP volumes seems perfectly natural.

■ You will be able to animate your desktop by automatically changing your Desktop pictures. Third-party utilities exist to do this under Mac OS X, but Apple has quietly integrated this into the Desktop preferences pane.

■ Nerds will appreciate Bluetooth support, CUPS printing, IPv6 and IPSec support, Kerberos authentication, and support for file systems larger than one terabyte.

Aside from failing to make any mention of an upgrade price, Steve's demo of Mac OS X 10.2 was a huge and popular success. People liked what they saw.

Beyond the Keynote

Outside the keynote, in the "real world" of the Expo exhibit hall, pen drives were hot. It seemed almost everyone was selling some sort of USB "pen" drive, devices the size of a lipstick tube (or smaller) that connect to a USB port and allow you to transfer data without first installing drivers. Most of these require no extra

power, and have capacities ranging from 8 MB to 128 MB. At least one vendor had an even niftier "keychain" storage that uses FireWire.

There were lots of gizmos for iPods: car adapters, cases, earphones and earbuds, cables, and utilities. The two oddest were by Photo Control Corp., which makes the "BookEndz" docking stations for PowerBooks. They have developed iPodDock, a desktop docking station for the iPod, and an iPod desktop stand. Try as I might, I saw no purpose for either of these. One of the great strengths of the iPod is that you can "dock" it to a Mac by just plugging in a FireWire cable. Why do you need to add the bulk of a docking station, or a stand?

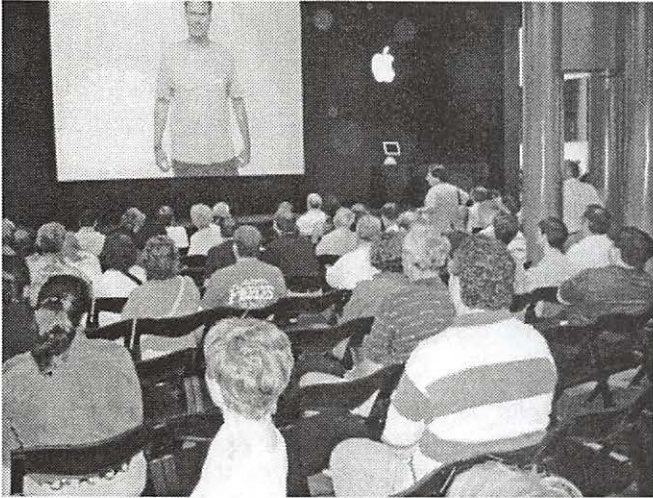
CMS Peripherals, after disappearing from view for several years, was back with specialized

storage devices, ranging from PCMCIA hard drives to automatic backup systems, essentially hard drives that automatically grab everything that needs to be backed up on your laptop or desktop machine. These devices can also be used as ordinary external drives.

FireWire drives were everywhere. If you looked hard, you could find SCSI and USB drives, but you had to look very hard. As Macworld was ending, a computer consulting firm released a white paper claiming FireWire hadn't "caught on" outside of the world of digital video cameras, and the authors of the paper clearly have never been at Macworld.

On the other hand, video card manufacturers were scarce. Since 1987, when the "slot Mac" Mac II was introduced, Macworld has always played host to lots of video and sound card manufacturers. The built-in video and sound capabilities of the current Macs have greatly reduced their ranks. One shining exception was Radion, showing their outstanding Radion 8500 card.

Video displays are also going through a transition. There were relatively few vendors of traditional "television-like" CRT monitors, but flat panel displays were everywhere. NEC/Mitsubishi had an enlightening booklet listing their various monitors. What was inter-



As part of its "switchers" series, actor Will Farrell compared eating a parfait with using a Macintosh, and the Macintosh, he claimed, was clearly superior. This was easily the most popular ad shown during the Expo, though some elements of the ad (Will claims he is a porn star, and discusses what happens to parfaits) may prevent it from ever being shown on TV. (Photo by Lawrence I. Charters)



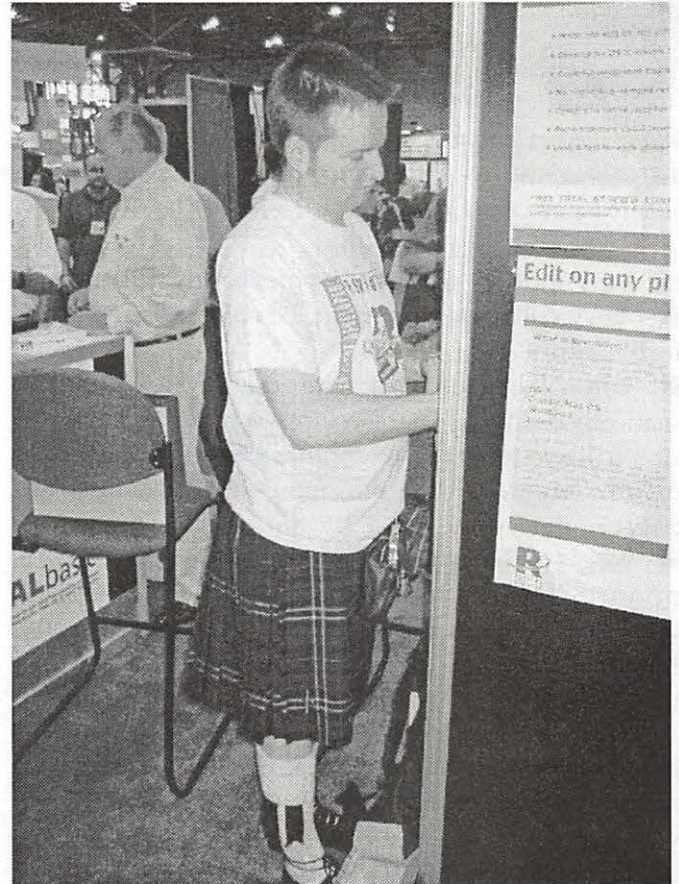
Phil Schiller, Apple's Vice President for Worldwide Product Marketing, answers some questions from the press in the Apple booth.

esting: the number of CRT-based monitors compared with LCD monitors. While CRTs still outnumber flat panels, there were still 24 different models of flat-panel displays listed in the booklet.

Just before Macworld opened, there was a blizzard of hype about EyeTV. EyeTV is a combination of hardware and software that allows a Mac with Mac OS X 10.1.5 and a USB port to record live TV directly to disk. The hardware is a little larger than a paperback book,

and has a coaxial cable input for connection to a cable or TV antennae, plus RCA jacks for connection to a VCR or camcorder. The software allows you to watch live TV on your Mac, pause live TV, skip through commercials, program EyeTV to record shows at set times, etc. The rather small booth was always packed, and sales were brisk. Since the booth demos were all canned (old game shows, movies, and news casts), it was impossible to see how well it would work in the "real world." Exactly how many people want to use their Mac to record TV is also unclear.

Harman Multimedia, which produced the iSub and SoundSticks for Apple, had a new, radically different sound system on display: Creature. This combination of subwoofer plus two satellite speakers certainly produced incredible sound. Harman also engaged in their



Conference organizers asked Rod McCall, of Edinburgh's Runtime Revolution, Ltd., to wear a kilt to the Expo. When he is not at Macworld, Rod is a PhD candidate (specializing in human-computer interaction) and director of marketing for Runtime Revolution, which makes powerful cross-platform development tools. (Photo by Lawrence I. Charters)

usual marketing ploy of loaning units to various software and hardware vendors scattered throughout the show, allowing visitors to see and hear Creature in combination with games, music and video software.

Hewlett-Packard was promoting "hp Mac-connect," which aside from strange capitalization is a major campaign to keep HP as the number one peripheral manufacturer for Macs. They were showing a bunch of forgettable digital cameras (that do work with Mac OS X, but otherwise are unexceptional), plus their extensive line of inkjet printers, laser printers, and large-format plotters. Catching quite a bit of attention was the HP Scanjet 3570cxi, an attractive flat-bed scanner with a transparency scanner built-in to the cover, for \$149. In what could be a trend, many HP devices had drivers for Mac OS 9 and Mac OS X, but not for anything older.

IOGEAR, best known for their geeky networking KVM (Keyboard, Video, Mouse) switch boxes, was showing their famed switch boxes and quite a bit more, ranging from FireWire hubs to USB 2.0-based hard drives. Many other network-centric, enterprise-centric companies, not normally seen at Macworld, were displaying similar devices.

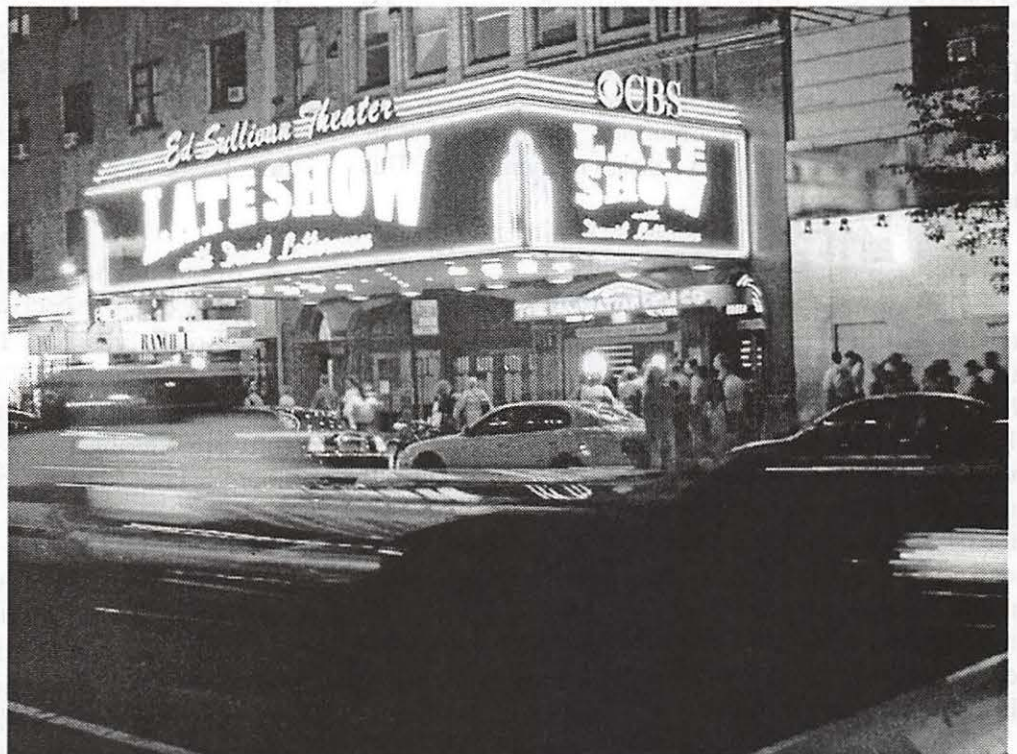
Mark/Space, a telecommunications company that used to have a strong presence back in the days when people used modems, had a new product: Missing Synch 3.0. This driver allows a Sony CLIÉ to connect with a Mac, and even drag and drop MP3 and photos from the Mac to the CLIÉ. They say they will soon have versions of Missing Synch for "all Palm OS devices with USB."

Microsoft didn't offer any big new products, but their new "Microsoft Office Keyboard" looks interesting. It is a USB keyboard, with the standard Microsoft Windows key instead of an Apple logo key, but it features a large, built-in wrist and palm rest, a built-in scroll wheel to the left, dedicated buttons for

launching Word, Excel, and other Microsoft Office programs, shortcut keys for Cut, Copy, Paste, and a number of other touches, and comes complete with Mac OS 9 and Mac OS X drivers for \$44.95. Drivers were also available for two similar keyboards, and for various versions of Microsoft's "Intellimouse" optical mice.

Canon has released an explosion of digital still cameras and digital video cameras, effectively filling almost every niche from the inexpensive "I'm just going to try it out" to the "I'm a pro and I want pro equipment." The cameras and scanners attracted lots of attention; their printers, in comparison, were pretty much ignored.

Probably the most impressive camera at the show was the new Nikon D100 digital SLR camera, with a 6.1 megapixel resolution and the ability to use the wonderful Nikon AF Nikkor lenses. It starts at \$1995 for the body alone, and a full compliment of batteries, lenses, storage media, flash accessories, remote controls, voice memo options, and a llama to carry everything will probably cost somewhat less than a Porsche. The only camera with a comparable drool factor was the Olympus E-20N, also an SLR camera but with a 5 megapixel resolution.



Many Macworld visitors took advantage of the trip to the Big Apple to take in the bright lights of Broadway. (Photo by Lawrence I. Charters)

“You could see the breaking wave of the future at the Expo. In addition to the usual Mac stalwarts – home hobbyists, graphic artists, musicians, publishing professionals, photographers and videographers – there were many new faces. Linux and UNIX gurus were everywhere...”

In startling contrast, Kodak had a small, even tiny booth, promoting their digital cameras. The people staffing the booth were remarkable: they didn't seem to know much about the cameras, they were completely unaware of what their competitors had to offer, and they knew almost nothing about Macs. The cameras, and the booth, were forgettable, a genuinely sad state of affairs for the company that almost single-handedly created modern mass-market photography.

One of the more interesting barometers of the computer industry are sales of computer books. Recently, Mac books have been doing very well. O'Reilly, the famed UNIX and networking book publisher, had a large booth that was constantly packed, and people were buying their books by the ton. PeachPit Press, publishers of the famed “Little Mac Books” and QuickStart Guides, had a comparably-sized booth, and it was similarly packed, and also doing a booming business. In contrast, Wiley, currently the publisher of the infamous “Dummies” books, usually had more staff than visitors in their booth. This is an encouraging sign.

Outside Macworld

Outside the exhibit hall, New York City was sweltering, victim of high temperatures and high humidity. Apple decided to engage in a bit of weather modification by opening their coolest retail store on July 18, in New York's SoHo district. Quite a few Macworld visitors took the subway down to the store, but far more stayed away: the store was jammed with people for the entire week. It is the largest Apple store so far, and among other things features a stairway with steps made of glass planks. The store's calendar for the first month was filled with luminaries doing presentations on everything from video to photography to art to Internet services to music.

Maybe things will calm down by next year. Assuming, of course, that Macworld is still held in New York instead of Boston. ■

MacWorld Ramblings

by Dave Ottalini

I USUALLY wear many hats at MacWorld. To start with, I'm a long time Apple/Mac user and member of WAP. I love to talk with vendors and tell them about the great things our club does. I enjoy providing a “human face” to companies that usually only see emails or web pages. Some vendors even remember me from previous years.

Beyond that, I attend as a member of the press - covering events for the suburban DC Journal Newspapers. I co-write a column called DoubleClick which many of you read in the paper or here in the WAP Journal. And most years, I write a MacWorld wrap-up for the Home PC section of the paper that comes out each Thursday (see my WAP version in this issue!). Being a member of the Press gains me access to additional information I can use for these articles. I've also started doing quick interviews with some of the vendors - transcriptions of which you will see in future issues of the WAP Journal.

This article is a variety show of sorts—to give you information from some of the events I attended and which I might not have enough material to do a separate article. So let's get started.

Adobe breakfast

Adobe did not have a booth on the Expo floor again - but they did help sponsor User Group University and a User Group Breakfast. The breakfast is always held at the New Yorker Hotel and includes scrambled eggs mixed with some great demos of the company's latest software offerings. This go-round we were shown Premier 6.5, Photoshop Elements 2, Illustrator 10, Photoshop 7 and InDesign 2.0. All operate under OS X. In fact, it turns out Adobe offers the most programs operating under OS X outside of Apple. I'll provide some insight on a couple of the programs:

Premier is one of Adobe's most popular programs. The company says its video editing application sells more than one thousand (1000) copies every day! Adobe has decided to place it between iMovie and Final Cut Pro - although it's feature set weighs it much more towards

the FCP side of the world.

Turns out Premier has been around for 12 years and it's seen a lot of changes over that time. This go-round, along with working under OS X as a native application, it also gets a new "Titler" that allows you to do some amazing things with text within your video. It knows what Firewire is now and can save your final production to a Firewire enabled camcorder. There's a new Font Browser and Hot Links feature like you'd find in After Effects. Adobe is also providing lots of pre-designed templates for everything from birthdays to business themes. It can also do streaming.

Photoshop Elements 2.0 was announced during the breakfast, but won't be available until later in the Summer. Again, Adobe sees this program as a step up from iPhoto and a great way to get ready for Photoshop. Elements 2.0 will also run natively in OS X and has been eagerly awaited by many - including this writer. The program uses iPhoto for picture importing now, has a wonderful batch renaming feature and a photo merge tool for panorama shots you can print on Epson printers using roll photo paper. It can even change the perspective of the stitched together photo. There's a new PDF slide show, great new Titler and you can choose different photos to print with the wonderful Photo Package feature. Oh and did I tell you it can also import stills from video?

Apple user group meeting

Garr Reynolds is Apple's UG Representative (OK he has a much fancier title - "Program Manager, Worldwide User Group Relations", but to us, he's the UG guy). He used to head up an Apple Users Group in Japan so he has a pretty good idea of what it takes to run an organization like ours.

During a meeting in the User Group Lounge (yes, we're special enough to get our own room at MacWorld), he gave a short speech and then took some Q and A from those present. There were UG members from all over the US and overseas as well.

Garr gave a general "State of the User Groups" report to start. He says there are some 550 registered UGs in the US - about 100 of which have been ap-

proved in the last 15 months. If you checked WAP's own UG list at www.wap.org, you would likely find many more than 550. But Apple has some fairly strict requirements for groups to become officially registered with Apple.

That said, Reynolds says the User Group community is growing - especially on college campuses and specialty groups focusing on programs like Final Cut Pro. Moving on to the "Switchers" Campaign, Reynolds told us "it didn't come out of nowhere." Apple started getting letters - unsolicited letters - from Windows users who had switched to the Mac. That led Apple to post a request for more switchers online. In just a few days they had to shut down the page. They'd received some 70,000 responses! And the Switchers Campaign was born. That, combined with PC users coming into the Apple stores to make the switch has given the company some hope that their message is getting through. "We want people to consider Apple," Reynolds told the UG reps. In fact, he specifically pointed to user groups like WAP as an important part of the equation - especially "if you can get the product into people's hands and (provide) someone of good people skills who can help."



Apple's booth was dominated, as usual, by a large theater for demonstrating Apple technology. In the past, the demos have covered a vast range of hardware and software products, frequently from other vendors. This year most of the demos were for one product: the forthcoming Mac OS 10.2, code named "Jaguar." (Photo by Dave Ottalini)

Finally, on the Keynote, Reynolds said his favorite part was when Steve Jobs announced the iPod for Windows. "The brand," he told us, "transcends the product."

Apple breakfast

Quiche is what they serve at the Apple Breakfast (I'm from California and I'd settle for scrambled) and it's complemented with a healthy portion of program demos. Sheila Annis, the Mac OS Product Manager and a compatriot did the honors after a few comments from Garr Reynolds.

Ms. Annis took us through the best features of OS X - v.10.2, adding that she was "always impressed at how Apple's engineer's take our technology to the next step." Among the improvements that you may not have heard about (see the accompanying articles that detail 10.2's improvements), the Finder is multi-threaded and has been given springloaded folders back. There's even an integrated quick searching feature now.

You'll be hearing a lot more about Rendezvous as well - the technology that gives the Mac "Zero Configuration Networking." That means it can automatically see every computer or other device on the network it's hooked up to no matter if its Windows, Mac or other.

This new version of OS X will have 15 languages built



This is the view you would see coming out of the exhibit hall. Several blocks straight ahead is the Empire State Building. (Photo by Dave Ottalini)



Four Pi members hold a mini-conference outside the Expo hall. Expo goers were easy to spot in New York City, even without their badges, because virtually all of them were carrying one or more bags filled with computer peripherals or propaganda. (Photo by Dave Ottalini)

in now including Hebrew and multi-lingual spell checking capabilities. And Universal Access features have been greatly enhanced.

WRAPUP

This year's MacWorld was, in the end, a bit subdued over past conferences. Apple had already announced Jaguar before the event - and could not deliver it in New York (but it should be out by the time you read this). The decision to charge \$129.00 rubbed many users in the wrong way because there was no upgrade path for those (like me!) currently using OS X. The 17" iMac and new iPod were nice but not unexpected. New hardware with faster processor speeds tho should be out by the time you read this.

That said, it was this MacWorld where it seemed OS X was finally coming of age. A young age to be sure, but software developers (with a few striking examples of those not quite on board yet —like Quark) are finally embracing the OS that Apple is staking its future on. Adobe has led the way in converting its products to run natively on OS X and many other developers are following in their footsteps. The race is on to see who can bring the best and brightest new products to the Mac world. I saw some really outstanding products on the EXPO floor this time. With its Unix underpinnings, the OS will open more doors than any of us could ever have suspected when it was first announced. I can hardly wait. ■

Where Spam Comes From

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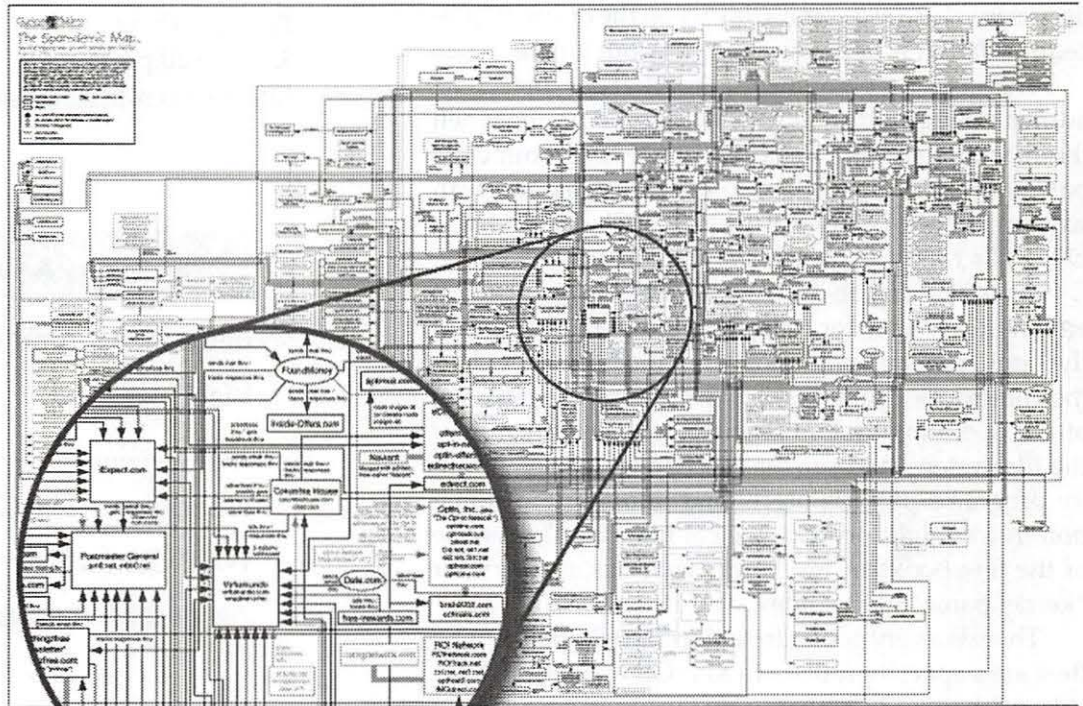
IF YOU HAVE an E-mail account, you have received Spam. "Spam" is the general term given to unsolicited electronic mail – mail that appears in your electronic mailbox simply because the mailbox exists. In this respect, it is similar to junk mail that appears in your postal mailbox, with one big difference: postal junk mail requires that the sender pay for postage, and identify who sent the mail. Spam, in contrast, costs the recipient money (since you must pay to have an E-mail box, and frequently have to pay extra if your E-mail volume exceeds a certain amount).

2002 is rapidly becoming the Year of Spam, as unsolicited electronic mail has exploded. A lack of laws governing Spam has encouraged explosive growth in the use of E-mail for fraud and other scams. Several Internet worms and viruses that target, specifically, Microsoft Windows E-mail systems and E-mail clients have created periodic floods of Spam. This latter phenomenon is significant since it is now possible to get random E-mail messages simply because someone, somewhere, added your address to their electronic mail directory. The person adding your listing didn't

"2002 is rapidly becoming the Year of Spam, as unsolicited electronic mail has exploded."

want to send you E-mail, and you didn't want to receive it, but the Internet worm found your address and mailed copies of itself to countless others. Adding insult to injury, the Internet worm credited these E-mail messages to you.

In response to this deluge, some people have set up a Web site, Clueless Mailers, dedicated to the "irresponsible bozos who need education." The Web site (<http://www.cluelessmailers.org/>) contains a wealth of information (and opinion) on Spam, including articles, a glossary, a blacklist of domains known for producing Spam, and other material. Their most famous contribution, however, is the Spamdemic Map, a massive chart that shows how various domains are interlinked to spread Spam, share lists of addresses, and otherwise promote unsolicited E-mail. A portion of that chart is shown below, with their permission. ■



A portion of the highly-detailed Spamdemic Map, showing how various domains (including those offering drawing prizes, "free" services and other marketing ploys) have collected and shared E-mail addresses, and in turn sent out a flood of unsolicited E-mail. You can purchase a 35 inch by 23 inch copy of the poster via their Web site, or download a GIF or EPS image.

Mac OS X Disaster Relief: Troubleshooting techniques to help fix it yourself

Review by John Barnes

VIRTUALLY EVER since the appearance of Mac OS X I have been looking for a book that carries on in the tradition of *Sad Macs, Bombs, and Other Disasters [and what to do about them]* by Ted Landau. Well, the redoubtable Ted Landau and Peachpit Press have joined forces to produce the volume in the title of this review. Ted is well known as the creator of the MacFixit web site, so he has plenty of exposure to the foolish things that users do to create problems for themselves.

While Mac OS X is much more stable than its predecessors, there *will* come a day when the ordinary procedures fail. It is not a question of if, but when.

This book prepares the user for that day. In fact the author recommends that the user start preparing when the machine comes out of the box. He recommends partitioning the disk space to provide separate clean environments for Mac OS 9 (including Classic) and Mac OS X. His rationale for this is well laid out.

Disaster Relief, in spite of its title, does not focus entirely on recipes for troubleshooting. Large parts of the book, perhaps even most of it, focus on providing the context for problem solving. In-depth discussions of the operating system architecture, the structure of the file system, and proper procedures for using utility programs provide useful and important information in a straightforward, logical manner. This is one of the few books in my library that has an entry for "kernel panic" in the index.

There is a very good discussion of backups and why they are a special problem in Mac OS X. Every *Pi Journal* reader should know by now that good backups are a vital to providing peace of mind.

This is a book that geeks will enjoy browsing. Non-geeks ought to give the chapters a quick run-through

because they will want to refer to it just to sort out puzzling issues like working with the Print Center. The book also prescribes a lot of preventive medicine, such as how to make a bootable CD-ROM.

On that day when the inevitable happens (usually just before a project is due) reach for this book and take a good look at the table of contents. It is very detailed and well organized and your problem may pop right off the page. Failing that, go to the index and see what you find.

When following a recipe be sure to check the cross-references. They take a lot of the mystery out of the procedures.

This book is a mighty sharp tool. It describes procedures that may require more judgment than the workaday Mac user has been able to cultivate. The book is very good about issuing warnings in these circumstances. Every Mac geek should have this, and those who cannot handle their own troubleshooting should make sure that their favorite technician knows about it. ■

Mac OS X Disaster Relief: Troubleshooting techniques to help fix it yourself, by Ted Landau
Peachpit Press, 2002.
\$34.99, 620 pp.
<http://www.peachpit.com/>

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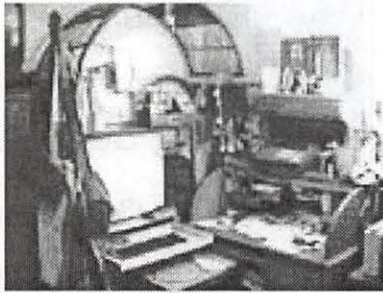
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What am I doing with a Computer? ...and who cares?

Part One: Resistance is Futile

by Cheryl Parker

TWENTY years ago, when I was embarking upon a new career as a letterpress printer, an acquaintance then writing banjo tablature for computers, insisted that I would own a



computer one day; that I would use it for communication, shopping and business, and that it would make my work easier. After trying out a game or two as his guest, I could see how some other people would fall into that trap, but I had no desire to pursue his games any further. "Not for me," I said, smugly.

As it turns out, he was not a complete lunatic. It wasn't the games or the shopping or banking or e-mail that seduced me; it was art. Operating on the "low tech" side of the scale, my business depends on delivering style, workmanship and a product with that distinctive, tactile letterpress element. In the beginning, I carved linoleum blocks for background shading and Wedgwood-like silhouettes and gradually supplemented those "cuts" with copper, zinc and magnesium photo-mechanical engravings gleaned from other printers who had modernized, printshop auctions, flea markets and antique dealers. I developed a big Dover habit, and would buy every new copyright-free collection they published, paste-up my favorites in precise rows, sometimes in more than one size, then have them photo-engraved as a gang, and carefully saw them apart later, as needed.

Eventually, when a part-time, paste-up job opened at a weekly newspaper, I applied, to supplement my

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printing income and qualify for health insurance, which was not formerly within my means. The production manager made it clear, in 1995, when I was hired, that the position would soon be phased out by newer technology, and that I should observe the graphic artists at their computers and acquire some useful skills, to extend my employment. And so began my practical introduction to the digital world.

Like an infant, I gradually came to understand some of the terms in use around me and to relate them to my work, sometimes sharing the origins of cross-over terms with my "high tech" young workmates. A training tape for Quark 3 was available. I listened to it. A "hands-on" Quark class was offered. I attended, only to discover that other members of the beginner class (who had apparently had their hands on a computer before) far outpaced me. I dutifully learned a few tedious tasks on the computer and little-by-little gained confidence, carefully concealing my lust for the mountains of clip art stored on those glittering CDs and the powers of PhotoShop.

In the fall of 1999, my father, who kept offering to send me a computer from his restored PC hoard, finally surprised me with a Mac II vi. The day it was delivered, I ordered Art Explosion 125,000, but by the time those CDs arrived, I knew I would never be content without upgrading.

In January 2000, as I was hunting for a used G-3, a tech/sales person recommended the wap.org website. Hoping to learn of a secret way to make Daddy's gift Mac perform like the G-3s at the newspaper, I shook myself awake early the next Saturday and raced 'round the Beltway to my first General Meeting. By the February meeting, I had rationalized a \$4000+ business investment for Hummingbird Press, and my G-4, monitor and printer/scanner/copier, along with Adobe's WebCollection, Norton Utilities, Freehand and Quark software and a Zip Drive, were on their way. ■

Review of Starry Night Pro

by Susan Kayser

WITH MOST OF the U.S. population living in urban areas, and a proliferation of street and building lighting, a sky full of stars has become an unfamiliar treat for us. Whereas people living a century ago were often familiar with the star patterns on the skylthe constellationsnowadays we usually experience them only during faraway vacations, with no opportunity to learn them, or in planetarium shows. Putting a planetarium on your desktop is a convenient and affordable way to learn to recognize the constellations, so that you can be the one to tell all your fellow travelers, "That's Scorpio, with the red star in its head!"

Starry Night is one of the best of the desktop planetarium programs. It shows you the appearance of the sky: stars and galaxies, the moon, planets, and artificial satellites, at any time or place you choose. There are three versions: the Backyard version (\$50; \$35 if you download it) gives you most of the functionality described below; the Basic version (\$30) has fewer stars and covers a shorter time period (though it's adequate for naked eye viewing), while the Pro version (\$130) reviewed here adds large star catalogs, a long time period, computer operation for telescopes (if they have the appropriate hardware), access to Internet databases, and other advanced features.

Getting Started

The *Starry Night Pro* package contains a CD-ROM, a good manual (also provided in PDF form), and a 200+ page book with an introduction to astronomy, including exercises to run on *Starry Night*.

Although *Starry Night* can be run from the CD, you should install the program and associated files on your hard disk, both for better performance and to be able to save your settings. The Installer appears on your desktop when you open the *Starry Night* CD icon; just click as needed. It will deposit about 75 MB on your drive.

Starry Night Pro is not easily figured out without

reading the manual if you are new to astronomy or to desktop planetaria. If you have used similar software before, however, you can quickly get to the basic stuff just by looking at the menus. Several palettes can be opened as well, which fit comfortably along the side of your window if you have a resolution of 1024x728.

These palette windows offer a quicker way to access most of *Starry Night's* features. In fact, the Time window is the only way to set your desired time.

You can get *Starry Night* to work just playing with it, but several features are likely to be overlooked if you ignore the manual, and many of the buttons in the

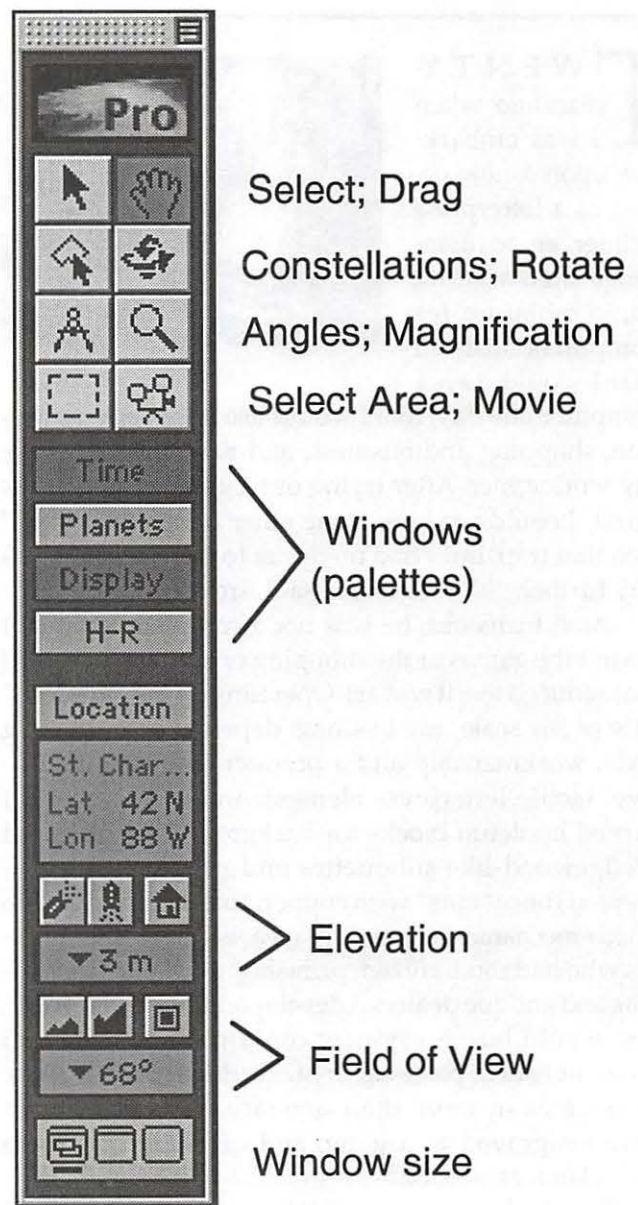


Figure 1: The Tool Palette



Figure 2: The Time Window

palettes are hard to understand without a guide. The manual is easy to use, and I recommend at least skimming the subjects to see what you've missed.

Basic Features

Here's how to get started quickly, without reading

the manual. In brief, you first set the **place and time** at which you want to be looking at the sky. From there, you adjust the direction in which you are looking, the field of view, your elevation above the surface, and how often you want updates of the view, as time passes.

Set your location and time and viewing direction

When you first open *Starry Night*, a dialog box will open for you to set your "**home location**". Use the Lookup list to select Washington, USA (or any other city you wish to consider as your home base), or add a latitude and longitude of your choice, or just click on a point on the map. (You can change this at any time by going to the Go menu and selecting Set Home

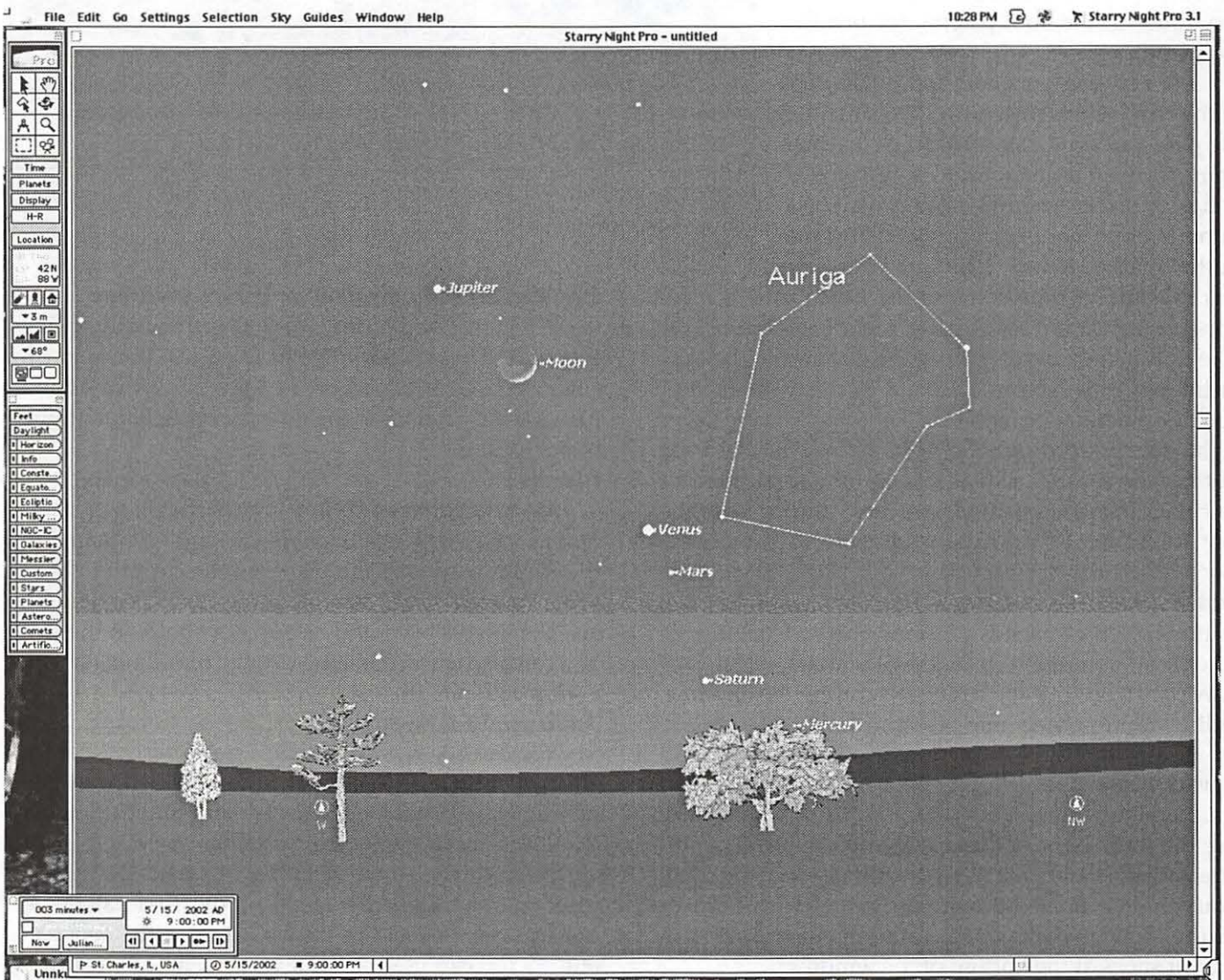


Figure 3: The *Starry Night* windows fill your monitor screen. This shows my monitor screen for 15 May 2002, at 9 PM, looking west from my home location.

LocationX.) If you aren't interested in seeing your home sky, either choose Go/ Viewing LocationX or click the Location button on the Tool palette (Figure 1). This brings up the same location dialog box you used for your home location. Fill it in as before for your current preferred location. *This does not have to be on Earth!* There's a pull-down menu at the upper left of the dialog box that lets you "stand on" any planet or moon in the solar system, or farther yet. This means you can put yourself on the moon and watch the moon's shadow sweep across the earth during a total eclipse of the sun. To get back home fast, click on the button with the house in the Tool palette, (or use the Go menu).

After setting your location, you work in the Time window (Figure 2). You can set the **date and time** you want (click on each item you want to change and type in a new value, or use the arrows). You can always jump back to the present by clicking the button marked "Now". (Be sure your Mac has the correct time set. Use the Date/Time control panel to adjust it if necessary.) You set the **frame rate** (the time step between successive updates of the sky) in the upper left, from 1 second to many years, and run the updates with the VCR-like controls on the lower right. The button with the right-arrow (the Forward button) updates the sky as fast as your computer can calculate the new positions; the next one updates the sky in "real time"; the right-most button advances the sky by one time step each time you click it. The button with the small square stops the updates; the left two buttons run time backwards. I recommend leaving the "daylight" setting on (from the Sky menu, or the Display panel), giving you a blue sky during the daytime, fading appropriately into twilight.

The default **view direction** is looking south, with a field of view of 110°, so you see from a bit east of southeast to a bit west of southwest. To look westward, use the scroll bars, or click the button in the Tool palette with the hand on it, then drag the view to the right. You can drag up and down also, to look further up or further down (when you look straight down, you see a pair of shoes at the bottom of the window). You can also set your **altitude**. The default is 3 meters, but clicking on the "rocket" button lets you rise to any

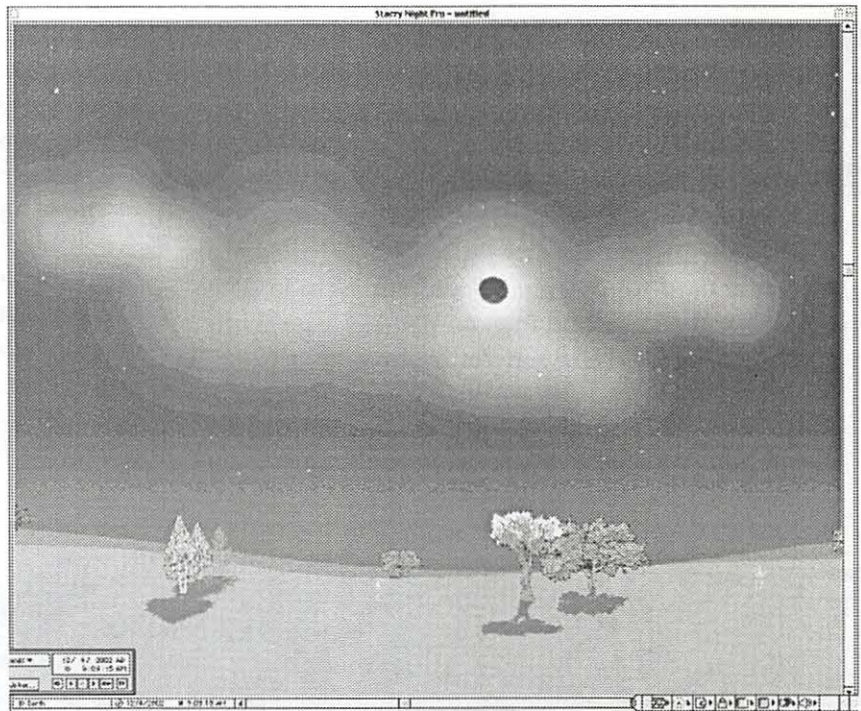


Figure 4: This shows *Starry Night's* representation of a total solar eclipse (4 December 2002)

altitude you wish, even out of the solar system.

When this is all done, you will see something like Figure 3. This shows the sky from my home in St. Charles, IL at 9:00 PM on 14 May 2002. I've added planet labels and also labeled one constellation in the basic display.

Planets

Starry Night has a palette just for the planets, their moons, asteroids, etc.. Double-clicking on a name in this window centers the planet in the current field of view. You can "lock" it in place (i.e., keep it centered), and display its orbit and its apparent path on the sky. You can also use this palette to go to the planet (switch your location to it).

Additional Features

You can zoom in to see just a small part of the sky, enlarged, in at least four ways. 1) You can click the magnifying glass button on the Tool palette and then either drag out a rectangle for the part of the sky you want or click in the area of interest. 2) You can select the field of view from a pull-down menu on the Tool palette. 4) You can use the Field of View buttons on the Tool palette. 3) You can use the contextual menus, by control-clicking on an object and selecting Magnify. (You can also Go There, a dizzying effect, which often ends up

Total Solar Eclipse of 2002 Dec 04

FIGURE 1: ORTHOGRAPHIC PROJECTION MAP OF THE ECLIPSE PATH

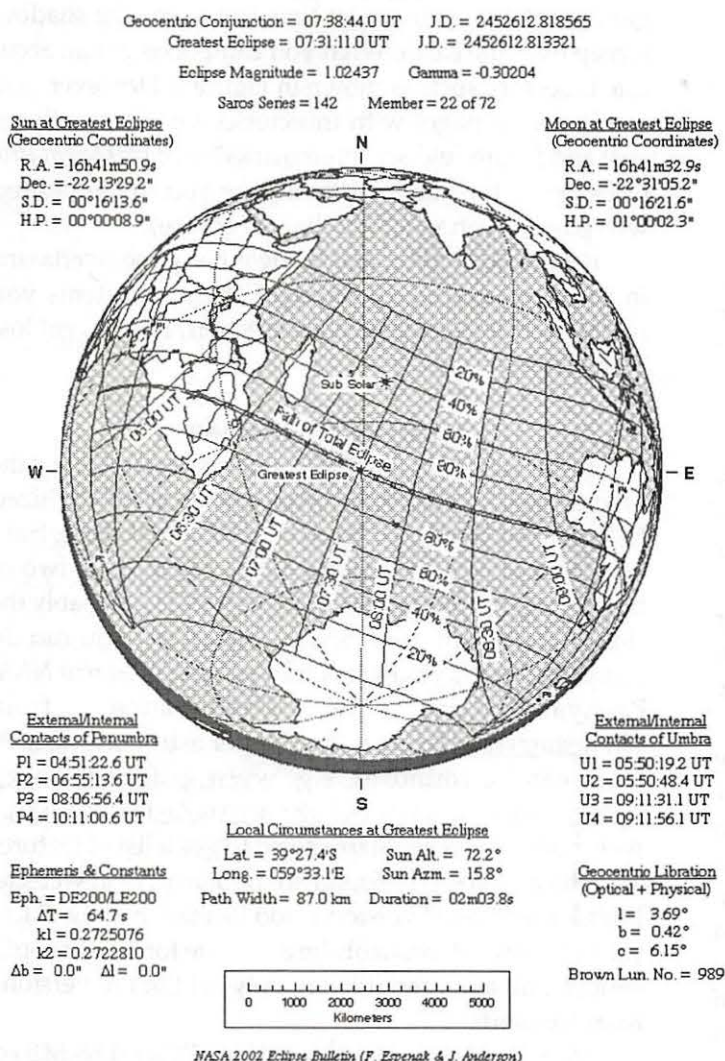


Figure 5: The track of totality for the solar eclipse of December 2002.

with a nice photo of the object.)

The contextual menu, which you get by control-clicking on an object, also give you access to additional information, including photos of the object in question. You can look at any named object you want (e.g., a planet, a star, a nebula) from the Selection menu (Find...).

You can move rapidly through time, by setting your starting time and place, adjusting the time step to months or years, and clicking the Forward button. You

can make a movie of this, and save the movie to play again. For example, you can trace the position of a planet on the sky over several years.

There's a list of special events, mostly eclipses (Figure 4), which you can access from Sky/Interesting EventsX, and with *Starry Night Pro*, you can access the SPACE.com web page to tell you what is worth seeing that very night. You can open multiple windows and synchronize them to get several views of the same event. Watching an eclipse from the moon and earth simultaneously gives a wonderful feeling for what's going on.

Customizing

Much of *Starry Night's* complexity comes about because you can make so many choices about what is shown and the way in which it is shown, and because there are two or more means of accessing most of the settings. In fact, the multitude of settings comprise a lot of the menu items, but you can leave most of them alone at first. You can choose the kinds of objects you see: planets, stars, galaxies, and even your horizon.

- You can decide which of these you want to label (I keep the planet labels on all the time) and adjust the fonts and colors of the labels.

- You can show the outlines and boundaries of the constellations, various coordinate systems on the sky, and planet orbits.

If you find a setting that's really good for a special purpose (like watching eclipses on Jupiter), you can save it to make it easy to get back to.

When the pointer rests on an object, its identification pops up, so you can keep your labels simple to start with. If you want to change them, use the Sky and Guide menus, or click on the appropriate button in the Display palette; the small "i" on the left of the button gives you more detailed access to labels, etc. for that class of objects.

Printing

Starry Night prints out only sky charts for observing. You can select just the desired area, or fill the whole page, by setting File/Preferences/Printing. The print-

"Starry Night is one of the best of the desktop planetarium programs. It shows you the appearance of the sky: stars and galaxies, the moon, planets, and artificial satellites, at any time or place you choose."

out is always of black stars on a white background. If you want to print a color picture of what you see on your monitor, use the File/Export As ImageX option to save the sky window as a JPEG or other format file.

Extra Features in *Starry Night Pro*

The additional features in *Starry Night Pro* are primarily for serious amateurs—those who spend hours every clear night observing, or do real research. The major ones are listed below (and see Figure 1).

Starry Night Pro offers many more stars than the other versions: many catalogs are provided on the CD, and you can link to more on the Web. It also offers a longer time line, guaranteeing positional accuracy to 0.5 arcsec.

A more important feature is the ability to enhance *Starry Night* over the Internet: to upload data on new comets, update orbits or add new spacecraft, and (as just stated) to access additional databases, or even to create your own. You can also add new photographs, download digitized Palomar Sky Survey images, or export data into a spreadsheet. David Harris' *Journal* article in the September/October 1999 issue describes the tracking of spacecraft in an earlier version of *Starry Night*, but his procedure is useful also for *Starry Night Pro*.

If you have a telescope that can be computer-controlled, you can use *Starry Night* to move the telescope to find a desired object, or to track an object. Meade LX200E and AutoStar telescopes can be controlled "out of the box"; the documentation says it isn't hard to write a driver for other brands. You can modify the sky window appearance by setting a "night view", so as not to hurt the dark adaptation of your eyes, or by viewing a mirror image, to correspond to the view in your telescope eyepiece.

Flaws

It takes a lot of work and knowledge to use *Starry Night* to study eclipses. A list of events between 1800 and

2300 is provided, but clicking the "go there" button takes you to the moon looking at earth near the start of the eclipse. You can see the shadow of the moon on the earth, and the small black spot in the middle which is the region of totality; you can let time run to see the shadow sweep over the earth. What you can't do is get an accurate trajectory such as shown in Figure 5. However, you can find web pages with trajectories for many eclipses past and future, and set "bookmarks" in *Starry Night Pro*. Clicking on the bookmark will take you to the desired web page (when you're on-line, of course).

Personally, I think *Starry Night* has gone overboard in its customization of settings. The menu items you might use frequently, such as Selection/Find..., get lost in the crowd.

Comparison to others

There are other desktop planetaria available for the Mac, as well as CDs of sky images (such as the digitized Palomar Sky Survey). I haven't tried any of these, but I hope to find time to compare *Starry Night Pro* to two or three similar programs soon. (Voyager III is probably the closest contestant, from www.carina.com.) You can do comparisons for yourself: a trial version of *Starry Night Backyard* can be downloaded from www.starrynight.com; a list of other astronomical software can be found at, e.g. www.griffithobs.org/software.html or www.r-clark.org.uk/astrosoft1.htm. As for which version *Starry Night* to get, a list of features of each version can be found on the *Starry Night* website. I think the "Basic" version is too limited, but the Backyard version will probably be adequate for most people. Serious amateurs should definitely get the Pro version.

Requirements

Starry Night Pro requires a PowerPC and 88 MB on disk, and System 7.5 or later. It uses 10 MB of RAM. An update for OS X has been promised for this fall. (For older Macs, with 68K CPUs, running OS 7, *Starry Night Deluxe* will run if you can still find it.)

Take the CD with you when you travel, especially if your friend in the hinterlands has a computer. Even if it's a Windows PC, you can still run it from the CD, without putting anything on the borrowed machine, as long as the PC has a Pentium III.

Conclusions

Get it! This is a very good desktop planetarium program, at a reasonable price. ■

Hotline

The hotline service is only for members of WAP. Please do not call after 9:00 pm or before 8:00 am.

Name	Telephone	Heading	Subjects
Apple General			
Bob Sherman	305-944-2111	Communications	DBMaster
Ron Evry	703-490-1534	Hypermedia	Hyperstudio
Bernie Benson	301-951-5294	Miscellaneous	Ile Card for the LC
Harvey Levin	301-299-9380	Programming	Apple Script
Eric Sheard	908-782-6492	Spreadsheets	Advanced Visicalc (eves) 908-782-6492 (days) -2242
Allan Griff	301-654-1515	Spreadsheets	Apple Works
Eric Sheard	908-782-6492	Spreadsheets	Visicalc (eves) 908-782-6492 (days) -2242
Ken DeVito	703-960-0786	Telecomm	
Apple II			
Bernie Benson	301-951-5294	Accounting	Apple SSC (Super Serial Card)
Neil Laubenthal	703-691-1360	Apple IIGS	General
Allan Griff	301-654-1515	Apple Works	General
Ken DeVito	703-960-0786	Apple Works	General
Paul Campbell	313-255-6497	Apple Works	General
Ray Settle	410-647-9192	Apple Works	General
Allan Griff	301-654-1515	Apple Works	General
Ken DeVito	703-960-0786	Beagle Buddies	
W. T. Cook	410-995-0352	Beagle Buddies	
Don Avery	202-362-1783	Beagle Buddies	
Dale Smith	301-294-2287	Communications	
Allan Griff	301-654-1515	Database	Apple Works
Morgan Jopling	410-721-7874	Database	Apple Works
Milt Goldsamt	301-649-2768	Database	Apple Works
Guy Durant	202-575-0414	Epson Printers	
Ron Evry	703-490-1534	General	
Harold Polk	301-662-6399	General	
Ken DeVito	703-960-0786	General	
Guy Durant	202-575-0414	Hard Drives	
Guy Durant	202-575-0414	Hardware	
Ron Evry	703-490-1534	Hypermedia	Hyperstudio
Bob Sherman	305-944-2111	Laser Printing	
Ron Evry	703-490-1534	Word Processing	AppleWriter
Allan Griff	301-654-1515	Word Processing	
Apple II e			
Morgan Jopling	410-721-7874	Upgrade	
Apple II GS			
Rich Sanders	703-450-4371	Drawing/Graphics	Deluxe Paint II
Dick Grosbier	301-898-5461	General	
Eric Grupp	410-315-8331	General	
Seth Mize	410-766-1154	General	
Rich Sanders	703-450-4371	Word Processing	Multiscribe GS
Apple II GS			
Ken Carter	301-834-6516	General	
Apple III			
Dave Ottalini	301-681-6136	General	
Paul Campbell	313-255-6497	General	
Seth Mize	410-766-1154	General	
Robert Sambolin	203-853-2512	General Repair	
Steve Truax	304-263-5749	Integ. Packages	3 Easy Pieces
Dave Jernigan	540-822-5137	Integ. Packages	3 Easy Pieces
Paul Campbell	313-255-6497	Repairs	
Dave Jernigan	540-822-5137		3.5" Super Drive
Dave Jernigan	540-822-5137		SCSI Drives
Steve Truax	304-263-5749		Stemspeller
Dave Jernigan	540-822-5137		Stemspeller (before 9 PM)
Carey McGleish	313-332-8836		Word Juggler (evenings)

Name	Telephone	Heading	Subjects
Cross Platform			
Ken DeVito	703-960-0786	Transfers	MS/DOS-Apple-Mac
IBM/Compatibles			
Etana Finkler	301-891-2821	Illustration	General Can call until midnight
Tom Cavanaugh	301-627-8889	Printers	General
Internet			
Dan White	301-843-3287	General	
Walt Francis	703-278-0041	General	
Will DeKrone	410-626-7716	General	
Curt Harpold	301-762-0887	Programming	JAVA
Craig Contardi	410-796-4562	World Wide Web	Netscape Navigator
Seth Mize	410-766-1154	World Wide Web	Sailor
Jaque Davison	703-644-7354	World Wide Web	Web Site Builder
Macintosh			
Robert Sambolin	203-853-2512		General
John Engberg	301-262-9347 or 301-604-8348		Basics
Tho. Snowberger	410-757-4656	Contact Managers	Now Contact/UTD
Bill Waring	410-647-5605	Database	Filemaker Pro
Bob Wilbur	703-426-0556	Database	Filemaker Pro
Rick Shaddock	202-321-2110	Database	FoxPro
Harvey Levin	301-299-9380	Database	Helix
Bob Wilbur	703-426-0556	Database	Helix Express
Dick Nugent	703-425-1056	Database	FileMaker Pro
Elizabeth Mangan	703-750-2710	Database	Pro-Cite
Bob Wilbur	703-426-0556	Database	General
Blake Lange	301-942-9180	Desk Top Pub.	PageMaker
Eric Grupp	410-315-8331	Desk Top Pub.	Quark Xpress
Paul Schlosser	301-831-9166	Desk Top Pub.	Quark Xpress
Ron Johnson	410-315-8764	Drawing/Graphics	Adobe Illustrator 3.0
Nancy Seferian	202-333-0126	Drawing/Graphics	Aldus Freehand
Bob Wilbur	703-426-0556	Drawing/Graphics	Canvas
Lloyd Olson	410-544-1087	Drawing/Graphics	ClarisDraw
Etana Finkler	301-891-2821	Drawing/Graphics	Freehand Can call until midnight
Nancy Seferian	202-333-0126	Drawing/Graphics	General
Neil Laubenthal	703-691-1360	Drawing/Graphics	General
Etana Finkler	301-891-2821	Drawing/Graphics	General Can call until midnight
Bob Wilbur	703-426-0556	Drawing	General
Blake Lange	301-942-9180	Drawing/Graphics	Illustrator
Etana Finkler	301-891-2821	Drawing/Graphics	Illustrator Can call until midnight
Blake Lange	301-942-9180	Drawing/Graphics	Photoshop
Dave Jernigan	540-822-5137	Foreign Languages	FlashWorks
Dave Jernigan	540-822-5137	Foreign Languages	Greek Tutor
Dave Jernigan	540-822-5137	Foreign Languages	Hebrew Tutor
Dave Jernigan	540-822-5137	General	

Telecommunications

John Barnes	301-652-0667	Telecomm.	AOL
Dale Smith	301-294-2287	Telecomm.	TCS
Nancy Seferian	202-333-0126	Telecomm.	TCS
Paul Schlosser	301-831-9166	Telecomm.	TCS
David Harris	703-845-1331	Telecomm.	TCS

Washington Apple Pi Office
 12022 Parklawn Dr, Rockville, MD, 20852
 M-W-F 10 a.m.—6 p.m.; Tue 7 p.m-9 p.m

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

September 2002

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 Office Closed Labor Day	3 Clinic	4	5 Columbia Slice	6	7
8	9 Power User SIG	10 Clinic	11 WAP BoD	12	13	14 Graphics SIG Frederick Slice
15	16	17 Clinic	18 Excel SIG	19	20	21 Annapolis Slice
22	23	24 Clinic	25 Retired SIG	26	27	28 <small>No Vols. Comm. Cal.</small> WAP General Meeting
29	30					

Web address: www.wap.org
 e-mail address: info@tcs.wap.org

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

October 2002

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 Clinic	2	3 Columbia Slice	4	5
6	7 Power User SIG	8 Clinic	9 WAP BoD	10	11	12 Graphics SIG Frederick Slice
13	14	15 Clinic	16 Excel SIG	17	18	19 Annapolis Slice
20	21	22 Clinic	23 Retired SIG	24	25	26 <small>No Vols. Comm. Cal.</small> WAP General Meeting
27	28	29 Clinic	30	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

AOL SIG, contact John Barnes at JDBarnes@aol.com or in the evening at 301 / 652-0667.

Apple III SIG

Quarterly on 2nd Saturday; 10:00 AM; WAP Office.

Columbia Slice

1st Thursday; 7:00 PM. Call for location BBS (410) 964-3706

DataBases (Mac) SIG

Volunteers needed to restart this SIG

Delmarva Slice

At the campus of Salisbury State University, but will rotate throughout Delmarva area when appropriate. Email Shelly Wetzel form more information. <sawetzel@ssu.edu>

Excel SIG

3rd Wednesday; 7:30 PM; WAP office.

FileMaker Pro SIG

3rd Thursday; 7:30 PM; WAP office.

Frederick Slice

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

Game SIG

1st Thursday; 7:30 PM; Call for location.

Genealogy SIG

Volunteer needed.

Graphic Arts SIG

2nd Saturday of the month

Linux SIG

Contact Will Byrd or Gregory Kelley (wbyrd@fred.net or grekell@earthlink.net)

Mac Programmers' SIG

Volunteers needed to restart this SIG

Newton Developers' SIG

Volunteer needed

NoVa Education (Ed) SIG

Call SIG chair for times & locations.

QuickTime SIG

2nd Tuesday of each month; 7:30 PM; WAP office.

Retired SIG

4th Wednesday of each month; 11 AM to 2 PM; each meeting will have a topic, but be run informally. WAP office.

Stock SIG

2nd Thursday; 7:30 PM; WAP Office. (Morris Pelham who chairs StockSIG is Sysop of the Investment/StockSIG board on the TCS. Contact him on that board.)

Telecomm SIG

Call SIG chair for times & locations.

WAP Garage Sale— June and December

WAP General Meeting

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

Women's SIG

At the Pi Office at 6:00 PM dinner (\$2) followed by 7:00 PM meeting/presentation. Call SIG chair or office for next meeting.

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

Hotline

The hotline service is only for members of WAP. Please do not call after 9:00 pm or before 8:00 am.

Name	Telephone	Heading	Subjects
Joan Jernigan	540-822-5137	General	
Dan White	301-843-3287	General	
Dick Grosbier	301-898-5461	General	
Russell Robinson	301-739-6030	General	
Eric Seidel	540-667-5289	General	Networking
Eric Seidel	540-667-5289	General	Hardware
Robert Sambolin	203-853-2512	General Repairs	Older Mac through SE30
Neil Laubenthal	703-691-1360	General	
Tom Cavanaugh	301-627-8889	General	
Tom Witte	703-683-5871	General	
Bob Wilbur	703-426-0556	General	
Jim Kelly	301-926-2949	General	Applescript
Henry Miller-Jones	703-478-3721	Answering Syst.	Mac Commcenter, FAXciliate, GV
Henry Miller-Jones	703-478-3721	General	Fax Software
Joan Jernigan	540-822-5137	Hypermedia	HyperStudio
Jerry Iler	410-987-5432	Ilisi	General
Bill Geiger	703-237-3614	Integ. Packages	ClarisWorks
Sandy Kowalczyk	410-268-3149	Integ. Packages	ClarisWorks
Ray Settle	410-647-9192	Integ. Packages	ClarisWorks
Henry Miller-Jones	703-478-3721	Integ. Packages	ClarisWorks
Joan Jernigan	540-822-5137	Integ. Packages	ClarisWorks
Jim Ritz	301-770-1405	Integ. Packages	MSWorks
Ray Settle	410-647-9192	Integ. Packages	MSWorks
Tim Childers	410-997-0066	Integ. Packages	MSWorks
Dave Jernigan	540-822-5137	Mail List Manager	My Mail List Manager
Sandy Kowalczyk	410-268-3149	Miscellaneous	HyperCard
Blake Lange	301-942-9180	Miscellaneous	Hypercard
Tom Witte	703-683-5871	Miscellaneous	Hypertalk
Jeff Dillon	301-434-0405	Miscellaneous	MX-80
Dave Jernigan	540-822-5137	Miscellaneous	Online Bible Mac
Dave Jernigan	540-822-5137	Miscellaneous	Soft Windows Mac
Rick Chapman	301-989-9708	Miscellaneous	Hypercard
Tom Witte	703-683-5871	Miscellaneous	Hypercard
Peter Combes	301-445-3930	Multi Media	Director
Peter Combes	301-445-3930	Multi Media	Language
Stuart Bonwit	301-598-2510	Multimedia	Quicktime
Tom Witte	703-683-5871	Multimedia	Quicktime
Joan Jernigan	540-822-5137	Multimedia	HyperStudio
Frank PappaJohn	703-922-3851	Music Notation	Finale
Henry Miller-Jones	703-478-3721	Networking	AppleTalk
Jerry Iler	410-987-5432	Older Claris	Genera
Henry Miller-Jones	703-478-3721	Online Services	AOL, CISI
Jerry Iler	410-987-5432	PB180C	General
Lester Morcerf	410-987-0685	Performa 550	General
Tho. Snowberger	410-757-4656	Performa System	General
Rick Shaddock	202-321-2110	Pers.Contact Mgr.	ACT
Bill Geiger	703-237-3614	Personal Finance	Manage Your Money
Clarence Goldberg	410-263-5189	Personal Finance	Quicken
Henry Miller-Jones	703-478-3721	Personal Finance	Quicken
Bob Wilbur	703-426-0556	Personal Finance	Quicken
Tom Cavanaugh	301-627-8889	Printers	General
Walt Francis	703-278-0041	Printers	General
Michael Hartman	301-942-3717	Programming	C
Michael Hartman	301-942-3717	Programming	General
Harry Erwin	703-758-9660	Programming	General (e-mail at herwin@gmu.edu)
Joshua Juran	301-231-8622	Programming	Perl, C, C++, Pascal
Michael Hartman	301-942-3717	Programming	Pascal
Charles Schindler	410-437-4624	Spreadsheets	Excel
Lloyd Olson	410-544-1087	Spreadsheets	Excel
Walt Francis	703-278-0041	Spreadsheets	General
Roger Burt	301-424-6927	Spreadsheet/Chart	ClarisWorks
Bob Wilbur	703-426-0556	Spreadsheet	ClarisWorks
Dave Jernigan	540-822-5137	Spreadsheet	ClarisWorks

Name	Telephone	Heading	Subjects
Mark Pankin	703-524-0937	Spreadsheet/Chart	Excel
Dick Byrd	703-978-3440	Spreadsheet/Chart	Excel
Rick Shaddock	202-321-2110	Spreadsheet/Chart	Excel
Tom Cavanaugh	301-627-8889	Spreadsheet/Chart	Excel
Bill Waring	410-647-5605	System	General Mac Help
Lloyd Olson	410-544-1087	System	Mac OS
Neil Laubenthal	703-691-1360	System	Mac OS Modems General
Henry Miller-Jones	703-478-3721	System	Mac OS
Bernie Benson	301-951-5294	Telecomm.	Modems Hayes Smartmodem
Henry Miller-Jones	703-478-3721	Telecomm.	ProTerm
Henry Miller-Jones	703-478-3721	Telecomm.	General
Henry Miller-Jones	703-478-3721	Telecomm.	MacTCP, Free PPP
Dave Jernigan	540-822-5137	Utilities	Conflict Catcher, Retrospect, Stuffit Deluxe, Tech Tools
Henry Miller-Jones	703-478-3721	Utilities	General
Jaquie Davison	703-644-7354	Virtual Reality	Alien Skin Texture Shop
Jaquie Davison	703-644-7354	Virtual Reality	Bryce 2
Jaquie Davison	703-644-7354	Virtual Reality	Specular Logomotion
Jaquie Davison	703-644-7354	Virtual Reality	Virtus - 3-D
Jaquie Davison	703-644-7354	Virtual Reality	Virtus Walkthrough Pro
Dave Jernigan	540-822-5137	Word Processing	Word Perfect
Charles Schindler	410-437-4624	Word Processing	WordPerfect
Eric Grupp	410-315-8331	Word Processing	WordPerfect
Bob Wilbur	703-426-0556	Word Processing	WordPerfect
Walt Francis	703-278-0041	Word Processing	General
Tim Childers	410-997-0066	Word Processing	Hebrew
Tom Cavanaugh	301-627-8889	Word Processing	MS Word
Joan Jernigan	540-822-5137	Word Processors	Claris Works
Dave Jernigan	540-822-5137	Word Processors	Word Perfect
Henry Miller-Jones	703-478-3721	WWW	Netscape Navigator
Craig Contardi	410-796-4562	WWW	WWW Netscape Navigator

Macintosh & Apple

Ginny Spevak	202-244-8644	Miscellaneous	Dvorak Keyboard
Mike Spevak	202-244-8644	Miscellaneous	Dvorak Keyboard
Bob Sherman	305-944-2111	Telecomm.	General
Dale Smith	301-294-2287	Telecomm.	General
John Barnes	301-652-0667	Telecom	AOL
Dale Smith	301-294-2287	Telecomm.	TCS
Nancy Seferian	202-333-0126	Telecomm.	TCS
Paul Schlosser	301-831-9166	Telecomm.	TCS
David Harris	703-845-1331	Telecomm.	TCS

Networking

Douglas Ferris	301-924-4180	Networking	Novel
Douglas Ferris	301-924-4180	Networking	Windows

We're updating the hotline!!

To have any changes or additions made, simply call the office during normal business hours or send the information via e-mail to Jim Ritz at <jim.ritz@tcs.wap.org>.

Let us know if any of this information is incorrect. Thanks.

Hands-On Report: Mac OS X 10.2

By Bill Fox
www.maconly.com

PART 1 — Installation. Jaguar has arrived! We ordered ours from the on line Apple Store with 2-day shipping. FedEx delivered from Jonestown, PA, to our Global HQ in Vienna, VA, with a note to deliver by Friday, 9/23. Dana Baggett, who ordered at exactly the same time from the hinterlands in Maine, did not get his today. Needless to say, we have excellent FedEx service here in the suburbs of the Nation's capitol.

The retail box, contains a typically colorful and brief 19-page Mac OS X booklet and three CDs, a license, an AppleCare sheet and proof of purchase coupons. 10.2 is on 2 CDs and the third is a Developer Tools CD. The build number of the final version of Mac OS X 10.2 is 6C115 as widely posted on the web.

The booklet has one page on installation, one page on set up, six pages on eight of the advertised 150 improvements over version 10.1.x, two pages on support help, and eight more pages on advice for installation, set up and use. Inevitably someone will complain about the super thin manual but there will soon be a number of in-depth books on 10.2. We are no longer an X neophyte so we can't really judge whether a thicker manual would help. We have just seen many others install and use Mac OS X without even consulting the booklet.

Apple recommends that you back up your critical data and this is prudent advice. We backed up our photos, music, documents and email files just in case. We inserted Disk 1, clicked the Installer icon, entered our password and the Mac rebooted. The Happy Mac startup icon is gone. Now the initial gray screen now displays a darker gray Apple logo and a small round icon of spokes that are highlighted in a rotating fashion. After 30-60 seconds, the familiar blue screen appears followed by the Installer window with its series of screens. We clicked through them to get to the "Select the Destination" screen.

In the "Select the Destination" screen, the "Option" button reveals that the Installer has 3 options:

■ **Install or Upgrade** — This is the option that most people who first install or are already running Mac OS X will use. The option automatically changes depending on whether or not any version of Mac OS X is installed.

■ **Archive and Install** — This option is like a clean install in Classic Mac OS and is primarily for system reinstalls. No longer does one have to erase and install if the system needs to be reinstalled. There is also a check box to preserve users and network settings.

■ **Erase and Install** — We will be using this option on our 800 MHz TiBook because we messed up its hard drive by foolishly stopping Micromat's Drive 10.1 defrag routine half way through. Never, ever do this despite the existence of a "Stop" button and no warning dialog box. It erases the target drive or partition before installing 10.2.

In the "Installation Type" window, clicking the "Customize" button allows one to forego the installation of unneeded printer drivers, fonts and localized files to reduce the size of the installation significantly and to speed up the installation process. We unchecked all additional fonts and all printer drivers but Epson's. This reduced the size of the 10.2 installation by about 40 per cent. Unchecking localized files other than those for your language will substantially speed up the installation.

When the installation is almost finished, "Optimizing System Performance" dialog now tracks the per cent completed. While this is psychologically helpful, like the installer's bar and its "Time Remaining" message, the OSP per cent message is not linear with time so it is still hard to tell when it will actually finish. But it is much better than wondering if it is really working when optimizing takes a long time.

The time to Install Disk 1 using the "Upgrade" option for a fully up-to-date Mac OS X 10.1.5 takes a fairly long time. Install Disk 2 has additional software, mostly printer drivers and fonts, and generally takes under 10 minutes with the unnecessary fonts and printer drivers unchecked. Here are the Disk 1/Disk 2 installation times (in minutes) that we measured on three Macs:

- 12.1" iBook/500 MHz G3/256 MB RAM — 88/9 min.
- 14.1" iBook/700 MHz G3/256 MB RAM — 57/6 min.
- 15.0" iMac/800 MHz G4/512 MB RAM — 49/7 min.

The only setup required after installation was to check the preference panels of the System Preferences application because some of them have had features

added between 10.1.5 and 10.2. Otherwise, all of our preferences, settings and internet bookmarks/favorites were carried over from 10.1.5.

We also tried the second installation option, Archive and Install, with saving user preferences and network settings. We did so on our 450 MHz G4 Cube with a priori Mac OS X 10.2 installation.

The good news is that it went smooth as silk and super fast. Disk 1 took only 11 minutes and Disk 2 took only 4—clean installs are a snap with the new installer. The “Previous Systems” folder contained the previous root (or top) level folders for Applications, Library and System plus a few others. But only the applications installed by the 10.2 installer were replaced. All other applications were left in the root level Applications folder and appear to work fine. Applications or preference panels that install system level extensions or frameworks may have to be reinstalled.

Niceties & New Preferences.

Before we get into the System Preferences application, we’d like to take a look at some of the cool things that 10.2 contains:

Spring-loaded folders are back. We didn’t realize just how much we missed them.

The Aqua interface has been toned down just a bit. We think it achieves a more professional look and probably adds some speed to the Finder.

A Search field is included in the header of each Finder window. Just type in the word(s) to be searched for and hit the “Return” key. Make sure the correct drive, volume or folder is highlighted (selected) before hitting the “Return” key.

The new Calculator has an “Advanced” button that turns it into a scientific calculator and a “Paper Tape” button that emulates a paper tape no less.

TextEdit has more text editing features.

The cursor arrow is 3D!

The Bluetooth menu icon is the cool Bluetooth logo rather than a triangle with a dot.

We really like the new default desktop background. We were getting tired of the cool but “aging” foams.

Selecting “Shut Down” brings up a dialog box asking if one really wants to shut down.

When a software update finishes, the dialog box presents “Shutdown” as well as “Restart”.

System Preference Panels: We probably missed some things but here are the new features in the preference panels of the System Preferences application that we

found:

Desktop—Aside from the new default desktop background, jaguar fur has been added to the Nature set.

General—Font smoothing has four styles, including one expressly for flat panels.

Login Items—It contains only the items list. The automatic login setting has been moved to a renamed “Accounts” preference panel.

My Account—This is a new panel with settings specific to the logged-in user.

CD & DVDs—A new panel that allows one to determine what action will occur when a CD or DVD is inserted in the drive.

Screen Effects—Renamed from Screen Saver, this panel lost the Icons module but gained Flurry and .Mac modules along with a Random setting that plays each module randomly. The .Mac module is actually a slide show publisher/player that allows one to play slides from the .Mac account of another member.

Energy Saver—The Energy Saver panel has separate settings for the power adapter and battery on a laptop.

Mouse—There is a setting for scrolling speed that appears in the Mouse panel of our G4 Cube with a GeForce3 graphics card but not in our other Cube with a GeForce2 MX card nor in our TiBook, iBook or iMac G4.

Sound—There is an independent output level setting for our iSub in the output tab of this panel.

Internet—The iTools tab is renamed .Mac, an iDisk tab is added and the News tab is eliminated.

Network—The Active Network Ports setting is now called Network Port Configurations. The modem scripts include an Apple v.92 script. Hopefully, the V.90 script has been fixed so that solid connections can be made.

Sharing—There are more options including printer sharing, personal firewall and NAT (software router) internet sharing.

Accounts—The check box for an automatic login is located here instead of the Login Items panel.

Speech—There is a Spoken User Interface tab with more settings. This is really cool but we rarely use it.

Universal Access—Tabs are added for Seeing and Hearing enhancements in addition to the original Keyboard and Mouse tabs.

How Fast Is It?

We began benchmarking OS X with 10.0, the first release, in March of 2001 because the main complaint about OS X aside from the initial lack of features and capabilities was its speed, actually the lack of it. We ran the same

Mac OS X Actions on a 450 MHz G4 Cube
(Average Times in Full Seconds)

Action	10.0	10.0.4	10.1	10.1.5	10.2
Startup Chime to Login	-	96	68	79	56
Login to Desktop	-	20	9	19	20
Shutdown	-	-	4	5	20
Classic Mode	-	40	46	43	33
Netscape 4.77-4.79	7	4	2	3	2
AppleWorks 6.1-6.2.4	-	6	2	2	1
IE 5.1-5.1.4	9	9	2	3	3
OmniWeb 4.0-4.0.6	14	10	3	4	4
System Preferences	3	3	1	2	1
Scroll in Acrobat 5	-	69	82	71	-
Scroll in AppleWorks	-	-	-	15	15
LetItkWindowsBloom	-	-	61	57	73

Mac OS X Actions on a 500 MHz G3 iBook (Dual USB)
(Average Times in Full Seconds)

Action	10.1.5	10.2
Startup Chime to Login	91	72
Login to Desktop	55	27
Shutdown	7	26
Classic Mode	111	59
Netscape 4.77-4.79	3	3
AppleWorks 6.1-6.2.4	2	3
IE 5.1-5.1.4	4	4
OmniWeb 4.0-4.0.6	6	5
System Preferences	2	2
Scroll in Acrobat 5	100	-
Scroll in AppleWorks	33	31
LetItkWindowsBloom	92	89

Figure 1.

tests on version 10.2 that we ran on previous versions of Mac OS X.

All tests were done as before with AppleTalk off and network ports closed. Each action was timed for three iterations and the average was rounded to the nearest second. Our test platform has been a 450 MHz G4 Cube but this time with an NVIDIA Geforce2 MX graphics card to take advantage of 10.2's Quartz Extreme. We've used a few simple operations to illustrate the speed of Mac OS X because there wasn't (and still isn't) anything very sophisticated for OS X speed tests like there are for Mac OS 9. We ran into problems with Acrobat Reader 5.0.5 (i.e. the scroll bar not working in 10.2) so we added a scroll test with a 100 page document in AppleWorks. We also ran the same time tests on a 500 MHz iBook (Dual USB) running Mac OS X 10.1.5 and 10.2 for comparison. See Figure 1, above, for the results.

The time between the startup chime and the appearance of the login window has been substantially reduced. Curiously, the time from login to a complete desktop remained the

same for the Cube but halved for the iBook. The other major speed increase is in launching Classic Mode. Application launch times, whether Classic, Carbon or Cocoa, remained about the same, only a few seconds.

Subjectively, 10.2 seems faster and crisper in everyday use on all computers that we have used it but that isn't evident in the scrolling and windowing benchmarks. There's a slight improvement for the iBook, which doesn't have graphics that make use of 10.2's Quartz Extreme. For the Cube, scrolling time doesn't change but the windowing benchmark (opening and closing 1000 windows) greatly increased even though the Cube has a graphics card that makes use of Quartz Extreme. We can't explain this. The utility, Quartz Extreme Check 1.1, indicates that the Cube's graphics are indeed accelerated by Quartz Extreme.

We ran the scrolling and windowing benchmarks on our other 450 MHz Cube and our flat panel iMac 800 MHz G4. The second Cube has a hot NVIDIA GeForce3 graphics card, the performance of which is only exceeded by the new GeForce4 Titanium. The iMac has GeForce2 MX graphics. Both are Quartz Extreme capable. Here are the results: Time in Seconds Running 10.1.5/10.2 (See Figure 2)

Performance under 10.2 increased slightly for scrolling by the second Cube with a GeForce3 card but decreased slightly for windowing. Performance decreased for both actions with the new iMac 800 MHz G4.

While we think Mac OS X 10.2 is generally terrific and it is measurably faster than Mac OS X 10.1.5 in some aspects, we are disappointed in Quartz Extreme. We were expecting a significant and measurable performance boost in 2D graphics. The benchmarks may not capture the true speed boost of Quartz Extreme but the boost even subjectively, in our view, is not a lot and falls far short of the expectation created by the "Extreme" moniker. We can only hope that the special OpenGL drivers of Quartz Extreme will improve with future versions of Mac OS X. ■

Time in Seconds Running 10.1.5/10.2

Action	Cube	iMac
Scroll in AppleWorks	15/12	12/14
LetItkWindowsBloom	54/57	46/48

Figure 2.

MacWorld New York 2002 (and other ramblings)

ON JULY 18th, in the year of our Lord 2002, well over 100 Apple Pi Mac enthusiasts departed from Vienna, Virginia and Rockville, Maryland on their annual quest to the east coast Mecca known as MacWorld. Our dedication and devotion to all things Mac is undeterred by recent events in the tech section of the various stock markets of the world. While most of our PC brethren look on in dismay at the conditions of the computer manufacturers of choice (massive layoffs, cutthroat pricing, quarter after quarter of dismal earnings), Apple chugs along doing what they do best. Innovation, lower prices, and creating excitement for the future. This year's MacWorld proved to be no exception. Former iCEO and head cheerleader Steve Jobs introduced in one fell swoop (Can anyone tell me just what a swoop is? And why it keeps falling?), QuickTime 6 with it's MPEG-4 integration, an improved (if only for a larger display) iMac, the little

CRT that could eMac, and last but certainly not least, the latest version of OS X, Jaguar (10.2).

Events leading up to MacWorld included minor and major changes to the notebook line. Faster G4 PowerBook's and iBooks with a much welcome larger display are all part of what must be a master plan. At least I hope there's a master plan.

First, the rambling...

There has not been a lot of good news lately in the world, and I have always taken comfort in that regardless of global events, I could turn off the TV, hit the power button on my Mac, listen to that soothing BOOOOONG as my Beige G3 started its boot sequence, and know that I was about to be subjected to the finest computing experience the world can have. In any case I felt that way until I started going to MacWorld.

Don't get me wrong. I love the my Mac and all stuff that is Maclike in nature (I include chocolate and peanut butter ice cream on this list. I think it's a kind of Zen thing), but after going to two MacWorlds, I'm beginning to feel incomplete. There is a void in my life that yearns for a QuickSilver Tower complete with a 23" flat screen display. A longing for a 17" iMac with a SuperDrive, a deep need for a Titanium PowerBook with its memory maxed out. After playing with all of Apple's latest toys in New York, the machine I have so lovingly upgraded seems almost quaint by comparison. I sneer at its beigeness. I feel utter contempt for its floppy drive. I suppress the urge to scream obscenities at its slow by comparison bus speed (YOU CALL 66 MHz FAST?!? MY GRANDMOTHER IS FASTER THAN THAT!). The worst part of it is that this machine that has served me so faithfully doesn't deserve this abuse. No matter what horrible things I've done to it, it always starts up and does exactly what it was made to do. I've pulled PCI cards in and out, changed hard drives, installed a new processor, made jumper settings to overclock it, and installed software of questionable quality and usability. Played with extensions and control panels until I couldn't begin to tell you what the original (and most likely better) configuration was. Still, it chugs along asking not for love, not for respect, but only to make my life and whatever computing tasks I require as painless as it can.



A block from a police station, this bike frame guards a very valuable bike chain attached to a "No Parking" sign. (Photo by Lawrence I. Charters)



Many apartments have bars on windows and doors to protect the homes within. These plants are similarly protected. (Photo by Lawrence I. Charters)

I have never been one to jump on the bandwagon of newer and better. Why spend \$40,000 on a brand new Cadillac when a 1974 AMC Pacer Wagon will get me from Point A to Point B in the same amount of Federally mandated speed-limiting time? Why buy that fresh bread when day-old is so much more inexpensive. Scrape off the mold and Voila! A meal fit for a (cheap) King. I make my computer purchases the same way. Except I don't have to scrape mold off (usually anyway) computers.

My current computer is a 1998 vintage beige G3/300. I maxed its memory. I've installed an almost obscene amount of storage space. I've given it audio/video capabilities that it didn't have factory fresh. I've put in a faster processor and installed the best (that I could afford anyway) digital video software that I can find. And I STILL can't get more than 15 frames per second (640 X 480 resolution) reliable video out of it. Is this MY fault? Or is it the fault of the computer? The definitive answer is....yes. A computer is a tool. It's all it was ever meant to be. If the results are not what were desired, the fault usually lies not in the tools, but in the expectations of the user. Michaelangelo could not have

created the statue of David with 50 pounds of Halibut and a dry sponge. By the same Tolkien (a hobbit sized pun if ever there was one), I can't use this computer and create the sequel to "The Lord of the Rings". This machine was not designed for and therefore cannot give me 30 frames per second video output. If that's what I want, I need to purchase a newer (GASP! THUD!), faster computer.

When PC users shop for computers, even the best of them focus on things that aren't necessarily important. Processor speed for instance. How fast do you really need to open



A small patch of soil surrounded by acres of concrete and asphalt hosts some weeds, a small tree, and a sign. (Photo by Lawrence I. Charters)

Microsoft Word? Or Excel? What kind of graphics powerhouse do you need for PowerPoint? How quickly should the refresh rate be for that last game of Solitaire or FreeCell? The fact is that most people have computers that are more than capable for the things they use them for. Unless of course you use them for games, in which case go out and buy a frigging PlayStation 2. Games should not be (but many times are) the overwhelming factor for faster and better computers. The questions that any sane person SHOULD ask themselves before buying a computer is, "What will I use this computer for? Does it run the applications I use on a daily basis? Will it give me years of reliable service and not be obsolete before the credit card bill is due?" When Apple designed the original Lisa and Macintosh computers back in 1983/84, they could not have anticipated what people would use their comput-

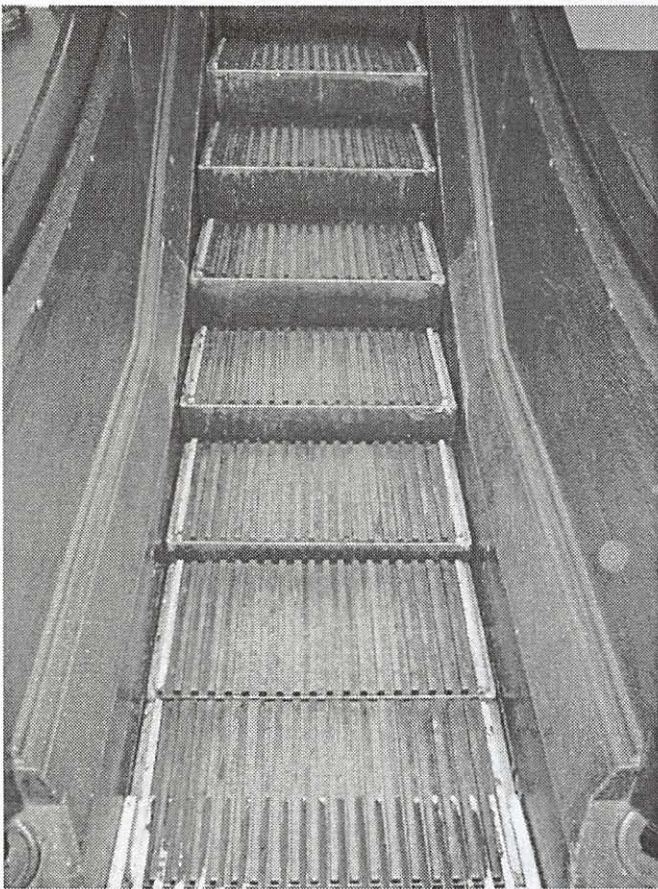
ers for almost 20 years later. What they did expect was that people would want an easy to use computers. A computer where the Operating System stayed out of the way of the creative thought process. In this, they succeeded beyond their wildest dreams. Apple sets the standard for everyone else. With every new revision of the Mac OS, the bar is raised. When everything else is said and done, Mac users enjoy an experience that die-hard PC users will never surpass. This is why most creative professionals use Macs. Which brings me full circle back to the MacWorld show.

Back to the Show

Let's get the hardware out of the way first. That's not to say that there wasn't new and exciting stuff to be seen, but let's face it. Anything really different to be introduced had already been done before the show. For instance the portables. Apple released the new G4 titanium's last month with speed bumps and cache changes. The iBook also recently got a speed bump and a bigger screen.

The iMacs got a larger screen. Bumped from 15 to 17 inches for the top of the line, this will move some hardware. At 15 inches, the screen size was the equal to a 17-inch CRT, but unlike some other comparisons, size does matter. A 17-inch flat screen LCD monitor just looks right on everyone's favorite all in one. Apple even managed to hold the line in price for the bigger unit. A welcome addition to the family.

The eMac was announced more than two months ago, and it didn't take long for Apple to realize that a low-priced G4 was just what the market was looking for. Originally intended only for the education market, the clamor that rose from people wanting one took Apple by surprise. Remember that when the LCD based iMacs came out, Apple discontinued all CRT production and it was proclaimed throughout all of Macland that they would no longer sell CRT based Macs. The assumption at the time was that once the G3 iMacs were all sold, it would no longer be possible to purchase a Mac with a CRT. Steve Jobs himself said the CRT was dead. Well, never let it be said that Mr. Jobs is incapable of changing his mind. The possibility of selling a few million computers will do that to you and I personally don't hold it against him. The eMac is exactly what most people probably expected (or something like it) when it became apparent that changes were going to be made the iMac line. The eMac is a great little machine and a good choice for those just



Macy's famed Fifth Avenue department store has a long history. How long? The escalator between the top two floors is made of wood. (Photo by Lawrence I. Charters) Macy's famed Fifth Avenue department store has a long history. How long? The escalator between the top two floors is made of wood. (Photo by Lawrence I. Charters)

X.2

The real meat and potatoes for this year's MacWorld was OS X.2. Not that the other renditions of X weren't fine, but this one came to the table ready to play. One of the biggest complaints that I've heard and read about OS X was that it wasn't Mac-like. It didn't feel as intuitive as OS 9 and features that people liked and used daily were missing. Little by little, Apple has been putting in the stuff we liked about OS 9 while keeping the advanced features of X. I'm not currently using OS X on my own personal computer, but this one feels right. Spring loaded folders were one of the main additions to X.2 and while that may seem minor,

it's something I would have missed. When this is released, I may go down to the Apple Store, hand Steve and Ellen Dockery (my favorite Apple Store Geniuses and thanks for making room at the table at Mastori's guys) my credit card and make the plunge to X. My only complaint might be that early adopters may have to shell out 129 bucks for this. C'mon Apple! Give the early birds a break and lighten that load for previous registered users.

Lastly, the end of an era. The free iTools storage capabilities Apple gave you on their web site is kaput, gone, seeya, bye-bye! Replacing it is mac.com, a pay for use storage site. Paying the fee however gives you more storage than iTools did (different fees for more storage) and a mac.com email address. There is more to it than that, but I haven't been able to log enough time to work out the details. It ain't free, but it might be worth looking into. Go to apple.com, then click on the mac.com icon, for more information.



On Tuesday, July 16, the view from the Hotel New Yorker (a few blocks from the Macworld convention center) was reasonably clear. Looking south, the mind had trouble accepting the absence of the World Trade Center towers. By Friday, July 19, the same view was choked with pollutants. Visitors blamed New York traffic, but the cause was elsewhere: a large forest fire in upper Quebec blanketed most of the East Coast (including Washington, DC) in smoke. (Photos by Lawrence I. Charters)

entering the Mac line of computing. Look at the specs. A 700 MHz G4, 17-inch CRT, a powerful graphics chip, Ethernet, built-in 56K modem, FireWire and USB ports, 40 gig hard drive, and the return of the audio in port. This will be one of Apple's best sellers and for good reason. Heck, even I (mister never buy new) could get this without straining my budget (or marriage).

Also announced was an addition to the digital lifestyle family. A 20 gig iPod. You could in essence stuff nearly your entire music library into this darn thing. It also makes a nice portable drive as well as possible serving as a data backup device. Also announced was software that allows PC users to use the iPod on their machines. What might be next in this category? Could an Apple branded PDA be far behind? I always felt that Apple gave up too soon on the Newton. It really is the missing link (iLink?) in Apple's Digital Lifestyle. All of these things put together made for a great MacWorld. This wasn't the true focus of this year's show though.



New York City frequently has campaigns to make the city "more beautiful." One place to start: ban these incredibly ugly parking structures. (Photo by Lawrence I. Charters)

What I liked about the show:

- The companionship of my fellow Apple Pi members. It's always a good time to be surrounded by like-minded Mac Fanatics!
- The Apple Section. Lots of machines to play with and many helpful Apple reps to smooth any problems and answer any questions.
- The Game section. Games aplenty this year and some real winners!
- The Microsoft booth (SAY IT ISN'T SO!). Microsoft was well represented at this Mac show and the Mac version of Office for X is a winner. Let's hope Microsoft doesn't get wise to the Mac enthusiasts working for them. Plus the Silly Putty in the eggshells was a great giveaway (SHHHH! I grabbed 5 of them!)
- Some great show deals on hardware. I picked up a CD-R/RW and a Analog to Firewire Digital converter for a good price! Thank J&R electronics for a good booth presence.
- DevDepot also had some good stuff on sale, though none of what I was looking for this year.
- Eating at Mastori's. The food there was great as usual.

What I didn't like about the show:

- The bus ride. I know it's the cheapest way to go, but my long legs were killing me there and back. Any chance to charter a plane next year

(AS IF!)?

- The food at or near the Javitts center. I realize it's not their fault as that's all contracted out, but a guy could starve there! The food at the court is that bad.
- No real Digital Video section. There was a corner for some vendors to display their wares, but selection was pretty light considering the Mac is the premiere platform for video. We paved the way, shouldn't we get some credit? How about something a little cheaper than Adobe (Where the heck were they?) or Final Cut Pro. Cheaper DVD authoring software would be nice too.

All in all, I thoroughly enjoyed the show, and I'm looking forward to next year. ■



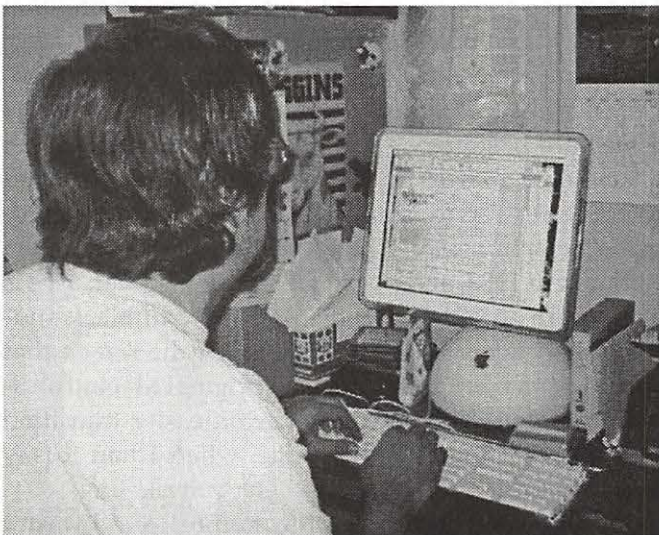
A sign of the times. (Photo by Lawrence I. Charters)

Moving up to an iMac and Mac OS X

by Kevin W. Parker

NO ONE CAN accuse me of being an early adopter. (Well, my wife does, but then she was still using a Mac Plus up until very recently.) I bought my first Macintosh in 1985 and replaced it with an already near-obsolete Power Mac 6100/60 in 1994, so it was high time (in my mind, at least) to upgrade for the third time, and the new iMacs seemed like the best bet. (The new iMacs—Apple refers to them as the G4 iMacs—are the “monitor-on-a-stick” style, not the older, fruit-colored “computer-packed-with-the-monitor” style.)

Some discussion with the salesman at MacUpgrades (in Bethesda, MD) led me to select the low-end iMac, since I wasn’t planning to create DVDs or even CDs (that’s the main variation among the three models.) I had them put an extra 512MB of memory in and also bought some assorted peripherals: printer, scanner, floppy disk drive, and Orange Micro SCSI-FireWire adapter. One of the main reasons to upgrade was that it’s just impossible to get new peripherals with the interfaces for my old computer. I’d wanted a scanner for some time but none of the ones on offer would



My iMac in its native habitat (and my wife’s usual view of me).

hook to my computer. The whole package cost just over \$2000.

I bought the boxes home and moved the old Power Mac aside. Opening the iMac box revealed a quintessentially Apple-ish installation manual, with absolutely no text: just a couple disembodied hands demonstrating how to plug the various components in and hook up the power. It was like having a mime for a computer technician.

I picked up the computer by the arm, finding it surprisingly heavy for such a small package. The base is somewhat larger than half of a basketball, but not by a lot. All of the various sockets are at the back, clearly if nonverbally marked, with the power switch off to one side. Following the mime’s instructions, plugging in the power cable and hooking up the mouse and keyboard were no problem.

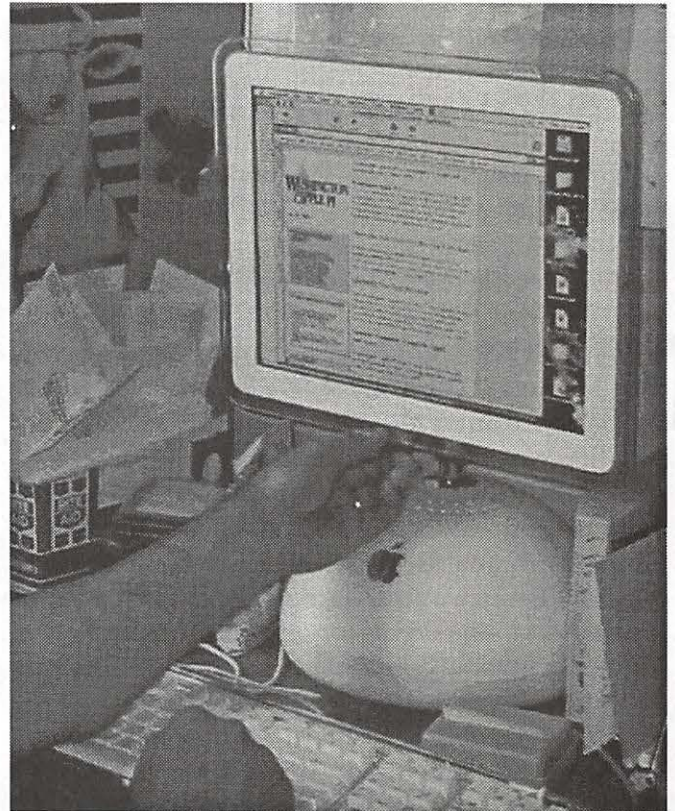
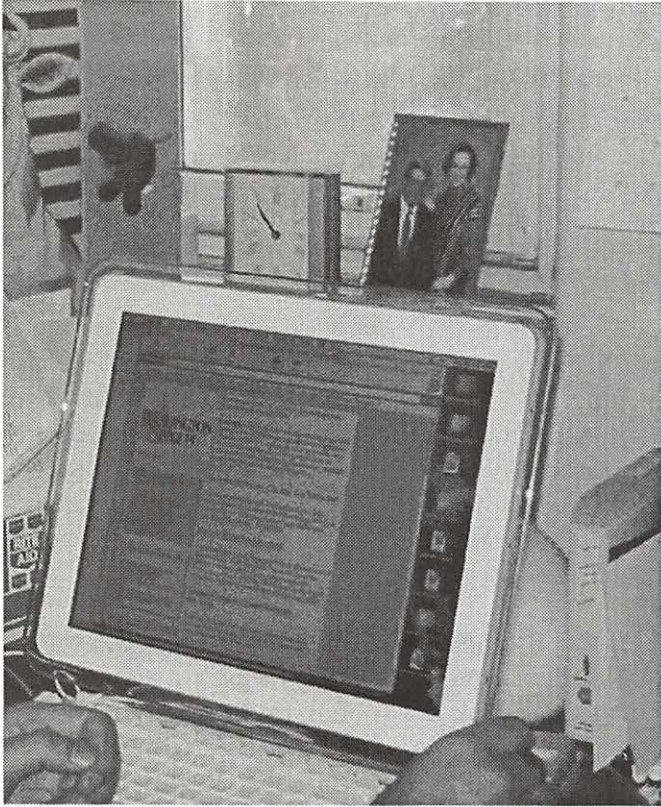
The first test: hooking to the Internet

My first criterion for ease-of-use was going to be how long it took me to hook to the Internet, and the iMac and the brains behind it passed with flying colors. Probably the longest and most difficult part of the sequence was threading the power cord down behind my desk and getting it plugged in, but that’s hardly Apple’s fault.

Booting the computer brought a new chime, shortly followed by some soothing “new age” music. A series of screens walked me through setting up a user account, and then hooking to the Internet through my Washington Apple Pi TCS Explorer account. I had previously noted down the relevant settings and entered them as instructed. Soon enough, I was on Apple’s predefined home page with *Internet Explorer*. I didn’t actually time it, but even with the groping and cursing under my desk, it had to be less than ten minutes. Certainly having the built-in 56k modem simplified the process significantly.

It took a few minutes more work to get my email program (*Eudora Pro*) working, but again not long at all. It also took me some time to figure out that the iMac had a menu item at the top to connect or disconnect from the Internet (and to indicate whether you are connected or disconnected). Initially, I was going through the (remarkably robust) built-in help capability whenever I wanted to connect.

The built-in help is impressive because it not only provides the ability to search for advice on numerous topics, but it also will even open whatever utility or sys-



Despite cartoon depictions to the contrary, the iMac's adjustment range, though impressive, is not unlimited.

tem preference is needed if you tell it to. So I would search on "Internet connect," click on "Establishing a network connection" when it came up in the search list, then click on "Open Internet Connect for me," which was a link at the end of the explanation. So that was handy, if a bit cumbersome for what I was using it for.

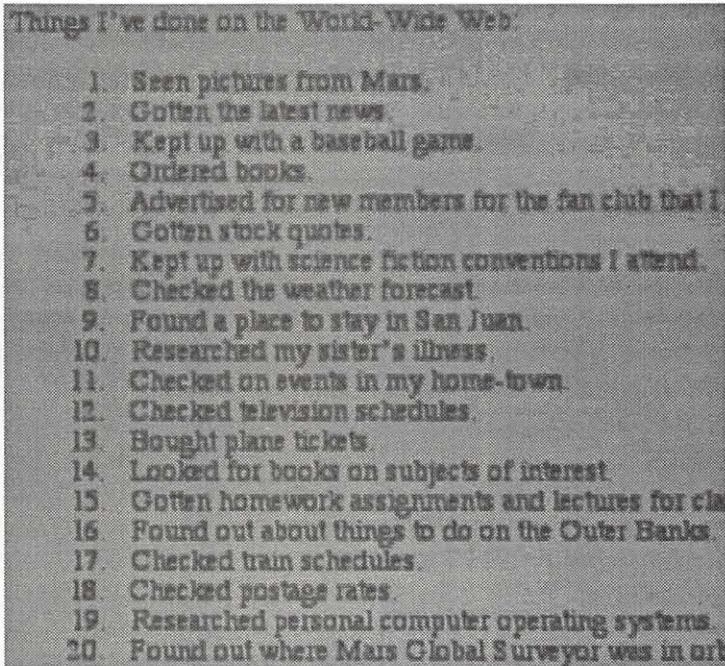
Physically, meanwhile, the iMac is all that it's advertised to be: the monitor screen has crystal-clear graphics and all but appears to float in space. It can be moved up or down and tilted forward or back to suit whatever ergonomic setup you want to have.

On the other hand, text does not look particularly good: the letters in most fonts are blurry and have inconsistent thicknesses, even after I installed the Mac OS 9.2 version of *Adobe Type Manager*. The display model at MacUpgrades exhibited the same problem (I made a point of checking), so it wasn't just my machine. Searching the help found a suggestion to use the System Preferences to alter the size of the fonts that the system automatically smooths, but even that didn't help. After some searching I eventually found that an Apple-supplied font called Georgia provided a respectable display text. Still, considering that one of my main uses for the computer

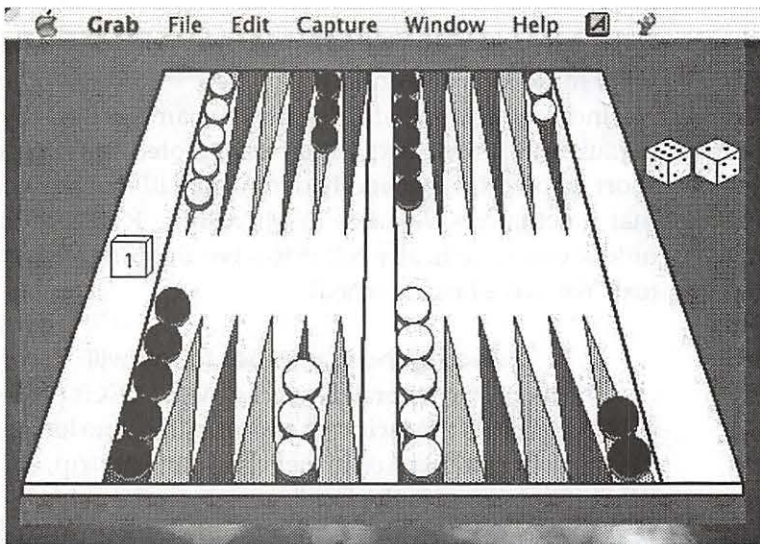
is writing, it was annoying that the display disappointed in what I considered a key area.

My next step was to perform triage on my old applications, to see what still worked and what didn't. So I shut down the computer, used the adapter to hook my old hard drive to the new computer, and rebooted. Everything showed up, and I was pleased to find that all of my key applications still worked: *ClarisWorks 4*, *WriteNow*, *Panorama*, *PageMaker*, *Graphic Converter*, etc. I even went through my archive of games—some of which are positively ancient—and found that almost all of them still worked. (I was particularly entertained to bring up David Young's classic *Backgammon* program, which was originally written in 1984 and last updated in 1987, and play a few rounds with it. This is a program so old that it displays only in black-and-white and takes up only that part of the screen that would equate with the size of an original Macintosh 9-inch monitor.) This looked to be an easier transition than moving to the Power Mac, when I had to say goodbye to a bunch of games I enjoyed playing.

There were, of course, a few failures, and I wasn't too surprised to find that terminal programs *White*



Not all of the blurriness and inconsistent thickness here is due to my trying to photograph the screen with my digital camera.



Old and new: playing a primordial Macintosh game—successfully—on a 21st-century machine.

Knight and *Zterm* couldn't cope with the concept of an internal modem, wanting only to know whether it was hooked to the serial port or the printer port. (Upgrading *Zterm* was no problem, though I was sad to say goodbye to *White Knight*, which in its previous incarnation of *Red Ryder* was a pioneer program for online communication.) I was also frustrated not to have the use of *QuicKeys* and *Typelt4Me*, each of which I'd tuned to a fare-thee-well over the years on my old system.

And so endeth iMac Day 1.

Day 2 - Disaster Strikes!

I began the second day by copying the entire contents of my old 4-gigabyte hard disk over to the iMac's 40-gigabyte drive. Just about everything of importance was on my old external drive, ported over years ago when I found that there wasn't enough room on the PowerMac's internal drive to install Mac OS 8, let alone anything else on top of it. This turned out to be a big mistake, about which more shortly. However, at the time I was hugely impressed with the speed of the transfer, which I initially attributed to FireWire but was later informed was more likely due simply to having a faster computer.

The next step was to start installing the peripherals, which began with the Canon bubble-jet printer I'd bought. The driver installer seemed to hang in Mac OS X, so I switched over to boot in Mac OS 9.2 (which was what the installer ran in, anyway). It hung on bootup, so I did a force-shutdown (holding in the power button until the computer turned off), then powered it back on. Nothing happened. I stared at the computer in disbelief, amazed that a one-day-old (to me, anyway) computer would have such a problem.

Anyhow, after a couple of tries, I unhooked the computer and hied myself back to MacUpgrades. The technician took a quick look and verified that it would indeed not power on, then had to take off the bottom plate in order to press the reset button (convenient, huh!). After this, it would at least start to boot in Mac OS 9.2 but would get hung. This puzzled the technician until I mentioned to him that I had copied over my old hard drive that morning. He gave me a polite chewing-out over this. Evidently, Apple in its infinite wisdom designed the Finder so that if you copy an extension or control panel onto your

startup disk, it assumes that you want it in the Extensions or Control Panel folder and will automatically move it there. So, having copied my old System Folder over, I now had a bunch of obsolete system utilities that my new iMac was futilely trying to run on startup.

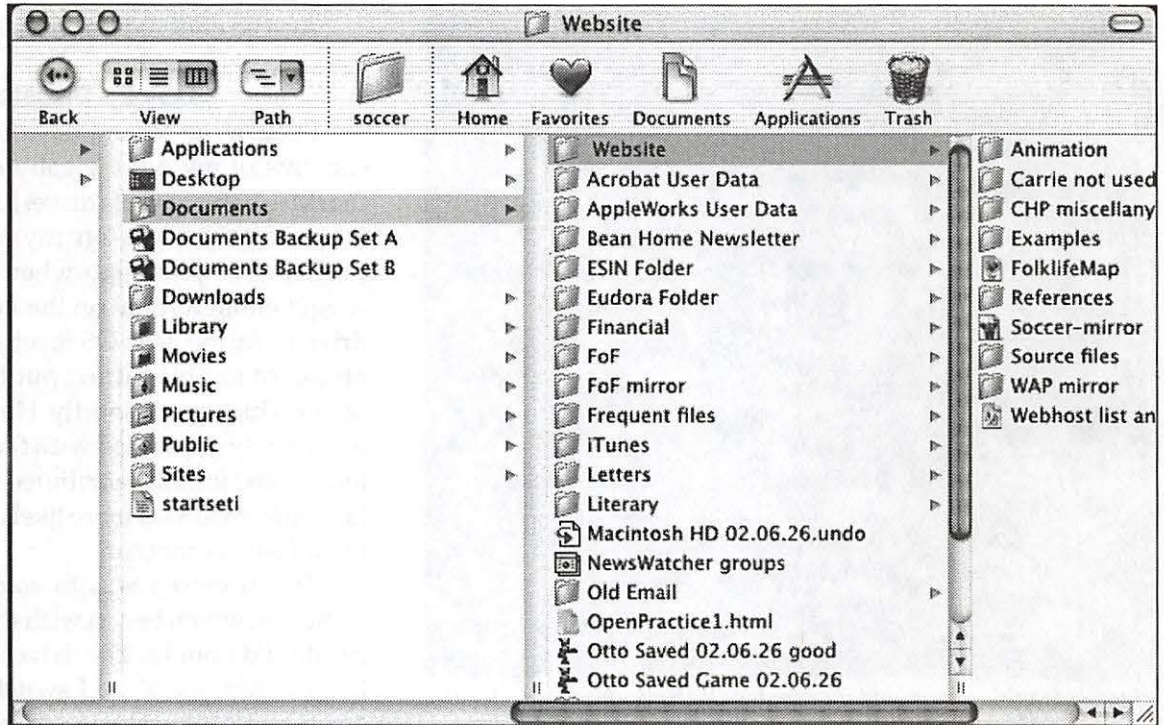
So I took the computer home and, taking the technician's advice, did a clean reinstall of Mac OS 9.2, which seemed to fix the problem.

Recovery and moving on

Hooking up the printer and scanner proved to be relatively straightforward after that. I finished that, scanned a photo and then printed it out, mostly just to prove that I could, and then returned to tailoring the system to my liking.

The new file structure in Mac OS X is daunting at first. I wasn't sure where I wanted to put things, since there seemed to be at least two choices. At the top level of the startup disk, there were "Applications" and "Documents" folders, but there were also such in my "Users" folder, several layers down. (This is Mac OS X's Unix roots showing, about which more later.) For now, at least, most of my applications are at the global level, while my files and data I keep in my user area. Some may be put out by feeling obliged to put particular files in particular locations, though I'm not particularly bothered. (On the other hand, I'm used to dealing with Unix.)

Speaking of applications, the iMac came with an extensive if not complete set already installed. *Internet Explorer* I've already mentioned, but other applications supplied included *AppleWorks* (which I am reluctantly migrating to from *WriteNow* since the latter is no longer supported), *Quicken 2002 Deluxe*, *Preview* (a basic im-



A typical Finder window showing the toolbar and the new column view.

age display program), *BEdit Lite 6.1*, *TextEdit*, and a lot of little odds and ends.

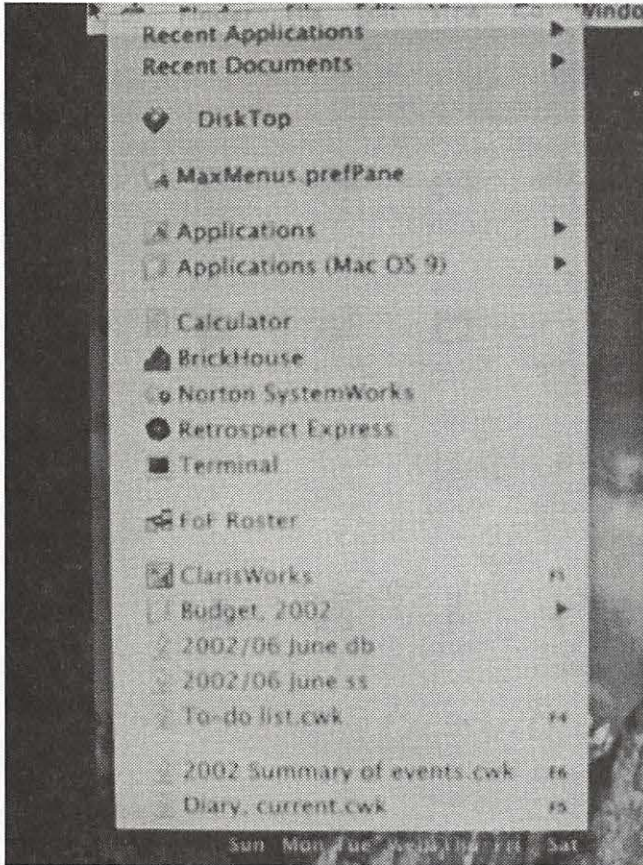
Incidentally, *TextEdit*, despite the name, is not—by default, at least—a text editor. I attempted to write a short Unix script in it and had to turn to *BEdit* to find that it actually saves files in Microsoft's RTF format unless you specifically tell it to save the file as plain text. You have been warned!

Bending the computer to my will

The most controversial aspect of Mac OS X is probably the traditional Macintosh elements that it no longer has: no configurable Apple menu, no control strip, etc. What it does have is the Dock, a user-configurable array of icons that sits along the bottom or either side of the screen. Applications, folders, or documents may be added or removed from the Dock at will, and can



The infamous Dock. Note that Fetch (a dog icon, somewhat blurry in the screen snap) is trying to get my attention by jumping up and down. This is typical of all the icons, not just the canine ones. The little triangles under an application indicated that it's loaded into memory.



My upper-left corner maxMenus menu, with frequently-accessed applications (especially utilities) and files that I don't have in the Dock. Note the function-key equivalents in some cases.

be opened simply by clicking on the corresponding icon. The Dock may be set up to appear constantly at one edge of the screen (other than the top), or to appear when the mouse arrow is moved close to the appropriate edge and disappear otherwise. Its size can also be set, within limitations, and it can be configured to magnify what's under the mouse arrow, again within limitations. The dock also shows the applications that are currently active and any windows that are open but minimized. In addition, the Trash now lives in the Dock, rather than enjoying a separate existence out on the Desktop.

My wife finds particularly entertaining that icons in the dock jump up and down when the application is loading, or when it wants to get your attention. She says it seems that they're going, "Oh, goody! He picked me!"

Anyhow, the Dock is a useful if fairly rudimentary capability. It's fine for applications, which tend to have distinctive icons that are easy to pick out, even with the

crowd that I have. However, folders and documents tend to look pretty much the same, and I have a lot of them.

I ended up trying out several utilities to try to help with this. I mentioned above about losing the use of *QuickKeys* with the upgrade. I downloaded a demonstration version but have found that I haven't used it much at all. (The most sophisticated thing I used it for before was to open up *Eudora* and to check my email, all with one keystroke.)

Another utility I'm currently trying out is *DockExtender*, which allows you to create icon-based submenus that you can hook to the Dock. I'm finding this rather limiting as well: the icons *DockExtender* uses are configurable but aren't differentiated from the applications, and the menu that comes up is just text, which jars with the graphics-based Dock.

On the other hand, early on I installed a third-party utility called *MaxMenus*, which has become so useful that I didn't realize until researching this article that some of the capabilities I thought came with Mac OS X were in fact being supplied by *MaxMenus*. *MaxMenus* primary feature is that it provides up to four menus that can be brought up by clicking any of the corners of the screen (and more than that, if you're willing to press shift, option, or another such key while clicking). All of these are fully configurable, but the defaults are useful in themselves.

The upper-right corner provides a menu with the currently active programs, mounted volumes, and what's on the desktop. (Somehow on Mac OS X I find that I leave applications running rather than exiting out of them, and it's useful to know what's still active, though the dock also provides an indication of this.) The lower-right menu mirrors the current user's "Favorites" folder. This folder is initially empty, but I've put in the aliases (yes, we still have aliases) of numerous folders that I access frequently, from games to writing to mirrors of the websites I maintain to my Eudora attachments folder. The lower-left menu mirrors the user's Documents folder where, as I indicated above, I keep my documents. Lastly, the upper-left menu is left pretty much up to the user, but I've added the applications folders as well as a few documents that I access on a regular basis, like my journal, my electronic to-do list, and the family budget. In addition, *MaxMenus* allows you to define keystrokes to bring up particular files or applications. (I've mostly taken advantage of the function keys, since Macintosh applications tend not to make use of them.)

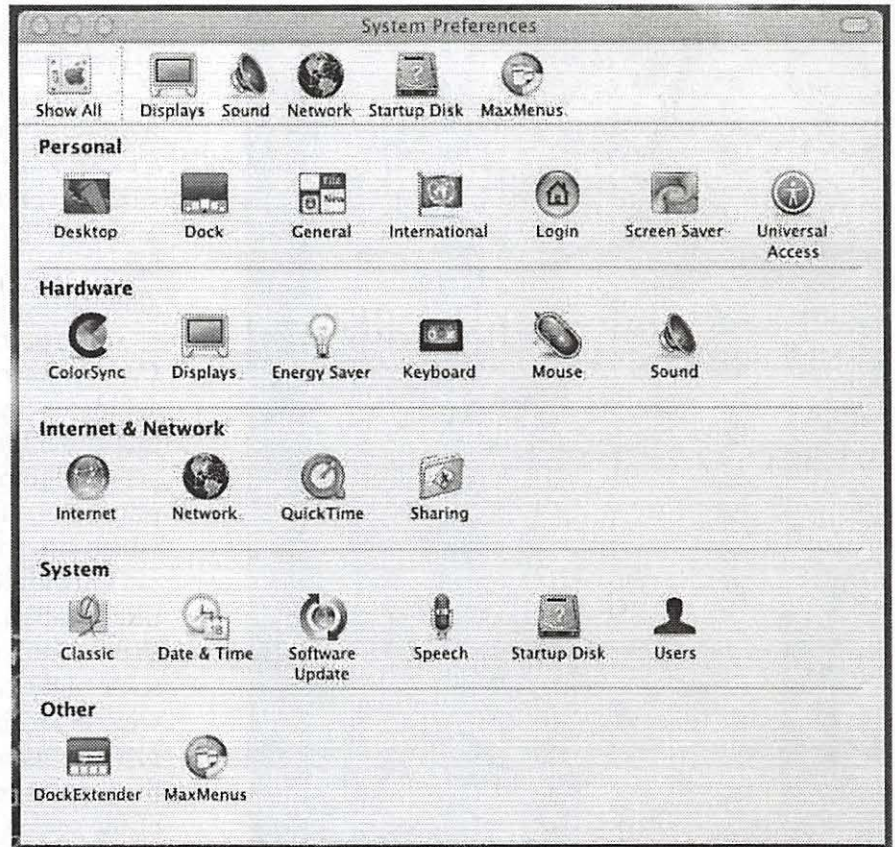
That capability put paid to reusing QuickKeys so far as I was concerned, since that was the main functionality I used QuickKeys for. All in all, I've already found MaxMenus to be hugely useful.

Good things about Mac OS X

MaxMenus joins a collection of utilities that in Mac OS X are referred to as System Preferences. Old-fashioned Macintosh users will think of these as Control Panels, though the Mac OS X approach is a big improvement. Instead of just being a collection of items in a folder or off of the Apple menu, the System Preferences pane organizes the various items logically into groups: personal, hardware, Internet and network, and so on. More than that, the window has a bar across the top where you can put your most frequently used preferences. On the downside, System Preferences for some reason tend to take several seconds to come up, rather than popping up almost instantly.

The Finder has its pluses and minuses as well, though it's mostly a plus. Unlike some people, I'm very comfortable with the new column view, a more sophisticated version of the old list view that shows multiple levels of folders at one time (each level in a separate column, hence the name) and makes it very easy to navigate around. All Finder windows also now have a toolbar across the top (not unlike the System Preferences), which can be stocked with icons to perform various actions or else represent locations on the system. The ones I have selected allow me to go back to previous folder selections, change the view, or go up to a higher level. In addition, I've got frequently visited or accessed locations in the toolbar: my home user area, my documents folder, my favorites folder, and the trash.

The main loss is that of spring-loaded folders (the ability to bring a file icon over a folder icon and have it open automatically, thus making it very easy to store a file several levels down with having to open a whole bunch of Finder windows that you then have to close again.) However, one can hope this will be added in a future release—I even found an online petition asking



The new, improved System Preferences window (think Control Panels). Note organization and user-configurable toolbar at top.

for this capability! [This will be part of Mac OS X 10.2 – ed.]

Across the very top of any window in Mac OS X is the usual title bar, now with three small, colored transparent balls on the left, one red, one yellow, and one green. Bringing the mouse arrow in the vicinity of these balls will add an "x", "-", or "+", respectively, to the balls. Clicking on the red ball closes the window, clicking on the yellow minimizes it (moves it to an icon on the right-hand side of the Dock), and clicking on the green maximizes it, features which should largely be familiar from previous Mac OS incarnations even if triggered differently. Option-clicking on the red ball also has the further capability of closing all of the windows for the accompanying application.

Double-clicking on the title bar no longer creates the "windowshade effect," reducing the window to just the title bar, but minimizes the window just as clicking the yellow ball does. (Mac OS X optionally uses what is called the "genie effect" for this, as the windows swooshes and squishes down to the bottom of the

screen, not unlike Barbara Eden and her "I Dream of Jeannie" bottle, only without the smoke.)

Option-clicking on the Desktop preserves the effect of hiding the application currently in the foreground and all of its windows, very handy if you want to get to the Desktop quickly. The easiest way to restore the application to visibility is to click its icon in the Dock.

There may or may not be a transparent white oval on the right-hand-side of the title bar. If so, clicking it has the effect of hiding the display information at the top of the window. For example, in Internet Explorer clicking this oval gets rid of the button, address, and favorites bars that are normally (for me, anyway) at the top of the window and allows the full window to be used to display a Web page.

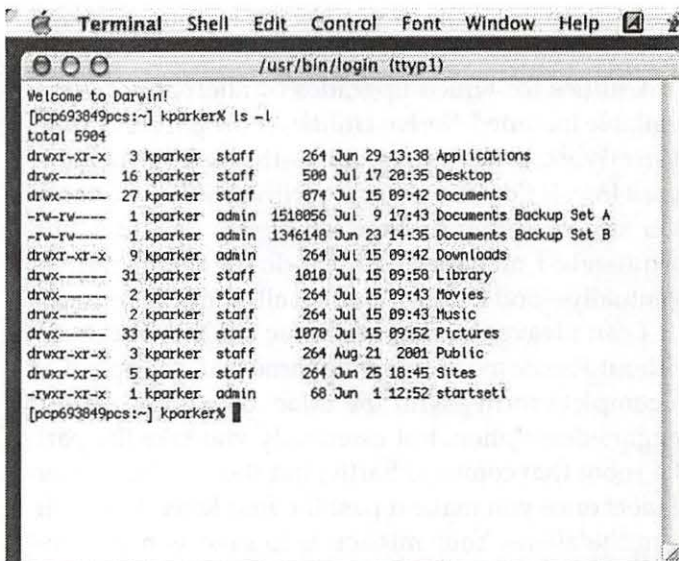
One feature I particularly like—and one of the very few I wanted to see Apple borrow from Microsoft Windows—is the Finder-level cut-and-paste. Now, if you want to move or copy files from one location to another, you can select them, do a CMD-C (or X), go to the destination folder, and do a CMD-V, and there they'll be.

Adapting to Mac OS X

The software on the iMac has something of a split personality: new applications run under the Mac OS X applications environment ("Cocoa"), while older applications run under Mac OS 9.2 ("Classic"). If you've booted up in Mac OS X, start up a "Classic" application and don't have Mac OS 9.2 running yet, it will automatically be started up. This doesn't take as long as it did on my old system (due mostly to the number of extensions I couldn't bear to do without), but it does take a while. Even if 9.2 is running, it seems to take an inordinate amount of time to bring up a Classic application running under it. And once it is up, you're back to the old-style Finder and Desktop, which look hopelessly old-fashioned, compared with the elegant "Aqua" interface.

So I was motivated to move to Mac OS X applications as much as possible.

Since *AppleWorks* was provided and already installed, I thought moving my financial and budget files (in *ClarisWorks* spreadsheets and databases) would be painless. Well, the file format is new, but the conversion is done automatically. I can live with that. What I couldn't live with—or without, rather—was the macro I used to intelligently collect and copy budget infor-



"Popping the hood" to reveal the Unix underneath. There is either something deeply right or deeply wrong about being able to do this on a Macintosh.

mation from the monthly transactions file (a database) to the monthly summary (a spreadsheet). Evidently this is a capability lost in the upgrade. Who ever heard of a software company taking features *out* of an upgrade? Oh, well, maybe it's time to finally try out *Quicken Deluxe*, particularly since it's pre-installed.

As far as Internet access went, a Mac OS X compatible version of *Internet Explorer* was supplied, and I had no trouble finding other browsers as well. In fact, I currently have five Mac OS X browsers installed, which must be some kind of record. (*Mozilla*, *Netscape Navigator*, *OmniWeb*, and *Opera*, in case you're keeping score.) Upgrading my email program (*Eudora Pro*) to Mac OS X cost a nominal amount, though I also had the option of using the basic mail program provided.

For editing my Web pages in HTML, I'd been using an obscure program called *World Wide Web Weaver*. I tried *BEdit* for a while but found its HTML feature set minimal. I'm trying out another program called *WebDesign*, and I've been happier with it so far.

For uploading pages, I upgraded to the Mac OS X version of *Fetch*, again for a nominal cost.

The marvelous shareware program *GraphicConverter* was my program of choice for dealing with pictures and images, and I ended up forking over the dough to upgrade that to Mac OS X, even though I later realized that my old license also covered the upgrade. No matter—it's well worth the price.

Programs I'm stuck with (for now) on the Classic

side include *Panorama* (my choice for serious database work) and *PageMaker*.

Utilities for which upgrades or alternatives were available included *Norton Utilities* (now part of *Norton SystemWorks*), *Retrospect*, and—thank goodness!—*TypeIt4Me*. If I'd been suffering withdrawal symptoms over any one program I missed, it was the latter, but fortunately I managed to track down an upgrade—eventually—and it even imported all of my old settings.

I can't leave the subject of Mac OS X applications without at least mentioning the game that is supplied—in complete form—with the iMac. *Otto Matic* almost begs description, but essentially you take the part of a robot that comes to Earth (and then various other planets once you make it past the first level) to save it from the aliens. Your mission is to save as many humans as possible while gathering enough fuel to launch your rocket again and coping with the various alien menaces along the way. Even on the farm you first visit, the menaces are delightfully bizarre, as the farm you land in contains killer corncocks that attack you by popping corn at you, pumpkins that try to smash your head, and giant onions that swat you with their stalks. And that's only level one!

Dealing with fonts

I'm still trying to figure this topic out, so bear with me. I lost the use of *ATM Deluxe* with the upgrade and haven't acquired a replacement. (*ATM Deluxe* provides significant font management capabilities, while the free *ATM* just provides font smoothing.) Currently, the list of fonts that shows up in my font menus is unnervingly long. (I get uncomfortable when it goes past the bottom of the screen, and I think the list is at least twice that.) On the good side, that means that Mac OS X comes with an impressive array of new fonts, which is nifty. On the other hand, all my fonts are just sort of lumped together right now.

The new system also wholeheartedly embraces the TrueType font format (not surprisingly since Apple developed it), while I, with my PostScript printer, had mostly PostScript fonts. It took some digging and rearranging to make sure that *PageMaker* still had access to the fonts I used in the newsletter I edit. This involved going down to the "type" and "creator" level and making sure that for every "LWFN" file (laserwriter font) had an accompanying "FFIL" (screen display font), not always easy when the names of the files themselves aren't consistent enough to be able to match them with

one another right away (that's what *ATM Deluxe* is for!). Anyhow, I will probably break down and buy a Mac OS X-capable font management utility, but I haven't done so yet.

Further problems

One of the "features" of Mac OS X (you'll shortly see why I put that in quotes) is that it will automatically check for updates for you and let you know if any element of your system needs upgrading. Soon after buying the iMac I was informed that I could upgrade the operating system to 10.1.3 from the 10.1.2 it came with. So I downloaded the new version and proceeded to install it. (As usual, this was simply a matter of clicking some buttons and then going away for a while.)

I of course rebooted after this was done and was nonplussed to see a "question-mark Mac" icon at the center of the screen, indicating that the iMac could no longer find a disk to boot from. I sighed and, after some diddling around, ended up re-installing Mac OS X 10.1.2 from the supplied CDs. I ended up having to re-install *Stuffit* and my printer driver again as well, which was further annoyance, particularly since a couple of weeks later I had the same problem—and then all I had done was reboot. So I became rather chary of rebooting, at least until I had gotten the Mac OS X version of *Norton Utilities* (now *Norton SystemWorks*).

However, my most recent experience, upgrading to Mac OS X 10.1.5—again after being automatically informed of the upgrade—went painlessly, though I made sure I ran *SystemWorks* first. *SystemWorks* found an unnerving number of problems, actually, considering how little time I'd had the computer.

Under the hood

I don't know where else to mention this, so I'll just stick it in parenthetically, but beneath all the fancy graphics Mac OS X runs, as briefly mentioned above, on Unix, a seventies-era, text-based operating system. You can pop the hood, as it were, by bringing up a utility program called *Terminal* that provides the standard Unix command-line interface. I did this at one point in order to run the Mac OS X, text-based version of *seti@home*, a distributed processing program that analyzes chunks of radio-frequency data received from space, looking for signs of intelligent life. (It was in the process of trying to write a script to start up *seti@home* that I experienced the problem with *TextEdit* mentioned

above.) As an experienced software developer who has used Unix extensively in the past, there's both something kind of cool but also seriously *Twilight Zone*-ish in being able to run programs like *vi* (a very basic Unix text editor) on a Macintosh!

Cool stuff

The iMac is definitely geared for the connected, digital age, and I've only begun to plumb its capabilities in that area. It comes with an assortment of Apple custom applications and features designed for that purpose. *iTunes* manages mp3 music files on the computer and automatically interfaces to an iPod if and when one is attached. However, I've only used it so far to listen to music via the Internet (which based on a recent decision may be a vanishing opportunity.)

iMovie is a basic movie editing program, which I haven't tried at all yet.

On the other hand, *Image Capture* and *iPhoto* are handy for dealing with digital images. *Image Capture*

reads in images from a digital camera and is amazingly straightforward: all I do is to hook up my digital camera with a USB cable, power it on, and *Image Capture* comes up and asks me where I want to store the photos. I tell it, and it does the rest. *iPhoto* is an organizer, and I've only dabbled with it, though it looks interesting so far.

Likewise, *iTools*—not an application but a set of related online features that Mac owners can register for—provides some additional Internet capabilities, including, sending electronic greeting cards, hosting a Web page on an Apple-sponsored site, and storing data (Web page or otherwise) on Apple's servers. The associated *iDisk* is used for this purpose, and, when connected (there's a Finder menu item specifically for it), looks like just another disk or partition on your computer. And, in addition to being able to move stuff onto the *iDisk*, it also provides an easy way to download a host of Mac OS X software, since it's sitting out there (in some sort of virtual fashion) on your *iDisk*.



This program and prompt comes up automatically when I plug my digital camera into a USB port and power it on. Note that it even recognizes which camera model I have.

Final thoughts

Overall the iMac and the accompanying Mac OS X are definitely a curate's egg: "Parts of it are excellent." The hardware is little short of stunning. (When the guy who installed my cable modem found that the base of the monitor was in fact the entire computer, his succinct response was "Damn!") The display is gorgeous, except for the previously mentioned problem with getting clear fonts. But I'm reasonably comfortable with the Georgia font I'm using for most of my casual writing, and Palatino works well, too.

The Mac OS X interface is gorgeous, also, and makes the Mac OS 9.2 menus and windows look tatty in comparison.

On the other hand, getting Mac OS X to be as easy to use as possible requires some third-party utilities. As indicated above, I highly recommend *MaxMenus*. But I must also admit that I've only had the computer for about a month, so I figure I will continue to work out easier way to do things as I go along. (It took me two days to realize that there was an easier way to get onto the Internet than going through Help!)

Also, as indicated by my experiences, Mac OS X isn't nearly as robust as Apple makes out. For a while I was ready to risk a lightning strike rather than shut the computer down when a storm came through and wonder if I was going to have to reinstall the OS and the drivers yet again. At one point I had a problem with being unable to put anything in the main Applications folder, and even running Apple's utility which was supposed to fix this problem didn't help. (The only solution I found at the time was to pop the hood and turn myself into a Unix superuser long enough to copy the new application I want to add into the folder. However, upgrading to Mac OS X 10.1.5 seems to have fixed the problem.)

It would seem appropriate to make recommendations at this point, to give a thumbs-up or thumbs-down. Based on my one-month experience, I'd give a somewhat guarded thumbs-up. But, regardless of my recommendation, if you want a new, reasonably-priced Macintosh, you're obliged to get an iMac with Mac OS X. It's the future of Macintosh, and one can only hope that Apple continues to address its problems and limitations, which it clearly has been doing. ■

Information on third-party products recommended in this article (and not supplied with the iMac), most downloadable via the Internet:

Adobe Type Manager (ATM) Light is a font smoothing utility useful for Classic applications and for printing. My evaluation: must-have (why not—it's free!) Price: free. Web page: <http://www.adobe.com/products/atmlight/main.html>

DockExtender adds menus to the dock. My evaluation: take it or leave it. Price \$10. Web page: <http://www.codetek.com/php/dockext.php>.

MaxMenus is a Finder extender. My evaluation: must-have. Price \$29.95. Web page: <http://www.proteron.com/maxmenus/>.

Eudora Pro is Qualcomm's email program. My evaluation: it's what I've used for years, but I'm sure there are good alternatives. Price \$39.95 (or an ad-laden version for free). Web page: <http://www.eudora.com/>. (The iMac also comes with a built-in email program.)

GraphicConverter is an image conversion and manipulation program. My evaluation: must-have. Price \$30. Web page: http://lemkesoft.com/us_index.html. (The Preview program supplied with the iMac has a few of these capabilities.)

WebDesign is an HTML page editor. My evaluation: some limitations, but I prefer it to BBEdit, and it's cheaper. Price \$29.95. Web page: <http://www.ragesw.com/webdesign.php>.

TypeIt4Me automatically converts user-defined abbreviations to full text strings as you type: a great timesaver, ensures consistency, reduces typos. My evaluation: must-have. Price \$27. Web page: <http://members.aol.com/rettoe/TypeIt4MeIndex.html>.

Norton SystemWorks is a package of disk maintenance, repair, and rescue utilities. My evaluation: these capabilities are a must-have, but there are alternatives that I haven't examined. Price \$69.95 (but check for discounts, rebates, and upgrade pricing). Web page: <http://www.symantec.com/sabu/sysworks/basic/>. 🍏

SketchUp 2.1 for Mac OS X 3D Design Program

A Review by ©Danny Cohen

SketchUp 2.1 for Mac OS X @Last Software <http://www.sketchup.com/>

Minimum Requirements: Mac OS X 10.1 400 MHz or faster PowerPC G4 128 MB RAM 20 MB free disk space for minimum installation

Recommended: 800 MHz or faster PowerPC G4 256 MB RAM A 100% OpenGL compatible 3D Hardware Acceleration card A scroll-wheel, three button mouse.

MANY PC companies who decide to bring their software over to the Mac usually come close but lack one thing: The Macintosh Interface. @Last Software has brought over their 3D Design Application, SketchUp 2.1, to Mac OS X supporting all of Cocoa's frameworks such as the color chooser, font panel, tool tips, customizable toolbars, and the list goes on. This allows SketchUp to perform well at making and designing 3D models. SketchUp is not advertised as a CAD program but rather a 3D design program. The

Interface is stunning and allows you to use the tools to create simple 2D shapes that can be pushed and pulled to make 3D shapes. To add some realism to your buildings, shadows for every minute of every day of the year are available by just changing the settings in two sliders. Also, your buildings can be textured with your own, or the included textures with the add components, such as doors, windows, furniture. They can be added just by clicking the object in the Component Library (See Figure 1).

When the program is launched, the only visible windows are the tool palette and drawing window. You can begin creating a house using the tools on the left side of the screen. They are similar in form and function to the tools you may have used in other graphics programs. By clicking on end points, you can actually draw lines that are parallel with the help of SketchUp's intuitive snapping tools which cause objects you draw to be parallel with 3D axis. Polygon tools are available and the number of sides can be changed easily. (See Figure 2.)

Once you have created your 2D objects the easiest way to make them 3D is to use the Push/Pull tool. It is

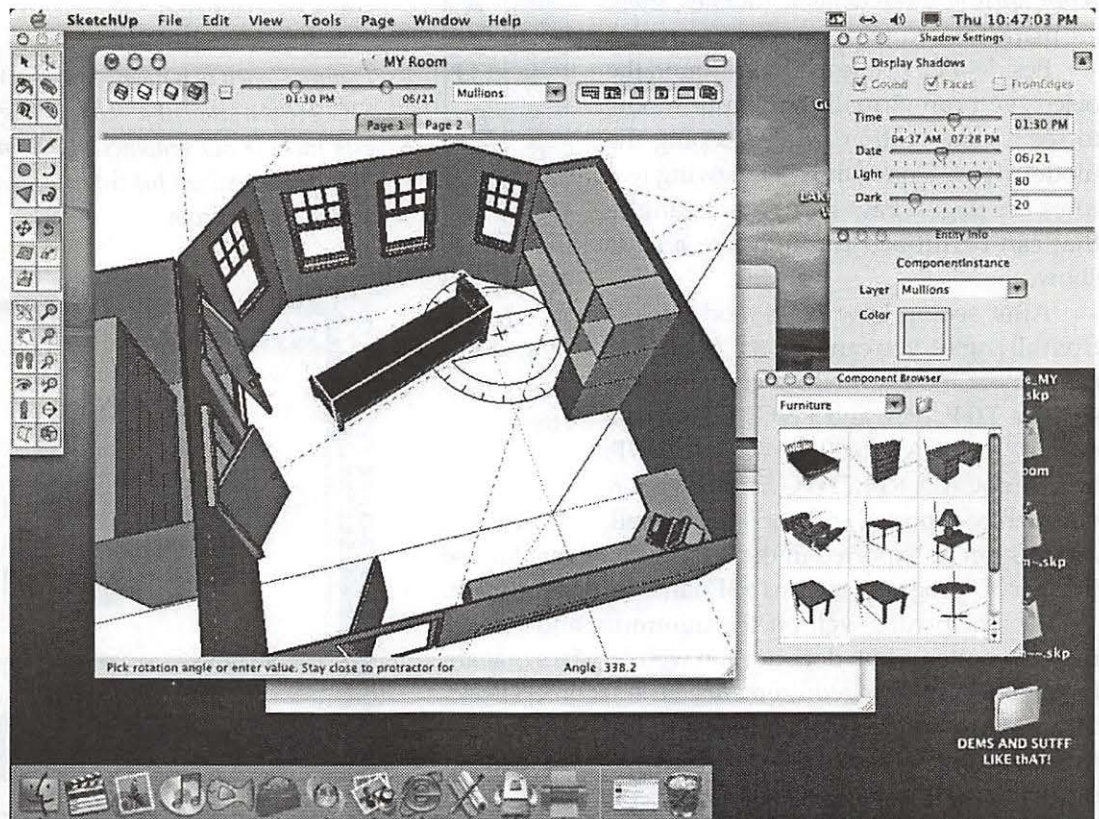


Figure 1- A Model of a room made in a few hours. The windows and furniture are included components in SketchUp

probably the best tool in SketchUp. By clicking on surface you can push in the surface to create indentations. To make a flat rectangle into a box, simply pull a side of the rectangle. Another helpful tool is the Offset tool which takes a surface and makes a scale copy. This tool can be use in conjunction with the Push/Pull tool to make a rectangle into a box, then offset the surface in to be able to create towers. Once you have created your model, realistic effects can be added.

To help with realism, SketchUp provides some really neat features (See Figure 3). Shadows from every time of the day of the year can be added as well as textures and colors from the over one hundred included textures. SketchUp includes a Component Library that comes with objects such as furniture and widows that can be placed on the exterior or in the interior of your model. More components are available from the SketchUp web site for free. After adding these realistic touches, there are many tools to help you view the model.

Besides being able to rotate around the object, you can virtually slice your model to see a cross-section, while keeping the model intact. One of the best viewing features are pages. Pages are camera angles that can be flipped through like a slide show.

After seeing how your model looks from all angles, you can export it. SketchUp can import and export 2D picture formats such as TIFF, JPG, and PNG; 3D formats such as AutoCAD 2000 DWG and DWF; and AutoCAD, R14, DWG, and DWF formats can be exported and imported as well. Models can be exported in the 3D Studio format for use in other 3D programs such as a 3D landscaping program.

SketchUp runs well on the minimum and recommended systems but, does not run well on Macs that are below the minimum requirements. I tried it on G3 iMac. There, it would crash when trying to import a 2D picture. SketchUp is very stable for @Last's first Macintosh product and it is feature rich. The price is a little steep but, there are many different pricing plans available for teachers, companies, students and also a referral pro-



Figure 2- The SketchUp Tool Palette

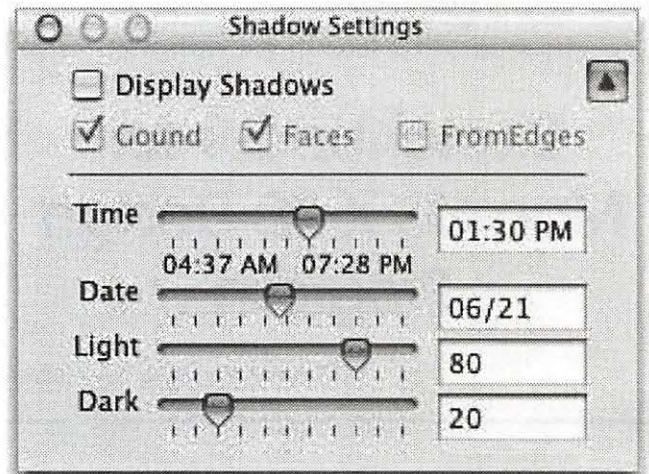


Figure 3- SketchUp's Shadow window for advanced customization of the model's shadows

gram.

There is a full functional demo available from SketchUp.com. It is about 20 Mb in size but a CD, which includes the online tutorials and videos, can be shipped for free. Try it out and see how simple it is to create houses and buildings without any previous experience with 3D software packages. ■

Danny Cohen is a member of the Washington Apple Pi Teen SIG. He is a student at Wilson High School in DC. His interests include 3D graphics, movie making and programming. You can download his first freeware program, GurgelDoll at Versiontracker.com

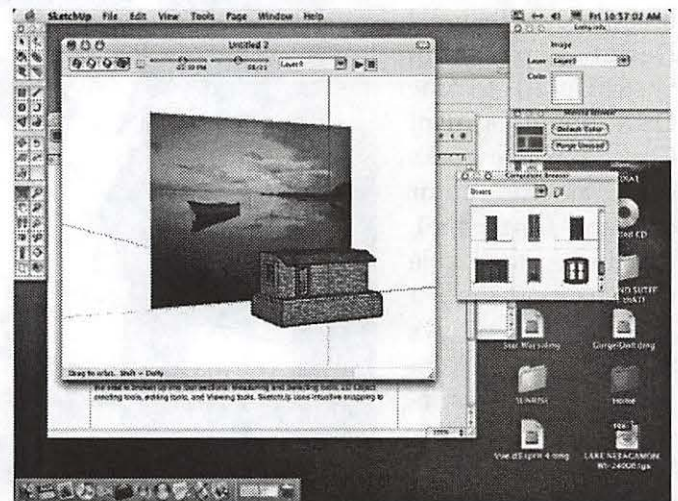


Figure 4.—A house with an imported 2D picture as the backdrop

3D Landscaping Programs for Mac OS X

By Benjamin Ashwell and Danny Cohen

Vue d'Esprit 4 \$199 E-On Software www.e-onsoftware.com Requirements: Mac OS X, 300 MHz G3 processor or faster, 64 MB of free RAM (128 MB recommended), 100 MB of free Hard Disk space, 800x600 in 65K colors/16 bits (1024x768, 24 bits recommended). Bryce 5 \$299 Corel www.corel.com Requirements: Mac OS X or Mac OS 9 128 MB RAM 100 MB hard disk space 24-bit color display CD drive VGA monitor mouse or tablet

SOME OF THE teens in the Washington Apple Pi Camp experimented with Vue d'Esprit. It rapidly became our favorite graphics program. The program can be used to make photorealistic landscapes and animations. Projects can be saved in all QuickTime native formats. They can be imported into and exported from LightWave, 3D Studio, Wavefront, AutoCad, RAW, USGS Elevation Model, and Targa altitude map encoding scheme. Also, plain picture formats, such as TIFF, JPEG, and GIF are available for export. It has numerous controls to produce life-like landscapes including vegetation, terrain, and water.

We tried Vue d'Esprit out for three days and the results were amazing. We produced near professional quality with animations and pictures from Vue. We did this with the demo version, which does not allow output of images larger than 640 x 480 pixels and animations longer than 5 seconds, not to mention not being able to save. Despite these difficulties, we

"Bryce is a very good program, and in some ways is more powerful than Vue d'Esprit. However, the learning curve is much steeper, and the nonstandard interface makes it clunkier to use. It is for those reasons that we prefer Vue to Bryce."

still made impressive artwork. By double clicking on a mountain that we laid down with one click, we could dig or raise the terrain as if it were a paint program and in the same window were many more advanced options. Vue d'Esprit comes with a vegetation tool that creates a slightly different plant each time it is used. There is also a large selection of gorgeous atmospheres or sky types. The excellent interface allowed us to begin making scenes so quickly. The program is both user friendly and elegant, unlike Bryce 5 By Corel.

While Bryce, is a powerful program, it is complicated and has a much steeper learning curve. Its interface does not lend itself to quick exploration and easy

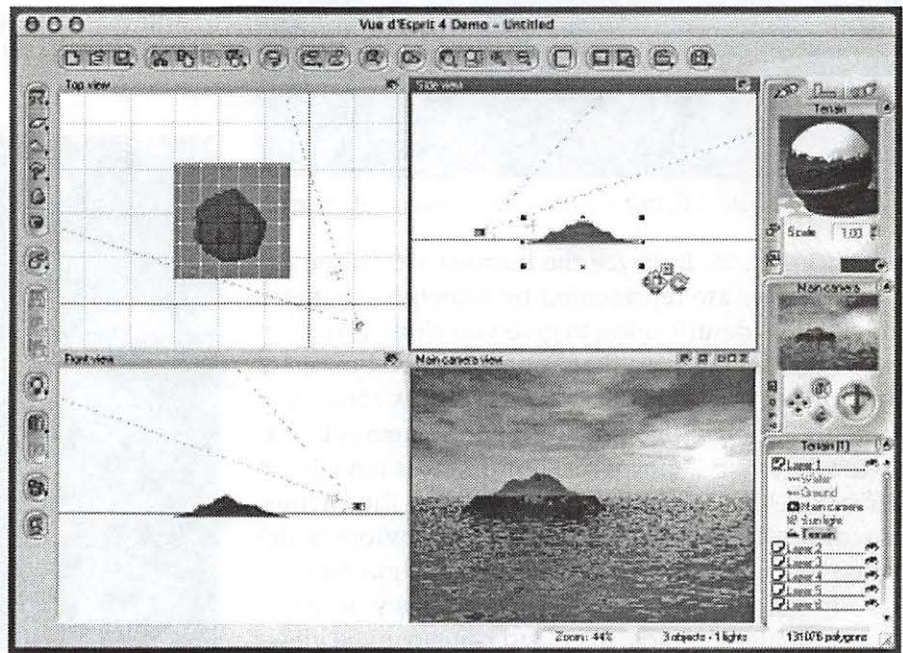


Figure 1:—The Vue d'Esprit Interface

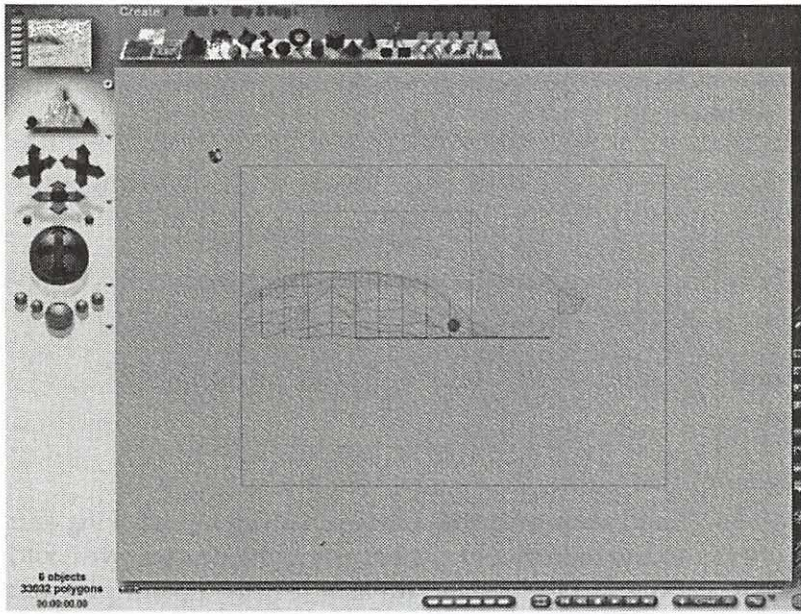


Figure 2:—The Bryce 5 Interface



Figure 3—A Vue d'Esprit creation by Benjamin Ashwell.

experimentation. In Bryce the buttons are on the left and top. They are represented by unhelpful pictures, with no text identification to give you clues as to their use. There is a text area that appears on the bottom of the window. However, it is not as useful as actual pop up items. Much of the remaining screen area is blank, obviously for style purposes, but it makes navigation difficult. Other tools are forced inside the menus, crowding things significantly. It was obviously designed to look good but not for user functionality.

In Vue d'Esprit, the interface allows you to see, by default, the top, side, front and camera angle views of your scene all at one time. In Bryce, only one angle

can be seen at a time. (The user must toggle through the different views.) Vue d'Esprit's interface allows for rapid assimilation of information. In the bottom right corner is list of all the objects in the construction. Bryce does not have a similar list. While Vue d'Esprit's fills the entire screen, you still have access to the menu bar and dock. Bryce covers your entire screen, hiding both.

In Bryce, there are some options that are not available in Vue d'Esprit. One is the ability to rotate your camera, continuously, around the project. This allows you to find errors more easily. You can edit vegetation after it has been placed and there are options to randomize the objects more easily. Bryce's way of editing objects such as trees involves bringing up a window allowing for customization of bark and leaf style.

Bryce is a very good program, and in some ways is more powerful than Vue d'Esprit. However, the learning curve is much steeper, and the non-standard interface makes it clunkier to use. It is for those reasons that we prefer Vue to Bryce. One other enticing factor in Vue are the number of add on kits that are available. It comes with samples and pre-made objects, like houses, cars, tanks, and boats. There are additions that you can purchase to improve the animation detail. While Vue is already good, one of the add-ons, called Mover, allows you to animate people and animals with professional smoothness. We are not

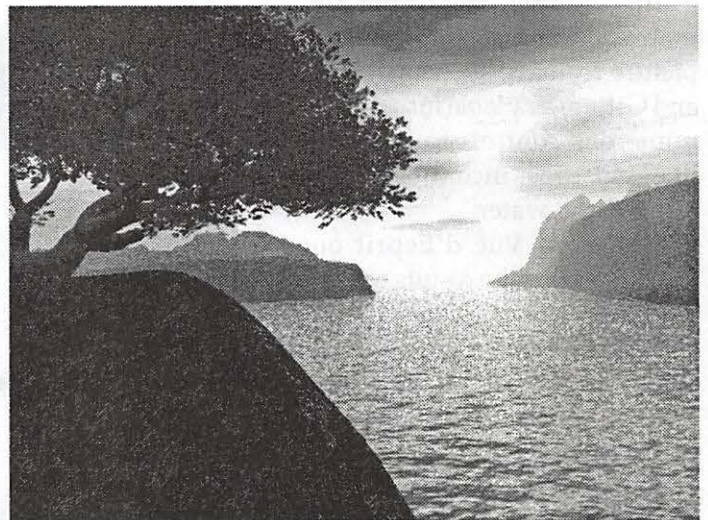


Figure 4— A Vue d'Esprit creation by Danny Cohen.

aware of similar add-ons for Bryce.

Now we come to the all important price factor, price. Bryce retails for \$299 while Vue d'Esprit is only \$199. In our opinion, Bryce is not worth the additional \$100.

You can download demos of both programs at their sites, both work for 30 days. Vue is about 27 MB to download, making it difficult for dial-up users. The Bryce demo is a 57 MB, making it nearly impossible for a dial-up users to download. ■

Benjamin Ashwell is 14 and is freshman at Walter Johnson High School in Bethesda MD. He enjoys playing the violin, tennis, listening to music, programming, and crusading for the Macintosh cause. He hopes to use Vue d'Esprit for cut scenes in his next computer game, "Oberon". Contact him with questions or comments about Vue d'Esprit or any computer related things at tige2000@mac.com

Danny Cohen is 15. He is a junior at Woodrow Wilson High School in Washington DC. Besides playing with graphics programs, he plays around with music software and system add-ons. He has created a program with no practical purposes, "Gurgel Doll Production Factory," available at http://homepage.mac.com/nebagakid/gurgel_doll, and would love to hear from you at nebagakid@mac.com Both Danny and Ben are founding members of the new Washington Apple Pi Teen SIG. It meets on the third Thursday of each month at the Washington Apple Pi office from 6:30 p.m. to 8:30 p.m. Interested teens are invited to attend the meetings

How I barely survived installation

HP All-In-One (AIO) LaserJet 3300mfp Series Multi-function Printers

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I HAVE NEVER bought an all-in-one (print, scan, copy, fax) device before. It seemed to me that if it went on the blink, you were stuck with no devices at all. But my study is filled with books, computers (3), a router, and more. Over time I have needed a scanner and particularly a flatbed copier. Not just to copy book pages. Anyone who has ever tried to copy a driver's license through a sheet fed copier knows what I am talking about. I rarely send faxes, but I still receive a fair amount of faxes. I use the ink so little in my ink jet fax/copier that the expensive cartridges dry up. So when I saw the Hewlett-Packard LaserJet 3330 that had stand-alone features, a toner cartridge, and USB connections – I got it.

All previous HP devices I have had worked flawlessly out of the box. Their documentation is usually good, the features are well thought out, and they usually supply software that is a cut above the competitors in my opinion. [I do think Apple is better overall in software.] Note, however that HP does harm users by failing to update drivers after about 3 years or so. They need to fix this to attain brand loyalty.

The stand-alone features worked without flaw. However, I had a devil of a time getting this device to work with my PowerMac G4. In retrospect, if I had some key information, I believe it would have been a snap. On the other hand, without that key information, I found myself congenitally unable to do only and precisely what the instructions said. I write this article in hopes that it will save others much frustration.

Key Information:

- 1- Do *not* connect the printer to the USB port on the Apple Extended Keyboard.
- 2- Trim the twenty plus unnecessary extensions *after* you get everything working.
- 3- HP does not use or support the Chooser. If you use the Chooser, you go into a hyper-space of problems. Use the HP LaserJet Utility as below.
- 4- In Mac OS X, open the Print Center (Apple) from Applications/Utilities folder, and select Add Printer. Also, select Directory Services, *not* USB to choose HP AIO Print.

Problems and Error Messages I Wrestled:

1- "software to use USB device Apple Extended USB Keyboard could not be found"

The Apple Extended USB Keyboard does use USB Device Extension, but I always had that loaded. The Apple software nicely does a search on the Internet for the software it feels is missing, but it never could find what it wanted. I never understood this.

Eventually, searching the Apple Knowledge Base, I found an article that pretty much said never connect a printer to the keyboard via the USB port. It may be that the keyboard and the printer in combination draw more power than the port can supply. Who knew?

2- I had trouble with the entire computer 'hanging' in limbo after the desktop had completed display. I thought it was a problem with file sharing. But, after all the dust settled, I installed the file sharing extension and it seems to work. More likely, in my blind search for simplification I had removed the HP LaserJet 3310 USB extension. Clearly I have no insight into the ultimate problem as occasionally I have had to Cmd+Opt+Esc to restart the finder. This is not recommended. I get desperate.

What worked for me:

Connect USB printers directly to the Mac. Once I found the article stating not to use the keyboard port, I went directly to the second USB port on the back of the Mac. I used a 14-foot USB cable directly to the Mac with no problem once all the other problems were ironed out. I never went back to try my powered USB hub, but it should work.

Installation in Mac OS 9.22

0- Initially I could not successfully run this with File Sharing. See above.

1- I did a clean install, minimal extensions. HP requires QuickTime ≥ 4.0. Eventually I added all extensions in my world with no conflict. By slow attrition I eliminated the unused HP extensions.

2- Run the HP CDROM installer. I think it helped to also run

- a. HP LaserJet 3300 Cache installer
- b. HP LaserJet 3300 Help installer

3- Run the new HP drivers, dated 26 May 02, from HP's Web site, <http://www.hp.com>.

4- **Don't** eliminate all the extraneous drivers. How could you know that the 3330 **requires** the 3310 driver??

5- It is critical to use HP LaserJet utility v.4.3 to select USB printer. Then **reboot!** Automatic set up in the Apple Desktop Print Utility is **not** supported and **will** crash the HP USB printer setup.

6- I Repeat, I believe it is critical to reboot at this point.

7- Run the HP All-in-One (AIO) application. For the most part this collects registration data.

8- HP AIO 3330 works with Carbon Lib extension versions 1.4, 1.5, 1.6.

9- It works with Mac OS 9.21 and 9.22 (and Mac OS X).

10- I still have not been able to register my printer at the HP web site.

- a. The serial number is on the bottom of this rather heavy, clumsy device.
- b. You have to register yourself at the web site with ID and password first.
- c. The HP site will not accept registration via MS Internet Explorer 5.14.
- d. The HP web pages jump all over and back and forth when I tried to use Netscape Communicator 4.79.

11- These extensions are required for the HP 3330 AIO USB Printer:

- Printing Lib ≥ v.7.1.4
- Classic DTP Lib v.4.03, from HP
- Desktop Printer Spooler
- Desktop Print Monitor
- HP All-in-One (AIO) application, used at start up
- HP LaserJet 3300 Scan
- HP LaserJet 3300 USB
- HP LaserJet 3330 USB
- HP LaserJet 3310 USB
- HP LaserJet 3330 Fax
- Toner Tuner® extension still works! HP software also has a toner saver feature.

12. HP does NOT support Apple USB Printer Sharing.

13. HP installs roughly twenty other extensions for other printers, but these do not appear to be necessary. On the other hand, who knew the

3310 driver would be required?

14. HP LaserJet Toolbox – this utility is of no help until you have already successfully installed the printer. It contains: Device Chooser, Device Configuration, View On Screen User Guide, and View Help

Installation in Mac OS X 10.1.5

1- I thought it was critical to get it working in Mac OS 9 first, since that is what it uses. It is stunning how many providers still are not Mac OS X native.

2- Run all three of the HP CD-ROM installers noted above in Mac OS 9.

3- Immediately run the Print Center application and select the printer from dialog boxes. Use Directory Services in Print Center.

4- **Reboot.**

Unresolved Issues:

1-If anyone knows the cause of error message: "Shared memory service has not been set up", please let me know.

2-Several times during attempted installation, I got an error dialog box with an exclamation inside a triangular icon. This clearly was a serious problem, but each time, the error message itself and any possible buttons were blotted out by a totally black rectangle of cosmic doom. A cold boot by unplugging the machine was the only answer.

3-In Mac OS X, the HP All-In-One Setup Assistant often could not see the USB device. This is a classic issue in which, if you did not do it right in the first place, there are no guideposts and you are at a dead end.

4- If someone in installer heaven is listening, I think all installers should have a final list at the end of the documentation. It should state all of the files that you need, and where they should be located if you were successful.

This was not easy – at least for me. And I learned from the HP discussion pages (on their Web site, <http://www.hp.com>) that many others have suffered while installing this printer on both Macs and PCs. I had no reason to try this but one message revealed that you could reset the HP printer itself by pressing and holding both the Menu/Enter button and the Symbol (asterisk) button while plugging in the computer. This is akin to playing Twister by yourself and could be hazardous to your health.

FireWire vs. USB

By James Wiebe, CEO WIEBETECH LLC
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Q1. Can you provide a performance comparison between FireWire, USB 1.1, and USB 2.0?

A1. USB 1.1 is very slow, and offers real world transfer rates that peak at around 900KB/sec. Using USB 1.1, a 100MB folder will take a little under two minutes to transfer. FireWire is much faster, and offers burst transfer rates that approach 40MB/sec. Real world transfer rates on files and folders are really fast as well. Our hypothetical 100MB folder may transfer in about 7 or 8 seconds on a good machine with a OXFW911 based external FireWire drive. USB 2.0 will produce transfer speeds that are generally about 20% slower than FireWire, even though the USB 2.0 spec has a 20% faster top burst speed specification. A new form of FireWire (1394B) offers the promise of burst speeds that are twice as fast, although the reality of times required to transfer folders and files will not be that good.

Q2. Is my Mac bootable on an external FireWire drive?

A2. The best answer is extracted deep from within Apple's knowledge base: "FireWire booting, as the name implies, is the ability to start up a computer from an internal or external FireWire drive. FireWire booting is possible on all Macintosh models that have built-in FireWire ports with the exception of the Power Macintosh G3 (Blue & White) and the Power Mac G4 (PCI Graphics) models. You may need to upgrade the computer's firmware before FireWire booting will work. You can download the latest firmware for your computer from the Apple Software Updates Web site at <http://www.apple.com/swupdates>."

Q3. Which OS versions will support FireWire drives without using drivers?

A3. OS9.1 usually and OS9.2 always; also OSX. Check for Apple's latest FireWire software drivers for your computer at <http://www.apple.com/firewire>

Q4. Can I take the drive out of an Apple iMac that has died (or any other older computer) and use FireWire DriveDock (or NoteBook DriveDock) to view and extract the data? This obviously assumes that the drive has not also died.

A4. Yes, this will work great. FireWire DriveDock is useful for viewing data on drives that have been preformatted. The drive will generally mount right on the desktop of your computer. Voila! You can get access back to older drives.

Q5. How can I format an unformatted FireWire drive in OSX and also in Windows XP? (This is an important question. I hope you enjoy my response.)

A5. (Windows XP version). If you are using Windows XP:

You will need to be logged in as administrator to your computer. The FireWire drive needs to be powered up and attached to your computer. The task bar will show the presence of the FireWire drive through a small green arrow remove icon in the lower right hand portion of your screen. Once these requirements are met, you are ready to format the drive.

1. Click START.
2. Click CONTROL PANEL.
3. Click PERFORMANCE AND MAINTENANCE.
4. Click ADMINISTRATIVE TOOLS.
5. Double Click COMPUTER MANAGEMENT.
6. Click DISK MANAGEMENT.
7. If your new disk is uninitialized, it will appear as red circle bar within the list of disk drives. Right click on the red circle bar and select INITIALIZE DISK. Initialization just takes a few seconds.
8. Once your disk has been initialized, it will appear as "Unallocated" within the drive descriptor list. Right click over the box that says "Unallocated" and select NEW PARTITION.
9. Follow the steps which Windows provides for creating a new partition. Select either FAT32 or NTFS format at the appropriate time. FAT32 is appropriate for exchange with other Windows computers and with Macs. NTFS is appropriate if you will use the disk drive

only with Win2K and WinXP systems. Select the volume label of your choice. Choose QUICK FORMAT if you are in a hurry. Allow the drive to finish formatting.

10. Click COMPUTER MANAGEMENT closed (red X).

11. Click ADMINISTRATIVE TOOLS closed. Your new drive will now be available for use. It will appear under MY COMPUTER, under sub heading of HARD DISK DRIVES. It may be accessed like any other drive. Your drive is ready to use!

A5. (Mac OSX version). If you are using OSX:

When the powered up drive is first attached to your computer, OSX will open a dialogue box and ask for a format style and name. Select the style and the name, click OK. Confirm the selections. That's about it. The drive will mount on the desktop shortly thereafter. You're drive is ready to use!

Random URLs 5

by David L. Harris

ON THE PI'S TCS bulletin board system I randomly post URLs (addresses of Web sites) that intrigue me. If you have an Internet connection and a Web browser, you can go to any of these places yourself. If you use the TCS you can see the newest Random URLs on the "Explorer Service & Internet" board of the General Conference. The URL of the TCS is <http://webtcs.wap.org/>. If you are a long-time TCS user you might skip this article, because you've seen them.

Here are some more URLs I've posted. They are all working at the time this article was written (you might have to try different Web browsers), but by the time you read it, who knows? Due to the limitations of printing them, some may wrap to a second line. Make sure you get the entire URL—they are surrounded by < and >. (Don't use the brackets in your browser's address space.) Some pages may require JavaScript be turned on in your Web browser; if it is, you may get extra cookies or advertising on those pages. Some of the descriptions are taken from the sources where I get the URLs.

Here's the latest edition:

US Lighthouses

<<http://www.us-lighthouses.org/>>
Includes photographs and directions to many US lighthouses.

Live Webcams in outdoors Africa (and more)

(there may not be much action, depending on when you access the cameras)
<<http://www.africam.com/>>

Multnomah County Library Homework Center

<<http://www.multcolib.org/homework/index.html>>

The Blind Readers Page

<<http://www.execpc.com/~wgraczyk/blindrdrs.html>>
Guide to sources of information in alternative formats (braille, recorded cassettes, large print, e-texts, web audio) accessible by people with print disabilities—those with visual and physical handicaps as well as dyslexia. It is also a guide to information about blindness, visual handicaps and other physical handicaps.

Eat Here

<<http://eathere.com/>>
EATHERE.COM is especially for the rare breed of traveler who wants to make each driving trip a great eating experience. You too can find those wonderful little spots the locals love.

Beekeepers & Honey Exporters from Morocco

We're a cooperative of beekeepers and HONEY exporters. Through this Web Page, we would like to make the acquaintance of fellow beekeepers from all parts of the world. We'd like to exchange views and opinions on beekeeping and HONEY exporting.
<http://members.tripod.com/~CASABLANCA_2/MIELROMMANI.html>

Professional Bull Rider - Bull Riding at its best!

<<http://pbrnow.com:80/>>
The Web home of Professional Bull Riders.

First Ukraine Internet Art Gallery

<<http://www.hello.to/artgallery>>
We are glad to see you into first Ukrainian Internet Art Gallery. Here you can see pictures what was served on realistic painting. Also you can, provided will arise eagerness, to buy it. We anticipate that you applaud our project. ■

PickChar

by David L. Harris

REMEMBER Key Caps, that thing that used to hide under the Apple menu, and you could see a picture of your keyboard, with symbols on the keys corresponding to whatever font you had chosen, and whatever modifier key you were pressing? Key Caps let you copy one of those strange characters, such as ç, and paste it into your document. Well, Key Caps



Figure 1. Key Caps for OS X



Figure 2. PickChar's icon in the

still exists under OS X, only it's in the Utilities folder now (Figure 1). But it never was very convenient for adding characters that aren't shown on the real keyboard. Another utility, called PopChar, became available. Originally free, it developed a Pro version, not

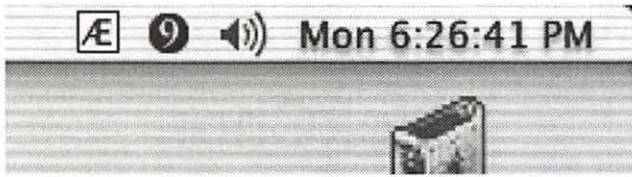


Figure 3. Close Up

free. It is available for OS X now. But there is also something called PickChar, for OS X, which does the same thing as the old simple PopChar did. See the little icon in the menu bar (Figure 2)? That's PickChar waiting to be used.

Figure 3 shows a close up. I've pulled a trick here: changed the Desktop (background) picture. Also, I have Classic running, and that is shown by the number 9 in the menu bar, thanks to another free utility that enables me to easily start or stop Classic. (There are several such; I've forgotten which one this is!)

Click on the PickChar icon and you are presented with a window showing all the characters available in your chosen font (Figure 4). You can change the font right there. Move the mouse pointer off the window and it disappears. Run the mouse pointer over one of the characters in the window, and it is highlighted (Figure 5). Click on it, and that character is pasted where the cursor is in any text document (Figure 6). Much easier to use than Key Caps. And PickChar's free (the author accepts donations, though).

PickChar has several settings under preferences (Figure 7). You can optimize it for different software programs, such as AppleWorks or Microsoft Word. You can set it so the PickChar icon shows in the menu bar or not. And a few more. Basically it is so easy, I just set it once and forgot it.

PickChar is up to version 1.1 now. I just downloaded it at

http://homepage.mac.com/jessi_k/PickCharEnglish1.1.sit

but I haven't tried the new version yet.

Figure 8. shows some information about PickChar's creator. And did I say PickChar is free?

■

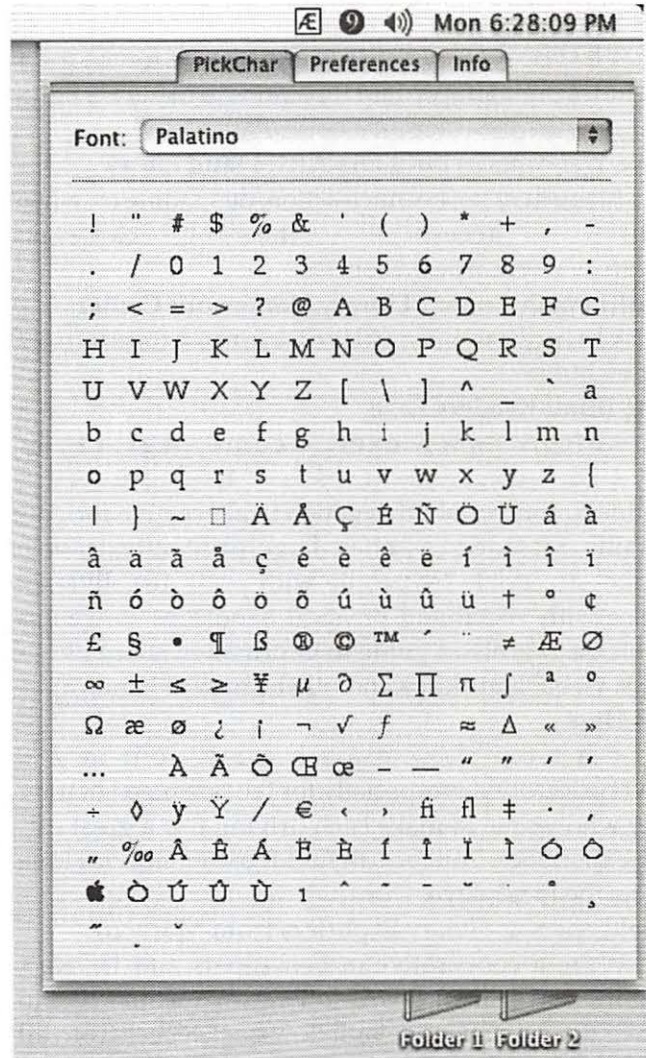


Figure 4. PickChar open

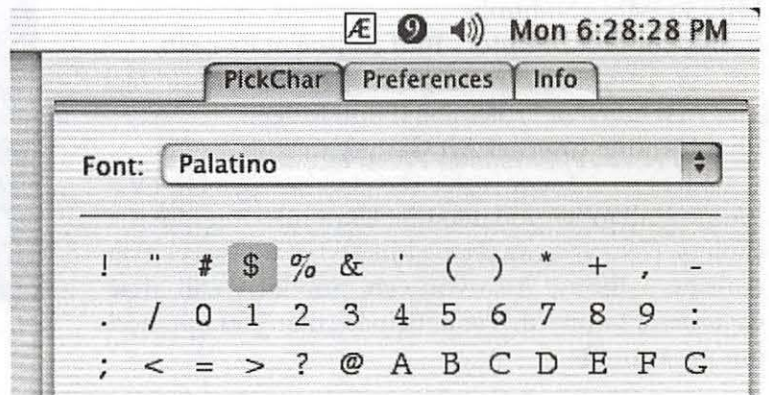


Figure 5. A character selected

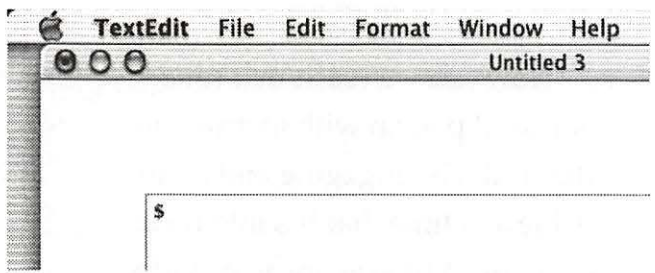


Figure 6. A character pasted

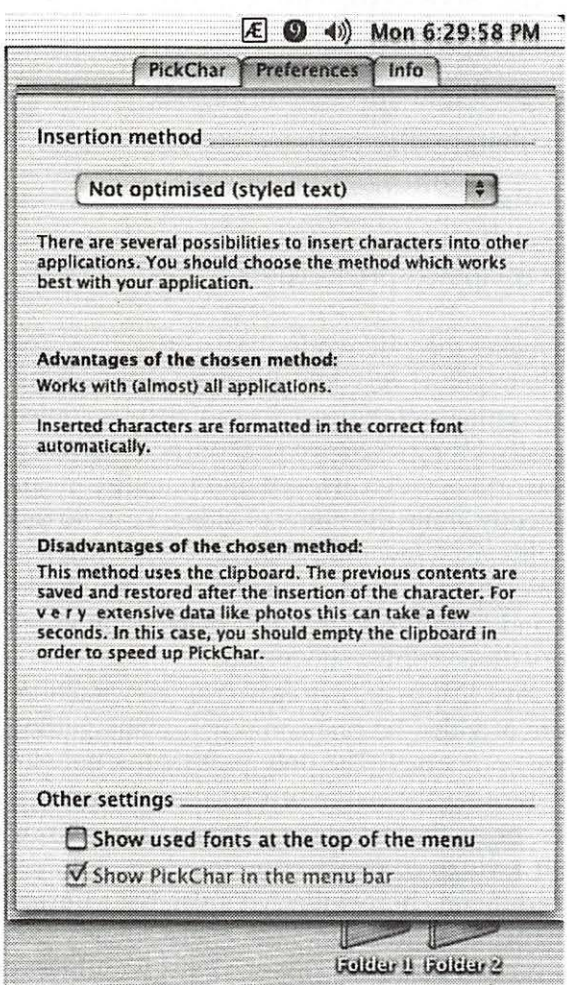


Figure 7. PickChar Preferences

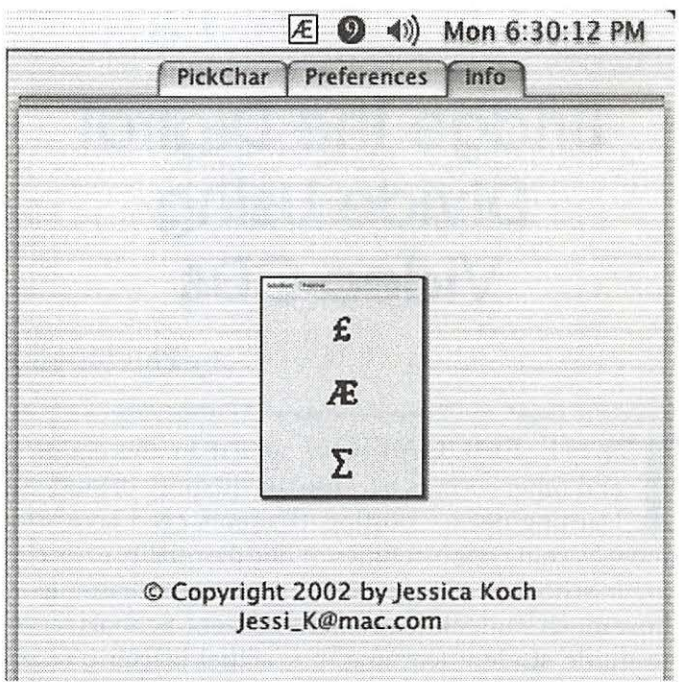


Figure 8. Who did it



The Pi's Jim Ritz tries out Mac OS X 10.2 (Jaguar) at Apple's booth on a new 17-inch iMac. His hand is on a new Sony/Ericsson digital telephone that can use Apple's new iSync utility to import names and phone numbers into the phone. (Photo by Dave Ottalini)

Bridge the Digital Divide Using Video CDs

by Phil Shapiro

THE EDUCATION deficit in this country and others occurs because the quantity of student learning needs boosting. Students need access to more learning opportunities. While the quality of teaching in schools is often good, the quantity of learning — how much students learn, is insufficient. Schools serve to guide student learning, but actual learning takes place both inside and outside of school. There are few ways of increasing the quantity of learning taking place inside schools, but ample ways to increase the quantity of learning taking place outside of schools.

One strategy to increase the quantity of learning is to create new learning places like ctc's (community technology centers). (See <http://www.ctcnet.org> for information about the community technology centers' movement.) Another strategy is to make learning more portable so students can learn whatever they want, wherever they want, whenever their schedule allows.

In the time-stressed world many people live in, portable learning offers great promise. Even if there were a ctc on every block, some people would not be able to schedule time to visit one. How can we reach that time-stressed person with instruction that is lively, engaging and accessible at a time that fits into their schedule? Video is one way. Video used to be expensive to produce, time consuming to copy and expensive to distribute. Now videos can be produced cheaply, copied fast and distributed at substantially reduced costs.

One video format now very attractive is the video cd format also called mpeg-1. This format fits up to 70 minutes of video on a blank cd disk. The video can be played back on Windows computers (using Windows Media Player), on Macintosh computers (using QuickTime Player) and in most consumer DVD players. The minimum processor requirements for video cd playback are 166 MHz (with MMX) for Windows computers and G3 or better processors for Macintosh

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computers. (Roughly speaking, all Windows and Macintosh computers produced since 1999 - and some from 1998.)

What makes the video cd format so attractive? The price of the media is very low. Blank cd disks cost as little as 10 cents each. Video cd's can also be copied fast and easily. Using a 32-speed CD burner, I can copy an hour's worth of video in less than 2 minutes. In one hour I can copy almost 30 hours of video. I can do this copying with just a few mouse clicks using much less effort than copying a VHS video tape, which requires that I rewind both the source and destination video tapes every time I copy a new video.

Using my CD burner I can easily copy several hundred hours of video on one computer, while getting work done on another. The only part that is time-intensive is writing the name of the contents, using a magic marker, on the face of the video cd. Considering the benefit a video cd could bring to others, I do not find this a difficult chore. Video cd's also have the advantage of being lightweight. I can mail a single video cd for 60 cents. I can mail 50 video cd's, with plastic sleeves, anywhere in the country for \$2.23 via media mail. (The same rate as "book rate.") [This rate will be rising 4% July 1, 2002.]

Last, video CDs take up much less space than VHS tapes. If I had a collection of 50 VHS videotapes in my apartment, they would take up several shelves. 50 video CDs easily fit in a cabinet drawer.

How clear does video on a video cd look and sound? It sounds very clear, as long as the audio from

the source video is clear. And it looks fairly clear - not as clear as a commercially produced DVD's, but perfectly adequate for viewing. A neat thing about the video cd format is that you can place various "chapters" of video on a single cd. Using the appropriate button on the remote of a consumer DVD Player, you can jump to any chapter on a video cd. You can also jump to any particular second of a cd.

This means that if someone wanted to learn about a particular topic that was delivered on video cd, that person could look up that topic on a hard-copy timeline, and then jump right to the topic of interest. This could be an invaluable on a series of "how-to" video cd's. People could concentrate on learning the topics they wanted to learn.

An interesting angle to the video cd story is that in the next year or two most of the laptops entering the donation stream will have built-in CD-ROM drives. Law firms, corporations and government offices that upgrade their laptops will pass along to charities and the nonprofit sector a very usable, portable multimedia access device.

The time is ripe to start creating interesting and vibrant educational content that will be of use to the organizations and individuals who receive these donated laptops. What kind of instructional content could be placed on a video cd? Instruction on GED subjects — English as a second language (ESL) instruction — question-and-answer sessions on computer topics, helping people learn from each other's questions. An entire algebra or geometry curriculum, taught by the best teachers in this country and others. Portable. Take it with you while visiting your cousin's house. Have it with you waiting at the doctor's office.

If video cd's are physically portable, can they also be distributed over the Internet? Yes, they can. A video cd produced in Milwaukee can be viewed in 25 other cities the following day. The video cd could be downloaded and burned onto cd disks by volunteers with broadband Internet connections.

While the video cd format is currently one of the most useful formats for distributing video, future video formats will offer even greater portability, greater resolution and greater density of video on removable media. The future of removable media, coming in the next 3 to 5 years, is called "holographic storage." This is an optical media, like a CD-ROM or DVD, that uses 3-dimensions rather than 2-dimensions to store data. The third dimension of holographic storage is very small

"... video CDs take up much less space than VHS tapes. If I had a collection of 50 VHS videotapes in my apartment, they would take up several shelves. 50 video CDs easily fit in a cabinet drawer."

to human perception, though. The quantity of data that can be stored on holographic media is in the terabyte range. Video cd's made today will be able to be copied onto that media and a single holographic media (about the size of a credit card) could hold as much as 100 to 500 hours of video. Therefore an entire academic course could reside on a single piece of media.

It's interesting that the talent of the best teachers in this country and others is kept locked up in the buildings in which they teach. If someone is the best teacher in a country at a particular grade or on a particular subject, their instruction and explanations deserve to be videotaped. They deserve to be compensated for their excellence. And the resulting video ought to be made available to the public for free - distributed via the Internet and volunteer cd copiers.

Perhaps there is a role for libraries too to distribute such content. One thing is sure. The U.S. Department of Education ought to involve itself more in the creation of outstanding educational content. The tools for distributing that content are right before us. And the private sector is assuredly not interested in the free distribution of high-quality educational content. This is a time for the government to take action and shine — and for the rest of us to do the work to carry out the vision. ■

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The author is a writer, educator and digital divide activist in Arlington, Virginia. He was recently recognized by CTCNet with an award for his support over the past 10 years. (Bought a way cool new iBook with the award money.) At the CTCNet annual conference in June, 2002, he distributed 600 video cd's to attendees. These video cd's were copied by himself and two friends. If you have a broadband connection and are feeling adventurous, try downloading some video cd's from <http://www.zvideo.org>

This article, along with accompanying files and updates, can be found on the web at <http://www.his.com/pshapiro/videocds.html>

Two Bytes of the Cherry: Unicode and Mac OS X, Part 1

by Matt Neuburg <matt@tidbits.com>

IF YOU'RE using Mac OS X, a massive revolution is proceeding unnoticed on your computer. No, I don't mean Unix, preemptive multitasking, or any other familiar buzzwords. I'm talking about text.

How can text be revolutionary? Text is not sexy. We take text for granted, typing it, reading it, editing it, storing it. Text is one of the main reasons most people bought computers in the first place. It's a means, a medium; it's not an end, not something explicit. The keyboard lies under our hands; strike a key and the corresponding letter appears. What could be simpler?

But the more you know about text and how it works on a computer, the more amazing it is that you can do any typing at all. There are issues of what keyboard you're using, how the physical keys map to virtual keycodes, how the virtual keycodes are represented as characters, how to draw the characters on the screen, and how store information about them in files. There are problems of languages, fonts, uppercase and lowercase, diacritics, sort order, and more.

In this article I'll focus on just one aspect of text: Unicode. Whether or not you've heard of Unicode, it affects you. Mac OS X is a Unicode system. Its native strings are Unicode strings. Many of the fonts that come with Mac OS X are Unicode fonts.

But there are problems. Mac OS X's transition to Unicode is far from complete. There are places where Unicode doesn't work, where it isn't implemented properly, where it gets in your way. Perhaps you've encountered some of these, shrugged, and moved on, never suspecting the cause. Well, from now on, perhaps you'll notice the problems a little more and shrug a little less. More important, you'll be prepared for the future, because Unicode is coming. It's heavily present on Mac OS X, and it's only going to become more so.

"In this article I'll focus on just one aspect of text: Unicode. Whether or not you've heard of Unicode, it affects you. Mac OS X is a Unicode system. Its native strings are Unicode strings. Many of the fonts that come with Mac OS X are Unicode fonts."

Unicode is the future—your future. And as my favorite movie says, we are all interested in the future, since that is where we shall spend the rest of our lives.

ASCII No Questions — To understand the future, we must start with the past.

In the beginning was writing, the printing press, books, the typewriter, and in particular a special kind of typewriter for sending information across electrical wires—the teletype. Perhaps you've seen one in an old movie, clattering out a news story or a military order. Teletype machines worked by encoding typed letters of the alphabet as electrical impulses and decoding them on the other end.

When computers started to be interactive and remotely operable, teletypes were a natural way to talk to them; and the first universal standard computer "alphabet" emerged, not without some struggle, from how teletypes worked. This was ASCII (pronounced "askey"), the American Standard Code for Information Interchange; and you can still see the teletype influence in the presence of its "control codes," so called because they helped control the teletype at the far end of the line. (For example, hitting Control-G sent a control code which made a bell ring on the remote teletype, to get the operator's attention—the ancestor of today's alert beep.)

The United States being the major economic and technological force in computing, the ASCII characters were the capital and small letters of the Roman alphabet, along with some common typewriter punctuation and the control codes. The set originally comprised 128 characters. That number is, of course, a power of 2—

no coincidence, since binary lies at the heart of computers.

When I got an Apple IIc, I was astounded to find ASCII extended by another power of 2, to embrace 256 characters. This made sense mathematically, because 256 is 8 binary bits—a byte, which was the minimum unit of memory data. This was less wasteful, but it was far from clear what to do with the extra 128 characters, which were referred to as “high ASCII” to distinguish them from the original 128 “low ASCII” characters. The problem was the computer’s monitor—its screen. In those days, screen representation of text was wired into the monitor’s hardware, and low ASCII was all it could display.

Flaunt Your Fonts, Watch Your Language

When the Macintosh came along in 1984, everything changed. The Mac’s entire screen displayed graphics, and the computer itself, not the monitor hardware, had the job of constructing the letters when text was to be displayed. At the time this was stunning and absolutely revolutionary. A character could be anything whatever, and for the first time, people saw all 256 characters really being used. To access high ASCII, you pressed the Option key. What you saw when you did so was amazing: A bullet! A paragraph symbol! A cedilla! Thus arrived the MacRoman character set to which we’ve all become accustomed.

Since the computer was drawing the character, you also had a choice of fonts—another revolution. After the delirium of playing with the Venice and San Francisco fonts started to wear off, users saw that this had big consequences for the representation of non-Roman languages. After all, no law tied the 256 keycodes to the 256 letters of the MacRoman character set. A different font could give you 256 more letters—as the Symbol font amply demonstrated. This, in fact, is why I switched to a Mac. In short order I was typing Greek, Devanagari (the Sanskrit syllabary), and phonetic symbols. After years of struggling with international typewriters or filling in symbols by hand, I was now my own typesetter, and in seventh heaven.

Trouble in Paradise

Heaven, however, had its limits. Suppose I wanted to print a document. Laser printers were expensive, so I had to print in a Mac lab where the computers didn’t necessarily have the same fonts I did, and thus couldn’t print my document properly. The same problem arose

if I wanted to give a file to a colleague or a publisher who might not have the fonts I was using, and so couldn’t view my document properly.

Windows users posed yet another problem. The Windows character set was perversely different from the Mac. For example, WinLatin1 (often referred to, somewhat inaccurately, as ISO 8859-1) places the upside-down interrogative that opens a Spanish question at code 191; but that character is 192 on Mac (where 191 is the Norwegian slashed-o).

And even among Mac users, “normal” fonts came in many linguistic varieties, because the 256 characters of MacRoman do not suffice for every language that uses a variation of the Roman alphabet. Consider Turkish, for instance. MacRoman includes a Turkish dotless-i, but not a Turkish s-cedilla. So on a Turkish Mac the s-cedilla replaces the American Mac’s “fl” ligature. A parallel thing happens on Windows, where (for example) Turkish s-cedilla and the Old English thorn characters occupy the same numeric spot in different language systems.

Tower of Babel

None of this would count as problematic were it not for communications. If your computing is confined to your own office and your own printer and your own documents, you can work just fine. But cross-platform considerations introduce a new twist, and of course the rise of the Internet really brought things to a head. Suddenly people whose base systems differed were sending each other email and reading each other’s Web pages. Conventions were established for coping, but these work only to the extent that people and software obey them. If you’ve ever received email from someone named “=?iso-8859-1?Q?St?phane?,” or if you’ve read a Web page where quotes appeared as a funny-looking capital O, you’ve experienced some form of the problem.

Also, since fonts don’t travel across the Internet, characters that depend on a particular font may not be viewable at all. HTML can ask that certain characters should appear in a certain font on your machine when you view my page, but a fat lot of good that will do if you don’t have that font.

Finally, there is a major issue I haven’t mentioned yet: for some writing systems, 256 characters is nowhere near enough. An obvious example is Chinese, which requires several thousand characters.

Enter Unicode.

The Premise and the Promise

What Unicode proposes is simple enough: increase the number of bytes used to represent each character. For example, if you use two bytes per character, you can have 65,536 characters—enough to represent the Roman alphabet plus various accents and diacritics, plus Greek, Russian, Hebrew, Arabic, Devanagari, the core symbols of various Asian languages, and many others.

What's new here isn't the codification of character codes to represent different languages; the various existing character sets already did that, albeit clumsily. Nor is it the use of a double-byte system; such systems were already in use to represent Asian characters. What's new is the grand unification into a single character set embracing all characters at once. In other words, Unicode would do away with character set variations across systems and fonts. In fact, in theory a single (huge) font could potentially contain all needed characters.

It turns out, actually, that even 65,536 symbols aren't enough, once you start taking into account specialized scholars' requirements for conventional markings and historical characters (about which the folks who set the Unicode standards have often proved not to be as well informed as they like to imagine). Therefore Unicode has recently been extended to a potential 16 further sets of 65,536 characters (called "supplementary planes"); the size of the potential character set thus approximates a million, with each character represented by at most 4 bytes. The first supplementary plane is already being populated with such things as Gothic; musical and mathematical symbols; Mycenaean (Linear B); and Egyptian hieroglyphics. The evolving standard is, not surprisingly, the subject of various political, cultural, technical, and scholarly struggles.

<<http://www.unicode.org/>> <<http://www.unicode.org/unicode/standard/principles.html>> ■

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Two Bytes of the Cherry: Unicode and Mac OS X, Part 2

by Matt Neuburg <matt@tidbits.com>

IN THE FIRST part of this article, I introduced you to Unicode, a grand unification scheme whereby every character in every writing system would be represented by a unique value, up to a potential one million distinct characters and symbols. Mac OS X has Unicode built in. In this concluding part of the article, we'll look for it.

<<http://db.tidbits.com/getbits.cgi?tbart=06774>>

Forced Entry

To prove to yourself that Unicode is present on your computer, you can type some of its characters. Now, clearly you won't be able to do this in the ordinary way, since the keyboard keys alone, even including the Option and Shift modifiers, can't differentiate even 256 characters. Thus there has to be what's called an "input method." Here's a simple one: open the International preferences pane of Mac OS X's System Preferences, go to the Keyboard Menu tab, and enable the Unicode Hex Input checkbox. Afterwards, a keyboard menu will appear in your menu bar (on my machine this looks, by default, like an American flag).

Now we're ready to type. Launch TextEdit from your Applications folder. From the keyboard menu, choose Unicode Hex Input. Now hold down the Option key and type (without quotes or spaces) "042E 0440 0438". You'll see the Russian name "Yuri" written as three Cyrillic characters. The values you typed were the Unicode hexadecimal (base-16) numeric codes for these characters.

<<http://www.unicode.org/charts/PDF/U0400.pdf>>

Observe that if you now select "Yuri" and change the font, it still reads correctly. Is this because every font in Mac OS X includes Cyrillic letters? No! It's because, if the characters to be displayed aren't present in the font

you designate, Mac OS X automatically hunts through your installed fonts to find any font that includes them, and uses that instead. That's important, because a font containing all Unicode characters would be huge, not to mention a lot of work to create. This way, font manufacturers can specialize, and each font can contribute just a subset of the Unicode repertoire.

Now, Unicode Hex Input, though it can generate any Unicode character if you happen to know its hex code, is obviously impractical. In real life, there needs to be a better way of typing characters. One way is through keyboard mappings. A keyboard mapping is the relationship between the key you type and the character code you generate. Normally, of course, every key generates a character from the ASCII range of characters. But consider the Symbol font. In Mac OS 9, the Symbol font was just an alternative set of characters superimposed on the ASCII range. In Mac OS X, though, Symbol characters are Unicode characters; they aren't in the ASCII range at all. So to type using the Symbol font, you must use a different keyboard mapping: you type in the ordinary way, but your keystrokes generate different keycodes than they normally would, so you reach the area of the Unicode repertoire where the Symbol characters are.

To see this, first enable the Symbol mapping in the International preference pane. Next, open Key Caps from the Application folder's Utilities folder, and choose Symbol from the Font menu. Now play with the keyboard menu. If you choose the U.S. keyboard mapping, Key Caps displays much of the font as blank; if you choose the Symbol keyboard mapping, the correct characters appear. In fact, it's really the mapping (not the font) that's important, since the Symbol characters appear in many other fonts (and, as we saw earlier, Mac OS X fetches the right character from another font if the designated font lacks it).

Another common keyboard mapping device is to introduce "dead" keys. You may be familiar with this from the normal U.S. mapping, which lets you access certain diacritical variations of vowels, such as grave, acute, circumflex, and umlaut, using dead keys. For example, in the U.S. mapping, typing Option-u followed by "u" creates u-umlaut; the Option-u tells the mapping to suspend judgment until the next typed input shows what character is intended. The Extended Roman keyboard mapping, which you can enable in the International preference pane, extends this principle to provide easy access to even more Roman diacritics; for example, Option-a becomes a dead key that puts a macron over

the next vowel you type.

<<http://homepage.mac.com/goldsmi/.Pictures/ExtendedRoman.jpg>>

Various other input methods exist for various languages, some of them (as for Japanese) quite elaborate. Unfortunately, Apple's selection of these on Mac OS X still falls short of what was available in Mac OS 9; for example, there is no Devanagari, Arabic, or Hebrew input method for Mac OS X. In some cases, the input method for a language won't appear in Mac OS X unless a specific font is also present; to get the font, you would install the corresponding Language Kit into Classic from the Mac OS 9 CD. In other cases, the material may be available through Software Update. I won't give further details, since if you need a specific input method you probably know a lot more about the language, and Unicode, than I do.

<<http://docs.info.apple.com/article.html?artnum=106484>>

<<http://docs.info.apple.com/article.html?artnum=120065>>

Exploring the Web

An obvious benefit of Unicode standardization is the possibility of various languages and scripts becoming universally legible over the Web. For a taste of what this will be like, I recommend the UTF-8 Sampler page of Columbia University's Kermit project; the URL is given below. You'll need to be using OmniGroup's OmniWeb browser; this is the only browser I've found that renders Unicode fonts decently. For best results, also download James Kass's Code2000 font and drop it into one of your Fonts folders before starting up OmniWeb. (If you're too lazy to download Code2000 you'll still get pretty good results thanks to the Unicode fonts already installed in Mac OS X, but some characters will be replaced by a "filler" character designed to let you know that the real character is missing.)

<<http://www.omnigroup.com/applications/omniweb>>

<<http://home.att.net/~jameskass/CODE2000.ZIP>>

<<http://www.columbia.edu/kermit/utf8.html>>

When you look at the Sampler using OmniWeb, you should see Runic, Middle English, Middle High German, Modern Greek, Russian, Georgian, and many others. One or two characters are missing, but the results are still amazingly good. The only major problem is that the right-to-left scripts such as Hebrew and Arabic are backwards

(that is to say, uh, forwards). Note that you're not seeing pictures! All the text is being rendered character by character from your installed fonts, just as in a word processor.

You may wonder how an HTML document can tell your browser what Unicode character to display. After all, to get an ordinary English "e" to appear in a Web page, you just type an "e" in the HTML document; but how do you specify, say, a Russian "yu" character? With Unicode, there are two main ways. One is to use the numbered entity approach; just as you're probably aware that you can get a double-quote character in HTML by saying """, so you can get a Russian "yu" by saying "ю" (because 1102 is the decimal equivalent of that character's Unicode value). This works fine if a page contains just a few Unicode characters; otherwise, though, it becomes tedious for whoever must write and edit the HTML, and makes for large documents, since every such character requires six bytes. A better solution is UTF-8.

To understand what UTF-8 is, think about how you would encode Unicode as a sequence of bytes. One obvious way would just be to have the bytes represent each character's numeric value. For example, Russian "yu" is hexadecimal 044E, so it could be represented by a byte whose value is 04 and a byte whose value is 4E. This is perfectly possible - in fact, it has an official name, UTF-16 - but it lacks backwards compatibility. A browser or text processor that doesn't do Unicode can't read any characters of a UTF-16 document - even if that document consists entirely of characters from the ASCII range. And even worse, a UTF-16 document can't be transmitted across the Internet, because some of its bytes (such as the 04 in our example) are not legal character values. What's necessary is a Unicode encoding such that all bytes are themselves legal ASCII characters.

That's exactly what UTF-8 is. It's a way of encoding Unicode character values as sequences of Internet-legal ASCII characters - where members of the original ASCII character set are simply encoded as themselves. With this encoding, an application (such as a browser or a word processor) that doesn't understand UTF-8 will show sequences of Unicode characters as ASCII - that is, as gibberish - but at least it will show any ordinary ASCII characters correctly. The HTML way to let a browser know that it's seeing a UTF-8 document is a <META> tag specifying the "charset" as "utf-8". OmniWeb sees this and interprets the Unicode sequences correctly. For example, the UTF-8 encoding of Russian "yu" is D18E. Both D1 and 8E are legal ASCII character bytes: on a Mac they're an em-dash followed by an e-acute. Indeed, you can just

type those two characters into an HTML document that declares itself as UTF-8, and OmniWeb will show them as a Russian "yu".

If you want to learn more about the Unicode character set and test your fonts against the standard, or if you'd like to focus on a particular language, Alan Wood's Web pages are an extremely well-maintained portal and an excellent starting point. And TidBITS reader Tom Gewecke (who also provided some great help with this article) maintains a page with useful information about the state of languages on the Mac, with special attention to Mac OS X and Unicode.

<<http://www.hclrss.demon.co.uk/unicode/index.html>>

<<http://hometown.aol.com/tg3907/mlingos9.html>>

Exploring Your Fonts

Meanwhile, back on your own hard disk, you may be wondering what Unicode fonts you have and what Unicode characters they contain. Unfortunately, Apple provides no way to learn the answer. You can't find out with Key Caps, since the range of characters corresponding to keys and modifiers is minuscule in comparison with the Unicode character set. Most other font utilities are blind to everything beyond ASCII. One great exception is the \$15 FontChecker, from WunderMoosen. This program lets you explore the full range of Unicode characters in any font, and is an absolute must if you're going to make any sense of Unicode fonts on your Mac. It also features drag-and-drop, which can make it helpful as an occasional input method. I couldn't have written this article without it.

<<http://www.wundermoosen.com/wmXFCHelp.html>>

Also valuable is UnicodeChecker, a free utility from Earthlingsoft that displays every Unicode character. Unlike FontChecker, it isn't organized by font, but simply shows every character in order, and can even display characters from the supplementary planes. (Download James Kass's Code2001 font if you want to see some of these.)

<<http://homepage.mac.com/earthlingsoft/apps.html#unicodechecker>>

<<http://www.unicode.org/Public/UNIDATA/>>
<<http://home.att.net/~jameskass/CODE2001.ZIP>>

A Long Way To Go

Unicode is still in its infancy; Mac OS X is too. So if

this overview has given you the sense that Unicode on Mac OS X is more of a toy than a tool, you're right. There needs to be a lot of growth, on several fronts, for Mac OS X's Unicode support to become really useful.

A big problem right now is the lack of Unicode support in applications. Already we saw that not all browsers are created equal; we had to use OmniWeb to view a Unicode Web page correctly (try the UTF-8 Sampler page in another browser to see the difference). And there's good reason why I had you experiment with typing Unicode using TextEdit and not some other word processor. Also, be warned that you can't necessarily tell from its documentation what an application can do. Software companies like to use the Unicode buzzword, but there's many a slip 'twixt the buzzword and the implementation. Microsoft Word X claims you can "enter, display, and edit text in all supported languages," but it doesn't accept the Unicode Hex Input method and often you can't paste Unicode characters into it. BBEdit can open and save Unicode text files, but its display of Unicode characters is poor - it often has layout problems, and it can display only a single font at a time (whereas, as we've seen, Unicode characters are typically drawn from various fonts). BBEdit also doesn't accept the Unicode Hex Input method, so you can't really use it to work with Unicode files.

The operating system itself must evolve too. The Unicode standard has requirements about bidirectional scripts and combining multiple characters that Mac OS X doesn't yet fully handle. The installed fonts don't represent the full character set. More input methods are required, and Apple needs to provide utilities for creating keyboard mappings, and perhaps even simple input methods, so that users can start accessing their favorite characters easily. The Unicode standard, meanwhile, is itself constantly being revised and extended. At the same time, Windows users are getting built-in language and Unicode support that in some respects is light-years ahead of Mac OS X. The hope is that as things progress, Apple will catch up, and the Unicode promise of Mac OS X will start to be fulfilled. Then the Mac will be not just a digital hub, but a textual hub as well. ■

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Digital Cameras

by Mike Marus

DIGITAL CAMERAS are similar to the human eye. There is a lens in the front through which light passes and strikes a collection of sensors. These sensors, called CCDs (Charge-Coupled Devices—in the eye, they're called rods and cones), make up the image sensor. The image sensor records the variations in the light intensity and transfers this to an electronic signal, which is sent to a computer or saved to memory. The image sensor is the "film" in the digital camera. Just like the human eye, there is a time frame from the moment light is exposed to the sensors, the image is recorded, and the sensors are cleared and ready to take the next picture. In your eyes, this happens within milliseconds, but you see the effect when a bright light shines in your eye: the image remains after the light disappears. With digital cameras, this time lag separates the inexpensive cameras from the higher-priced ones.

When choosing a camera, you may be overwhelmed by the specifications and terminology. Addressing some of the basic questions before you get started might help to keep you focused.

- Will you be shooting indoors? This will determine the quality of the flash needed.
- Will you be photographing stationary, or moving objects? This will determine the best viewfinder and lens.
- Will you shoot wide-angle scenes (landscapes, interiors, etc.), telephoto scenes (portraits), or close-ups (stamps, coins, etc.)? This will determine the focal length of the lens.
- Are you a casual or a professional photographer? You may or may not want manual controls.
- Will you be printing the images, or will they be viewed on a computer, by e-mail, or on a web site? The resolution of the camera will effect how you want to view the images. You'll need to understand the following terms when you start looking at cameras.

Resolution:

Image resolution is the measure of sharpness and detail in an electronic image. As you enlarge (over-enlarge, actually) images, you will begin to see visible

π

square pixels in printed images. Digital camera sensors (CCDs) record a fixed number of image details, normally quoted in pixels. The higher the resolution, the more detailed the image. 640x480-pixel resolution is great for web publishing, small prints, or images in presentations that are to be viewed on a computer. You'll want resolutions over 1 million pixels (1280x960 or more) for printing photo-realistic enlargements.

Frame Rate:

There are two delays built into digital cameras:

- Refresh rate is the time from the pressing of the shutter button to the capture of the image.
- Recycle time is the time it takes a captured image to be processed and stored.

[Added by editor: with a long refresh rate, you will have a noticeable delay between the time the shutter is pressed, and the picture actually taken. With changing scenes, you may not get what you wanted. A long recycle time means that you cannot take pictures rapidly; there will be a delay between times the shutter button will operate.]

Image Quality:

The higher the resolution, the more pixels there are to store and the larger the file is. Most cameras offer several quality levels for the picture.

Optical vs. Digital Zoom:

There are two different types of zoom features: optical and digital. Optical zoom is a mechanical zoom done by the lens, making it look as if the camera has been moved closer to the object. Digital zoom is done by the camera's processor, which "guesses" what the object would look like if the camera was moved closer. Digital zoom can enlarge an image many more times than optical zoom can, but the image quality isn't as good.

Bit Depth:

This defines the maximum number of colors that a digital camera can capture. The more bits, the more color. A bit depth of 1 can store just two colors: black and white. For example, a monitor with a bit depth of 4 can display 16 different colors. An 8-bit system can display 256 colors. A 24-bit system over 16.7 million colors. The number of colors a camera captures plays a major role in its pictures' richness and fidelity. Most but not all consumer cameras are 24 bit.

Memory:

Digital cameras have either fixed memory (built into the camera) or removable memory (most often in the form of a PC card). With fixed memory, once the capacity is full, you have to download your images to a computer or erase them before you can shoot additional pictures. Most early cameras had this type of memory. With removable memory, when its capacity is full, you just have to switch to an unused memory card to continue shooting. There are two kinds of memory cards in common use: CompactFlash and SmartMedia. [Some] Sony Mavica cameras store images on standard floppy disks [or on CD-ROMS].

Connecting to a Computer:

Since most cameras now have removable memory, connectivity is easier. There are plenty of card-readers that are either USB for connectivity to newer Macs, or PC card for connectivity to PowerBooks and laptops.

Battery and AC Power:

Most cameras have an AC adapter, either included or as an option. This is especially important if you are connecting directly to a computer or to a camera-specific printer, since downloading images uses up battery power.

Now that you are loaded with information, how do you decide?

There are two great on-line resources that I used as a reference for this newsletter:

The Digital Camera Resource Page (www.dcresource.com) has reviews and a walk-through camera selector.

The Short Courses (www.shortcourses.com) web site provides on-line classes on digital photography and digital video. This is one of the sites that taught me the most about digital photography. The courses are geared toward people who already know a bit about photography, but explain it clearly enough that you don't need to be a professional photographer to make use of it.

Since looking at pictures is subjective, I recommend reading any reviews that you can find on a particular camera. This will make it easier to translate the specifications into image performance. ■

From July 2002 *Silicon Summit*, newsletter of the Silicon Mountain (CO) MUG

Washington Apple Pi Classes September & October

IT IS TIME to begin a new season of classes in the Washington Apple Pi classroom. In planning the fall schedule and looking back over the classes that were held during the past year, it is apparent that how we are using our computers is evolving. I am beginning my eighth year of teaching for Washington Apple Pi. When I began, the average Pi student was a middle-aged male and he had owned his computer for several years. He used his computer to write letters, keep track of finances and perhaps he did a little e-mail. He did not own a digital camera. He might have had a scanner, and if his computer could capture video, that was something he was not interested in. Listening to music on his computer was the farthest thing from his mind and he was using floppy disks to back up a few documents. His primary interest was learning how to keep his computer running.

Today our average student is a little older, but we certainly see younger students in the classroom as well.

While many of our students have just bought their first computer — or they are migrating from the Windows platform, we are also seeing people who are buying a new Macintosh after having owned their old computer for five or more years. Most are anxious to learn OS X and they are ready to delve into the concept of the Digital Hub that Steve Jobs keeps talking about. E-mail has replaced letters as the communication method of choice, students are more likely to be interested in learning about digital cameras than scanners. They are busy converting old family photos and film in videos and they want to burn CD's, DVD's and Video CD's. While they want to learn how to use their computers, they are spending less time trying to keep it running and more time keeping up with new things they can do with their computers.

These changes have affected the mix of classes we will be offering in the Pi classroom. While we will continue to offer Intro to the Mac course for OS 9, the Intro course for OS X will be held more frequently. *The Movin' Up to OS X* class has been replaced with a three session course called *Mastering OS X*. This course will be replacing the *Brush Up Your Mac* set that were required for many of our upper level classes. Some classes will require that you be using OS X, because the software being taught is not available for OS 9 users.

There are a number of classes that have not been scheduled yet. In particular, we are still working on DreamWeaver and Final Cut Pro. Check the WAP Cal-

Washington Apple Pi Tutorial Registration Form www.wap.org

Washington Apple Pi
12022 Parklawn Drive
Rockville, MD 20852
301-984-0300 Office@wap.org

Name _____	Please fill in the name(s) of the class(es) that you wish to attend.
Address _____	Class #1 _____
City/State/Zip _____	Class #2 _____
Phone (day) _____ (Evening) _____	Class #3 _____
Member Number _____ Non-member _____	Class #4 _____
Email address _____	Class #5 _____
Times when your are available for classes _____	Class #6 _____

Type of class wanted _____	

Mail registration and payment to the above address.

endar at calendar.wap.org and be sure to read the WAP Class updates that are e-mailed to members whose e-mail addresses we have. If you are not receiving those e-mails, go to <http://www.wap.org/lists/pi-announce.html> and add yourself to the list.

What Class Should You Take?

If you are totally new to computers and want a class that moves slowly, the Intro courses are made for you. At the end of the course, we hope you will be comfortable with writing a letter and printing it, will begin to surf the Internet, and will be sending simple e-mails. You will have learned how to save a document and how to find it again. You will know how to use the dock and how to find applications or programs that are on your computer. While you will be ready to move on to some of our less complex classes, you will need to take the Mastering OS X series before you will be ready to take many of our other classes.

If you have been using OS 9 and feel comfortable with it, or if you are coming from the Windows platform and have had a good command of it, the Mastering OS X course series will be a good place to start. By the end of the course, we hope you will be comfortable with cutting, copying, and pasting text, images and audio content within applications and between applications. You will know how to save documents to specific locations, how to find things you have saved, and how to navigate around your computer via the finder to import various file types. You will know how to use the Print Center and how to troubleshoot Print Center errors. You will also know how to deal with the file permissions and the trash, how to do basic troubleshooting, how to burn backups of your files, how to install applications and how to keep your computer up to date. *Mastering OS X* will replace the *Brush Up Your Mac Skills* course for the OS X user. If you are an OS 9 user and do not plan to upgrade to OS X, the *Brush Up Your Mac Skills* course has been replaced by *Mastering OS 9*. It also replaces *The Digging Deeper* class.

What To Do if the Course You Want Is Not on the List?

We have dropped a number of course offerings because we have not had people sign up for the course in a long time. Other courses are in the planning stages. If you do not see what you want, please send an e-mail to tutorials@wap.org to tell us what you would like to see offered.

Do I Have to be a Member to Take Classes?

While our classes are available to anyone, we offer reduced prices for members. In fact, it is always cheaper to sign up for a course or class series if you are a member. If you are not a member when the class begins you will be charged the nonmember rate. Membership is defined as delivery of a check to Washington Apple Pi. It takes two to three weeks for membership cards to be processed, so sending or delivering a check will count as membership. The member price applies to current members. Expired members and others must pay the higher price. If you are not a member, but would like to join, please use the form at <http://store.wap.org/signup.html>. The renewal form is at <http://store.wap.org/renew.html>. The cost of membership is \$49.00 per family per year. It includes a subscription to our bimonthly magazine, the Washington Apple Pi Journal and access to our Web bulletin board, the TCS.

Do I have to take all of the classes in the same series?

Our classes at WAP never have more than six students. Each class begins with everyone introducing themselves and telling the instructor what they presently know and what they hope to learn. The class sessions are then tailored to meet the needs of the students in the class. This means that the class sessions may not cover exactly the same material in exactly the same session from course set to course set. Since we must have three students in any class in order for it to be offered, having students sign up for individual sessions may mean that Pi will lose money on a course due to insufficient registration for other classes in the set. Therefore, you must pay for all sessions in the course. If you miss a session, make ups will be at the convenience of the tutorial program and we will not add you to a different session unless there are more than three people, and fewer than six people signed up. It will be your responsibility to watch for future sessions and to call regarding class openings.

Do I have to pay in advance?

Since our office manager left, it has been difficult to prepay for classes. However, since the office is now open from at least 10 a.m. to 1 p.m. on most Mondays, Wednesdays and Fridays, please call the office to arrange payment by credit card or send a check to Washington Apple Pi, Attn. Tutorial Program: (add the name and date of the class) 12022 Parklawn Drive, Rockville MD 20852. You are not officially enrolled in the class until your payment has been received. Your check or credit card pay-

ment will not be presented until the day of the class. If you must cancel your enrollment in a class, notification must be given to Washington Apple Pi no later than 48 hours in advance. If the class is to take place in less than 48 hours, you will not receive a refund except in very unusual cases. We are returning to this policy because we have had far too many no-shows. Check the Washington Apple Pi Web site, www.wap.org for additional payment options in the coming months.

How do I sign up for a class?

To sign up for this class send an e-mail to tutorials@wap.org with the class name, date and time, your name, address, e-mail address, phone number and WAP membership number.

Where are the classes held?

Classes are held in the Tutorial Room at Washington Apple Pi, 12022 Parklawn Dr., Rockville, MD.

Are classes ever canceled?

Class will be canceled if there are fewer than 3 students signed up 2 days before the class is to be held. You will be notified via e-mail if this happens. In the case of inclement weather, classes are canceled if school is canceled or delayed for two hours in Montgomery or Fairfax county. Classes will be rescheduled.

General Macintosh Classes

Mac OS X New User Series

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 e-mails 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.

Prerequisites: None Cost: Current Members: \$140 Others: \$190

Instructor: Pat Fauquet

Dates: —Monday, September 9, 2002; Wednesday, Sep-

tember 11, 2002; Monday, September 16, 2002 and Wednesday, September 18, 2002 from 9:30 a.m. to 12:30 p.m.

Instructor: Pat Fauquet

—Tuesday, September 24, 2002; Thursday, September 26, 2002; Tuesday, October 1, 2002; and Thursday, October 3, 2002 from 1 p.m. to 4 p.m. Instructor: Jim Ritz

—Tuesday, October 22, 2002; Thursday, October 24, 2002; Tuesday, October 29, 2002 and Thursday, October 31, 2002 from 9:30 a.m. to 12:30 p.m. Instructor: Jim Ritz

Mac OS 9 New User Series

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 e-mails 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.

Prerequisites: None Cost: Current Members: \$140 Others: \$190

Instructor: Jim Ritz

Dates:—Tuesday, September 24, 2002; Thursday, September 26, 2002; Tuesday, October 1, 2002 and Thursday, October 3, 2002 from 9:30 a.m. to 12:30 p.m.

—Tuesday, October 22, 2002; Thursday, October 24, 2002; Tuesday, October 29, 2002; and Thursday, Oct. 31, 2002 from 1 p.m. to 4 p.m. each day

Mastering OS X

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.

Prerequisites: OS X Four Part New User Series or Permission of the Instructor Cost: Current Members: \$150

Others: \$200

Dates: —Tuesday, September 10, 2002; Thursday, September 12, 2002; and Tuesday, September 17, 2002 from 9:30 a.m. to 12:30 p.m. Instructor: Jim Ritz

—Monday, September 23, 2002; Wednesday, September 25, 2002 and Monday, September 30, 2002 from 1 p.m. to 4 p.m. Instructor: Pat Fauquet.

—Monday, October 14, 2002; Wednesday, October 16, 2002; and Monday, October 21, 2002 from 9:30 a.m. to 12:30 p.m. Instructor: Pat Fauquet.

Mastering OS 9

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 9. This course replaces the Brush Up Your Mac Skills and Digging Deeper courses. The course is not designed for users who are primarily using OS X. If your primary operating system is OS X, please sign up for OS 9 for OS X Users. This course consists of a series of three three hour sessions. Students are expected to attend all three sessions in the same series.

Prerequisites: Four Part New User Series or Permission of the Instructor

Cost: Current Members: \$150 Others: \$200

—Tuesday, September 10, 2002; Thursday, September 12, 2002; and Tuesday, September 17, 2002 from 1 p.m. to 4 p.m. Instructor: Jim Ritz

OS 9 for OS X Users

While most applications are available for OS X today, there are times when OS X users must use Classic or even boot their computers into OS 9 to run certain applications. This course will cover differences between the two operating systems and their use. Students will also learn what changes to make in OS 9 to make the Classic mode operate more efficiently. The course is designed for OS X users who must occasionally use OS 9. This course is offered as one three hour session.

Prerequisites: Mastering OS X Cost: Current Members: \$50 Others: \$100

Dates: —Thursday, September 19, 2002 from 9:30 a.m. to 12:30 p.m. Instructor: Jim Ritz

—Monday, October 21, 2002 from 1 p.m. to 4 p.m. Instructor: Pat Fauquet

How to Open Almost Any File

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. This course is offered as one three hour session.

Prerequisites: Mastering OS 9 or Mastering OS X Cost: Current Members: \$50 Others: \$100 Instructor: Pat Fauquet

—Friday, September 6, 2002 from 9:30 a.m. to 12:30 p.m. Instructor: Pat Fauquet

—Tuesday, October 8, 2002 from 1 p.m. to 4 p.m. Instructor: Jim Ritz

Digital Video Classes

iMovie Slideshows

Bring your camera full of digital photos, a photo CD or photos on a portable hard drive to learn how to make a video from them. We will edit the photos, add transitions, effects, voice and music to complete a project that friends and family will want to watch. Completed projects will be made into Video CDs or QuickTime movies ready for the web. This course is six hours long. It will be taught either as an all-day class or in two three hour sessions.

Prerequisites: Mastering OS 9 Cost: Current Members: \$100 Others: \$150 Instructor: Pat Fauquet

Dates: —Wednesday, September 4, 2002 from 9:30 a.m. to 4 p.m. or

—Monday, October 28, 2002 from 9:30 a.m. to 4 p.m.

Using iMovie to Edit Video Content

Bring your digital video camera with some movie footage, your firewire cable and the power cord for your camera, a new video tape and we'll make a movie. You will learn to edit your video, add titles, transitions, effects, music and voice to your movie. Then we send the edited movie back to your camera, make a QuickTime movie, and show you how to make DVDs and Video CDs. This course is six hours long. It will be taught as an all-day class.

Prerequisites: Mastering OS 9 or Mastering OS X Cost: Current Members: \$100 Others: \$150

Dates: —Wednesday, October 9, 2002 from 9:30 a.m. to 4 p.m. Instructor: Pat Fauquet.

Graphics and Digital Photography

Introduction to iPhoto

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 or a zip or CD with digital images to learn how do these and more projects. This course is offered as one three hour session.

Prerequisites: OS 9 Four Part New User Series or Permission of the Instructor Cost: Current Members: \$50 Others: \$100

Instructor: Pat Fauquet

—Monday, September 9, 2002 from 1 p.m. to 4 p.m.

—Monday, October 14, 2002 from 1 p.m. to 4 p.m.

Introduction to Adobe Photoshop Elements

Now that you are taking digital photos or scanning pictures, learn how to fix problems such as over exposed or under exposed pictures, color casts and contrast issues. This inexpensive program is often included with cameras, scanners and printers. It may be all you will ever need to edit and print your treasured photos. Come learn how to use it! This course is offered as one three hour session.

Prerequisites: Mastering OS 9 or Mastering OS X Cost: Current Members: \$50 Others: \$100

Dates: —Wednesday, September 11, 2002 from 1 p.m. to 4 p.m. Instructor: Pat Fauquet

Adjustment and Image Layers in Photoshop Elements

The ability to add layers to an image and then to work on 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. This course is offered as one three hour session.

Prerequisites: Mastering OS 9 or Mastering OS X Cost: Current Members: \$50 Others: \$100

Dates: —Wednesday, September 18, 2002 from 1 p.m. to 4 p.m. Instructor: Pat Fauquet

Adobe Photoshop 1

Learn the basic fundamentals of Adobe Photoshop, the most widely used graphics program. Learn the proper way to configure the Photoshop preferences and how to

use the tool, info, channel and color palettes. Also learn how to use each of Photoshop's tools, create new documents, define colors and manipulate text and images. Also covered will be the proper format to save your image in, and what compression will or won't do to your image.

Prerequisites: Mastering OS 9 or Mastering OS X Cost: Current Members: \$50 Others: \$100

Dates: —Wednesday, September 25, 2002 from 6:30 p.m. to 9:30 p.m. Instructor: Paul Schlosser

Adobe Photoshop 2

Learn how to isolate different parts of an image or layers. Edit layers as discrete artwork with unlimited flexibility in composing and revising an image. Create more complex effects in your artwork using layer masks, clipping groups, and adjustment layers. This class includes both layer basics covered in the Photoshop tutorial and advanced layer techniques.

Prerequisites: PhotoShop 1 or Permission of the Instructor Cost: Current Members: \$50 Others: \$100

Date: —Wednesday, October 30, 2002 from 6:30 p.m. to 9:30 p.m. Instructor: Paul Schlosser

Web Pages with iPhoto, iDisk and .Mac Homepage

Bring your camera full of digital photos, a photo CD or photos on a portable hard drive to learn how to make a video from you them. We will edit the photos, add transitions, effects, voice and music to complete a project that friends and family will want to watch. Completed projects will be made into Video CDs or QuickTime movies ready for the web. This course is six hours long. It will be taught as an all-day class.

Prerequisites: Mastering OS 9 Cost: Current Members: \$100 Others: \$150

Date: —Wednesday, October 30, 2002 from 9:30 a.m. to 4 p.m. Instructor: Pat Fauquet

How to Make Great Prints

Bring your printer, its software and some digital photos to class. We will explore how to get good results, how to choose the best paper for your project and how to make a variety of decorative items with your printer. This course is six hours long. It will be taught as an all-day class.

Prerequisites: Mastering OS 9 or Mastering OS X Cost: Current Members: \$100 Others: \$150

Dates: —Wednesday, October 2, 2002 from 9:30 a.m. to 4 p.m. Instructor: Pat Fauquet

Productivity

AppleWorks Word Processing

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.

Prerequisites: OS 9 or OS X Four Part New User Series or Permission of the Instructor Cost: Current Members: \$50 Others: \$100

Dates: —Thursday, September 19, 2002 from 1 p.m. to 4 p.m. Instructor: Jim Ritz

Putting AppleWorks to Work

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 in two three hour sessions.

Prerequisites: Mastering OS 9 or Mastering OS X Cost: Current Members: \$100 Others: \$150

Dates: — Tuesday, October 8, 2002 and Thursday, October 10, 2002 from 9:30 a.m. to 12:30 p.m. Instructor: Jim Ritz

Introduction to FileMaker Pro

This course covers what a database is, database terms, how to plan a database, and create database fields and layouts. Searching, sorting, printing and editing information in a database will also be covered. This course is offered as one three hour session.

Prerequisites: Mastering OS 9 or Mastering OS X Cost: Current Members: \$50 Others: \$100

Dates: —Monday, September 16, 2002 from 1 p.m. to 4 p.m. Instructor: Pat Fauquet

Other Classes

iTunes, Internet Radio, iPods and Making Music CDs

There is more to iTunes than meets the eye. Learn how to copy your CDs to your computer, add song information to the files, listen to Internet radio stations, make mix CDs and use your iPod to store music, addresses, dates, notes and even files. If you do not have an iPod, you will learn why you might want to add one to your wish list. This course is offered as one three hour session.

Prerequisites: OS 9 or OS X Four Part New User Series or Permission of the Instructor Cost: Current Members: \$50 Others: \$100

Dates: —Monday, September 23, 2002 from 9:30 a.m. to 12:30 p.m. Instructor: Pat Fauquet

Lets Burn Some CDs

Learn the finer points of making music, data and video CDs in this three hour class. Learn all about Roxio Toast and the Apple Disc Burner software. Learn how prepare data, optimize files and make labels too. This course is offered as one three hour session.

Prerequisites: Mastering OS 9 Cost: Current Members: \$50 Others: \$100 Instructor: Pat Fauquet

Dates: — Monday, September 30, 2002 from 9:30 a.m. to 12:30 p.m.

—Wednesday, October 23, 2002 from 1 p.m. to 4 p.m.

OS X Only

OS X Mail, the Address Book and iChat

Microsoft is not upgrading Outlook Express to run in OS X. Instead Apple Computer has written Mail as the suggested e-mail client for OS X users. Come learn about this simple but powerful program. Learn how to combat spam, filter your mail, use the system wide OS X Address Book and how to use iChat. Students will learn how to migrate their existing mail and address books and learn how to check e-mail via the web when they are away from home. This course is offered as one three hour session.

Prerequisites: Mastering OS X Cost: Current Members: \$50 Others: \$100

Dates: —Thursday, October 10, 2002 from 1 p.m. to 4 p.m. Instructor: Jim Ritz

iCal, iSync, Palm PDAs and the Address Book

OS X 10.2 has made it possible to keep all the data in your life synchronized. Learn how to use these free applications to keep all of your contact data in one place and then use that one file to keep your computer, address book, PDA, e-mail application and even some cell phones using that same data. This course is offered as one three hour session.

Prerequisites: Mastering OS X

Cost: Current Members: \$50 Others: \$100

Dates: —Wednesday, October 16, 2002 from 1 p.m. to 4 p.m. Instructor: Pat Fauquet ■

Other Educational Opportunities

Apple Computer Inc.

Reston, VA 703-264-5100 or
www.seminars.app.com

MacBusiness Solutions

301-330-4074 or
www.mbsdirect.com

MacUpgrades

301-907-0300

Micro Center

703-204-8400
or www.microcenter
educaton.com

Piowar & Associates

202-223-6813
or www.tjpa.com

Member of a

SIG? Help by

sending cop-

ies of your

minutes to the

journal.

Classifieds

Classified advertisements can be placed by mailing copy to the business office of Washington Apple Pi, Ltd., 12022 Parklawn Drive, Rockville, MD 20852. Be sure to include your WAP membership number and indicate area codes with your phone numbers. Ads must be received by the ad copy due date listed in the calendar page for that month in order to be included in the appropriate issue. Any ads postmarked after that time will be included at the discretion of the editor. Cost is \$2.00/line (40 characters per line), maximum 12 lines. Members of Washington Apple Pi, Ltd., may place ads up to three lines at no charge. The editor reserves the right to refuse any ads deemed inappropriate.

Services

Mac Hardware, software, networks & training. Apple factory trained & A+ Certified. Marchetti Associates. LLC. 301-404-2210 or philm@erols.com

Waterfront property

—Are you interested in a second home or a retirement home on the water but not too far from DC? Within 2.5 to 4 hours of the District is the Northern Neck of Virginia. Located between the Potomac and Rappahannock Rivers this area has an extensive selection of waterfront properties either in communities with amenities or in more secluded settings. If you are interested in learning more about properties in the Northern Neck please call Kathryn Murray at 804-580-2366 or email her at KAM129@aol.com (Realtor® with Barnes Real Estate Inc.)

Law Office of

Richard S. Sternberg

A General Practice of Law
since 1984

General Civil & Criminal Litigation
Employment, Labor & Civil Rights
Personal Injury & Auto Accidents
Business and Corporate Practice

Domestic Relations

Wills & Probate

Admitted DC, MD, VA &

Fed. Courts

First consultation free and discount rates
with valid Pi membership
(202) 530-0100

—**Mac Tutoring and troubleshooting help.** Arlington area. \$50/hour. Phil Shapiro. Contact pshapiro@his.com

For Sale

—**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>.

Help Wanted

—**Senior Software Engineer:** V-ONE Corporation is looking for a Senior Software Engineer for Mac Client. Please refer to our website at www.v-one.com, or e-mail HR at paige@v-one.com

—**Idactix, LLC Consulting** - Expert Mac solutions and troubleshooting. Services include networking, AirPort, FileMaker databases, AppleScripting, PC/Mac integration, and data backup. Prompt on-site service. 301-530-2607 or info@idactix.com.

—**Volunteers Needed:** Recording for the Blind and Dyslexic of Metro Washington is looking for volunteers who can read technical books (as well as books on a wide variety of subjects). 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 (as well as folks interested in history, poetry, education, politics, fiction, religion, etc.) willing to volunteer 2 hours a week to help read textbooks into a computer. We also need directors to monitor the readers and control the computers. When the reading of a book is completed, the text is transferred to a CD. The CDs are used by student borrowers who request specific books. Interested folks can come by any Monday-Thursday evening. Evening recording sessions start at 5:30 and 7pm. Else, they can call Laurel after 3pm at 202-244-8990 and get more info. ■

Membership Application

New Member *Renewal*

Please print or type:

Name _____ Company _____

Address _____

City _____ State _____ Zip _____ Email _____

Home Phone _____ Work Phone _____
(Must have for the TCS)

Occupation _____

Please answer a few questions for us regarding your computer use. Check the computers/equipment that you use on a regular basis.

- | | |
|---|--|
| <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 |

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)

- | | |
|---|------|
| <input type="checkbox"/> Basic Membership—1 year | \$49 |
| <input type="checkbox"/> Student rate* for 1 year | \$42 |

Indicate desired New Member Kit (1 only)

- Mac 1.44 k
 Mac CD

For other options please add correct amounts

- WAP Bulletin Board System (TCS)**with e-mail \$ 20
- WAP Bulletin Board System (TCS)**with Internet \$ 171
- 1st class mail (U.S.) \$17
- Airmail to Canada, Mexico, West Indies or Cental America \$20
- Airmail to Europe & South America \$38
- Airmail to Asia & elsewhere \$48
- Surface to Europe, Asia & elsewhere \$18

Total enclosed \$ _____

Please circle Yes or No for the 2 items below.

1. Please leave my name on the Pi mailing list. (The list never leaves the office and all mailings are supervised by the Pi staff.)

Yes No

2. My name, address & phone number may be published in the membership director.

Yes No.

*Please enclose photocopy of current student ID.

** Access to the TCS is contingent on WAP having a current home telephone number for the member.

Applicant signature and date

Rated by Consumer Checkbook and featured on Channel 4 News as a top computer service company!

Bethesda Computers and Networks, Inc.

4931 Cordell Avenue, Bethesda MD 20814

Phone: (301) 652-5108, Email: bcnt@erols.com

www.bethesdacomputers.com

Deals!

\$25 instant rebate on any Apple computer purchase!*

Get \$20 off an AppleCare Protection plan if purchased with a Mac.*

Call for information about current Apple promotions!

New iMac G4's with 15" Flat Panel!

\$1399 700MHz/ 128MB/ 40GB HD/ CD-RW/ Ethernet/ 56K
\$1599 700MHz/ 128MB/ 40GB HD/ Combo/ Ethernet/ 56K/ Speakers
\$1899 800MHz/ 256MB/ 60GB HD/SuperDrive/ Ethernet/ 56K/ Speakers



iPod's from \$399



PowerMac G4 Tower

\$1599 800MHz/ 256MB/ 40GB HD/ CD-RW/ Radeon 7500/ 56K
\$2299 933MHz/ 256MB/ 60GB/ SuperDrive/ NVIDIA GeForce4 MX/ 56K
\$2999 Dual 1GHz/ 256MB/ 80GB/ SuperDrive/ NVIDIA GeForce4 MX/ 56K

Call about Special Government Pricing

Titanium PowerBook G4

\$2499 667MHz/ 256MB/ 30GB HD/ Combo/ Gigabit Ethernet/ 56K
\$3199 800MHz/ 512MB/ 40GB HD/ Combo/ Gigabit Ethernet/ 56K/ AirPort Card Included



iBooks from \$1199

\$1199 12.1-inch/ 500MHz G3/ 128MB/15GB HD/ 56K
\$1499 12.1-inch/ 600MHz G3/ 128MB/20GB HD/ 56K
\$1799 14.1-inch/ 600MHz G3/ 256MB/25GB HD/ 56K

*Rebate subtracted from price at time of purchase. Customer must present this ad at time of purchase.

**Up to 512MB. \$30 installation fee required. Call for details.

Washington Apple Pi, Ltd

12022 Parklawn Drive
Rockville, MD 20852

September / October 2002

Periodical
Postage rates
paid at
Rockville, MD