

The Journal of Washington Apple Pi, Ltd.

# WASHINGTON APPLE PI

Volume 23, Number 6

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## Address List

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ADDRESS  
CITY  
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COUNTRY  
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OFFICE PHONE  
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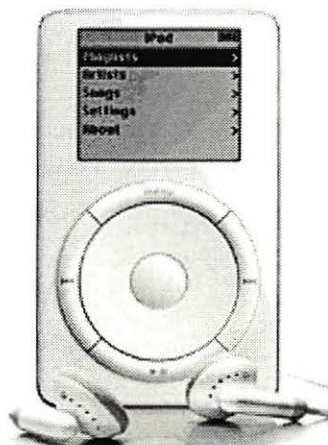
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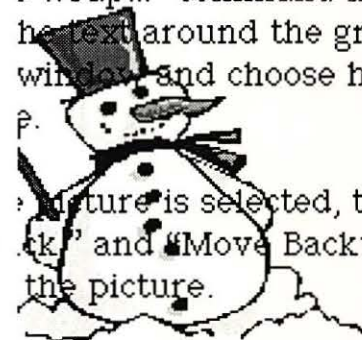
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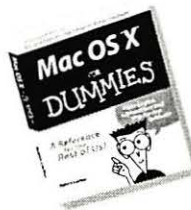
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"more fun than an Apple I" - Stan Wozniak

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for the latest news.



Members: \$5/person  
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\$30 with electricity



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## Icon Guide



Macintosh



General Interest



Apple II, IIe, & IIGS



Apple III (SARA)

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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.

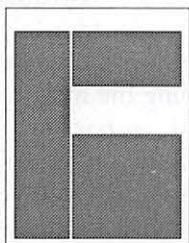
The page layout program used was PageMaker 6.5 the word processing program was Microsoft Word 5.1; the principal typeface is Palatino (10/12) for the articles; and Avant Garde Demi for headlines, subheads, and emphasis. Charlemagne Bold for drop caps.

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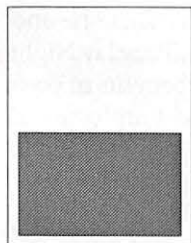
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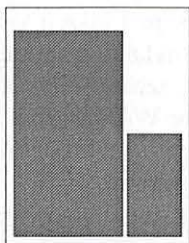
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# Welcome to WAP!

By Dave Ottalini

I'M SITTING here tonight at work—just a few days after the tragic events in New York and Washington, DC—trying to write my short column welcoming you to our club. As a journalist, this has probably been the toughest story I've ever covered—simply because of the heartbreak and disbelief. But I know that I'll get through these difficult times just as our country will. I'm sure you and your loved ones will too.



Your decision to join Washington Apple Pi was an important one. You had to think about joining and then fill out the form and pay the money. As such, you have shown that you are willing to be someone who doesn't just use a Macintosh, but someone who wants much more. You've decided that WAP is the vehicle that will help you get what you want from the computing world. I'm here to tell you that your new club is ready, willing and able to help you succeed.

Washington Apple Pi is, above all, a union of people who care about learning the most they can about a special box of hardware and software. Of course its not just *any* box (or Cube if you're lucky enough to have one). It's a Macintosh. And as such, you've joined a group with a higher calling, a higher interest. Our members work hard to help each other become more productive using a Mac. We do that in any number of ways. Just take a look through this magazine and you'll see what I'm talking about. Tutorials, CDs, Tuesday Night Clinics. This magazine itself is one of the major benefits of your membership. The WAP Journal is one of the most professional Mac User Group magazines you will find. And you're going to get it ever other month.

Beyond that, this club offers you opportunity. Opportunity to learn. Opportunity to give back. We have many, many jobs that need to be done. Some require only a little time. Others a bit more. But we hope that as you grow more confident using your Mac, you'll also consider giving back a little of that knowledge to fellow WAP members. Just email [office@wap.org](mailto:office@wap.org) for more information.

I've been a member of this club for many, many years. Over that time, I have learned so very much from so many wonderful people. I still depend on many of them at times—our strength is in the shared knowledge of all. I am thrilled you've joined us! Your experience, knowledge and (I hope!) volunteer efforts will add a great deal to all our memberships. ■

*If you have questions contact me at [MacNovice@wap.org](mailto:MacNovice@wap.org).*

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# Ten dot One

I AM THE person around here who travels in the back of the technology pack. I have never seen a cellophane-wrapped package of computer anything that was worth opening first. [ed. note: cellophane is to shrinkwrap, as Evans is to technology].

So the nice man who assigns articles to be written for the Journal asked me to tell you about the new release of the Macintosh Operating System OS X v10.1. He reminded me that Apple is betting the farm on this new operating system and needs all of us to switch to it. The reasoning seems to be that writing about the update will convince me to upgrade. So, I will pass that on to you. I was told that if anyone could convince others to switch, I could. I began to wonder if our assignment editor has ever read my stuff. Great stampedes I don't create. Aphorisms that contain water and oceans in them, or windmills and horses come to mind. But I did my homework. I discovered it all begins with . . .

## Where's The Beef?

Fritz got lots mileage with that line. To live with that analogy, it's not where it is, but the age of it. You see, the underpinnings of the Macintosh operating system go back to a time of small hard drives, expensive RAM, slow processors, and a paucity of peripherals.

The things you want to do with a computer today were at best dreams in the early 80s. The roots of the Mac OS were never expected to encounter the choices we have today in peripherals and applications. Clearly a new, more robust OS must come to the Macintosh. Robust means simply:

- you can start a sequence of actions in InDesign and work in GoLive at the same time: preemptive multi-tasking
- that if a new Illustrator plug-in crashes that application, the Photoshop task running in the background is unaffected: memory protection
- a Photoshop task can execute on one processor while Illustrator runs on another, truly making dual-processor machines act like two machines in one: full symmetric multiprocessing

## Chickens or Eggs

But, something has to come first. It is either the operating system or the applications that run under the operating system. Well, you could do what Apple did when it introduced the Mac 128 and Sun does today: bundle applications with the new operating system. But bean counters are not big on that these days. Then there is something called. . .

## Track Record

Oops, who brought this up? Apple has developed some very creative technologies for its computers. It also dropped technologies it had backed like OpenDoc



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(a universal document-centered system); PowerTalk (universal mail and directory services); QuickDraw GX (display and print methodology) and HyperCard to name a few that aren't around any more or appear to be dead. If you were a developer that decided to believe that each was a methodology that Apple was going to incorporate into its operating system and support, then you sunk bucks into work that Apple abandoned. Ask Nissus or Claris to name two that believed Apple. May I bring up several self-induced immolations prior to the arrival of OS X. Some of the code names of projects that were to become the next generation Macintosh operating system include Pink, Copland, Gershwin, and Rhapsody. It just seems that Apple does not have a solid reputation for promising to follow a course of action and actually seeing it through. Thus, if you create applications, do you design your program based on a briefing from some Apple hand-holder or on the released operating system? My understanding from what I found is that the aps people are holding back and for good reasons.

### **Ten Dot 0 vs. Ten Dot 1**

Just how different is the initial release from new version? Huge. But it is not the eye candy differences that really matter in this story. The new release is a major rewrite of the myriad pieces of code that tie the operating system together. It is the stuff you don't see, but the stuff that applications designers depend upon that make 10.1 such an important release for Apple and one that offers developers the level of assurance they seek before committing big bucks to design applications that take advantage of the tools that run in the background. This update also allows us a peek into the struggle that appears to be ongoing among the programmers who develop the operating system.

### **That Human Interface Thing**

In addition to the struggle to correct the underpinnings of the operating system, there is a struggle going on for the way you and I interact with our computer under Mac OS X. To put it simply, the struggle is between the Macintosh way of doing things—not where those pieces are located, but how we do it—and the way operators interacted with the NeXT computer, the core of whose operating system is now at the heart of the new Mac OS. The programmers from NeXT who came to Apple in the acquisition, want us to interact with the OS the way one did on a NeXT box. Many in the Mac community object. Let me give you an example.

### **The Alias**

You know that a Mac alias tracks its target files by a unique file number that stays with the file as long as it exists on your hard drive, no matter how you otherwise change the file. You can move the alias file anywhere, and you can move or rename the original file anywhere on the same volume. The connection doesn't break. You can leave the original file where you wish while referencing it via the alias from wherever you want to place it. You can create an alias of the AppleWorks application on your desktop for convenience and retain full functionality with the program. This makes no sense to a UNIX operating system.

There are many more examples such as this. The challenge is for Apple to preserve the value and power of UNIX in Mac OS X while adapting its traditional elements to suit Macintosh owners. Mac OS X v10.1 is an improvement; but the tension between the two views remains. Those of you who played with the beta release, then the initial commercial release, and now update v10.1 are aware of how much the interface has moved back to being more Mac-like. Much more is needed.

Mac OS X goes farther than any preceding operating system in putting a human interface on UNIX, but there is clearly a clash of cultures going on. The UNIX people obviously want to turn the Mac OS X into another UNIX flavor, one with mainstream hardware and software support and a bouncy graphical shell. We want our computers to act like Macs, and any UNIX concepts that interfere with this should therefore be hidden or eliminated. There's much more of this to come. You may not always see it, but at least you are now aware of it. Sometimes I wonder who bought whom.

### **At A Fork in The Road**

OS X is the way it is going. It has to be if we want to take advantages of the great new hardware features Apple has incorporated in its machines and the applications it is creating to take advantage of those features. Apple VP Phil Schiller (worldwide product marketing) put it succinctly when he said: "Our strategy is to make the world's best personal computer, and that's called a Macintosh. And so we invent...technology to make the Mac a better platform and a better solution for our customers." But how does that affect you and me?

If you are asking me about my desires for the financial viability of Apple, I care. I take considerable satisfaction that for the fourth quarter of its fiscal year, the Company posted a net profit of \$66 million, or \$.19



per diluted share, when Wall Street speculation was \$.15 per share. That represents 850 thousand machines shipped.

I believe the newly upgraded PowerBooks and existing desktop computers are scrumptious. Our classes on using digital cameras, iMovie, FinalCutPro, etceteras are full. There is immense satisfaction in creating those kinds of works — work that can only be done on a modern Macintosh computer. It is significantly easier to create such projects on a Mac than on any Windows machine. Digital mastery requires modern machines running a modern operating system if you are to gain access to the features that make owning one so satisfying. All that contributes to the robust bottom line reported by Fred Anderson, the Chief financial Officer at Apple on October 17th.

### Absent a Digital Lifestyle?

But my computer is a tool for work you say. I want it to work for me until I shut it down at the end of the day. I like the way this human interfaces with this box in front of me. I find I am more productive using this computer than others I have used that run under a different operating system. I want to retain that human/machine interaction. Bells and whistles don't attract me. I want to retain the interpersonal functionality I now enjoy with my Macintosh. I am willing to wait out the internal machinations that are currently ongoing inside the OS X design team for the human interface heart of the Macintosh Operating System. I obviously hope human/machine interface — and do not confuse that with what it looks like visually — will be retained. The original release of OS X was not encouraging. v10.1 is much better, but does not give me enough of a warm fuzzy feeling that the NeXT designers have given up making things right for the rest of us. Well, if you feel that way, wait it out.

### The Bottom Line

We each must weight two items: altruism and needs. I don't mean to make light of it, but do you want to help prime the economic pump of the economy of the United States? If yes, go buy a nice new desktop iMac or Silverado G4; or a shiny new titanium or polycarbonate laptop from your local dealer and get on with it. Sure there is a learning curve, more so for converters like you and me that for the converted coming to OS X from the PC world and working with the Mac interface for the first time. The consensus among our instructors is that once you install Mac OS X, you accommodate to its differences pretty quickly. Most of

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“The things you want to do with a computer today were at best dreams in the early 80s. The roots of the Mac OS were never expected to encounter the choices we have today in peripherals and applications. Clearly a new, more robust OS must come to the Macintosh. Robust means simply...”

---

our students often boot into Mac OS 9 because Mac OS X can't yet do everything Mac OS 9 can do, but that's changing rapidly as well.

If you are the type that wants to work it through, try this road map. First, keep in mind that your present Macintosh will not atrophy from envy or cookies delivered to your computer via the web. What will happen is that the applications you rely on will not receive further updates. At some point you will find access to websites denied to you because your browser does not recognize new design features that take advantage of the new tools in newer web applications. It happened to our forbears who still run Mac System 7.1 and Navigator 1.1, and it will happen to you. When, I don't know; that it will, yes.

You want to take very good care of your peripherals, especially if they are ADB or serial devices. When they go you will have a very hard time finding replacements. We will be here to help you, but no promises. Losing such devices will essentially force the move on you.

Your clue as to the road to travel is you. Look at how you use your Macintosh.

- if the majority of what you do is word processing, web browsing, corresponding via e-mail, and shuffling files from folder to folder, and you are satisfied doing it as you do it, stay with your existing equipment and operating system. Understand the limits of what you have, and keep all in good working order. Your transition date is the furthest out.

- if you are planning to upgrade your equipment,



buy new. You cover both sides of this story. At this writing, a new Macintosh comes with two operating systems installed: Mac OS 9.2 and Mac OS X v10.1. Thus, you can avail yourself of the rich base of applications that run under OS 9 and can cross over to OS X when it suits you. You will have crossed the divide on peripherals. All will be USB, Ethernet, or FireWire so your investment has serious longevity.

- if you like using the latest stuff, Mac OS X v10.1 works just fine. Classic (OS 9) support for all your older programs is robust. If you crash a program in Classic mode, you restart Classic - not restart the whole computer. If you use a substantial number of native (OS X) applications, you start getting real Mac OS X benefits. If any of them crash, the rest of the system is unaffected. Applications written for X have a full Aqua interface and can access features like Quartz graphics, useful Dock icons, the Services menu, and lots more. Best of all, preemptive multi-tasking means you can listen to streaming media and browse the Web while writing and copying files, all without missing a beat. That is what X is all about.

- If you are a serious Power user, you have a different measure. If you spend your day in Photoshop, QuarkXPress, FreeHand, Acrobat 5, Final Cut Pro, or working with peripherals like scanners or graphics tablets, you may find Mac OS X a hindrance instead of a help. You need its underpinnings, but the lack of native applications is not a incentive builder to switch yet. Well, there is one advantage. If you crash one of your heavy duty aps, the rest of the system is unaffected.

Lots of good work has gone into making Apple's new operating system faster and smoother than was the initial release. At the moment, our power users find it of limited utility and those of us who travel in the middle of the pack find it of marginal value. All this is changing as the OS stabilizes and the applications producers update and refine their products to take advantage of this new OS.

I offer Phil Schiller the last word. Stephen Wildstrom of BusinessWeek quotes him as saying that Mac OS X will be the primary operating system on all new Macintosh computers before the first anniversary of its initial release [March 2002]. That statement reduces this story to its simplest form.

- Lorin

## Mac OS X 10.1: Where Do I Get It?

a report from Pi Labs

**Y**OU HAVE probably heard too many stories by now on how to obtain the Mac OS X 10.1 upgrade, which is "free" even though it costs \$20.00 shipping and handling. You may be even more confused because the instructions on most Web sites refer only to the US and Canada. The rules in other geographic regions differ a bit; so check carefully.

### What Am I Getting?

A lot depends on how much you pay. There are four different CDs involved: the Mac OS X 10.1 update; the Mac OS 9.2.1 update; the full install Mac OS 9.2.1; and, Developer Tools.

- Let's start with the easy non-option. For lots of good technical reasons, you cannot download the updates. You can download the contents of the Developer Tools CD if that is of interest to you [see below].

- You can visit your local Apple retailer — the one I hope you patronize — and ask for the upgrade package. It contains two CDs: the 10.1 and the 9.2.1 update disks. Most will give it to you, although they may charge if they wish. Keep in mind they had to pay to get them shipped to the store.

- You can go on line to the Apple Up-To-Date program <<http://www.apple.com/macosx/uptodate/>>, fill out a form certifying that you own Mac OS X 10.0 so you qualify for the upgrade, and mail it in with your payment. Your \$20.00 gets you the 10.1 update CD, a complete copy of OS 9.2.1 (not just the update), and the Developer Tools CD. That is the bargain package. For all those grouchers who are complaining about the "free" update costing \$20.00, try buying a full copy of Mac OS 9.2.1 for that amount. Watch the calendar: your order must be postmarked by December 31, 2001.

If you live off the North American continent, acquisition has a few more obstacles. The CDs are the



same; getting them is trickier. If you have friends, the USPS fee to ship the two CD set airmail is \$10ish. If you would like to know what the rules are for your location, the URL for the United Kingdom <<http://store.apple.com/0800-7834846/WebObjects/ukstore>> will work for almost any country if you substitute your Apple country abbreviation for "uk"; for example, Australia is </australiastore> , Switzerland is </swissfrstore>, etcetra. Be sure to read carefully the Web page with instructions for your country. Prices and rules vary.

### I Do Not Own Mac OS X 10.0

This upgrade is of no interest to you. All upgrade packages available are premised on your owning Mac OS X 10.0. If you do not have Mac OS X 10.0 installed on a system, the update CD is worthless. If you have Mac OS X but never installed it, you'll need to install 10.0 on your system, then update it to 10.1 with the update CD.

No upgrade paths include a full installation CD. The "Read Me" file on the Update CD clearly states that if you have removed Mac OS X, you'll need to re-install it before the update can be used. If you don't own it and want it, buy the retail package for Mac OS 10.1.

### I Own It – and Do Not Use The Developer's Tools

You have lots of options. You can update an existing Mac OS X 10.0 system from the free CD set mentioned above, or you can order the three-CD set so you have a full install copy of Mac OS 9.2.1 as well the developer tools you don't use.

If you are a person who likes one disk to perform the entire installation, that is you want to do a "clean install," rather than install patches from the update CD, you'd ought to purchase the full retail package. By the way, there is no reason for you to do that.

There are two install options on the 10.1 update CD. Either option requires Mac OS X 10.0 to be installed before the update CD will even begin to do its magic. One option updates your existing installation of 10.0 to 10.1; the other erases your hard drive and installs the full operating system. Remember: either requires Mac OS X 10.0 be installed on your hard drive. Pi Labs has heard differing reports from people who allowed the Mac OS X 10.1 installer to erase their hard drive volume. For some, it worked fine; others report that it then refuses to install 10.1 because Mac OS X is no longer there. Pi Labs experimented with it in our classroom and found that if you do it in one operation,

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"You can visit your local Apple retailer — the one I hope you patronize — and ask for the upgrade package. It contains two CDs: the 10.1 and the 9.2.1 update disks.

Most will give it to you, although they may charge if they wish. Keep in mind they had to pay to get them shipped to the store."

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it works. However, if you try to back out, change drives, or in any other way halt the installer, you're history. You must install OS X 10.0 and again apply the update.

Our lab technicians are convinced that the update CD will work just fine. But your local retailer will not object if you walk in and buy a new copy of Mac OS X 10.1.

### I Use the Developer Tools

You have a few more choices. The operative questions is whether or not you installed – and use – the Developer Tools that came with 10.0. If you did, you want order the three-disc package from Apple. Why? Because that is the only package that contains the revised Mac OS X 10.1 Developer Tools CD. Well, you could buy a complete copy of Mac OS X 10.1; the Developer CD is in there as well. If you installed and use any of the developer tools, or the programs that come with them (like Property List Editor, native SimpleText, the prebinding tools, or any of the others that are not part of a standard install) when you installed 10.0, you'll want the updated versions. Unlike the 10.1 update, you can download the developer tools from the Apple website. The download is a little over 187MB as a disc image, which you may then burn on to a CD if you wish. If you need the developer's disk, and burning your own is not an option, buy the three disk package.



## Xtra stuff

### Mac OS X Up-To-Date

Customers who purchased a Mac OS X retail software package or a Macintosh computer that came with Mac OS X can details on how to upgrade to Mac OS X v10.1 here.

Apple would like to give you the opportunity to upgrade to Mac OS X version 10.1. Customers who purchased a Mac OS X retail software package or a Macintosh computer that came with Mac OS X can upgrade to Mac OS X v10.1 for US \$19.95. Remember this Mac OS X v10.1 upgrade requires Mac OS X to already be installed on your Macintosh computer. Just complete and send in the Upgrade Order Form (Adobe Acrobat PDF) with your payment. See "Terms and Conditions" for program details and to determine if you qualify for this program. Your order must be postmarked by December 31, 2001, so send for your upgrade now.

**Full Upgrade Program** The Mac OS X full upgrade package includes:

\_ Mac OS X version 10.1 CD (upgrade install) \_  
Mac OS 9.2.1 CD (full install) \_ Developer Tools  
CD \_ User guide and electronic documentation

**Upgrade Order Form** Requires Adobe Acrobat Reader.

**Qualifying Products** The Mac OS X version 10.1 Full Upgrade program entitles the purchaser of Mac OS X retail software or a computer with Mac OS X included to participate. To determine whether your product qualifies, download the list of qualifying products provided below.

**Qualifying Products Matrix** Requires Adobe Acrobat Reader.

**Multiple Computers on a Single Invoice** If you purchase multiple qualifying systems on a single invoice, you can either (1) order a Single-User CD Upgrade Kit for each qualifying system; or (2) order fewer Single-User CD Upgrade Kits and request the Right to Copy for the remaining qualifying systems.

**Upgrade Order Form** Requires Adobe Acrobat Reader.

# September General Meeting Report

by Don Essick

**T**HE SEPTEMBER 2001 General Meeting of Washington Apple Pi was held, as usual, in the Ernst Community and Cultural Center of Northern Virginia Community College in Annandale, Virginia. This month we were pleased to have a representative from Apple Computer's Education marketing group and a demo from Wacom, makers of the Intuos2 and Graphire2 Tablets and the Cintiq LCD Graphic Tablet.

The meeting opened as usual with the question and answer session and business meeting. For the first time in many months, Pi Webmaster and Mac Guru Lawrence Charters was present to help with the session. I'm just too easy to stump. There were many questions regarding Mac OS X. It's good to see that there are many of us, if not adopting, at least experiencing the new OS. By the time you read this, MacOS X.1 will be on the shelves and in our hands. Hopefully it will be all that Steve Jobs promised at MacWorld!

Paul Faust of Apple Computer's Education Marketing group spoke at length regarding Apple's successes and admitted failures in the education market. The session was a "town hall" with lots of give and take with the audience. Paul was very frank with us regarding the problems of the past. He was more upbeat on the future and hopefully took away from the meeting the constructive criticism, suggestions and good wishes of the audience. It was very apparent that many of the audience had more than a passing interest in the topic!

Bill Lindsay, Regional Sales Manager for Wacom took the stage to demonstrate his products. Wacom has recently upgraded its entire line from the \$99 Graphire2 USB tablet up to the \$749 Intuos2 12x18 tablet with 4D mouse. Also new to the lineup is the Cintiq LCD Graphic Tablet system, a 1024x768 LCD monitor which allows you to draw directly on the screen.

Bill gave a very impressive demonstration of the products and the many features. That except for the entry level Graphire tablets, you can program multiple pens for different tasks and switch between them instead of going to various tool menus in Photoshop or other programs.

If you wish to purchase these products, they are available locally at most computer stores or through the local distributor, the Whitlock Group (877-992-9477). Mention Washington



Apple Pi for special pricing. Thanks, also to the Whitlock Group for the loan of the projector for the meeting.

As of this writing, the only presenter for the October meeting is Epson. Due to the varied product line and comments I've had so far, they can probably fill up the whole two hours anyway! Be sure to come, as the door prizes for this meeting include an Epson 780 printer! ■

## WAP Participates in NBC's first Digital Edge Expo

**T**HE NBC4 Digital Edge Expo 2001 took place on August 25th and 26th at the Washington Convention Center. This was the First Annual Digital Edge Expo

NEWS4 Technology Reporter IJ Hudson explained that the concept was to create a hands-on show that would put consumers up close and personal with the technology that is shaping the way they do things — whether at school, work or at home.

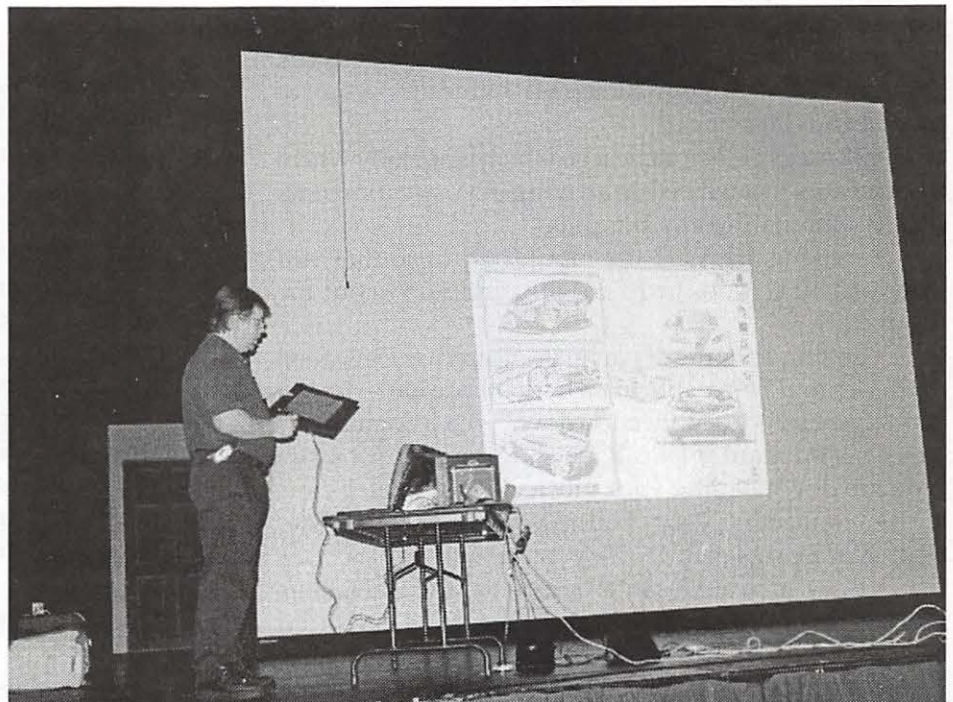
The Expo was a natural progression of the Digital Edge television segment which was created to explain technology to consumers. And while TV can be a great explainer, nothing beats hands on experience and asking questions to understand what type of technology will work best for you.

Washington Apple Pi was asked to participate in the Expo by having a booth on the floor of the Convention Center and also giving a stage presentation. Dan White generously stepped up to the plate and agreed to take over the organization

of our participation at the event. From dealing with all the paperwork and logistics to get everything in place, to going to Apple Reston to pick up the equipment that we borrowed from them as well as stopping by the office and Tom Witte's home to pick up the rest of the equipment that was needed to run the booth, Dan put in a lot of time and miles.

On the days of the show Dan and other members worked to set up the booth with equipment to show off our favorite toys in their best light. From the iMacs with games for the younger set to cameras, iToons and technical questions for the older kids we tried to answer all questions and point people in the right direction for answers we could not provide.

While the Expo was interesting and fun for us, it did show the marks of being a first time event. Too many presenters did not have the technology there for people to actually touch and feel. Tables were all the consumer can get is paper on what the technology is and what is doesn't quite cut it at a hands on Expo. The floor layout of like organizations seems to have fallen apart at the last minute and many organizations that should have been put near each other were not. All in all for a first time out it was a good showing for a late August event when most people were either at the shore, taking the kids up to college or out to last minute school shopping. ■



*Presentation at WAP General meeting in September*



# Digital Satchel

by Washington Apple Pi labs

*"There's been nothing like this before. And I don't think there's another company that could do this. To bring everything under one roof together to be able to create a product like this."*  
— Steve Jobs

**T**HAT PRODUCT is the iPod – the new benchmark for MP3 portables. Actually it is really two products: iPod the player, and iTunes 2 updated to compliment the flexibility found in iPod.

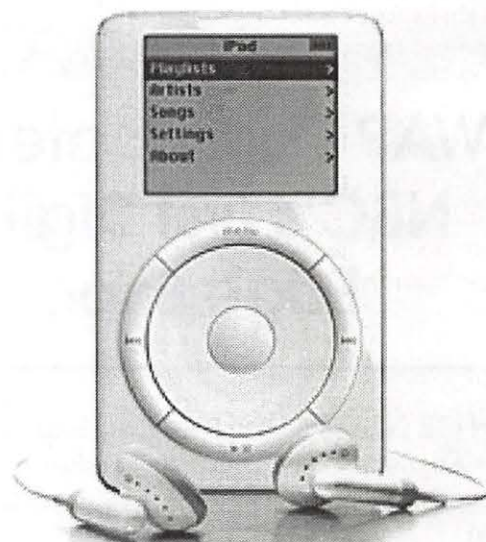
Get ready to pocket 5 gigabytes of ones and zeros in a really classy digital satchel. Finally you don't need to browse a Neiman Marcus or Sharper Image catalogue in order to find the right gift for yourself. The iPod from Apple is more portable than a Porsche toaster, better sounding than a BMW can opener, and able to navigate the bumpiest road without missing a beat.

## The Player

iPod is a \$400 portable MP3 player which gains synergy from the incorporation of several existing technologies into one slick package not much larger than a deck of playing cards. How about:

- a small 5 gig hard drive which holds between 1000 and 1300 of your choice MP3 tunes [or a mix of music and data – neat!]
- 32 megs of memory cache which is actually where the music is located before arriving in your ears – practically eliminating any skipping
- making FireWire the input/output so that you can load 1000 tunes in 10 minutes and you're out the door
- getting 10 hours of playing time from the installed batteries and being able to recharge those batteries via the same FireWire connection down which comes your music. iPod is automatically recharging your set while you are downloading your music de jour
- connecting your iPod to your home or car stereo. Not a problem
- that classical Mac interface of hierarchical menus to navigate playlists, artists, and songs now enhanced via iTunes 2
- future growth. The Read Only Memory can be upgraded to incorporate additional features and new

"iPod is a \$400 portable MP3 player which gains synergy from the incorporation of several existing technologies into one slick package not much larger than a deck of playing cards."



recording/playback formats

- something you can do that "they" can't, unless they buy a Macintosh.

## iTunes 2

This updated version of iTunes provides much needed improvements and revives some of the features found in its predecessor SoundJam. Besides supporting iPod, iTunes 2:

- can now burn around 150 MP3 tunes per CD. That CD can be played back on most any computer platform and MP3 CD players. Why? Because the CD you create uses the standard ISO-9660 format.
- now has support for external CD-RW drives enabling you to use iTunes with your existing equipment.
- fine-tune your listening via its built-in 10 band equalizer
- you will find that burn times have been reduced by half and that the quality of iTunes 2 playback has



improved noticeably over its predecessor.

- iTunes should be available as a free download on the Apple website by the time you read this.

### So What?

Well, that is a good question. Apple has clearly raised the bar for MP3 players. Feature for feature, iPod leaves the competition back there somewhere. iPod gives an Apple retailer a company-branded product to sell at under \$400. The question seems to be whether those features are worth it to you to cross the threshold from the \$250 range to \$400.

If exclusivity motivates you, you are covered. The market is limited to those of us with a FireWire capable Macintosh. If you are looking for a little data hauler, really chow down on MP3 music, hate spending all that money on flash memory cards and batteries, or need this year's Porche toaster, it won't get any better than this. ■

*Editor's note: last month we ran an article by Frank on Quicken 2001. The conclusion below should have run with that article. Our apologies for the confusion.*

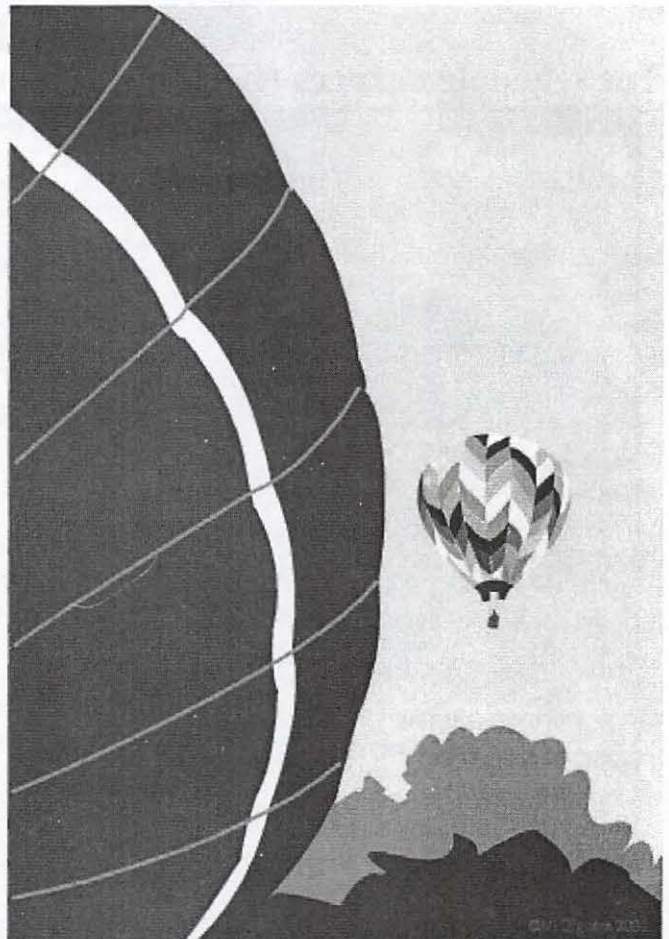
## Quicken 2001—the corrected conclusion

In my opinion, Quicken 2001 can be a complete financial management software package by customizing it through the setting of specific preferences, to help you organize, control, and manage your finances, and save you time and money through the proper use of its features for banking, monitoring your assets and liabilities such as your investment portfolio and outstanding debt, tax planning which can save you both money and time by setting up tax information in your accounts and income and expense categories, ability to produce needed reports and graphs, and planning for retirement. While it is true that you can use Quicken off line, I believe that in order to fully utilize and take advantage of the features of Quicken as a full financial management package to properly organize, control, and manage your finances, Quicken should be used online. If you have never used Quicken, I suggest you take a look at the package and give it a test drive, as they say "try it you might like it," and you may find that it can help you manage your finances; and also, if you are using an earlier version than 2001, review the features you are using to see if they should be changed or upgraded. —Frank Zappacosta

## Artwork by Marianne Giguere

**A** LOYAL WAP member, Marianne has been creating artwork for many years. Until 5 or so years ago this work was either oil painting or traditional silkscreen work. With her work in graphic design using computers and the development of newer technologies for creativity has brought her in a new direction.

Next month an article on her transition to an all computer printing process and her choices in technology will be published. In the meantime take a look at her work on <http://members.wap.org/m.giguere/> and perhaps find a gift for the holidays. (email address—[m.giguere@wap.org](mailto:m.giguere@wap.org))



*Up, Up and Away*



# washington Apple pi general meetings

9-11 a.m.

**November**  
Apple and Mac OS X 10.1  
Nov. 17, 2001

Northern Virginia Comm. College  
Community & Cultural Center Aud.  
8333 Little River Turnpike  
Annandale, VA

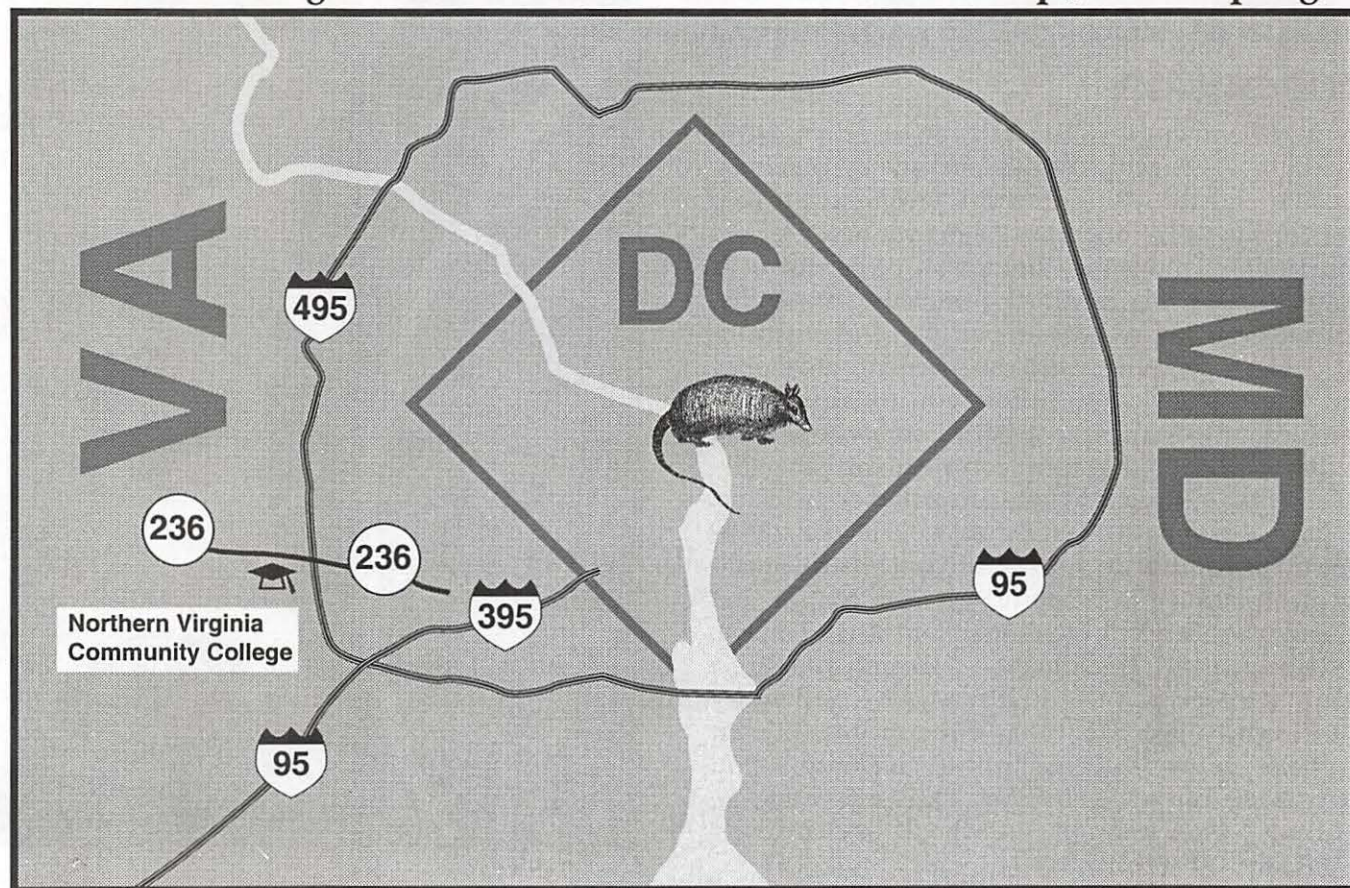
**Getting to NoVa:**  
take Exit 52 West  
onto VA 236  
(Little River Turnpike)

**December**  
**Winter**  
**Garage Sale**  
Dec. 8, 2001

# 2001

It's not just a movie anymore.

For schedule changes check the TCS or the Pi's Website at <http://www.wap.org/>





# iBook and PowerBook Accessories for Your Holiday Wish List

by Pat Fauquet

THERE ARE LOTS of neat new portable computer gadgets and with the holiday season upon us, its time to compile a list of new "toys" our loved ones could get us for the holidays.

## PowerBook and iBook Stands

A real must have for any modern laptop computer is some sort of pad to place under it for ventilation and heat dissipation. RoadTools makes two different models, the 'Traveler' CoolPad which is less than an inch tall, and the Podium CoolPad that is taller for better air flow taller. Both are ABS plastic and have an ingenious turntable that allows you to rotate your iBook or Titanium. The black Traveller CoolPad is available in Staples stores for about \$20.00, but white versions and

the Podium CoolPad can be found at [www.roadtools.com](http://www.roadtools.com). The only drawback with these pads is they don't work well on you lap or other soft surfaces such as a bed.

Although I have not seen one in person, the LapBottom (Figure 10) ([www.lapbottom.com](http://www.lapbottom.com)) looks like it would work well on soft surfaces. It is larger and more rigid and of course does not swivel, but does compress to 1" thick so it should fit in most carrying bags. It costs \$25.00.

Cyber3 ([www.cyber3.com](http://www.cyber3.com)) makes the TiBook Tote and Tilt Handle for Titaniums (Figure 5). It not only permits the PowerBook to be tilted for amore natural keyboarding position, it gives the Titanium PowerBooks a carrying handle in the spirit of the first iBook line. It sells for \$45.00. The company is making a similar handle for the new iBook line that should be available soon.

## A Scanner for the Road

Wouldn't be nice to be able to scan documents in a library instead of making a photocopy. All of the newer Canon USB scanners do not require a power cord, but are powered through the USB cable. The scanners are very



Figure 2. Canon scanner



Figure 3. Case logic sleeve

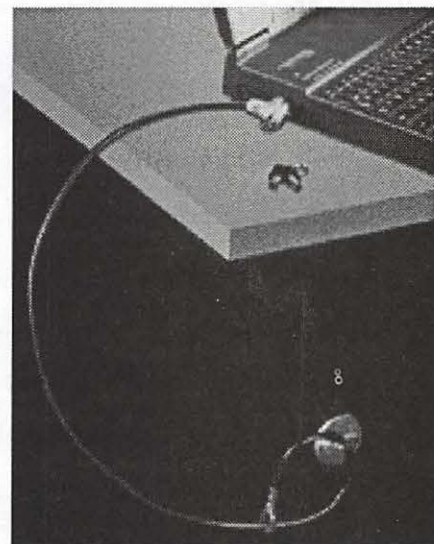


Figure 4. Curtis notebook security



Figure 1. Belkin Trolley







# Hitch your wagon to a star with



the same old  
same old  
**NEW TCS!**  
(and you'll be on cloud 9)

Now you can revel in discussions of software, hardware, jokes, recipes, sports, cars, enjoy WAP camaraderie *while* asking questions and finding answers about your computer —

on the 'net



Join the penguins at

## <http://webtcs.wap.org>



All present TCS users—you have access now.

You need to be:

1. A Pi member (\$49 first year, \$39.00 renewal)
2. Have TCS access (\$20.00 per year)

Check out the Web TCS  
with a guest pass:

<<http://webtcs.wap.org>>



For more information or to sign up:

E-mail: [office@wap.org](mailto:office@wap.org)





Figure 9. Kensington Astro Pak

packs and wheeled cases. These products range from \$49.00 to over \$300.

Neoprene cases or sleeves are great if you want a slim case, either to slip inside another bag for added protection or for a light case. CaseLogic ([www.casedirect.com](http://www.casedirect.com)) makes a number of models in the \$20.00-\$40.00 range (Figure 3). They also have many other cases styles including backpacks.

Kensington makes an interesting backpack (Figure 9). It has two wraparound pouches which serve as accessory compartments. There is also an integrated carrying

handle and an accessory shoulder strap. It retails for about \$50.00 and is available at MicroCenter or online at [www.buykensington.com](http://www.buykensington.com)

Spire ([www.spireusa.com](http://www.spireusa.com)) makes one of the nicest computer backpacks on the market-and it qualifies as a "real" backpack with its waist strap and very comfortable ergonomic design. I tried one at MacWorld New York 2001 and would have taken one home if they had been available on the show floor. Inside the backpack is a neoprene case to slip your laptop in for added protection. The SpireIcon must be ordered online and



Figure 11. Lap dog



Figure 10. Lap bottom



Figure 12. Scott Stand



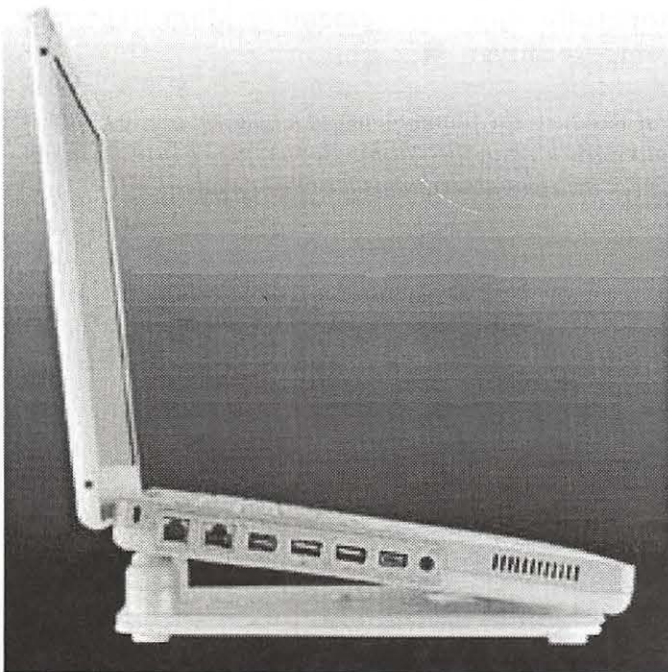


Figure 13. White Pod

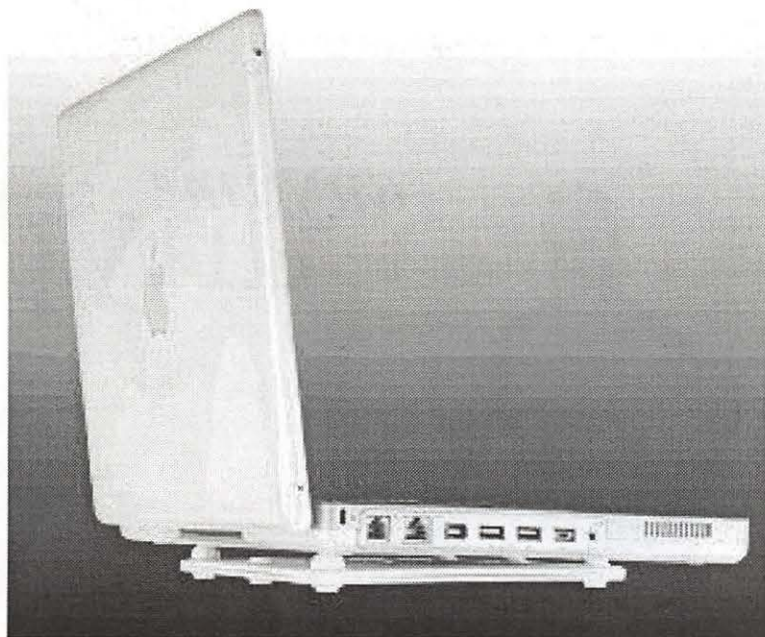


Figure 14. White travel

cost \$130. The inner case can be ordered separately for \$30.00.

Port ([www.port.com](http://www.port.com)) has several nice backpacks and at one time made some with the Apple logo. They also offer several rolling cases with telescoping handles.

Backpacks cost around \$90 and their cases begin around \$100.

A list of other computer cases with links to their manufacturers can be found at [www.pbsource.com](http://www.pbsource.com)

### Security

Security accessories are also important. In each Macintosh laptop case is a small slot that is engineered to accept industry-standard locks. If you take you laptop back and forth to the same place each day, Curtis (Figure 4) offers a lock with two different super-adhesive attachment plates to be left onsite. There is a 5 foot wire cable to attach between the lock and the plate. They cost around \$40.00. Kensington makes security locks that include a six foot steel cable with a loop at the end (Figure 8). This makes it possible to secure you laptop to immovable or large objects almost anywhere you go. There are a number of different models priced in the \$40.00-\$50.00 range. I own one of these and have another steel cable with loops at each end. I use it to secure additional items with the same lock. These locks can be found at MicroCenter, BestBuy and Staples.

### Lights

A must-have item if you "compute" in bed or in dark places is a Notebook light. These are bendable cables with a light at one end, and a USB plug at the other. Once again, Kensington makes a nice one for about \$20.00. MCE PowerBook Products ([store.poerbook1.com](http://store.poerbook1.com)) makes another light. It has red and clear diffusers that can be snapped on. It sells for \$25.00. The Kensington lights can be found at the Apple Store and MicroCenter. I have only seen the MCE lights at MacWorld. Both can also be purchased over the Internet.

### Cables, Hubs and Adapters

Another must have is a retractable phone cable for your modem. Targus ([www.targus.com](http://www.targus.com)) makes one that sells for \$14.99. They also have a wide variety of cases, hubs and power adapters. Sometimes retractable ethernet cable would be even handier. One is available from [www.madsonline.com](http://www.madsonline.com) for \$38.00. Madsonline also has several different power adapters, auto adapters and airline power adapters for both the newest iBooks and Titanium's as well as earlier powerbooks. They also make several nice carrying cases.



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"There are lots of neat new portable computer gadgets and with the holiday season upon us, its time to compile a list of new 'toys' our loved ones could get us for the holidays."

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The Apple AV cable at \$19.00 is a must-have for anyone who has the new iBook. It allows you to connect the iBook to a TV set to show PowerPoint presentation. It can also be used to send iMovies directly to VHS video tapes. Of course, if you have the DVD or CDRW-DVD drive, you can play DVDs from your iBook to a TV at home or on the road.

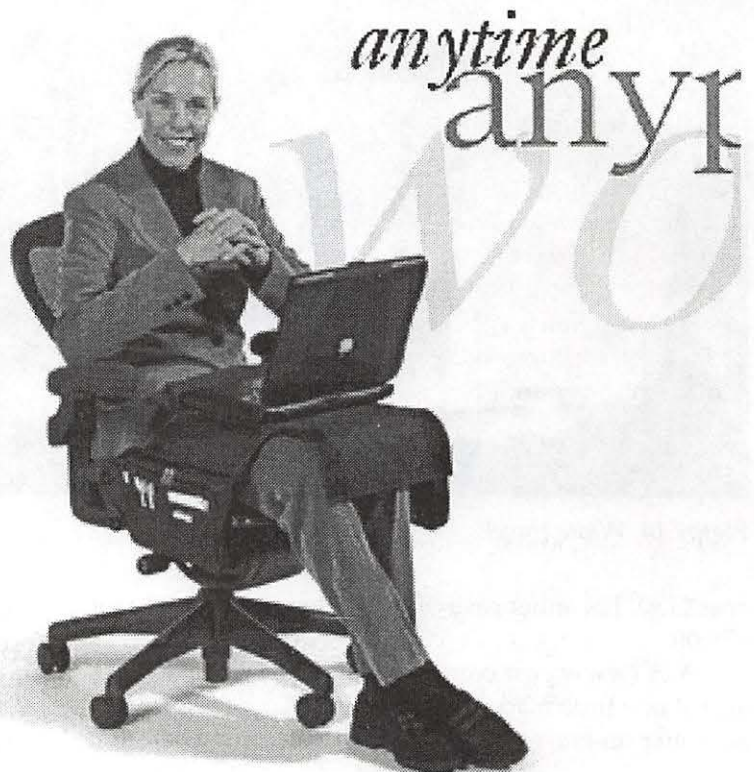
Since the latest computers from Apple lack audio in and out jacks, the Griffin iMic is another great accessory at under \$35.00. It plugs into a USB port and allows you to connect a conventional microphone or speakers to your Mac. It does not allow for headsets since it can only function as either an input or output at one time. However, many companies are making USB headphones, microphones, and speakers.

It's amazing how many USB devices Macintosh users are acquiring, and soon it is necessary to think about a hub. Now the one for my desktop Mac is pretty big, and the power brick almost doubles its size. I certainly don't have room for that in my iBook bag, and small hubs have been in short supply until recently. The T3 by Dr. Bott (Figure 6) ([www.drbot.com](http://www.drbot.com)) is certainly one to look at. Although it is not powered, it can draw enough power from the computer itself to run a larger peripheral like a flash card reader and still have enough power to enable a mouse or keyboard. The hubs are available in Ice, Titanium and Graphite to blend with today's Apple products. The web site also sells a wide variety of other accessories for Macintosh products.

I hope you find the toys you want in your holiday gifts. I plan on leaving this article

where my husband and children can find it, and hopefully they will remember Mom likes new computer toys! ■

*Pat Fauquet, the proud owner of a new white iBook can be found teaching in the Washington Apple Pi Tutorial Room. Check the class descriptions for more details.*





# The trials of installing a new program

by Herbert Block

**M**Y FRIEND Esther, whom I had known for many years called me recently and asked me to help her to cope with a change in the e-mail program she had been using for a number of years. Esther had been happy with the basic e-mail program provided free to supporters of FM Station WETA. The program was Pine®. Pine® is an electronic messaging program created and maintained by the Computing & Communications group at the University of Washington in 1998. Pine® was an easily operated program with an address book, folders to hold mail, easy word processing, etc. But, it had its limitations. In response to requests for a better e-mail program, WETA decided to drop Pine® completely and to introduce an e-mail program with multiple features and more suitable to service on the internet. The new program was: **First Class Client**, a product of Centrinity.

Esther called me to help to install the program knowing that I was a seasoned Macintosh user and generally competent in the intricacies of converting from one program to another.

WETA announced that the new program would take effect in about a month and that required material would be made available. For those who would like to start early, the basic First Class Client was available on WWW.WETA.Org.....WWW.Capaccess.Org

I proceeded to WWW.Capaccess.Org. A choice was available for downloading-PC or Macintosh. Linked to Macintosh were four folders for downloading. (See Figure 1.) Three were small, but the largest was 11.5 MB. Downloading with my 56k modem took 2.5 hours. I was so appreciative that my Remote Access held and did not cutout early.

These were the downloaded items.(See Figure 2.) Of course the next step was to decompress each of the "sit" labeled downloaded items. Two took the form of documents. So I knew that they were not to be opened but are subject to and ready for absorption into the final program during the installation process. But the big main program refused to be more decompressed than its present state. I Tried various alternative

decompression programs to no avail. What could be the hang-up? The pdf item was the Manual, which I opened and printed. (Figure 3.)



Figure 2.

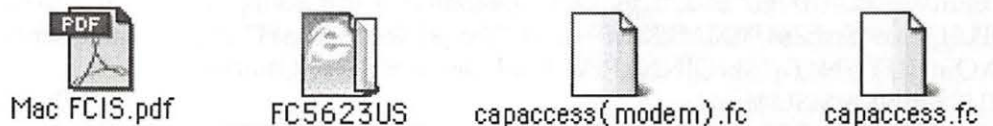


Figure 3.

## Subject

**FC for Macintosh Reference Guide**

**Modem Settings File For Capaccess**

**Internet Settings File For Capaccess**

**FirstClass v6.011 for Macintosh**

Size	Name
512	Mac FCIS.pdf
2	capaccess(modem).fc
2	capaccess.fc
4765	FC6011US.sit

I returned to recheck the material I had downloaded. Perhaps I had not downloaded everything notwithstanding that it took 2.5

Figure 1.



hours. I clicked the image again and to my surprise in word-processing format there was a full page of the guts of the program. Aside from all the programmer's language, the first line read: Open in BINHEX4. There was the needed clue. I copied that page onto Simple Text and readied it for conversion using Binhex decoder.

```
(This file must be converted with BinHex 4.0)
:'NPZFh4KE''J4QPbFh4$E' &cFkJJ3faTC@jd!%&38%a@59-
c)!!!2cXX!!A53&D
"8eC$9!#3!%'e2XAY@q`%B!'"!J!N!-"!*)G@H4dJ!qaf#!!3-
)5$Kl(qAe"e
d#P#2Z09ZZ5"!3k&E&F3CqARK#P6$ZPHKA,/cHG#U@eQZbL9HJaBY""r
+8'0,+8", 'R,6ijT-qFA89r'h)3pfq$M'q-IKafk#6h%'!1bL"-j'!l-
%6JbqH#D
IS(04KV$krf!cNQ+SrksL"6mdIcf+8N[hCViaR4YU6pE490mZU-
@@(2$kl,r[6GJ
'K@Qfka'CY@Z3mGcEbB3D9T!!&RFACYPp/pN#Ck%&cPEZ+IMPG$69eT2
QEE9fd[9]GJLX9C,$d+k6s)Q5%N!N%3IM)RqZ!%5D!*Y)KU0DIAPN!Gj
52IV(5P5bDd6TXMINXDEXN'C+k8%$Xk(UXGJ)XIX(5bEB8KG01#G@V-
bP'k
EKahQ!+N*al@Y%XiUj[$F'&#3$Bf'("mAMG'E(N)1r4NU0$ihYIF6]far`
a$G2rTIFZpKQKUx*5bERFHXC8PYXe10,cU+66p%CXIU2#diX1dN!*pak2[
SbPblGp[#TYe!GRE*GYIL!6k%+"b!M,d[i'!@ZRXBD+3!1*AjDpqlL-
U9iB!9fk
d k C - " X J c H K C Y Z ( R , d @ 4 G T 8 d Q K a Q + P f * 1 9 U P -
NB!P&j@3V3GShBAA'c,q%&Dah)pk$
j Q J ' -
4554Ya0c+[G$lmk6eMQZ)h(2430)ALMHCS!IP8%STqF+6K*QIH5MRYTINiM
6 ) p E 9 2 K 2 -
ET36j5L!"Rb)HE%qMG#[10kV'1GpJ0$bib(d)"qC,5mh[jSDBbpPbe
39FmX@jB)BL4Yh%BS3"$TdC!1,q(6Z'QKM%0a8&X0'G56'(Q6Y8L#k+1Bp%
[BukQk1bceA)mbZ&UX$XIAIBJKA89R+50FC"Ybp"!$8H##+,Y%60pe9HZG5(
XQmHUY&N*Tq"$krQ[NNkPrV+EXabc@6*ID8eJU#QQhE(F-
fh0aidfNLBiMSU@[mU
18d85VIN0a(q2!c0H#qZaVDfN38B8pRV+cBJBbfmk'S'N!c%qAKCk4DE2%
V(H)l@8&KE2!B5Rk0dLSmiNXqb'46$F!L"eP'#R[8@m1P-d-
e%TkSAS'k8qYaPGB
```

Excitedly, I pulled out my file of decoders. One was Binhex5. That did not work. Another: I YA-Decoder. That did not work. Frustrated, I searched the internet for other decoders to no avail. I sent an e-mail to CAPACCESS explaining my problem. Capaccess is staffed by volunteers. I received a reply saying that the volunteers present were skilled only in PC's. Try someone who knows Mac.

I went back to the downloading page I thought I might just try downloading again even if it took some hours. Once again as I clicked on the image of the big fellow, the material opened in word-processing format. But this time I was not satisfied to just

stop at one page, let's see how far it goes. Well, after 15 minutes I realized what was coming through. It was the entire 11.5 MB. That opened my eyes. The entire 11.5 MB must be subject to conversion via binhex4.

Using YA-Decoder the file opened. There bright and eager to go was the Installer for First Class Client. Happily, eagerly I installed the program. Now I was ready to see how it operates.

I clicked on the installed program and this banner announcement came up:

*"Can not open a connection to OT/ TCP.Check that the OpenTransport Internet Lib Shared Library is in your extension folder".*

Well, getting a missing extension should be easy. It is like getting a missing driver or such. Just contact the program people, etc. etc. The program people would be APPLE.

Via the internet, for the next 90 minutes I went through the ins and outs of WWW.Apple.com/Software. Nothing! What now?

Thinking that the missing extension might be unique to my machine (running 9.1), I installed all of the downloaded material onto Esther's machine (running 9.0). The same banner announcement blared through.

What now? Of course, the Mac club-WAI. Those gurus know everything. This then is the dialogue with the experts at WAP via the #TCS/WAP:

C3 B13 Msg # 7121 Missing Extension  
FROM HERBERT BLOCK, ON 20 Jul 01  
18:56:54

TO ALL, LINES: 9, REPLIES: 2

I am helping a friend who uses Capaccess for her e-mail. Capaccess is in process of converting to First Class Client as their operating program. I have installed First Class, but I have run into a hang-up. The program requires an extension which neither her iMac or my G3 has. The extension is: Open



Transport internet Lib Shared Library. I spent over an hour with WWW.Apple.Com/Software, but it seems there is no separate listings of Extensions subject to download—at least I could not find such a list. I will appreciate giving me any leads as to where I can get this particular extension. Thanks in advance. HERB

C3 B13 Msg # 7122 R/7121 Missing Extension  
FROM BILL HARK, ON 20 Jul 01 21:01:44  
TO HERBERT BLOCK/ALL, LINES: 5, REPLIES: 1

Try the Open Transport Networking Group which contains an extension (among others) called, I believe, Internet shared library. I found it with Conflict Catcher 8. Hope this helps. Bill

C3 B13 Msg # 7123 R/7121 Missing Extension  
FROM JON THOMASON, ON 20 Jul 01 21:13:17  
TO HERBERT BLOCK/ALL, LINES: 10, REPLIES: 0

>> The program requires an extension which neither her iMac or my G3 has.

>> The extension is: OpentTransport Internet Lib Shared Library.

That's not right. It requires the Open Transport subsystem to be present and active. It doesn't want any specific files copied around by themselves.

The functionality these days happens to be split between two files, called "Open Transport" and "Open Transport ASLM Modules". But if Open Transport isn't present and functioning, First Class Client isn't likely to show the only symptoms. It might be time to swim back to the life raft. /;+ /

C3 B13 Msg # 7125 R/7122 Missing Extension  
FROM BILL HARK, ON 20 Jul 01 21:37:43  
TO HERBERT BLOCK/ALL, LINES: 10, REPLIES: 1

I see Jon's reply now. I think the grouping I mentioned above may be done by Conflict Catcher so that all the included extensions are turned on or off together rather than individually. Anyway, there are two such groupings with several extensions in each. One of those extensions is the internet shared library (it appears that all are classified as "shared libraries." In any event, it is consistent with Jon's note that these are packages that work together and are not to be moved around as individual extensions. Hope I have not confused

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"In response to requests for a better e-mail program, WETA decided to drop Pine® completely and to introduce an e-mail program with multiple features and more suitable to service on the internet. The new program was: **First Class Client**, a product of Centrinity."

---

things. Bill

C3 B13 Msg # 7126 R/7125 Missing Extension  
FROM JON THOMASON, ON 21 Jul 01 01:06:35  
TO BILL HARK/ALL, LINES: 26, REPLIES: 0

>> consistent with Jon's note that these are packages that work together

>> and are not to be moved around as individual extensions.

I should clarify a point from my earlier message: the Open Transport stuff used to be spread out among a bunch of separate files, at least six or eight. One of these was "Open Transport Internet Lib" and another "OpenTptInetLib". Each of these files contained several components, all logically intertwined with corresponding components stored within the remaining files.

Apple realized that large numbers of people were doing home surgery, often with disastrous results, keeping their (and others') support lines busy. So in later systems they combined all those pieces into fewer, larger files. This dramatically reduces the number of possible misconfigured permutations.

But while Open Transport and its ASLM companion can't be combined any further, and although they could be conceptually treated as a pair, the tricky part is that the combined Open Transport functionality is really tightly coupled into the rest of the system. From deal-



ing with alias files, to one application asking another to perform some task or shut down, every aspect of communication throughout the system is either handled, overseen, or tweaked by Open Transport in some way. It's just not to be separated from the system, whether connecting to the Internet or not. (Though First Class wants to connect to it in a way.) More importantly — don't combine one or more of the files from older versions of Open Transport with the rest of the system and the current Open Transport. They'll fight, bitterly. And you don't want to be the clean-up crew... /;+/  
 C3 B13 Msg # 7127 Missing Extension  
 FROM HERBERT BLOCK, ON 21 Jul 01 08:18:36  
 TO JON THOMASON,ALL/ALL, LINES: 11, REPLIES: 2

Thanks for the further enlightenment.  
 For information, I am running OS 9.1 and my friend,s IMac is running 9.0. Each time we open First Class Client the following banner appears: "Could not open a connection to Open Transport TCP. Check that the - OpenTransport Internet Lib Shared Library- is in your extension folder. Any leads re searching the internet for this particular extension. Alternatives

C3 B13 Msg # 7128 R/7127 Missing Extension  
 FROM PAUL SCHLOSSER, ON 21 Jul 01 10:01:13  
 TO HERBERT BLOCK/ALL, LINES: 10, REPLIES: 0

>I am running OS 9.1 and my friend,s IMac is running 9.0.  
 I would reboot the iMac with the Mac OS 9.0 ALL extension set then upgrade to Mac OS 9.1. That should install the missing pieces Jon mentioned in one of his messages. Alternatively, a custom install from the 9.0 disk selecting only the Open Transport items might work. Myself, I'd either upgrade to 9.1 or better yet do a clean install of 9.1.

C3 B13 Msg # 7129 R/7127 Missing Extension  
 FROM JON THOMASON, ON 21 Jul 01 13:01:55  
 TO HERBERT BLOCK/ALL, LINES: 8, REPLIES: 0

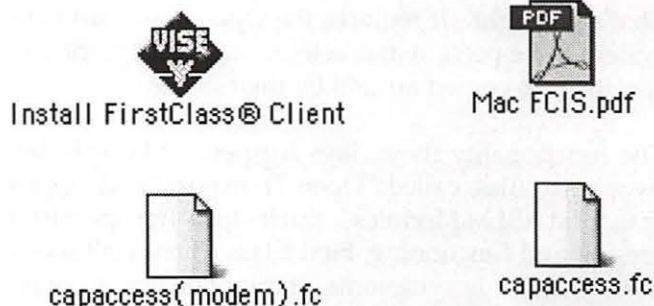
>> Any leads re searching the internet for this particular extension.

Chicken-egg. "Could not open a connection to Open Transport TCP" means that it can't access the Internet in the first place. And as I've explained, the other sentence is a ruse — or at least refers to operating systems of a bygone era. Your task is to reenale Open Transport, ignoring First Class's faulty advice. I think Paul's two suggestions are the shortest route to doing that. /;+/  
 C3 B13 Msg # 7130 Missing Extension  
 FROM HERBERT BLOCK, ON 22 Jul 01 13:40:32  
 TO ALL, LINES: 4, REPLIES: 0

You guys are great!! Jon your explanation of the "evolution of Open Transport" explained that an extension was not missing-it was embedded with others. And Paul came through with how to recover the required extensions. I am back on track now. Thanks to you both. Herb

As recommended, I reinstalled 9.1 on my machine and 9.1 on Esther's.

Here its is! ready for installation.



The complete First Class Client was successfully installed. Esther's iMac is ready for application of WETA's networks. ■



# Address Labels for Holiday Cards

by Pat Fauquet

**E**ACH YEAR around the holidays I get calls from people who want to print address labels for their Christmas cards with AppleWorks. First, let's define what is needed to properly address a greeting card or invitation to a family. The proper first line would be "Mr. and Mrs. John Thomas Jones," or perhaps, "Mr. and Mrs. John Thomas Jones and Children." When you make a database, each item needs to be in its own field, so we now need fields for a prefix, a first name, perhaps a separate field for the middle name, a field for the last name, and a field to fill in the "and Children" when necessary. Next, we usually do not put labels on formal envelopes. Most programs will also print envelopes, so if you plan to print the envelopes, look for that feature as you work through this tutorial.

In the AppleWorks Starting Points palette there is an assistant for making an address list. If you do not see it, you can use the "File" menu to have it appear (Figure 1). Click on the "Assistants" tab (Figure 2) to see the "Address List" assistant. As a part of the address lists setup, you are given a choice of a personal (Figure 3), business or student database. Note that none of the completed databases have all the fields necessary to make address labels for formal cards.

Recent Macintosh computers come with the Palm Desktop software. If you have any iMac or any

Macintosh computer newer than the first iMac, or if you have a System software CD, version 9.0 or newer, you will find an installer for the Palm Desktop software in the CD extras folder. If your computer or its System is older than the above, you can also find a copy on Pi

Fillings, Version 8 (the orange CD). Figure 4 shows you all the fields available in this database. Note that there is no field for the "and Children"

A number of long time computer users have adopted one of the many shareware computer address



Figure 1. Show Starting Points

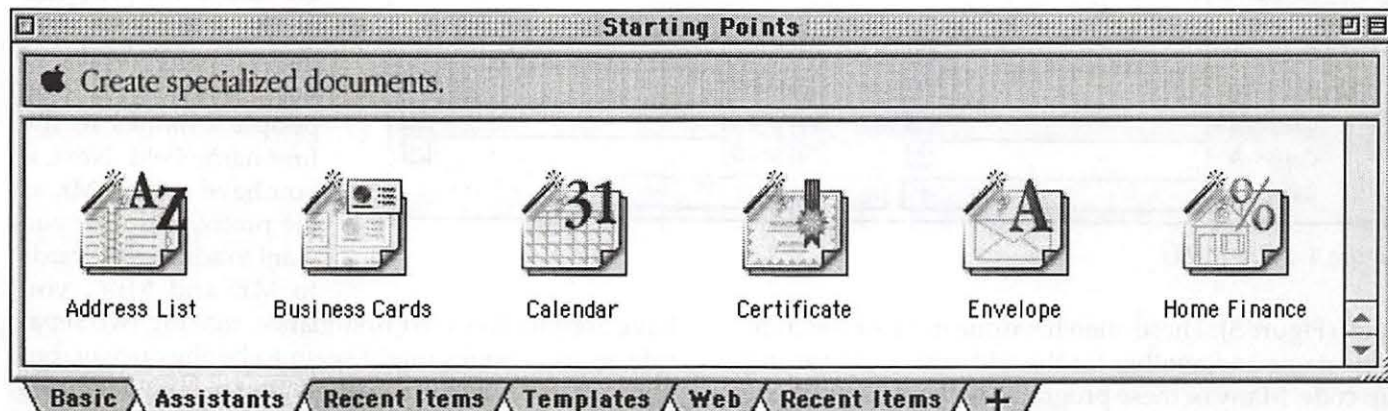


Figure 2. AppleWorks Starting Points



**Address List**

**Personal Addresses**

- LAST NAME
- FIRST NAME
- ADDRESS
- CITY
- STATE/PROVINCE
- ZIP/POSTAL CODE
- COUNTRY
- HOME PHONE
- OFFICE PHONE
- CELLULAR PHONE
- FAX
- E-MAIL ADDRESS
- NOTES

Select the type of address list you want to make: Personal, Business, or Student.

Type of list to make:  
☒ Personal  
☐ Business  
☐ Student

Click to deselect the Add More Fields box if you want to remove these fields from the final list: Nickname, Spouse's Name, Children's Name(s), Birthday, and Anniversary.

Progress

Figure 3. Address List Setup

First  Last

Prefix  Suffix

Nickname

Title

Company

Division

Work  Ext.

Home

Fax

Other

Home  ☒

Street

City  State

Zip  Country

Comments

Email

Web Site

Custom 2

Custom 4

Categories

Birthday  Age

Custom 1

Custom 3

Custom 5

Figure 4. Palm Fields

book (Figure 5). These often have one field for the complete name and another for the address, city, state and zip code. Many of these programs will not print labels, so it is often necessary to take that data out of the data-

base, clean it up, and then import it into a new address database.

If you plan to start an address database now, there are several things you should consider in choosing a program, and as you enter data, you should make sure to enter it in the cleanest and a most complete form from the start. I have seen few address book programs that have a place for spouse or partner names. If there are fields that can be customized (as in the Palm Desktop software), make that field now. Use a prefix field to enter how titles such as Mr. or Mr. and Mrs. should be added. Write complete names if you plan to make labels. Spell out Street instead of using St.

### Using the Palm Desktop Software

The Palm Desktop software will make casual labels with whatever you have entered in the "First Name" field, or formal labels in which the contents of the prefix field are added. The problems begin if you want to make formal labels, and you have put two people's names in the first name field. Next, if you have chosen Mr. as the prefix, and now you want to address the cards to Mr. and Mrs., you

have another mess. At first glance, making two separate address books might seem to be the answer, but will you remember to make changes in both databases when people move etc., and which one will you use in



Figure 5. Shareware Address Book

Figure 6. Contact List

your PDA? Another possible solution would be to have two entries in the database, one to handle normal

chores, and another to be used for formal situations. It would be possible to assign the second, formal entry to a special category, and then to hide that category until you need it, but again you would need to remember to make information changes in both records.

If you are going to print labels or envelopes, open the Palm Desktop "Contact List." Select the names you would like to make labels for by putting an "x" in the box beside the name. Then click on the triangle button above the "x" column to reveal the pop-up menu. Choose marked (Figure 6). Now go to the "File" menu and choose "Print" (Figure 7) Note that there are buttons beside fields such as "Print As" and "Which Contacts." Use the buttons to select what you want to print, which names to print, what format to print in, and what size of labels you are using. The "Address Layout" button is particularly important. One of the choices is "Add New Layout" (Figure 8) While it is possible to make several changes, there is no way to add the custom fields to the layout. One option is to use something like "Division" to be your field for "and Children." This field will print out on a line below the name, not at the end of the name, on the same line as it should be. Note there is a preview button. Use it to check the wording of your labels before you print them out.

### Using an AppleWorks Database

Although the pre made databases made by the AppleWorks assistant look easy to use, it is difficult to add additional fields to their color-



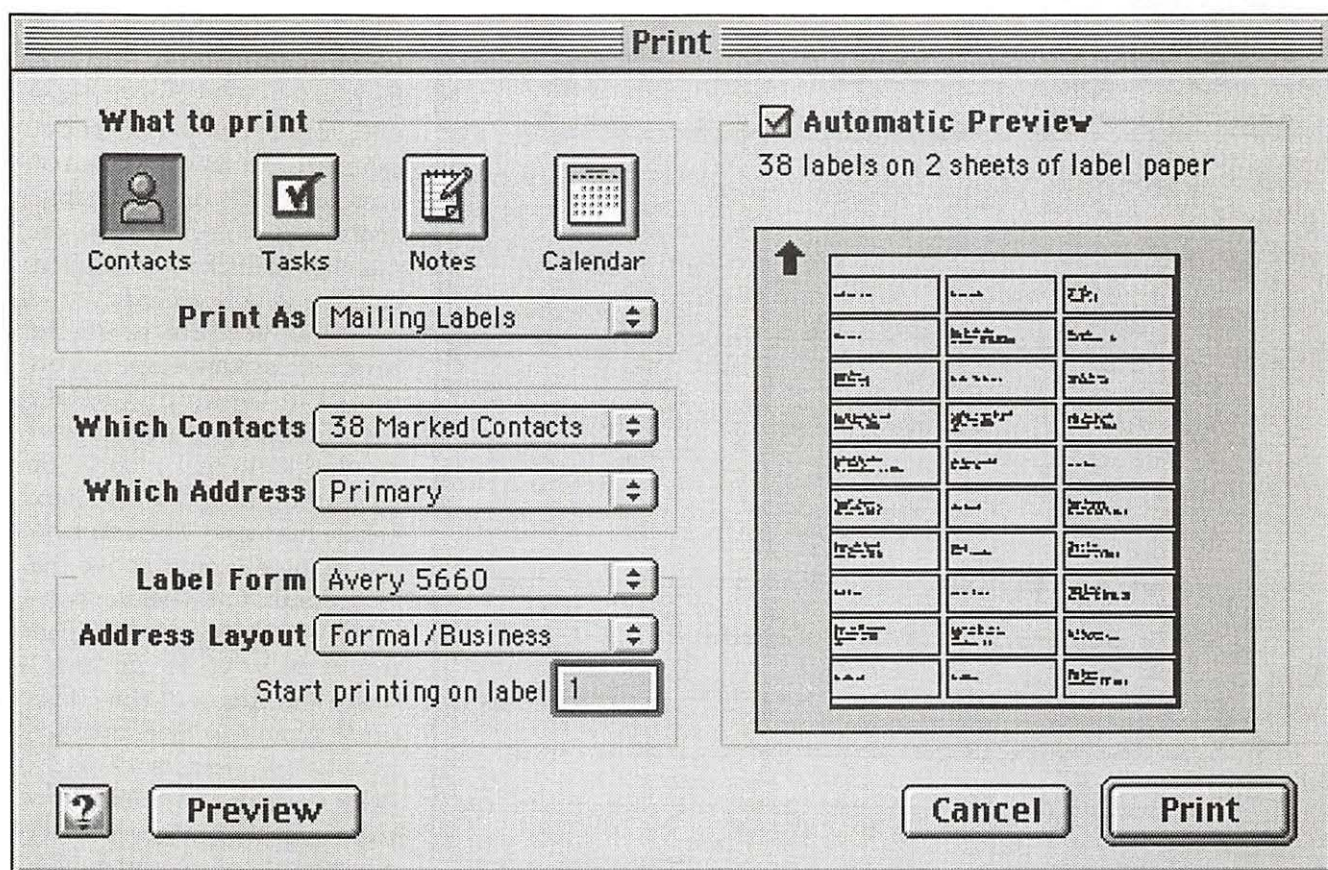


Figure 7. Print Mailing Labels



Figure 8. Palm Address Layout

ful layout. It may be easier to start fresh if you have any knowledge of database development. With that in mind, here are hints to help you along.

When you make a new database from scratch, you will see the "Define Fields" dialog box (Figure 9). At

this point, you need to decide what fields you want in the database. Start with fields for the prefix (Mr. etc.), first name, middle name or initial, last name and spouse or partners name. It may also be advisable to make a suffix field for things such as Jr., III etc. Make an additional field for things such as "and Children." It would be a good idea to look at other address databases to note which fields they use. Just remember, if you have lots of fields, you will always have logical places to add additional data. It is always possible to add more fields to your database later.

That feature is in the "Layout" menu (Figure 10). A database can have numerous layouts to display data, and not all fields will appear in all layouts. Therefore, if you are making your own database, you can make layouts for labels of different sizes and dif-



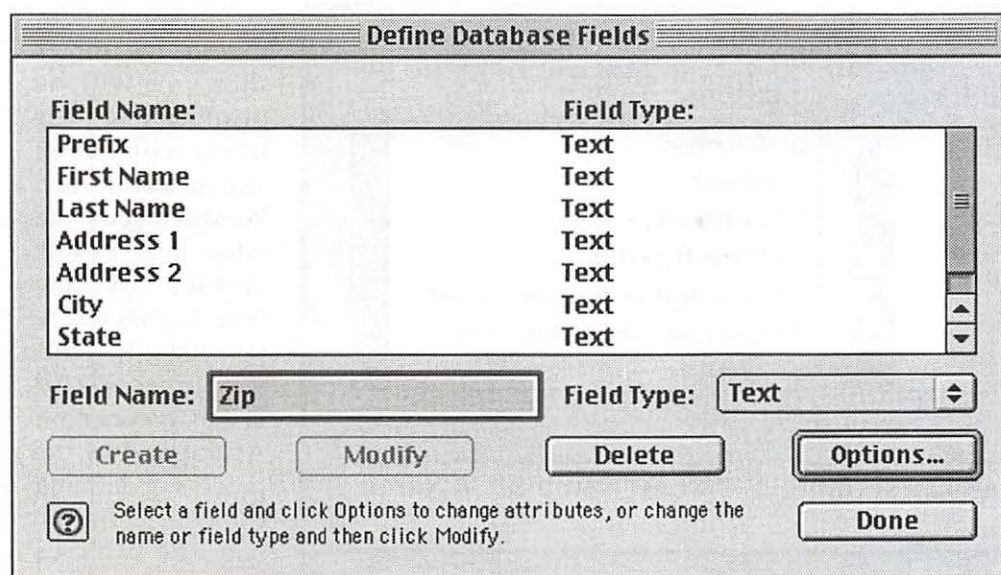


Figure 9. Define Database Fields



Figure 10. Layout Menu

phone numbers. DO NOT do that. You only use number fields if the data in the field will be used in a numerical calculation. If you type in 703-550-1111, the database program will subtract 550 from 703, the subtract 1111 from the results of the first

ferent wordings.

As you begin making the fields, you will see a pop-up menu to choose the field type. Many inexperienced database programmers try to use number fields for things such as zip codes and

one line. An easy way to handle that is to make text calculation fields (Figure 11). When you choose "Calculation" as the field type, you will see an additional window (Figure 12). You will need to write a formula for the calculation in the box, and AppleWorks will help you. Begin by clicking once on the first field you want to use from the "Fields" box. It will appear in the "Formula" box with single quotes around it. All items in formulas must be separated by the & symbol, so choose "&" from the "Operator" box. It is at the bottom. Next, we need a space. That is added by putting the space between sets of double quote marks. Now add another "&." Now add another field. Continue in this manner until you have everything you want to appear on the

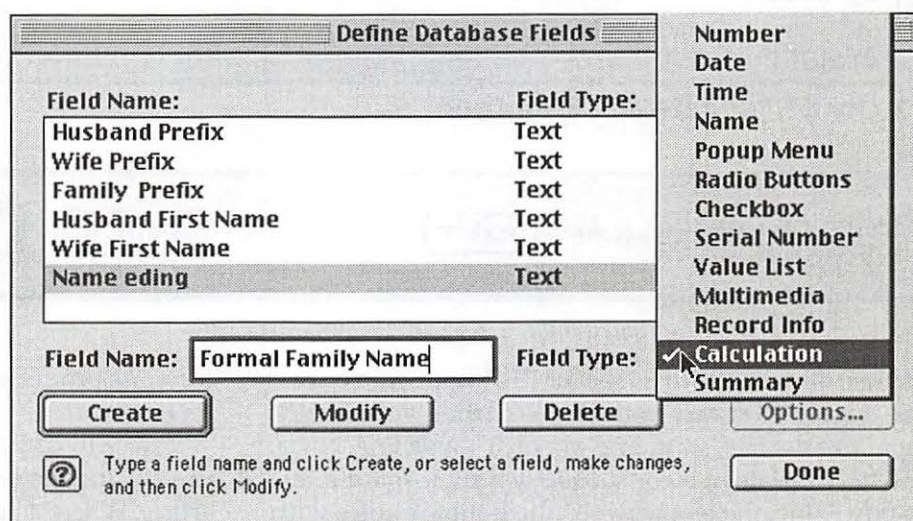


Figure 11. AppleWorks Calculation

calculation—and you will have lost the phone number!

Make two fields for the first line and second lines of the street address. Make separate fields for the City, State, and Zip code. You may also want to make fields for business addresses, vacation home addresses etc. Allow several fields for phone numbers if you also plan to use the database as a regular address database.

When you are putting fields into layouts for printing, getting the lines to print out correctly can be a problem if there are several fields in



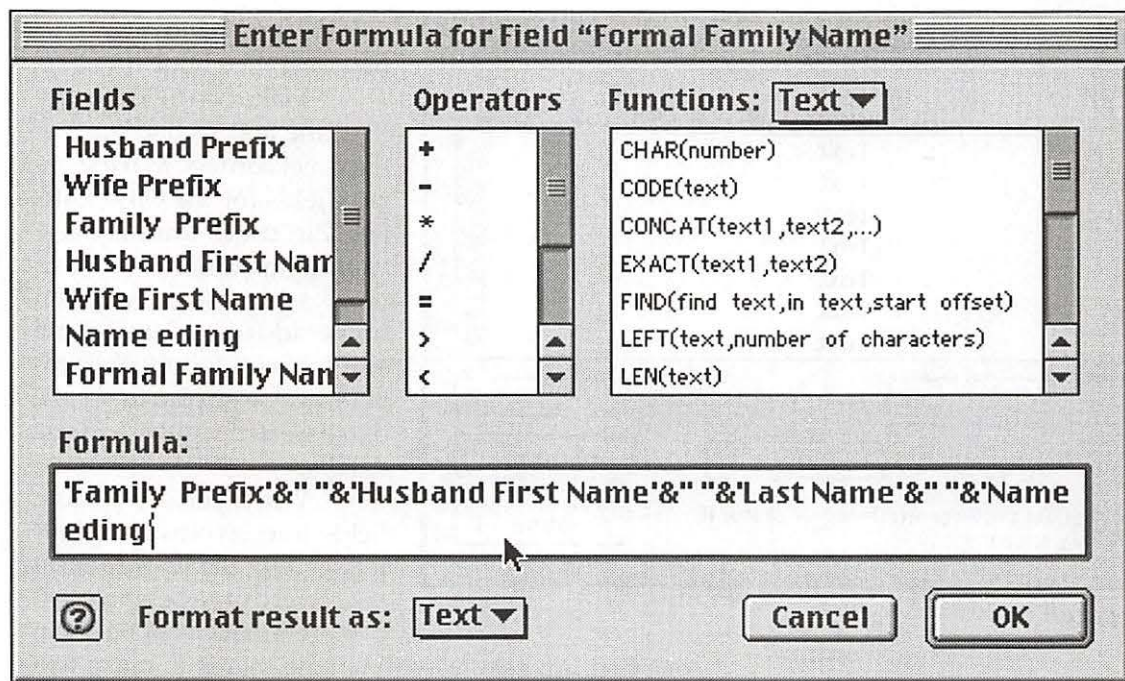


Figure 12. Name Calculation

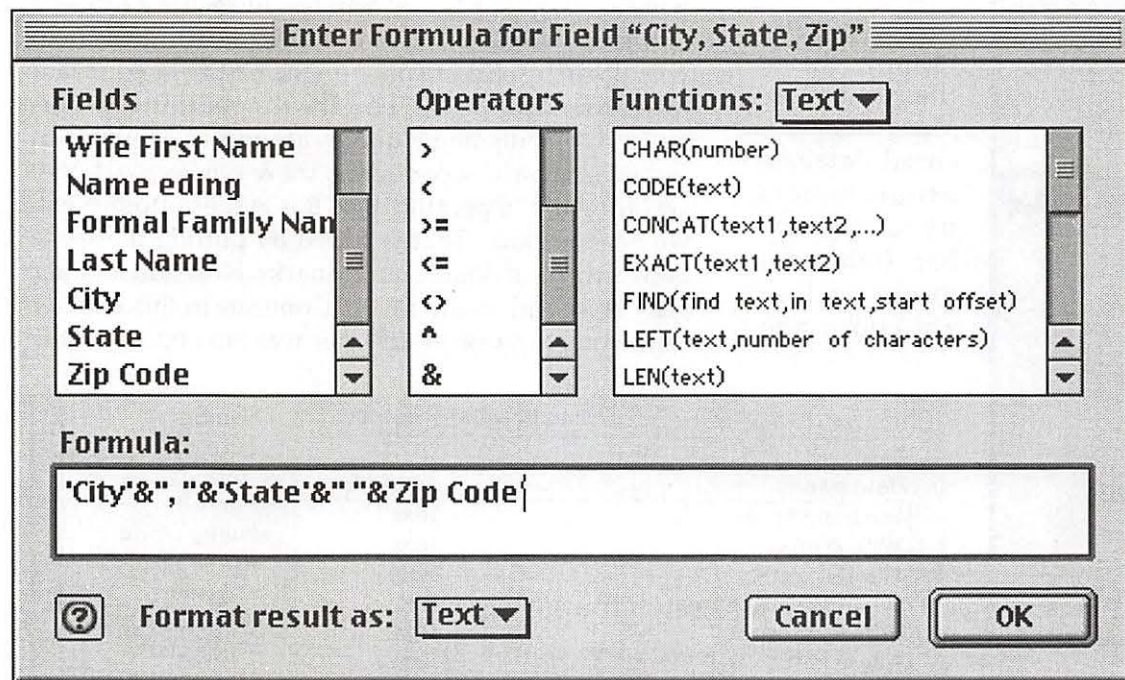


Figure 13. City State Zip Calculation

first line of your address label or "To" line on an envelope. Figure 13 shows you the calculation you would use to put the city, state, and zip on a single line. Note that since we need a comma followed by a space after the city name, the text between the double quotes will have a comma, followed by a space.

for your printer to determine how to set up an envelope layout.

We will continue as if we are making labels (Figure 14) and we will cover envelopes further on in the article. When "Labels" is chosen, a button labeled "Custom" appears. Clicking it leads to a very long list (Fig-

It is important to select the printer that you will be printing out your labels with before you go any farther. We will discuss the whys later in this article, but take time to make sure you have the correct printer selected in the Chooser now. At the end of the process of defining the fields, AppleWorks makes a layout with all the fields you have defined. You will see it when you click the "Done" button in the "Define Fields" window. This layout is ugly, but it works for basic data entry. We need a layout for making our labels. The command "New Layout..." is near the bottom of the "Layouts" menu (Figure 9). Choosing it will bring up the "New Layout" window. If you are making an envelope layout, you would need to choose "Blank." At this point, you will need to looking at the documentation



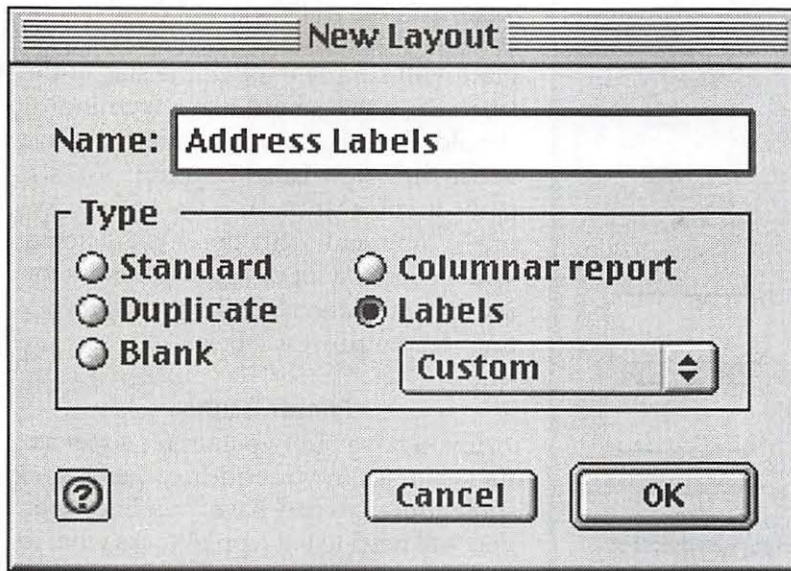


Figure 14. New Layout

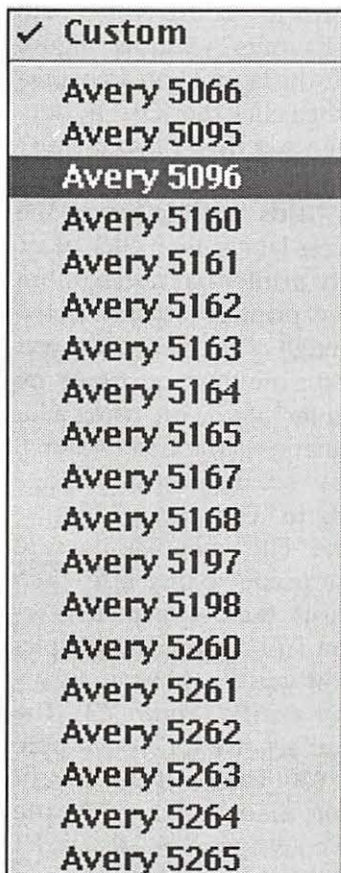


Figure 15. Label Choices

ber, you will need to either make a custom layout or try to figure out which Avery

ure 15) of label numbers which are keyed to the Avery brand of address labels. These are the industry standard, and other brands of address labels will often tell you which Avery labels they match. If there is no Avery num-

label matches your labels. This information is hard to find, so I have made a chart of the Avery labels, their dimensions, and other characteristics. That chart is included in this issue of the Washington Apple Pi Journal. It includes all current products that are normally printed with computer-based printers. If you compare my list to the list in AppleWorks, some numbers are not in my list. Remember that at one time there were far more items for dot matrix printers. Many of these are no longer made.

If you must make your own label layout, there are two ways to do it. The easiest way is to go back to the "Layout" menu (Figure 10) and select "New Label Layout..." This leads to an AppleWorks Assistant called "Create Labels." (Figure 16) There are 9 steps involved in setting up the label layout. They cover all elements including margins, fonts,

and fields to print. This assistant is very comprehensive and easy to use. The other way to set up a new layout is to use the "New Layout" command in the "Layouts" menu. That will once again lead you to the "New Layouts" window (Figure 14). Choose labels, then click the custom button. You will then see the "Label Layout" menu (Figure 17). Fill in the blanks. If your answers do not add up, you will see a message box (Figure 18) that warns you that you have made an error, but is less than helpful in determining exactly what



Figure 16. Create Label Assistant



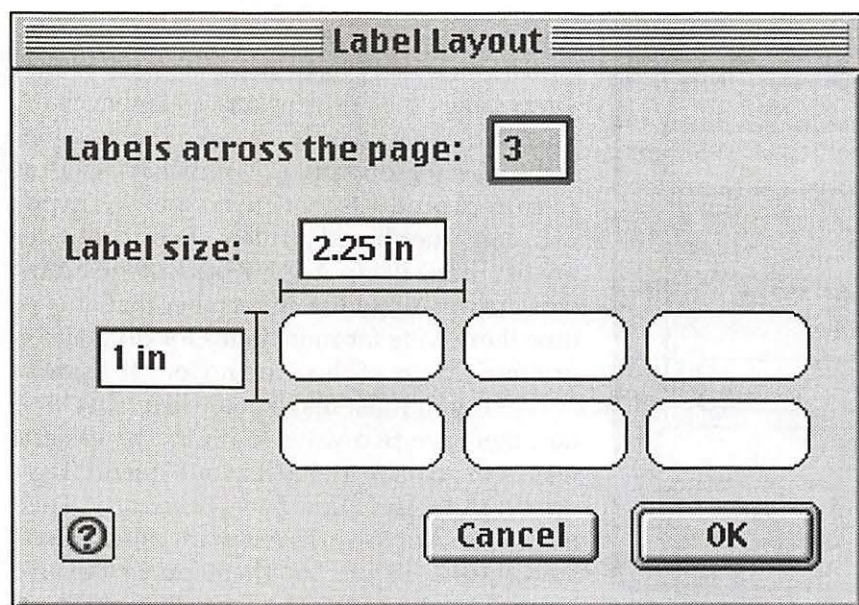


Figure 17. Label Layout Window

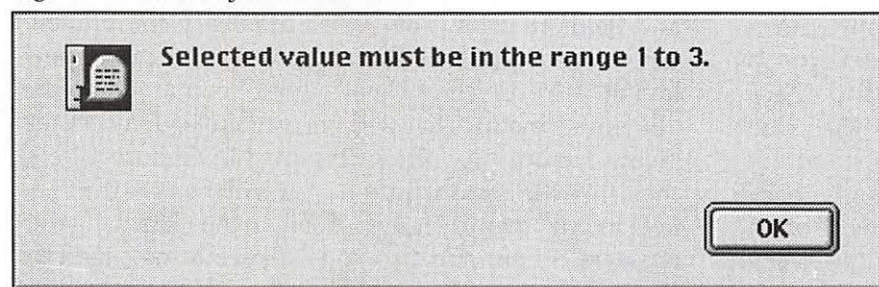


Figure 18. Label error warning

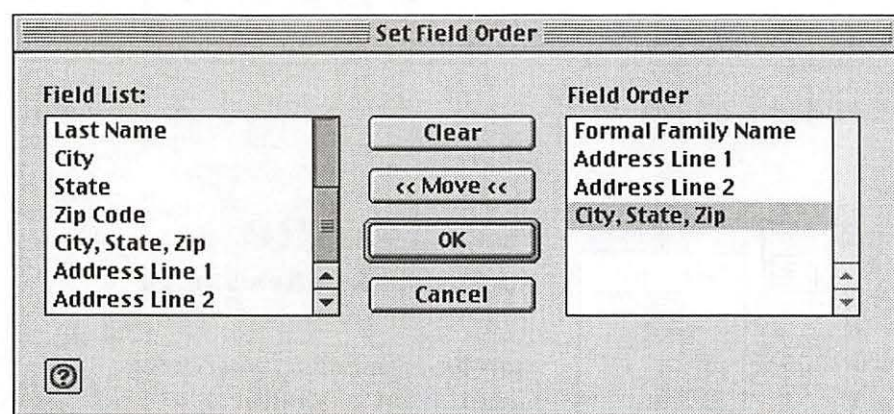


Figure 19. Set Field Order

is wrong. After all, your numbers pass the AppleWorks inspection, you will see the "Set Field Order" window (Figure 19). Fields must be moved from the left window to the right one in the order that you want them to appear on your label. If you have not made calculated fields to handle the name line and one for the city, state, and zip line, you will have lots of items to

move around. In fact, your layout for the label may be too large to fit, and the program will simply enlarge the size of the label. Does this sound like a warning? It should. The easiest way to make labels is to use the "New Label Layout . . ." assistant. If you want to use the "New Layout" command with the labels choice, save yourself a lot of aggravation by using text calculation fields to pre-plan your lines on the address labels.

### Printer Issues

If you have put two lines for street addresses lines in your address labels and some addresses only have three lines, then you will need to tell AppleWorks what to do when there is a blank line. Go to the Go to the "Layout" menu (Figure 10) and pull down to "Edit Layouts . . ." In the "Edit Layouts" window (Figure 20) highlight the layout you are working on and then click the "Ok" button. You will then see the "Layout Info" window (Figure 21). Choose how you want blank fields to slide (up in the case of address labels, then click okay.

Every printer has a maximum page size. Few printers can print all the way to the edge of the paper. Do you know what the minimum margins are for your printer? If you are using a laser printer that uses the LaserWriter 8 drive, you can see the maximum page size by going to "Page Setup" (Figure 22) under the "File" menu. Make sure to select the proper paper size, then click on Clarus, the dogcow. He is really a button and clicking on his picture will show you the minimum margins for your printer (Figure 23). The numbers you see are for my Apple LaserWriter 630. They will be different unless you also have a Apple

LaserWriter 630. If you have an Epson or HP Ink Jet printer, you will need to look up that information in your printer manual.

If your labels do not print out properly, make sure that the paper margins for your label layout are not less than those required by your printer. When I get a call from someone who is having trouble printing la-



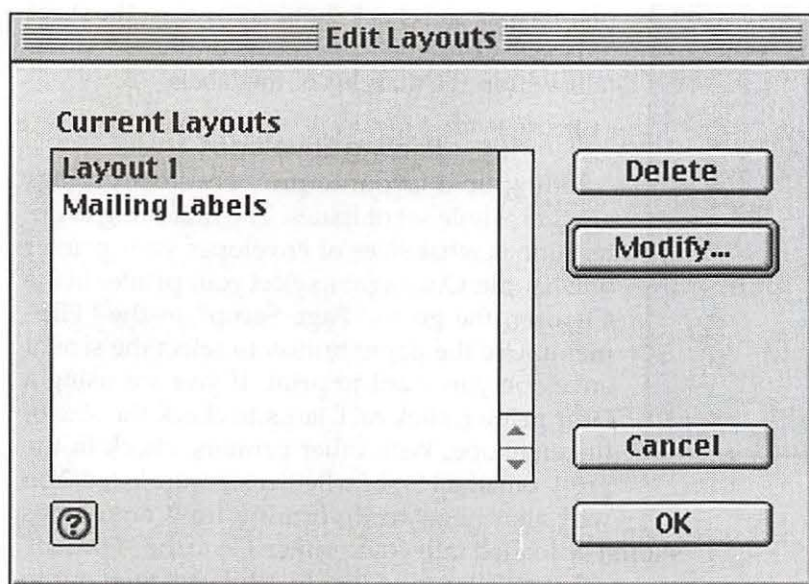


Figure 20. Edit Layouts

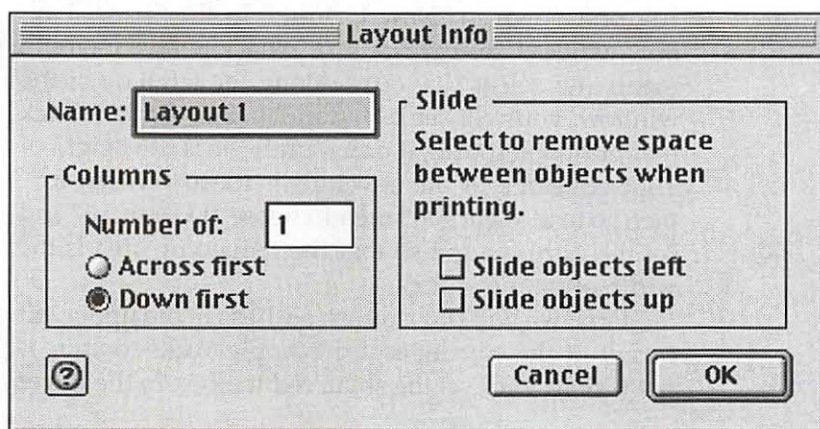


Figure 21. Layout info

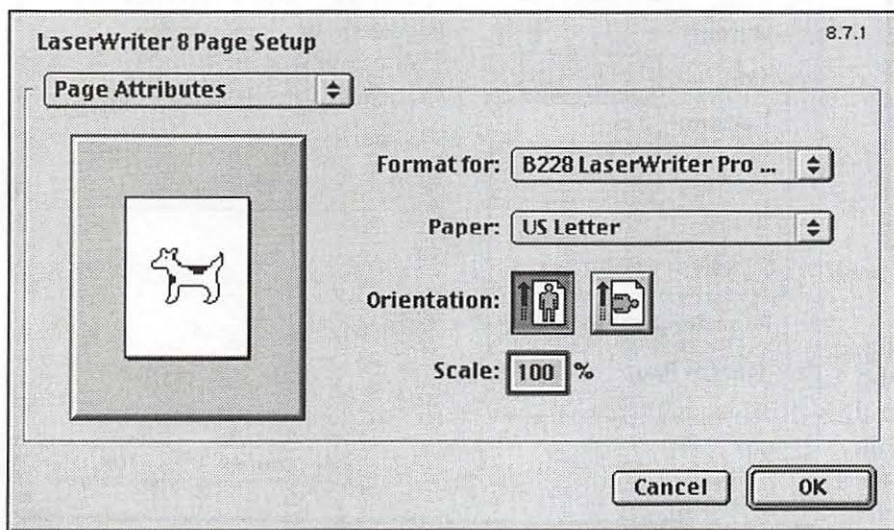


Figure 22. Page Setup

bels, most problems occur in these settings. If the first row of labels on your sheet of labels falls in the minimum margin area, you will not be able to print the top (and sometimes the bottom) row of labels. Page margins are set in the "Format" menu (Figure 24). Choose "Document" to change margin sizes (Figure 25).

Most labels come in at least two different "glue" types. If you have a laser printer, then choose labels that are for laser printers. If you have an ink jet printer, then choose labels made for ink jets printers. There is a difference in the glue formulation. Labels made for laser printers are made to be heated. If you put them through an ink jet printer, the glue does not get the heat it needs to release the labels from the paper backing. If you use ink jet labels in a laser printer, the glue will sometimes not stick to paper at all or the labels stick to the paper backing so tightly that you cannot get them loose.

Label sheets are made to make one pass through a printer. Although some label programs have an option to start on some other label than the first, resist the temptation to put label sheets through your printer twice. It is not economical to reuse a sheet of labels if they peel off the backing sheet on the way through your printer. The bill to remove a label from a printer is often so high that it is cheaper to replace the printer than to dismantle it to get a label out. Store your labels in a cool, dry place and don't use sheets that are bent or ones that show signs of labels coming off the backing. Although I have bought many inexpensive labels, their quality is often inferior to the Avery brand and unless I can use a whole package quickly, I often have trouble with "stale" labels.

Now, let's try printing. Leave the regular paper in your printer and print out the first page of your labels. Place the printed sheet behind one sheet of your labels and hold the sheets up in a strong light. Make sure the printing fits inside the label area and make sure the beginnings of lines on the left side of the paper are within the label. Check that the longest lines on the right edge also print out com-



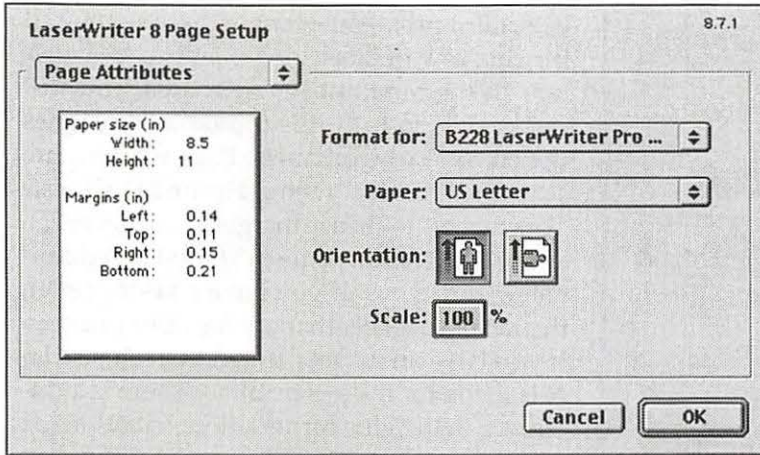


Figure 23. Page Size

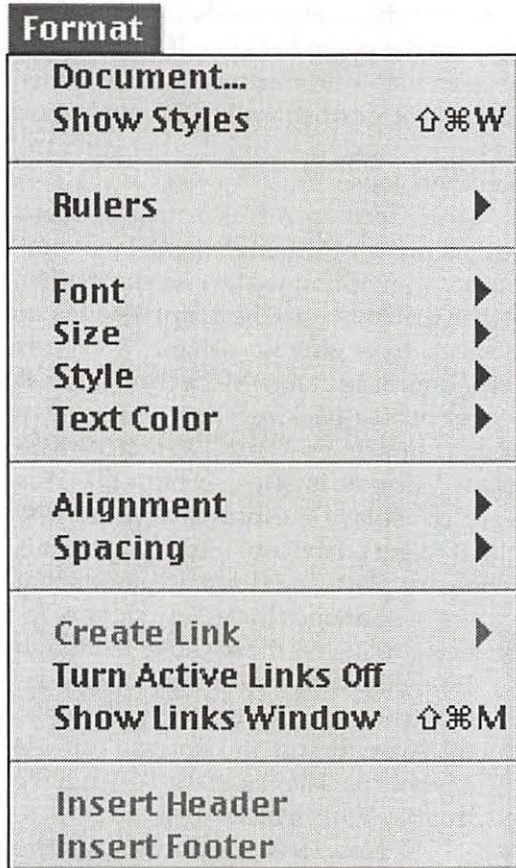


Figure 24. Format Menu

pletely. If there are problems, adjust the paper margins or go to the "Layout" menu, and choose "Layout." Go to the "Edit" menu and choose "Select All." Go to the "Format" menu (Figure 24), select "Size" and then go to the bottom of the pullout menu and select "Smaller." Print another sheet of labels on

plain paper and check the sheet against the sheet of labels. Continue this process until the writing falls within the margins of the labels.

## Printing Envelopes

Setting up a layout to print envelopes brings another whole set of issues. The first thing to determine is what sizes of envelopes your printer will handle. Once again, select your printer in the Chooser, then go to "Page Setup" in the "File" menu. Use the paper button to select the size of envelope you want to print. If you are using a laser printer, click on Clarus to check the size of the envelope. With other printers, check in the printer manual to see whether sizes are listed. You will also need to determine how envelopes should be loaded into your printer. Go to the "Format" menu (Figure 24), pull down to "Rulers," then out to "Show Rulers." Now go to the "Layout" menu (Figure 10), pull down to "New Layout." In the "Label Layout" window, select "Blank." Go back to the "Layout" menu and select "Layout." Along the left side of the window, you will see a button labeled "Body." Click that button and drag it down until it is the height of your envelope. If the envelope is narrower than 8.5" then go to the "Format" menu, choose "Document" and set the right margin so that the remaining area is the width of your envelope.

First, we will put a return address in the upper left corner of the envelope. If the AppleWorks toolbox is not visible, click on the small red toolbox in the lower

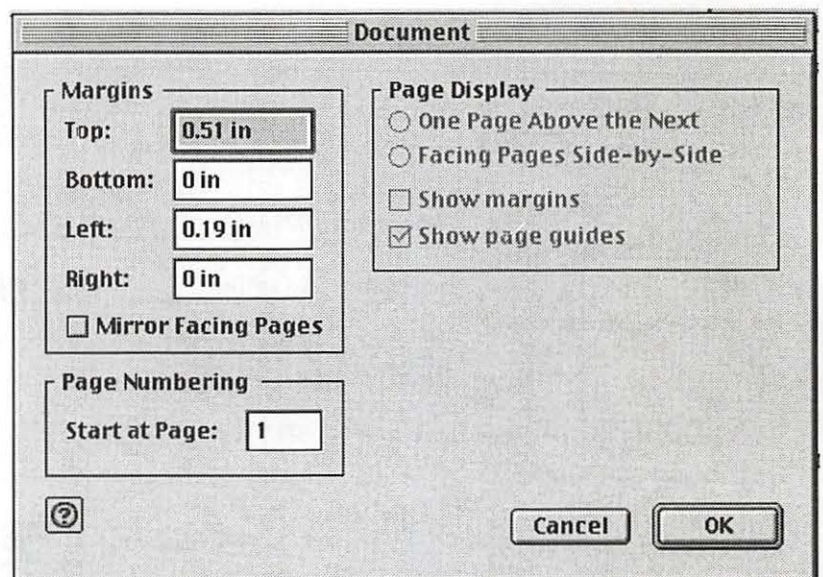


Figure 25. Document Page Margins Window



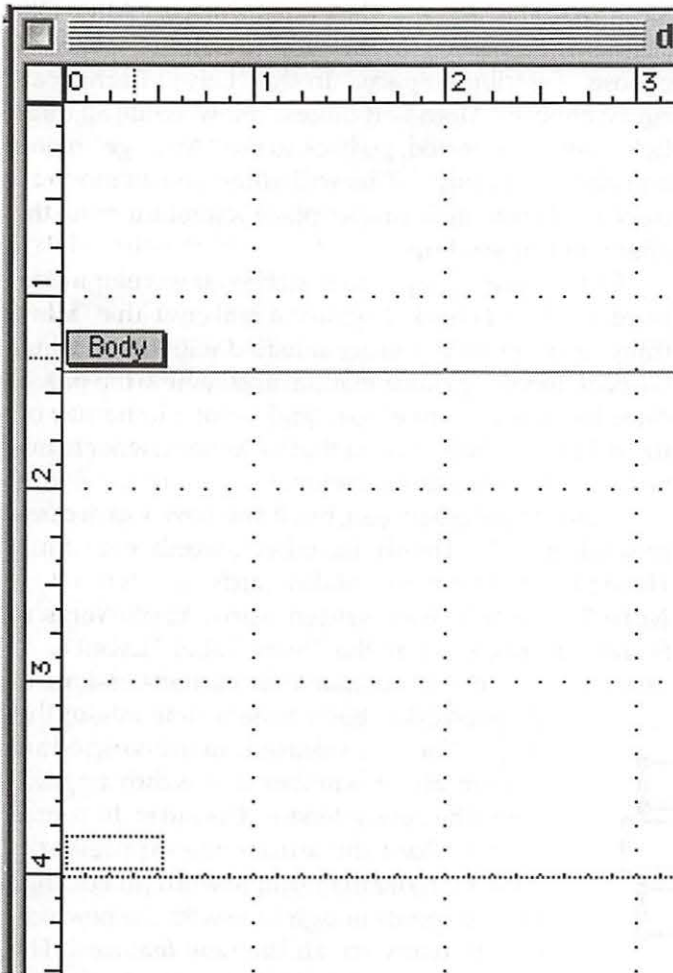


Figure 26. Changing Body Size

left corner of the AppleWorks window (Figure 27). You will then see the tools (Figure 28). Click on the "A" in the upper left corner. Go to the upper left corner of the envelope and click and drag a text box. Type in your return address (Figure 29). Now it is time to add the database fields to the envelope. Go to the "Layout" menu (Figure 10) and select "Insert Field . . ." (Figure 30) Select the first line of the address. You will need to repeat this last step twice more to add the street and city, state, zip lines. Hopefully, you have defined text calculation fields that contain all the fields to be contained in the first line of the address on the envelope, and hopefully, you have a text calculation field for the city, state and zip code. Now you will have the three fields on your layout, each with a label for the field and then a box containing the name of the field. First, delete the field labels. Then re-size the actual data fields. Click once on a field to select it, then click and drag the small square in the center on the right end of the field

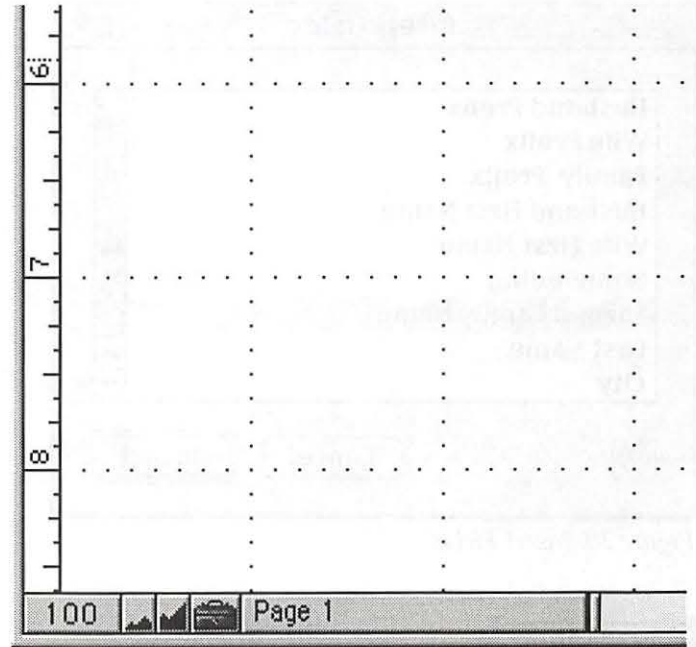
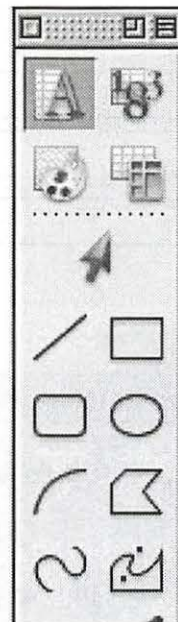


Figure 27. Toolbox



box to make it longer without changing its width (Figure 31). Make all three fields about the same length, and long enough so that your longest line of data will be able to be seen. Now we need to line the three fields up and distribute the space between the lines of text. First move them into approximately the right area and space them so they are fairly close together, top to bottom. We now need to select all three fields at the same time. To do this click on the first field to select it, then hold down the shift key on the keyboard and click the second field, now click the third field.

Figure 28. Text Tool (left)

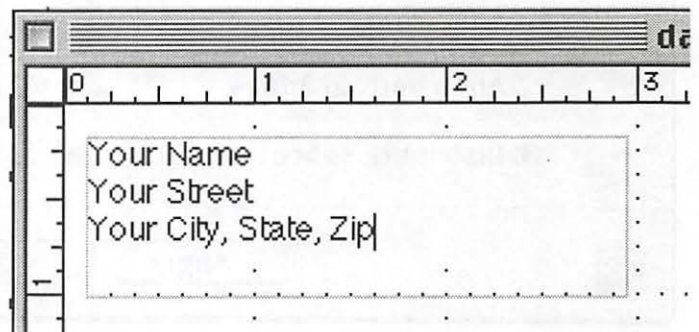


Figure 29. Return Address



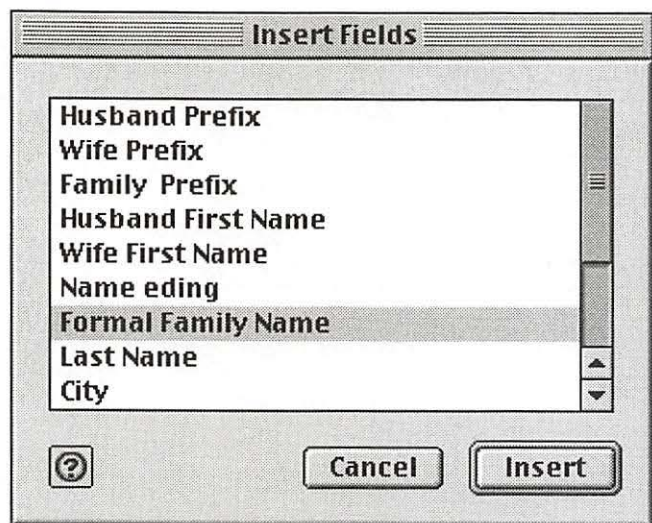


Figure 30. Insert Fields

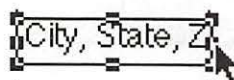


Figure 31. Resizing Fields

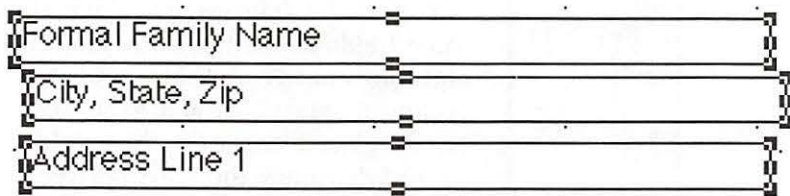


Figure 32. Three Fields Selected

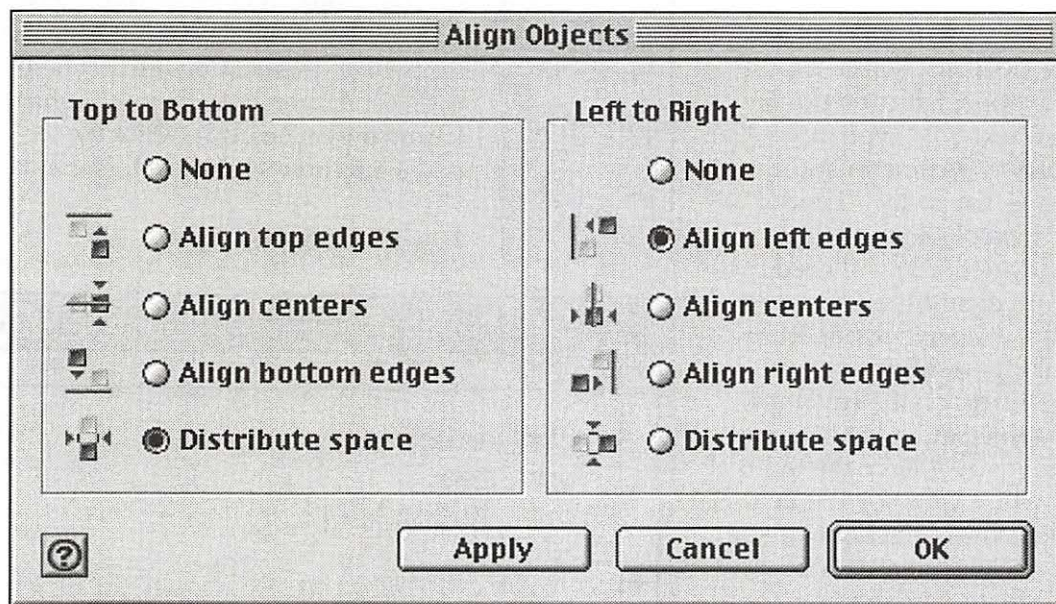


Figure 33. Align Objects

Now go to the "Arrange" menu and select "Align Objects . . ." (Figure 33). In the "Top to Bottom" category, choose "Distribute Space." In the "Left to Right" category, choose "Align Left Edges." Now, while all three fields are still selected, go back to the "Arrange" menu and choose "Group." This will allow you to move all three fields into their proper place without getting the alignment messed up.

Cut a piece of paper to match your envelope size, print it out and check it against a real envelope. Move things around until you are satisfied with the spacing. Go back to your printer manual and review the procedure for loading envelopes and print the names on them. I like to choose a font that looks somewhat handwritten for addressing envelopes.

This was quite a project, but if you have lots of cards to send, it will certainly have been worth your time. Have fun sending your holiday cards.

**Note:** This article was written using AppleWorks 6. Some features, such as the "New Label Layout . . ." assistant may not be available in earlier versions of

AppleWorks. Each time a new version of AppleWorks is released; many articles are written about whether it is worth upgrading to the newer version. Consider the source article. Does the author use AppleWorks daily for more than simple word processing? Has he spent enough time with the new version to really try all the new features? The best source of AppleWorks articles and re-

views in the AppleWorks User Group. They offer Washington Apple Pi members a discount on memberships. Check the classified ads of this journal for specific information and visit [www.awug.org](http://www.awug.org) for more information. ■

--Pat

*Pat Fauquet is one of the tutorial instructors at Washington Apple Pi. She uses her computer for many tasks and is always on the lookout for new things to use it for.*



## Avery Labels

Number	Size/Kind	Color	Printer	Glue	labels per sheet	sheets per pkg
2160	1" x 2-5/8"	White	Laser	Permanent	8	15
2162	1-1/3" x 4"	White	Laser	Permanent	6	15
2163	2" x 4"	White	Laser	Permanent	4	25
2164	3-1/3" x 4"	White	Laser	Permanent	2	25
2180	1/3 cut File Folder Label	Assorted	Laser	Permanent	12	25
2181	1/3 cut File Folder Label	White	Laser	Permanent	12	25
2186	2" x 2-3/4"	White	Laser	Permanent	4	25
3200	Variey Pack Cards	Matte White	Ink jet	None	1	24
3247	8-1/2 x 11" Photo Paper	Photo Glossy White	Ink Jet	None	1	15
3255	8-1/2 x 11" Printable Shrink Sheet	White	Ink jet	None	1	4
3258	5" x 7" Photo Frame	White	Ink Jet	None	1	15
3264	2 x 3-1/2" Mini-Fold Card	White	Ink Jet	None	4	15
3265	5-1/2 x 8-1/2" Half-Fold Card	Matte White	Ink Jet	None	1	15
3270	8-1/2 x 11" Printable Magnet Sheet	White	Ink jet	None	1	3
3271	8-1/2 x 11" T-Shirt Transfer Sheet		Ink jet	None	1	6
3273	4-7/8 x 6-7/8" Print to Edge Card	Matte White	Ink Jet	None	1	15
3277	8-1/2 x 11" Textured Canvas Sheet	White	Ink jet	None	1	6
4160	"3-1/2" x "3-1/2" Name badge	White, blue border	Dot Matrix	Removable	1 Stack	250
4167	3-1/2 x 6" Post Card	White	Dot Matrix	None	1 Stack	500
4241	"3-1/2" x "3-1/2"	White	Dot Matrix	Permanent	1 Stack	250
4255	4-1/2" File Folder	White	Dot Matrix	Permanent	1 Stack	250
4266	4-1/2" File Folder	Assorted	Dot Matrix	Permanent	1 Stack	1000
5036	2/3" x 3-7/16"	White	Laser	Permanent	30	50
5066	2/3" x 3-7/16"	Red	Laser	Permanent	30	25
5095	2-1/3" x 3-3/8" Name Badge	Red Border	Laser	Removable	8	50
5095	2-1/3" x 3-3/8" Name Badge	Red Border	Laser	Removable	8	50
5096	3-1/2" x 3-1/2"	Red Stripe	Laser	Permanent	9	50
5160	1" x 2-5/8"	White	Laser	Permanent	30	100
5161	1" x 4"	White	Laser	Permanent	20	100
5162	1-1/3" x 4"	White	Laser	Permanent	14	100
5163	2" x 4"	White	Laser	Permanent	10	100
5164	3-1/3" x 4"	White	Laser	Permanent	6	100
5165	8-1/2" x 11"	White	Laser	Permanent	1	100
5167	1/2" x 1-3/4"	White	Laser	Permanent	80	100
5168	5" x 3-1/2"	White	Laser	Permanent	4	100
5196	3-1/2" x 3-1/2"	White	Laser	Permanent	12	70
5197	5-1/4" Disk Label	White	Laser	Permanent	12	70
5198	1-5/8" x 3-1/2 Audio Tape	White	Laser	Permanent	12	50
5199	1-5/6" x 3-1/16 Video Tape	White	Laser	Permanent	10	50
5260	1" x 2-5/8"	White	Laser	Permanent	30	25
5261	1" x 4"	White	Laser	Permanent	20	25
5262	1-1/3" x 4"	White	Laser	Permanent	14	25
5263	2" x 4"	White	Laser	Permanent	10	25
5264	3-1/3" x 4"	White	Laser	Permanent	6	25
5265	8-1/2" x 11"	White	Laser	Permanent	1	25
5266	2/3" x 3-7/16"	Assorted	Laser	Permanent	30	25
5267	1/2" x 1-3/4"	White	Laser	Permanent	80	25
5274	2" x 3-1/2" Diskette Label	Assorted	Laser	Permanent	2	40
5293	1-2/3"	White	Laser	Permanent	24	25
5294	2-1/2"	White	Laser	Permanent	12	25
5364	2 x 3-7/8" Rotary Card	White	Ink Jet	None	3	10
5364	2 x 3-7/8 Rotary Card	White	Laser/InkJet	None	3	10



Number	Size/Kind	Color	Printer	Glue	labels per sheet	sheets per pkg
5371	2" x 3-1/2" Business Card	White	Laser	None	10	25
5376	2" x 3-1/2" Business Card	Ivory	Color Laser	None	10	25
5377	2" x 3-1/2" Business Card	Gray	Color Laser	None	10	25
5388	3 x 5" Index Card	White	Laser	None	3	50
5390	2-1/4" x 3-1/2" Name Badge	White	Laser/Ink Jet	Refill	8	50
5392	3"x4" Name Badge	White	Laser/Ink Jet	Refill	8	50
5395	2-1/3" x 3-3/8" Name Badge	White	Laser	Removable	8	50
5660	1" x 2-3/4"	Clear	Laser	Permanent	30	50
5661	1" x 4-1/8"	Clear	Laser	Permanent	20	50
5662	1-1/3" x 4-1/8"	Clear	Laser	Permanent	14	50
5663	2" x 4-1/8"	Clear	Laser	Permanent	10	50
5664	3-1/3" x 4-1/8"	Clear	Laser	Permanent	6	50
5667	1/2" x 1-3/4"	Clear	Laser	Permanent	80	25
5692	CD/DVD Disc Label	White	Laser	Permanent	(2 disc/4 spine)	20
5693	CD/DVD Case Insert	White	Laser	Permanent	1 Front/1 Back	20
5694	CD/DVD Disc Label/Insert	Clear Glossy	Laser	Permanent	1 Label/1 Insert	20
5766	2/3" x 3-7/16"	Blue	Laser	Permanent	30	50
5810	4 1" x 2 5/8"	White	Laser	Permanent	30	40
5824	CD/DVD Disc Label/Insert	White	Laser	Permanent	1 Label/1 Insert	20
5881	2" x 3-1/2" Business Card	White	Color Laser	None	10	25
5895	2-1/3" x 3-3/8" Name Badge	Blue Border	Laser	Removable	8	50
5896	3-1/2" x 3-1/2"	Blue Stripe	Laser	Permanent	9	50
5911	2" x 3-1/2" Business Card	White	Laser	None	10	250
5925	2"x2-11/32" Zip Disk	White	Laser	Removable	25	
5925	2"x2-11/32"	White	Laser	Permanent		25
5931	CD/DVD Disc/Spine	White	Laser	Removable	(2 disc/4 spine)	25
5960	1" x 2-5/8"	White	Laser	Permanent	30	300
5961	1" x 4"	White	Laser	Permanent	20	250
5962	1-1/3" x 4"	White	Laser	Permanent	14	250
5963	2" x 4"	White	Laser	Permanent	10	250
5966	2/3" x 3-7/16"	Yellow	Laser	Permanent	30	50
5970	1" x 2-5/8"	Fluorescent Magenta	Laser	Permanent	30	25
5971	1" x 2-5/8"	Fluorescent Green	Laser	Permanent	30	25
5972	1" x 2-5/8"	Fluorescent Yellow	Laser	Permanent	30	25
5979	1" x 2-5/8"	Assorted Fluorescent	Laser	Permanent	30	15
5980	1" x 2-5/8"	Blue Pastel	Laser	Permanent	30	25
5996	3-1/2" x 3-1/2"	White	Laser	Permanent	9	10
5997	Video Tape Label, Spine	White	Laser	Permanent	10	15
5998	1-5/8" x 3-1/2" Audio Tape	White	Laser	Permanent	12	10
6460	1" x 2-5/8"	White	Laser	Removable	30	25
6460	1" x 2-5/8"	White	Laser	Removable	30	25
6464	3-1/3" x 4"	White	Laser	Removable	6	25
6464	3-1/3" x 4"	White	Laser	Removable	6	25
6465	8-1/2" x 11"	White	Laser	Removable	1	25
6465	8-1/2" x 11"	White	Laser	Removable	1	25
6466	2/3" x 3-7/16" File Folder	Assorted	Laser	Removable	30	25
6466	2/3" x 3-7/16"	Assorted	Laser	Removable	30	25
6467	1/2" x 1-3/4"	White	Laser	Removable	80	25
6467	1/2" x 1-3/4"	White	Laser	Removable	80	25
6490	2" x 2-3/4"	White	Laser	Removable	15	25
6692	CD/DVD	White	Color Laser	Permanent	2 Disc/2 Spine	15
6693	CD/DVD	White	Color Laser	Permanent	1 Label/1 Insert	15
8066	2/3" x 3-7/16"	White	Ink Jet	Removable	30	25
8096	2" x 2-3/4" Diskette Label	White	Ink Jet	Removable	15	15
8160	1" x 2-5/8"	White	Ink Jet	Permanent	30	25



Number	Size/Kind	Color	Printer	Glue	labels per sheet	sheets per pkg
8161	1" x 4"	White	Ink Jet	Permanent	20	25
8162	1-1/3" x 4"	White	Ink Jet	Permanent	14	25
8163	2" x 4"	White	Ink Jet	Permanent	10	25
8164	3-1/3" x 4"	White	Ink Jet	Permanent	6	25
8165	8-1/2" x 11"	White	Ink Jet	Permanent	1	25
8166	2/3" x 3-7/16"	Assorted	Ink Jet	Permanent	30	25
8167	1/2" x 1 3/4"	White	Ink Jet	Permanent	80	25
8196	3-1/2" x 3-1/2" Diskette Label	White	Ink Jet	Permanent	6	25
8250	1" x 2-5/8"	White	Ink Jet	Permanent	30	20
8253	2 2" x 4"	White	Ink Jet	Permanent	14	20
8309	3-1/2 x 11" Tent Card	White	Ink Jet	None	1	25
8313	4 x 6" Card	Photo Glossy White	Ink Jet	None	1	25
8314	8-1/2 x 11"	Photo Glossy White	Ink Jet	None	1	20
8315	5-1/2 x 4-1/4" Note Card	White	Ink Jet	None	2	25
8316	5-1/2 x 8-1/2" Half Fold Card	White	Ink Jet	None	1	25
8317	5-1/2 x 4-1/4" Note Card	Ivory	Ink Jet	None	2	25
8366	1/3 cut File Folder Labels	White	Ink Jet	Permanent		25
8371	2 x 3-1/2" Postcard/Business Card	White	Ink Jet	None	10	25
8373	2" x 3-1/2" Business Card	Glossy White	Ink Jet	None	8	20
8373	2" x 3-1/2" Business Card	White	Ink Jet	None	8	20
8376	2 x 3-1/2" Promotion Mailer Card	White	Ink Jet	None	10	25
8377	2 x 3-1/2" Promotion Mailer Card	White	Ink Jet	None	10	25
8384	8-1/2"x11" Brochure	White	Ink Jet	None	1	20
8385	2-1/6" x 4" Rotary Card	White	Ink Jet	None	8	25
8386	4" x 6" Post Card	White	Ink Jet	None	2	50
8387	5-1/2" x 4-1/4" Postcard	White	Ink Jet	None	4	50
8388	3 x 5" Index Card	White	Ink Jet	None	3	25
8389	4" x 6" Post Card	Glossy White	Ink Jet	None	2	20
8395	2-1/3" x 3-3/8" Name Badge	White	Laser	Removable	8	20
8460	1" x 2-5/8"	White	Ink Jet	Permanent	30	100
8461	1" x 4"	White	Ink Jet	Permanent	20	100
8462	1-1/3" x 4"	White	Ink Jet	Permanent	14	100
8463	2" x 4"	White	Ink Jet	Permanent	10	100
8471	2 x 3-1/2" Promotion Mailer Card	White	Ink Jet	None	10	100
8476	2" x 3-1/2" Business Card	White	Ink Jet	None	10	100
8663	2" x 4"	Clear	Ink Jet	Permanent	10	25
8665	8-1/2" x 11"	Clear	Ink Jet	Permanent	1	25
8667	1/2" x 1-3/4"	Clear	Ink Jet	Permanent	80	25
8692	CD/DVD Disc Labels	White	Ink Jet	Permanent	1 Disc/2 Spine	20
8693	CD/DVD Case Inserts	White	Ink Jet	Permanent	1 Front/1 Back	20
8694	CD/DVD Label/Insert	White	Ink Jet	Permanent	1 Disc/1 Insert	20
8763	2" x 4"	White	Ink Jet	Permanent	10	20
8769	1-1/4" x 3-3/4"	White Glossy	Ink Jet	Permanent	12	24
8871	2" x 3-1/2" Clean Edge Business Card	White	Ink Jet	None	10	20
8925	2" x 2-11/32"	White	Ink Jet	Removable	6	25
15160	1 1" x 2-5/8"	White	Laser	Permanent	30	10
15162	1 1-1/3" x 4"	White	Laser	Permanent	14	10
15163	2" x 4"	White	Laser	Permanent	10	10
15267	2 1/2" x 1-3/4"	White	Laser	Permanent	80	5
15660	10 1" x 2-3/4"	Clear	Laser	Permanent	30	10
15662	1-1/3" x 4-1/8"	Clear	Laser	Permanent	14	10
18660	1" x 2-5/8"	Clear	Ink Jet	Permanent	30	10
18662	1-1/3" x 4"	White	Ink Jet	Permanent	14	10
27731	2" x 3-1/2" Business Card	White	Laser	None	10	10
28371	2" x 3-1/2" Business Card	White	Ink Jet	None	10	10



# Holiday Newsletters with AppleWorks

by Pat Fauquet

**E**ACH YEAR I enjoy holiday cards that include long newsy letters about what my friends and family have been up to. Everyone is busy today, so instead of a newsy letter, I get nothing, a few short lines or a general newsletter about the family's activities. Some are simply a type page that has then been photocopied. Others are printed out on fancy paper bought at Staples or Office Depot. Well, how about a newsy letter that includes some of those digital pictures and scans, perhaps a little clip art, and some creative layout techniques.

The best way to use this tutorial is to go to your computer, open AppleWorks 6 and follow along. If you have an earlier version, most things will work, but the names and location of menus and commands may be slightly different.

## Word Processing with Columns

The first way to enliven your newsletter is to use



Figure 1. Column tool

ing, a few short...  
the family's  
age that has  
printed out on  
Office Depot. Well,  
ides some of  
rhaps a little  
techniques.

letter is to use

Figure 2. Option Key on Column Line

the word processing module and add columns. This makes closely written text easier to read since the reader's eye only has to scan half-way across the page at a time. Did you ever wonder why newspapers and magazines use column layouts!

To make multiple columns in AppleWorks, go to the palette line right under the document title. Look for

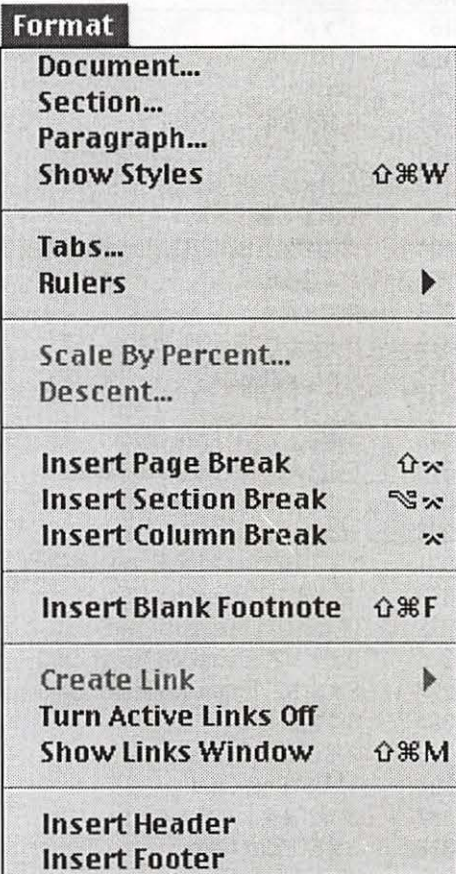


Figure 3. Format menu

the "Column" tool (Figure 1). Note that there is a number in the center. The single box to the left means less columns. The double box to the right of the number means more columns. Click the more button a few times to add a few columns, then click the less button until you are left with only two columns.

Sometimes you might want to have columns that are different sizes. One way to do this is to hold down what I like to call the "magic" key on the Macintosh. You probably call it by its more common name, the option key, but I have found that holding down the option key while clicking on keys or buttons or moving my mouse around the screen will often show hidden features. In this case, hold the option key down, then drag the mouse over the gray lines that divide the columns. You will see the cursors shown in Figure 2, but only one at a time. If you click while the first cursor is visible, you will be able to move the columns. The other two cursors are used to make a wider or narrower gap between columns.

Often, when you are making documents with columns, you want part of the document to cover the en-



tire paper and not just half. The term for that kind of an arrangement is "sections." If you want the first section of the document to be one column wide, and then to have a section that has two columns, you will need to make the first section, then go to the "Format" menu

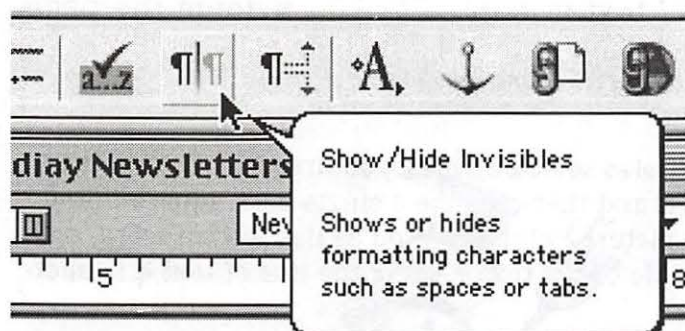


Figure 4. Show/Hide Invisibles

## Look for space dots.

See the return ↵

Check for the tab ➡

This is a section break □

This is a column break ≡

This is a page break ▢

Figure 5. Invisibles

(Figure 3) to choose "Insert Section Break." You will notice that there is a faint gray line across the document window. Place your cursor in the new sections and click the Column tool (Figure 1) to

tell AppleWorks how many columns to make. A document can have as many sections as you would like, each with one or more columns.

Sometimes you will want to move the cursor to the second column before the first column is full. Many new users simply press the return key until the cursor is in "right" place. That can really cause messes. Instead, you should use the "Insert Column Break" command in the "Format" menu to move to the next column.

## Invisible Characters

When you are working on documents using these more advanced formatting commands, it is often nice to be able to look behind the scenes to see what is really happening. Each key that you press and each command that you use makes invisible marks that AppleWorks records to format your document correctly. There is a toolbar at the top of the screen that has many buttons on it (and you can and more) to make it easy to use the features of AppleWorks. If you position your mouse over the buttons and pause without pushing the mouse button, balloons will appear to tell you a little about the tool (Figure 4). There is an annoying "bug" in AppleWorks 6 that sometimes makes it difficult to click the buttons in the toolbar. Make sure the button turns gray while you are clicking on it to activate the button. Click the "Hide/Show" Invisibles button, then look at Figure 5 to see the common invisible characters.

It is often nice to add graphics to your newsletter. In AppleWorks you can see the clip art included in the program by going to the "File" menu. Pull down to the "Show Clippings" command. A tabbed palette, "Clippings" (Figure 6) will open. Explore it by clicking

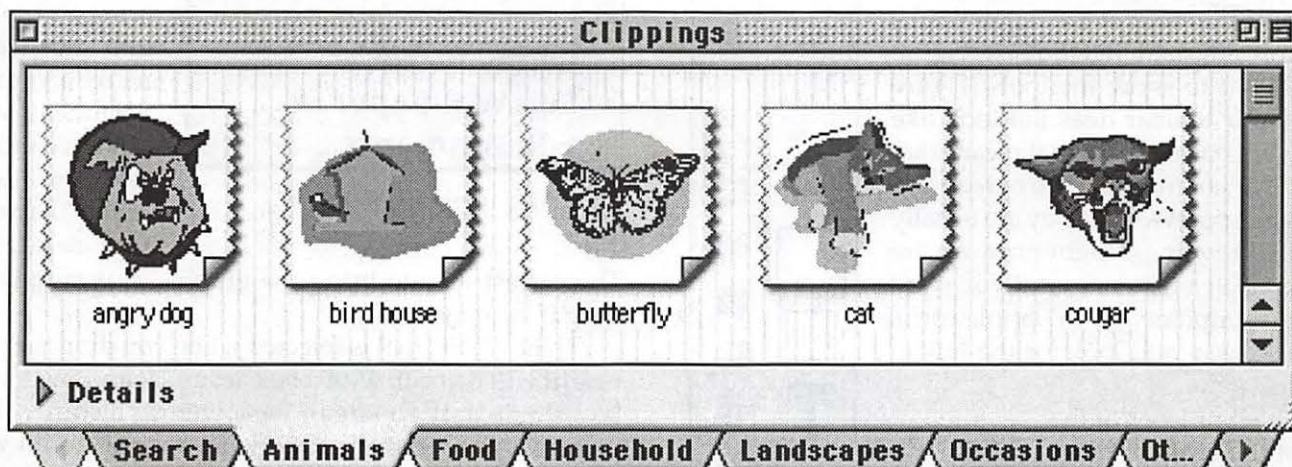


Figure 6. Clipping Palette



on the tabs and scrolling through the included clip art. There are some great pictures, but you would have thought Apple could have done a better job. Well they did. But, rather than clog

your hard drive with thousands of pictures that you only use once year, they put a whole lot more clip art on their servers on the Internet and gave you a great way to download just what you want. Click on the "Search" Tab, enter a word, make sure the "Search Web Content" box is checked, and then click the "Search" button. Your computer will connect to the Internet, contact the AppleWorks servers and show you what it found listed with that key word. If you do not get any results or very few, try a related word. Christmas brought up lots of holly and candles, but not one manger scene. Manger or nativity yielded a few more. Similarly, Hanukkah did not give me any results, but typing in "dreidel," "menorah" and "star of david" returned some nice graphics.

### Placing Graphics in Word Processing Documents

At the bottom of the AppleWorks window is a small red toolbox (Figure 7). Click it to show the tools (Figure 8). If your toolbar does not look like mine, but has two tabs that means that you have not installed the newest updates to AppleWorks. They are usually on our Pi Fillings. Right now, we are working on a new one, so if you want the latest update, go to <apple.com/appleworks> and look for the link to the updater.

The four icons at the top of the toolbox allow you to bring in a work

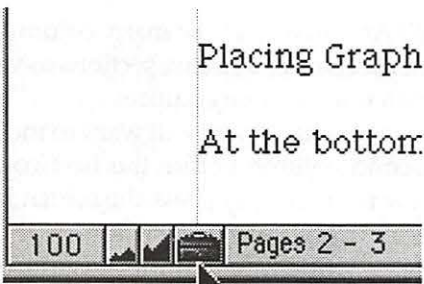


Figure 7. AppleWorks Toolbox

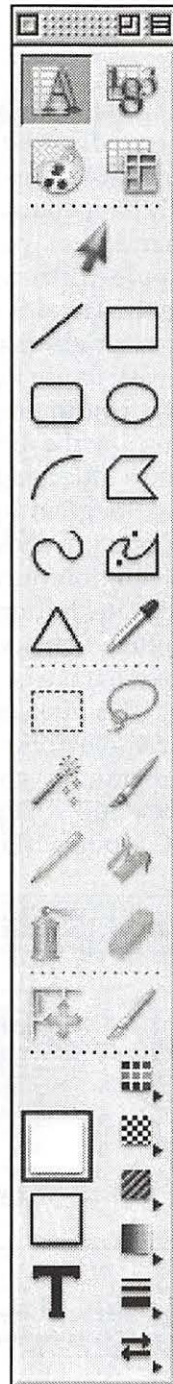


Figure 8. Toolbox

Placing Graph  
At the bottom

word, and it will move into the



text it is in down the page

Figure 9. Using Text Tool

tool is selected when you drag the picture, it will it and there be a single dark square in the 1 picture will be treated as if it were a word, and idle of text the line of text is in do

word or Selected Give when the picture there will



Figure 10. Using Arrow Tool

### Options

Show Graphics Grid	
Turn Autogrid On	⌘Y
Edit Master Page	
Object Size...	
Frame Links	⌘L
Text Wrap...	
Edit Patterns...	
Edit Wallpaper...	
Edit Gradients...	

Figure 11. Options Menu

processing, spreadsheet, paint, or grid into other documents. The arrow tool is also called the selector tool.

When you are ready to bring a graphic into your word processing document, you can have either the "Text" tool or the "Arrow" tool selected.

The easiest way to bring the graphic in is simply to drag it into position.

If the "Text" tool is selected when you drag the picture, it will come in with a box around it and there will be a single dark square in the lower right corner. The picture will be treated as if it were a word, and it will move into the middle of the text, forcing the line of





Figure 12. Text Wrap

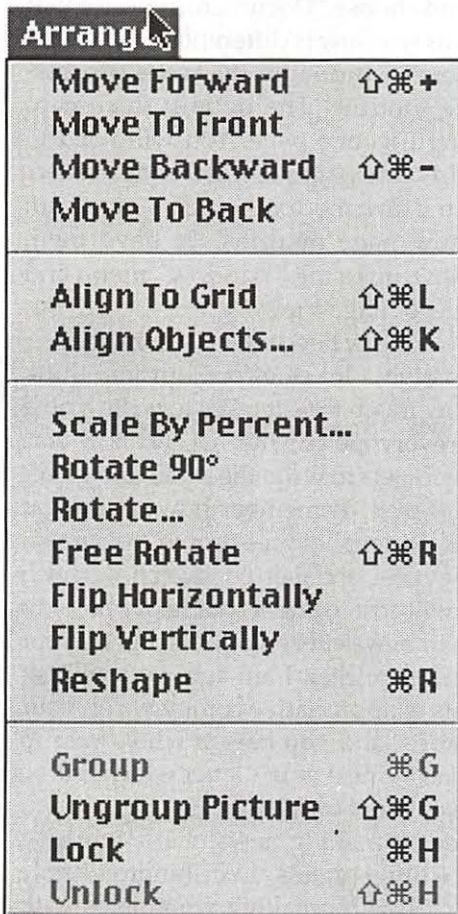


Figure 13. Arrange Menu

the picture is selected, the menu bar changes to reflect the kinds of tool that you would use on pictures. Of particular interest are the "Arrange" and "Options" menus.

The "Text Wrap..." command in the "Options"

text it is in down the page (Figure 9).

If the "Arrow" or "Selector" tool is active when the picture is dragged onto the page, there will be eight "handles" around the picture and it will "float" on top of the text (Figure 10). If you want to move or resize the picture, click it with the arrow tool and the handles will come back. When

menu (Figure 11) can be used to wrap the text around the graphic. Select the graphic, bring up the "Text Wrap..." window and choose how you would like the text to wrap around the picture.

When the picture is selected, the "Arrange" menu (Figure 13) appears. The "Move Back," and "Move Backward" commands can be used to move the text over the picture (Figure 14).

Photographs can be used as easily as clip art. You will need to use the handles to make them small enough to fit on your pages. If you have any experience with photo editing, it would be a good idea to get them to a smaller size before bringing them into AppleWorks. Unfortunately, that will have to be the topic of a future article.

If you are using one of the printed papers with a border design or a graphic, you may need to change the printing margins for your newsletter. This is done in the "Format" menu when the text tool is darkened. Select the "Document" command to make the changes. You will need to consider the minimum margins required by your printer. Read the article on Address Labels in this issue for more information on that topic.

### Making a Newsletter in the Draw Module

Newsletters that are made using the Draw module of AppleWorks can be more free-form. To Make a "Draw" document, go to the "File" menu and pull down to "New," then out to "Draw." You can also use the "Starting Points" palette or the toolbar at the top of the Appleworks window to start a new "Draw" document.

In draw documents, you use text boxes to hold headlines and areas of text. Each box is independent of the other boxes and can be moved around or resized whenever you want to do so. Clip art and photos are also separate boxes.

The boxes can be arranged, layered, grouped and locked into place. To make a text box, click the "Text" tool, move over to the document window, then click and drag to make a box. Type into the box. When you choose another tool or click outside of the box it is deselected. To work on

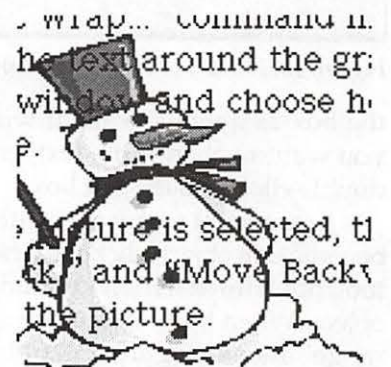


Figure 14. Text on top of picture



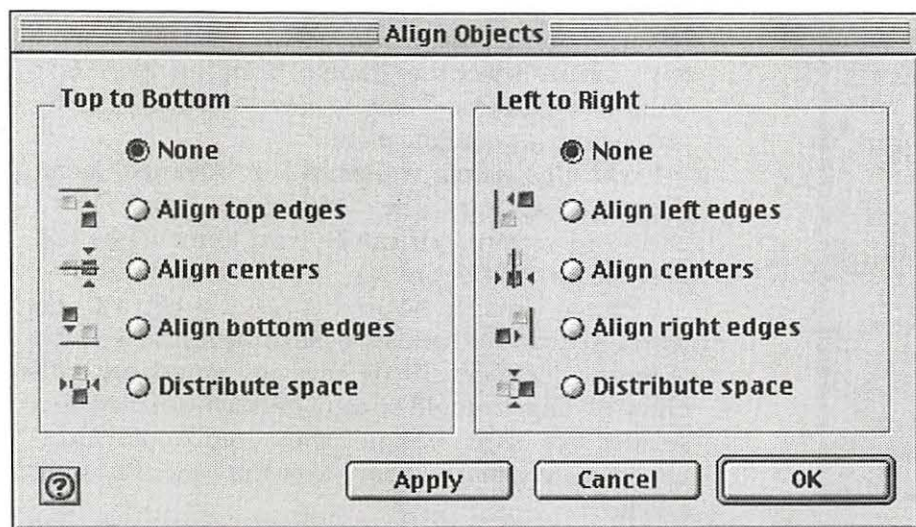


Figure 15. Align Object

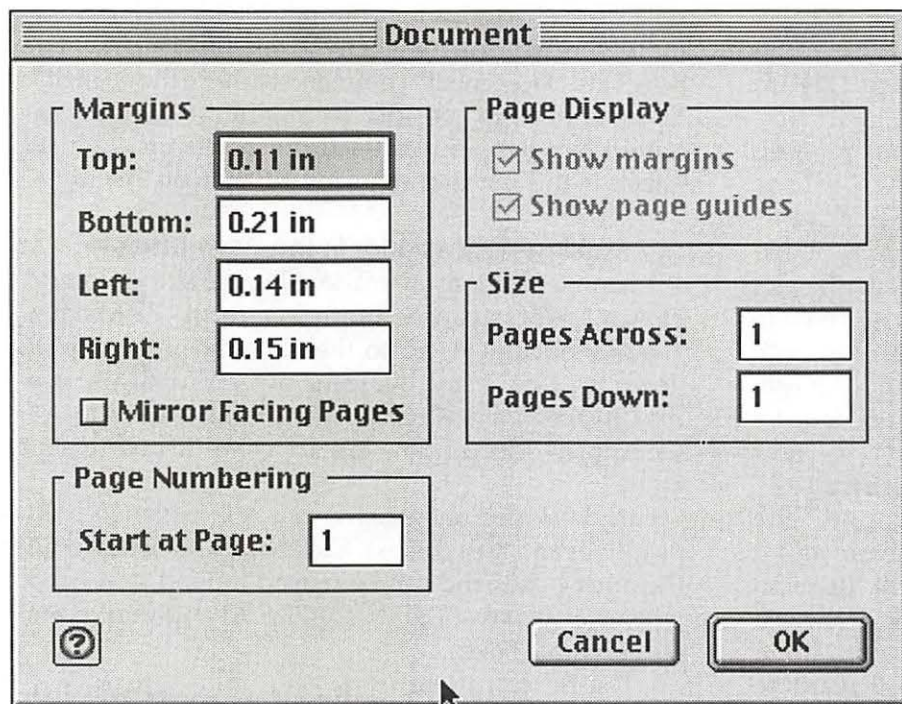


Figure 16. Draw Format Document Window

the box as a whole, click it with the 'Arrow' tool. If you want to change the text, choose the text tool and double click into the text box.

If you want to put text with a picture so that they become one object, click the first object with the arrow tool, hold down the shift key and then click on the other object. When both objects are selected, go to the "Arrange" menu (Figure 13) and select the "Align Objects..." command (Figure 15). After you have them arranged like you want them, go back to the "Arrange" menu and use the "Group" command. If you want one

"Holiday newsletters, at first glance, involve a lot of effort, but just think how much time it takes to write a note to everyone..."

or more object to stay in place, use the "Lock" command. You can group one set of objects, then select that group plus additional objects and make another group.

If your newsletter is longer than one page, go to the "Format" menu and choose "Document." Notice that this window is different from "Document" window in the word processing module. The default document length is one page. You will need to add more pages in this window. Also, the draw module window does not show page margins. To have them show, go to the "Window" menu and select "Page View."

Holiday newsletters, at first glance, involve a lot of effort, but just think how much time it takes to write a note to everyone on your list and how boring it gets to write the same thing over and over. Remember how much you like to get photos of people, how much they cost, and then consider how much it will cost to add a couple of photos to your newsletter and print it out on your ink jet printer. I am sure you will get lots of appreciative comments on your efforts, and you have a whole year to plan for next year's letter which will be even more impressive.

We offer classes on making newsletters, working with graphics, and editing photos at Washington Apple Pi. There are also classes on making web pages with the iTools homepage application, making iMovies and making CD's. Just think of the possibilities for next year! ■

*Pat Fauquet is one of the tutorial instructors at Washington Apple Pi. She uses her computer and cameras to make all sorts of interesting projects.*



# Email Unplugged (and Fiber-Optics Explained)

by Terry Hart

**U**NLESS YOU'VE been living under a rock, I'm sure you're familiar with email. You say, "sure, isn't everyone?" Nope, many think they're too old to learn about it, many don't feel they have a use for it, and still others just can't be bothered to learn "that newfangled stuff." Those of us who do use the internet depend on it every day. What can be easier than writing a letter and hitting a key and having it appear miles away in a fraction of a second. Keeping up with the grand kids, ordering flowers, keeping up with Mom and Dad in Florida, or just sending a new recipe to your friend across the street are everyday occurrences. Last week our internet connection was down. We couldn't get our email! Is this a minor problem? NO!! It's a major interruption of our everyday life!

Ok, so we all agree that the internet is a major influence and. it's here to stay in our daily lives. But have you any idea how it works? I'm not taking about how we use a computer to type our messages or the program you use to send it or even the type of program the recipient uses to read it. I'm talking about what happens to your message between your computer and the receiver's computer.

For our fictitious email, let's say we live in Pettswood, Kent, England and we're sending a picture of junior to his grandparents in rural Ohio. We begin by writing our letter and when it's finished we attach a photo of Junior's birthday party. Grandma's going to love it. All done? OK, we hit the send button, sending it on its way to: Grandma@montizard.com. Now let's follow our email. First stop is a brick office plaza between a canal and an elevated highway in Brentford, just west of London and one of the homes of Cable & Wireless, a company which connects our computer to the internet by telephone lines.

Inside Cable & Wireless's office is a windowless room with rows of fridge-size metal cabinets called racks which contain computers the size of TV sets, each

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"Ok, so we all agree that the internet is a major influence and. it's here to stay in our daily lives. But have you any idea how it works? I'm not taking about how we use a computer to type our messages or the program you use to send it or even the type of program the recipient uses to read it. I'm talking about what happens to your message..."

---

costing as much as a car. In an adjoining control room engineers monitor rows of complicated numbers on video screens. On shelves are rows of what look like video tapes but are really modems. When our computer dials their number it is answered by one of these modems, which checks your name and password with another computer, then asks what you want. Our computer replies, "I've got mail."

Next, our email is fed into a "mail server," which is a bunch of computers filling five racks. One reads our mail's destination and checks another which stores internet addresses like a huge phone directory. The Cable & Wireless directory can do ten look-ups per second. If, after searching its directory, it couldn't find Grandma's server "montizard.com," it asks a bigger directory that stores ten million addresses in Europe and Africa. If that didn't work either, it asked one of 13 core directories (10 in the USA, 2 in Europe, 1 in Japan) which contain every internet address in the world. Back comes the answer, "Send to Buckeye.net." This is the company connecting Grandma to the internet. Buckeye.net's internet address is then clipped onto our email like a dog tag. Next thing to happen is our email is chopped up and divided up and put into about 120 packets, each with Buckeye.net's address plus our email address. But the packets aren't all sent at once. Instead, a single packet is sent off to knock on the door of Buckeye.net to say, "Hi!" and make a connection. The first stop on the way for our packet is a gateway router, which will help it find its way.

Picture the internet as 65,000 interstate highways crisscrossing the globe and connecting to smaller roads and streets. Like a cop with a walkietalkie on every



crossroad, the router learns the fastest way to get an email to its destination. It knows all the routes, and by talking with other "cops" down the road every half minute, it discovers where the delays are—say, heavy traffic or a cut cable.

The router at Cable & Wireless sends our "Hello" packet across London to the company's transmission center where another router feeds it into the stream of email packets all heading for the western tip of Cornwall. Cornwall is the part of England nearest to America.

Now, what's surprising is that all this happens in four milliseconds! Unbelievable! Now our packet is at Cornwall in what is called the base station of the transatlantic fiber-optic cables.

Ever wonder what fiber-optic is? Imagine a hair-thin fiber of glass, wrap it in a protective jacket, then put it with others like it and wrap the whole thing in a rubbery protective tube. This is fiber-optic cable, known in the trade as pipe. A flashing laser at one end fires digital on/ off signals along the fiber at about 120,000 miles a second—more than half the speed of light—and they zip to the other end of the pipe. The lasers can flash ten billion times a second!

Next, our packet is merged with other transatlantic electronic traffic equivalent to 100,000 closely-typed pages every second, or 400,000 simultaneous phone calls. Sounds like a lot, doesn't it! At the present [March 2000] six parallel lanes of traffic hurtle along every glass fiber. Newly laid cables will soon have 128 lanes, getting us ready for the explosion of internet traffic coming shortly.

After traveling across the Atlantic, our "Hello" packet is received in Manaquan, New Jersey, where the fiber optic cables come ashore. From there it travels across telephone lines to Hudson Street in downtown Manhattan. How long has it taken to get from London? Try approximately 40 milliseconds or one-tenth of a blink of an eye! Amazing, isn't it?

Here our packet is switched into high-capacity "fat pipes" crossing the continent in what engineers call ATM—Asynchronous Transfer Mode. Next stop is a telephone exchange in West Orange, New Jersey, where our packet is cut again into dozens of identically sized cells. From there these "cells" run through Philadelphia, up the Ohio Valley through Cleveland and into a telephone exchange in Willow Springs outside Chicago. Here all the cells come together again, restoring our original "Hello" packet. All of this takes only a fraction of a second.

After the stop in Chicago, our packet travels

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"Ever wonder what fiber-optic is? Imagine a hair-thin fiber of glass, wrap it in a protective jacket, then put it with others like it and wrap the whole thing in a rubbery protective tube. This is fiber-optic cable, known in the trade as pipe. A flashing laser at one end fires digital on/ off signals along the fiber at about 120,000 miles a second..."

---

through Chicago and Detroit, then stops in Columbus, Ohio, at Fiber Network Solutions. This company sends it down a thin pipe running directly to Buckeye.net. Here Buckeye.net's mail server opens our packet which contains our message, "Helo, I'm junior's mom at cwcomnet. "Helo" means "hello" in a computer language called Simple Mail Transfer Protocol (SMTP). Buckeye.net then sends an acknowledgement to London, which takes one-tenth of a second to arrive. Next, these two computers make their connections using codes and plain text.

Now, from London five of our packets are sent. If for some reason any of these packets get lost, Buckeye.net tells London and they in turn resend it. Finally all the pieces are received by Buckeye.net. Time now? Less than half a minute from the time we hit the "Send" button on our computer. From Buckeye.net it's just a short jump to Grandma's computer and her "day brightening" sound, "You've Got Mail!" Just like that, Junior's birthday party pictures are being shared with Grandma who, of course, has tears in her eyes—just like a Hallmark ad. Why is our email cut and sent in pieces? Simple: pieces travel faster and smoother than one whole big piece. So next time you write your email and before you hit that "Send" button, take a moment to appreciate what it goes through to get where you're sending it! ■

From the August 2001 issue of *The Seed*, newsletter of the Denver Apple Pi, and taken from *The AppleGram* (newsletter of The Michigan Apple) for March 2000.



**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
<b>Apple General</b>			
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	
<b>Apple //</b>			
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	AppleWorks	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	
<b>Apple // e</b>			
Morgan Jopling	410-721-7874	Upgrade	
<b>Apple // GS</b>			
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
<b>Apple // GS</b>			
Ken Carter	301-834-6516	General	
<b>Apple ///</b>			
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
<b>Cross Platform</b>			
Ken DeVito	703-960-0786	Transfers	MS/DOS-Apple-Mac
<b>IBM/Compatibles</b>			
Etana Finkler	301-891-2821	Illustration	General Can call until midnight
Tom Cavanaugh	301-627-8889	Printers	General
<b>Internet</b>			
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
<b>Macintosh</b>			
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	



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

## November 2001

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 Columbia Slice	2	3
4	5	6 Clinic	7	8	9	10 Graphics SIG
11	12	13 Clinic	14 WAP BoD	15	16 Annapolis Slice →	17  WAP General Meeting
18	19	20 Clinic	21 Excel SIG	22	Office Closed 23	24
25	26	27 Clinic	28 Retired SIG	29	30	

## December 2001

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

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30	31					1
2	3	4 Clinic	5	6 Columbia Slice	7	8  WAP Computer Show/Sale
9	10	11 Clinic	12 WAP BoD	13	14	15
16	17	18 Clinic	19 Retired SIG Excel SIG	20	21	22
23	Office Closed 24	25	26	27	28	29

*Unless otherwise noted, call the SIG chairs or Slice officers for meeting information. A list of the SIG and Slice chairs is on page 3 of every Journal. Calendar events in italics are tutorials, workshops or seminars.*



# 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 for 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**— December 8, 2001

## **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 DeMay	410-461-1798	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

Name	Telephone	Heading	Subjects
Dave Jernigan	540-822-5137	Spreadsheet	ClarisWorks
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
Jaque Davison	703-644-7354	Virtual Reality	Alien Skin Texture Shop
Jaque Davison	703-644-7354	Virtual Reality	Bryce 2
Jaque Davison	703-644-7354	Virtual Reality	Specular Logomotion
Jaque Davison	703-644-7354	Virtual Reality	Virtus - 3-D
Jaque 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
<b>Macintosh &amp; Apple</b>			
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
<b>Networking</b>			
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.



# AppleScript's alive and well

## New version improves local and remote use

**W**HAT A turnaround it's been for AppleScript in Mac OS X. Four and a half years ago, when Apple's new NeXT employees were busily decreeing how miserably wrong everything in the Mac OS had been and how they'd fix it with their own market-bottoming technology, they said AppleScript was a quaint and insufficient attempt at scripting. The NeXT people, we were told, would fix it with a new, superior scripting language that might have some AppleScript-like compatibility, not that anyone would choose to use it since the NeXT solution would obviously be the only way scripting was ever meant to work.

You may stop laughing now. AppleScript won. In what would later become a pattern, Apple's customers made it clear to the company that AppleScript was not an optional feature. In this case, it was Apple's core publishing markets who said, "We have thousands of hours invested in AppleScripts that we rely on for production. If we have to rewrite them for your new operating system, we'll probably rewrite them to work under Windows, because there's no question Windows will succeed." After forcing a giant collective "gulp," Apple's management caved in like overleavened bread, vowing support for AppleScript now and always, even to making it better than ever in Mac OS X.

Version 1.7 improves on AppleScript somewhat, though details are materializing slowly: the developer release notes direct you to "see the change notes on the AppleScript Web site," but those have only recently become available. We do note small changes in the developer release notes, such as the internal scripting routines now compiling scripts even if they have lines ending in LF or CRLF combination characters, better support for "considering" and "ignoring" clauses in all scripting situations, and other similar minor but welcome changes.

The user release notes show us that AppleScript 1.7 tell us that AppleScript only offers one choice for script applications because, thanks to changes in Mac OS X 10.1, AppleScript can now create an applet that runs correctly under 68K, PowerPC, Mac OS 9, and Mac

OS X systems. There are new icons, new (ugh) file name extensions, and a slew of bug fixes (including a note that Program Linking now works again in Mac OS X 10.1, though you have to use TCP/IP and not AppleTalk to send events to other computers). Again, they're all welcome changes, but hardly major news.

No, in Mac OS X 10.1, the real AppleScript story is how it's implemented in user-visible ways. The system embraces AppleScript more fully than Mac OS X 10.0 did, and brings it into a more Unix-style Internet era without too many compromises to its Essential AppleScript Nature. But under the hood, the big news is more net scripting.

## Remote alphabet soup

AppleScript is valuable because it links multiple applications through a common scripting language. Scripts aren't limited to the features of a single program; as it did at Seybold, Apple often shows scripts taking data from a FileMaker Pro database, dropping the data into a scriptable desktop publishing application (Adobe InDesign 2.0 in this case), extracting images from an image database, and producing a catalog or other layout automatically from these different data sources. AppleScript uses Apple events to communicate with applications, and since Apple events work over either AppleTalk or TCP/IP, you can even script applications on other machines.

And yet, surprising no one, the rest of the industry has not adopted Apple events, in part because Apple never promoted them as a standard. Yet the concept is staggeringly useful: a program on your system gains much when it can call upon a remote program for results. Think about all the Web servers out there that have little pieces of information you want: stock prices, news headlines, weather forecasts, software listings, currency rates, and who knows what else.

Now think about how you might have tried to grab that information via AppleScript. Until Mac OS X 10.1, you'd probably use either URL Access or WebMiner to grab the Web page, parse the HTML, and extract the information you want. That's hard, and we know it — not only must you figure out exactly what patterns of HTML surround the information you want, but you must also be prepared to rewrite your script any given day if the site decides to change layout or format even slightly. A revision as innocuous as changing the font or adding italics can interfere with the HTML pattern your script seeks, making your script worthless until you figure out how to change it to match the new layout, which itself could change tomorrow.



### The simple standards

What you want, and can't necessarily get, is some way to query the server. "Give me the stock price," or "I want the temperature for this ZIP code," and so on. Database servers normally work this way, but there's been no easily-implemented SQL-type standard for accessing remote databases without usernames and passwords, and if there was it wouldn't be as easy as the Web. It's one of those things where you just wish someone would use existing standards like HTTP and XML and figure out a way for one program to ask a remote program for information.

Someone did – and it was Dave Winer. Way back in Frontier 5.1, the first commercial version, Winer's UserLand Software adapted the long-standing tradition of remote procedure calls, or RPCs – where one program can call upon an application program interface (API) on another system – to run over the Internet using HTTP and XML. Not all APIs make sense for the RPC treatment (there's little use in your Macintosh calling on a remote Macintosh to draw an oval, for example – your machine does that locally and there's not much point in asking a server to draw graphics unless it's a print server or something), but many do – "get current stock price" or "find latest version of Interarchy" are perfect examples. RPC is the right idea when it would be a lot of work for a program on your machine to come up with information, but a program running somewhere else has that information readily available.

RPC is a familiar acronym to network developers (Sun, in particular, has supported RPC for years), so Winer called his version XML-RPC: remote procedure calls using XML. UserLand has both a specification and a detailed non-programming explanation available, but the specification is easy enough to grasp. Each XML-RPC invocation sends a small XML "document" to the remote server over the same HTTP protocol that the Web uses. The XML contains the name of the routine being called and any parameters that it needs. The server processes the request and then returns a small XML document with the result or an appropriate error, but not both.

XML-RPC has all kinds of advantages. HTTP and XML are both well-known and easy-to-implement standards, so XML-RPC already works with a wide variety of platforms and languages. But it gets more complicated from there. XML-RPC is too simple in a number of ways. Some people working with it wanted a specific XML namespace reserved for XML-RPC so that in a big mixed XML environment it would be clear what elements were part of a procedure request. They also wanted some longer element names and other struc-

tural features. Microsoft was particularly interested in the idea for its ".NET" features built into Windows XP. So a couple of years ago, UserLand started working with Microsoft and DevelopMentor (a developer training company) to implement the Simple Object Access Protocol, also known as SOAP.

As Eric Kidd puts it, "Since then, however, SOAP has been turned over a W3C working group. Unfortunately, the working group has been adding a laundry-list of strange features to SOAP. As of the current writing, SOAP supports XML Schemas, enumerations, strange hybrids of structs and arrays, and custom types. At the same time, several aspects of SOAP are implementation defined. Basically, if you like XML-RPC, but wish the protocol had more features, check out SOAP." The important thing about SOAP? Microsoft's ".NET" fully supports it; anything that's ".NET"-ready is SOAP-enabled.

### The system's support

AppleScript 1.7 includes built-in support for both of these similar protocols, but that's not where the real work happens. You may remember from our Mac OS 9 coverage that it wasn't really AppleScript itself that gained extensive support for TCP/IP scripting in that OS release. It was instead the Program-to-Program Communication Toolbox (PPC Toolbox), upon which Apple events are built, that got the major reworking. Apple events then inherited TCP/IP transportability, as did components built on top of Apple events—such as AppleScript. The scripting language needed minor changes to support the TCP/IP Apple events, but the real work came in the PPC Toolbox.

PPC Toolbox is a private transport, though, unsuitable for extending to standard protocols. Apple could have chosen to make PPC Toolbox itself work with XML-RPC and SOAP, but that would require changes in Mac OS 9, and only scripts written for this latest version of Mac OS would work with each other using the new protocols. Instead, Apple chose to add support for the HTTP and XML-based protocols directly into the Apple event manager itself, as detailed in the developer documentation.

Every Apple event has a target, usually an application but perhaps a scripting addition or a component like AppleScript itself. In Mac OS X 10.1, the target of an Apple event may be a URL; if it is, the system knows the event is really a remote procedure call. Apple events contain lots of information; one such piece in the new events says whether the event goes to an XML-RPC server or to a SOAP server. Other attributes of the Apple event include the URL of the remote program,



the parameters, and optional requests for debugging information that include the full XML headers and replies from the remote program. This debugging information is available to programs creating their own Apple event descriptors, but as far as we can tell the capability is not exposed through AppleScript.

When applications send an Apple event with a URL target (technically, a target of "typeApplicationURL"), the Apple Event Manager in Mac OS X 10.1 knows the event really targets either an XML-RPC or SOAP program, determined by a separate attribute in the event. It then creates the properly-formed XML for the request, sends it over HTTP to the target URL, waits for a response (as specified by normal Apple event timeout values), reformats the results as Apple event descriptors that all programs can use, and returns them in a reply Apple event. These are all standard Apple event mechanisms, and the new support in Mac OS X 10.1 means any program that can use Apple events can now, with minor tweaks, use XML-RPC and SOAP servers as well.

### Going remote with AppleScript

The AppleScript syntax is a little bit different. AppleScript needs a way to tell the Apple event manager that you're targeting a remote application, as well as a way to get the information formatted properly for XML. This is still AppleScript, so don't worry—scripts don't have to make XML, just Apple events, and AppleScript does that for you. To target a remote application, simply use the familiar "tell application" construct, but use the full URL of the remote application as the target instead of the name of a local application like "Finder" or "TextEdit".

Apple's sample scripts also use the "using terms from application" clause, but don't let that throw you. When you compile a script, AppleScript looks at the scripting dictionary of each application you call upon to check the syntax and parameters of your script text. It can't do that with remote applications, not only because they might not be available but because SOAP and XML-RPC applications aren't really Mac OS "applications" and have no scripting dictionaries. (There are standard methods that XML-RPC applications can use to tell others what they can do, but they're not required.) AppleScript would normally stop and complain that it can't find the application, so Apple's scripts enclose the SOAP action inside a "using terms from application" `<http://www.apple.com/placebo>` block. You can use the real XML-RPC or SOAP URL if you want; the important part is that you're using terms from a URL. That tells AppleScript not to look for terminology, effectively overloading the existing terminology

to avoid problems. The syntax for calling remote applications in scripts is straightforward but not entirely trivial. All the information the Apple event manager needs to form the XML-based requests is provided through an AppleScript record, used as a parameter to either the "call xmlrpc" or "call soap" statements. The record contains most of what's needed: the endpoint URL, the remote application name, the procedure you're calling on the remote machine, the method name-space (only for SOAP calls), and the action.

The parameters are in another AppleScript construct, but that one depends on the remote program. XML-RPC parameters are positional—the values are defined by the order they're received. An XML-RPC routine that returns the ZIP Code for a US city and its state as two parameters, like "Ann Arbor" and "Michigan", will return an error if you accidentally send "Michigan" and "Ann Arbor," probably an error like "There is no US state named 'Ann Arbor'." Order counts with XML-RPC, but not with SOAP, where parameters are named—every value has a label defining it.

You could tell a similar SOAP routine that you were sending the state first and it would work properly. Therefore, when you pass parameters in a script, XML-RPC parameters are in an AppleScript list (an ordered collection of items, with the syntax {value1, value2, value3}), but SOAP parameters are in a record (a named collection of items, with the syntax {parameter1:value1,parameter2:value2,parameter3:value3}). It's not difficult: if you know what the remote application wants, creating it in AppleScript won't take too long. Both SOAP and XML-RPC define two pieces of returned information: a true or false value indicating if the call succeeded or not, and the result of the call (it's an error message or number if the call failed). AppleScript throws an error if the remote procedure returned an error, but the result of the "call soap" or "call xmlrpc" statements is the function result if there was no error or the error message if something went wrong.

If you have Mac OS X 10.1 installed and would like to see XML-RPC or SOAP in action, visit Steve Zellers' iDisk (use this URL in Finder's "Connect to Server" dialog box to mount Zellers' public folder on your desktop) and drag "AEXMLTutor" to your local disk and run it. The simple application includes a couple of UserLand sample XML-RPC and SOAP scripts and shows you the full HTTP and XML transaction, so you can see how the AppleScript versions get translated into XML and vice-versa. It can even write SOAP scripts for you: feed it a Web Services Description Language (WSDL) URL and it will not only show you how to use a Web service, it will write prototype scripts for you



that access the service. At first we thought this was an AppleScript feature, but a little more thought makes us believe it's something that AEXMLTutor is providing on its own, though we'd love to be wrong. Try playing around with SalesRankNPrice if you want some examples. Wow. Amazingly nifty, and we doff our cap to Zellers for providing it.

### But is this useful?

Oh yeah. You may be thinking, "I don't know of any XML-RPC servers or SOAP servers, so this is all pie-in-the-sky stuff to me." It's not. As we mentioned, Microsoft's ".NET" code supports SOAP, so you'll be able to access a great variety of ".NET" services from AppleScript. Several clueless analysts have already opined that Apple will have to port ".NET" to the Mac OS to keep up with Microsoft, but here's Mac OS X 10.1 and it already supports SOAP via Apple events—the lingua franca of Macintosh interapplication communication. That in itself is newsworthy.

In addition to Dave Winer's belief in open standards, UserLand Software has been instrumental in defining XML-RPC and SOAP because the company's main product—Frontier—implements both of them, allowing clients anywhere on the Internet to call properly-configured Frontier servers. If you use Frontier or, to a lesser extent, Radio UserLand, you've already got an XML-RPC server. Anything you can write in Frontier can be exposed to the Internet through either of these protocols, so you can build your own client-server implementations that you can access from AppleScript or from a lot of other platforms. That is also newsworthy.

But the biggest news is that there's a lot you can do today with these protocols. Take a look at XMethods and you may be surprised to find 114 SOAP-based servers operating right now, on a variety of platforms including Microsoft's ".NET" products. Each of these includes descriptions of the SOAP parameters they use, and some of Apple's sample scripts use these services. In fact, we changed the sample "Current Temperature by ZIP Code" script to use the eBay Price Watcher service and, within two minutes, we had an AppleScript that returned the price number of any eBay item. No HTTP parsing, no fragile text handling in the script, just asking for the data and getting it. The number of SOAP services is only going to increase from here. You can already query freeDB for CD track information, search the EDGAR database, translate text through Babelfish, check airline fares, and much more. You can add your own with Frontier and a growing number of

other server programs. The Internet is changing into a net of lots of services like these, and Mac OS X 10.1 is now a first-class client in that world. It's hard to sell because it's hard to explain, but now you know.

### Enjoying more scripts

So what's new in Mac OS X 10.1 for people who use AppleScripts but don't write them? Lots. They're not as much about changes in AppleScript itself, but in how the system views and leverages it for your convenience. For starters, more applications are scriptable in the default Mac OS X 10.1 installation: Apple lists Finder, Image Capture, Internet Connect, Mail, PrintCenter, Sherlock, Terminal, and TextEdit as examples. Finder was scriptable in 10.0, but the implementation was lacking compared to Mac OS 9's Finder; the new version is much closer to what scripters know. Internet Connect allows scripting PPP connections, and AppleScript's alive and well Sherlock scripting is again on par with the Mac OS 9 version.

### Delving into dictionaries

The new scripting capabilities are all in Cocoa applications (Sherlock and Finder are both Carbon programs). Cocoa added support for pervasive scripting in Mac OS X Server 1.0, long before Mac OS X was released, but Apple didn't get around to adding it to its core applications before now. In fact, there are lots of changes in Mac OS X 10.1's Cocoa frameworks to make scripting work better (specifically in creating better scripting dictionaries), so hopefully even more Cocoa applications will be scriptable now. Several already are, like OmniWeb, but we need more.

So what kind of capabilities are we talking about? Apple has sample scripts posted for several of the applications, but we scanned the scripting dictionaries looking for highlights. Internet Connect allows not only connecting and disconnecting via script, but also examining AirPort, PPP, and PPP over Ethernet configurations; you can even determine via script how strong your AirPort connection is, from 0% to 100% (beats "three dots" any day, if you ask us). Mail seems to have a reasonable dictionary, but it unfortunately goes off on its own with a "message suite" instead of adhering to the "mail suite" that works in several Mac OS E-mail clients (though, if you ask us, there's way too little standardization in mail client scripting dictionaries; on the one hand it makes universal mail scripting hard, but on the bright side it keeps the platform more protected against E-mail spreading viruses since every client has to be scripted slightly differently). In fact, you



can see some of the Cocoa underpinnings in the scripting dictionaries of applications like Mail (we hope you know we mean "<Mail.app>" without having to use that abominable construction). Mail has a class called "attribute runs" that separates text into chunks that all have the same text attributes (fonts, styles, sizes, and so on); this is very common in programming but pretty useless for scripts. The Mail scripting dictionary also exposes an "abstract object" from which other objects are descended. Again, that's the rule in nearly all object-oriented programs, but it's useless in a script. You can even see the OOP term "superclass" in some definition.

In Print Center, you're warned that all the names of print queues need to be "C strings" or "null-terminated strings," referring to how the program knows how long the string is; scripters shouldn't need to worry about this at all. Otherwise, Print Center allows you to see printer queues and errors, but otherwise is in pretty bad shape (it actually includes something called "Test Event" as well as events sent by Print Job Creator that scripts can't use). TextEdit looks like the old Scriptable Text Editor but without the 32K limit and with some Cocoa weirdness like attribute runs and "Abstract object;" some of Apple's sample scripts show TextEdit as a font preview utility. We welcome its new capabilities.

The Finder's dictionary looks a lot more like what a scripter would expect, but many of the capabilities are labeled "not available yet;" scripts using older Finder capabilities will probably compile but may not behave properly. There's lots yet to be hashed out here—like how a script that manipulates properties of "view as buttons" or assigns labels to icons should work since Finder X doesn't offer either button view or labels. You'll likely hear more about this over the next few weeks.

Terminal's scripting pleases us, even though it's pretty standard stuff. You can control all the aspects of a terminal window (color, size, title bar) and even get the visible contents and the entire scrollback contents of a terminal window. The more important capability, though, is the "do script" event. Suppose your script needs to execute one or two BSD commands to get something done nicely, like start a program with options on the command line or get the output of a command-line utility. There's a standard Apple event defined to tell a program to execute code in its own internal language, the "do script" event. Terminal now supports that event.

It doesn't return results to you, but you can work

"...AppleScript won. In what would later become a pattern, Apple's customers made it clear to the company that AppleScript was not an optional feature. In this case, it was Apple's core publishing markets who said, 'We have thousands of hours invested in AppleScripts that we rely on for production. If we have to rewrite them for your new operating system, we'll probably rewrite them to work under Windows, because there's no question Windows will succeed.' "

around that with Unix redirection. If you want an AppleScript to use the results of a command like "appletalk -s" (to display AppleTalk routing and status information), send the text "appletalk -s > <atoutput.txt>" to Terminal via "do script." You can then use standard AppleScript additions to read the contents of the file "<atoutput.txt>" and process it however you want. If you don't use redirection, the results will display in a Terminal window, but sometimes you don't care about the results so that's not a problem. We've wondered for about a year why Terminal didn't support "do script," and we think it will lead to all kinds of clever solutions to problems that aren't entirely solvable by AppleScript or Unix shell scripts. Now the twain shall meet. Heck, you could even use an AppleScript to create a shell script and run it. (For the record, you can do the reverse as well, generating an AppleScript via shell scripts and activating it with the osacompile and osascript command-line tools.)

The most surprising addition, in our opinion, is Image Capture Scripting, a scripting addition that provides automation (the Image Capture application itself is still not scriptable). In fact, "Image Capture Scripting" has no capability to capture images at all; it works only with image files already on disk. However, in addition to "open", "save", and "close," it has two verbs we don't associate with image capturing. "Scale" resizes an image either by a percentage factor (0.5 to make it 50% as large), or to a maximum width in pixels (but not to a



given height). "Rotate" does just that, rotating the image by the number of degrees you specify. This is the technology behind some of Apple's sample scripts.

During the Seybold Seminars keynote, Phil Schiller and AppleScript product manager Sal Sohogian referred several times to using "the power of Quartz", Mac OS X's PDF-based 2D graphics engine, to automatically perform tasks like scaling and rotating images. That's true, but scripts don't talk to Quartz, they talk to Image Capture Scripting. There are probably more capabilities hidden in the system that we haven't found yet. Some applications that really should be scriptable aren't, notably the Dock. The new DVD Player isn't scriptable; iTunes in Mac OS X 10.1 has an empty scripting dictionary, and iMovie supports only the "DoCommand" event (the one that lets you tell it to perform a menu command) but we're not sure it works. Preview, Stickies, and (most annoyingly) System Preferences are not scriptable. And aside from Terminal, you can pretty much forget about scripting anything in the "Utilities" folder, including Keychain Access and other programs with scriptable Mac OS 9 equivalents.

The new scriptable applications are welcome, but they also focus attention on how much of the system needs scripting capability. This has always been true. Mac OS 9 was never as scriptable as it should have been, but it's still more scriptable than Mac OS X 10.1. What we take away from the update is that Apple is still taking scripting seriously, making enough progress to brag about as well as to satisfy larger customers, even if there's a lot more work to be done.

### Easier script access

Mac OS X 10.0 didn't include Leonard Rosenthol's highly useful OSA Menu, an extension that let you put scripts in a system menu for easy access. Instead, Apple shipped Script Runner, an application with a small floating window that presents a hierarchical scripts menu when you click on it. It's nice, but it's not the same thing; the menu bar is just too convenient.

We'll explore Mac OS X's new system menu capability in a future article, but part of that, as demonstrated by Apple, is the Script Menu. As a standard system-level application ending in ".menu", you can either double-click it or drag it to the menu bar to install it, where it works much like Script Runner. The hierarchical menu includes the contents of the "/Library/Scripts/" folder, just like Script Runner does, but it also uses the contents of the "~/Library/Scripts/" folder. In other words, the top of the menu contains

scripts that every user can use, and the lower part contains your own private scripts that other users of the computer don't see.

Although Apple demonstrated Script Menu at Seybold and has made a big deal of it, don't go scouring your hard drive for it—it's not installed and isn't on the CDs. You have to download it before you can install it by double-clicking or dragging. To remove it, hold down the Command key and drag it off the menu bar (you can use Command-dragging to rearrange system menus, too). If you've used OSA Menu before, you'll be right at home with Script Menu. The only major difference? OSA Menu has both universal scripts and application-specific scripts; Script Menu's selection doesn't change with the front-most application. It would be a nice improvement; the default system-wide "Scripts" folder has sub-folders for "Finder Scripts" and "Mail Scripts" and "Script Editor Scripts" and "Sherlock Scripts" plus others; OSA Menu's scheme is less awkward in many ways. On the other hand, Script Menu can run AppleScripts, Perl scripts, or shell scripts, even though the latter two are not implemented as OSA scripting languages. OSA Menu is, unsurprisingly, for OSA languages only.

Apple is also hyping toolbar scripts, a side effect of a Finder change that lets you place any file you want in the Finder's toolbar. "Any file" includes script applications, of course, so if you put a script application in the Finder's toolbar it's available all the time, and is now a "toolbar script." This sounds really powerful, but it's not. All the Finder does when you click on a toolbar script is open it, just as it would do with any other file. If you put a compiled script in the toolbar, clicking on it opens it—launching Script Editor. You have to put script applications in the toolbar if you want the scripts to run when you click the toolbar icon.

We first thought that if we had icons selected in a window and clicked a toolbar script that Finder would send the selection to the script, treating it like a droplet. No such luck—it just runs the script. If you want droplet behavior, you have to drag-and-drop files onto the script application's Finder icon (drag-and-drop onto the toolbar icon doesn't work). Several of Apple's sample scripts are written to work on the contents of the front Finder window, or on the folder whose contents are shown in the front Finder window if there is no selection, but that's not standard droplet behavior; any droplets you have that you want to work this way will need revision to query the Finder for the current selection before doing any work. That's a AppleScript's alive and well shame. Toolbar scripts are useful, just not what we'd imagined.



## AppleScript Studio

If you installed Mac OS X developer tools, you may have run a couple of the NeXT-derived tools that developers use to build Cocoa applications and even some Carbon applications. Project Builder is the equivalent of CodeWarrior's IDE (integrated development environment); it's where programmers type their source code and compile them into full-blown Mac OS X applications. Project Builder comes with lots of project skeletons (like Cocoa and Carbon applications, plug-ins, command-line tools, and more).

Interface Builder is a visual program designer, allowing you to draw buttons and menus and icons and connect them to elements in Project Builder. The Project Builder and Interface Builder combination is behind a lot of Cocoa's rapid application development power; Cocoa has programming objects that match Interface Builder's interface objects, so just tying them together tells the system much of what it needs to make an application work. (This is why Cocoa developers always brag about being able to write a program like TextEdit in a dozen or fewer lines of code; all the parts in TextEdit are standard Project Builder or Interface Builder objects.)

You'd think this has nothing to do with AppleScript, and until later this year, you'd be right. But during the Seybold Seminars keynote, Apple announced AppleScript Studio, a new tool that lets you create AppleScript applications "that look, feel, and act just like Mac OS X applications," with "all the beautiful Aqua elements: buttons, windows, sliders, checkboxes, tabs, radio buttons and more." At first we thought this was like FaceSpan, the visual AppleScript programming environment. Then we thought it might be Script Debugger 3.0, a native version of that excellent script development environment that we saw previewed at WWDC but hadn't heard about since, but that wasn't it either: Late Night Software announced Script Debugger 3.0 later on the day of the keynote, so it's still a separate product.

You know what it is? It's Project Builder and Interface Builder.

Those tools work in multiple languages; as shipped today, Project Builder supports C++ (for Cocoa) and Java. When AppleScript Studio is released, Project Builder will add AppleScript as a native programming language. You'll get to lay out windows and menus in Interface Builder, open a new AppleScript project in Project Builder, connect the widgets to the scripts that get called when you click on them, and make a full-blown application.

Apple was pretty mum on the details, but Project

Builder and Interface Builder are widely admired in the industry as rapid application development tools; without the Builders, Cocoa would be just another application framework. If the power of Cocoa can be even partially granted to AppleScript authors through AppleScript Studio, Visual Basic might have a run for its money—and FaceSpan, venerable though it is, will have a hard time measuring up. The biggest question we have: how much will AppleScript Studio cost? The other development tools are free with Mac OS X. If AppleScript Studio is free as well, it could stimulate the kind of Mac OS X transition that Apple still craves, and the kind of tool development and in-house Mac OS X adoption that any computer company would crave. If it costs too much, it'll just be some option that non-experts will never explore. Apple should tread carefully on pricing.

## The script supreme

Changes to AppleScript usually aren't very sexy. They're obscure and hard to sell. Mac OS 9 managed to push PPC Toolbox changes as "AppleScript applications over the Internet"—true and easy to understand, but this is rarely the case with AppleScript. You can tell—there's plenty going on with AppleScript in Mac OS X 10.1, both externally and internally, but Apple has a hard time explaining the new features. The XML-RPC and SOAP capabilities are generally called "Web Services," a title that grabs no one's attention, but we haven't thought of a better one. The new ways to call scripts are nice but not groundbreaking, though they may be just the kind of evolutionary improvement Mac OS X needs right now.

We do know this: people who know and love AppleScript will find a whole new world for their scripts with Mac OS X's XML-RPC and SOAP capabilities. Running scripts is easier, editing them is easier with Script Debugger 3.0, and building entire AppleScript applications may be an entirely different experience when AppleScript Studio arrives. Uncertainty long clouded AppleScript's position in Mac OS X, but the clouds have dispersed. It's a bright day ahead for scripters. ■

*We would like to thank the technical wizards at MWJ, The Serious Journal for Macintosh Users™ for their assistance in preparing this article. Sample copies of MWJ and subscription information are available at <www.gcsf.com>.*





# It's a Mac's Life in China

by Woodson Gannaway

**T**HE FIRST thing you have to get used to if you're a Macintosh computer (or clone, as I am) in China is that everyone is different from you. If it bothers you to be different, don't come. The foreign teachers here often bring a Powerbook, it's true. But they only stay for a year or two tops and keep their Powerbook (you) discretely tucked away in their apartment or carrying bag. It is only occasionally that you have to be subjected to the intense scrutiny caused by being different from everyone around you. But really this isn't so bad for me. My owner's daughter probably is exposed to the worst of this, followed by my owner. But it only happens sometimes, and the interest is friendly. Many times they're simply the first foreigner(s) that a person has ever seen and the reaction is simply that of surprised and amazed curiosity.

I'm not exposed to much of that, even though I'm a full tower machine and my owner hopes to stay in China for a long time. I try not to be smug about how much work of such varied types I can do—and so easily and quickly—in comparison to the others.

Why aren't Macs used in China? Some people have said that they are used for graphic arts here but nothing else. When my owner asks the question we can see that people have never really thought about it. The computer boom was later to hit China than some other places. You might say it's just hitting now. Only in the last year have reasonably-priced and powered used machines started showing up in the electronics markets. Of course many computer parts are made here, but the cost of a computer here is about half again as much as in the US or more. I suppose Apple just never got a start. I understand that the situation is different in Japan, where Apple is strong. But still not as strong as Goliath.

Apart from that, life is pretty interesting. I get to see a lot of files that others probably don't see. I process sounds that others probably don't hear. I'm my owner's secret weapon here just like I was in the US. I

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"He's trying to use *HyperCard* to organize files of English sounds to help the students with the English sounds that trouble them. So far he's just set it up to make minimal pairs easy to play sequentially with pauses between them for practice."

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process file lists from PC-based CD-ROMs, save files from virus infected floppy disks at no risk to myself, and so on. I have a voltage stabilizer between me and the wall socket, which is 240 volts 50 Hertz. I live and work in an environment that is probably 20 times as dusty as where I lived and worked in the US. Otherwise life rocks along pretty much as usual.

My owner doesn't always sleep straight through the night so often I'm working a little in the early morning hours. There is a time when the slow periods of internet activity on both sides of the pond often coincide so this is a good time to download files. Maybe I will process a few words while the downloads are taking place. It's not very difficult really, I just have to be here doing it. Maybe this will last an hour.

The next time I'm turned on will be between 5 and 6 AM. I'll check the email on the local server, and on Yahoo if it's reasonable. About half the time it is. Then it's sometimes a lesson plan, or notes from classes, or something like that. If we downloaded files the night before we'll organize the files and maybe make a text file listing of them. My owner was trained for business programming and worked on the IBM AS/400 business midrange computer. He doesn't talk much about it but he misses many things about that work. One thing is the organization of files on the AS/400. When you sign on to SQL on the 400, you get the name of the machine as the relational database—all the files are text files and the entire machine is organized as a relational database! My owner would like me to be organized somewhat like that, but he doesn't have much time to work on it. So he makes occasional efforts in that direction.

He walks his 7-year old to school about 7:15 so he takes a shower about quarter to seven. Usually I'm resting. Sometimes I'm making mp3s while he's doing that.





He likes music a lot and is making all his albums into mp3s (he has quite a few). He's also converting some of his cassette tapes to mp3s to preserve them better. He also burns some of the tracks from cassette tapes onto audio CDs for durability and convenience in selecting tracks.

This is an ongoing project and also involves making text files of the album contents and so on. Then every ten albums or so I make a CD of the mp3 files. About every two weeks I make a backup CD of the new work we've done since the last backup. Although most things are cheaper here, magnetic media and CD blanks are an exception. The converted price is even higher than in the US.

A CD burner was part of me when I traveled from the US. It stopped working a few months after arriving here. It would have taken several months to get it fixed here, and at about the cost of a new one. So my owner bought another one - external this time - and started using it. Then about six months later he fixed the first one himself. He's using it again now. When he was searching for information after the first burner stopped working it didn't seem to be common knowledge that they could be easy to fix.

My owner works during the day, teaching either one or two 2-hour classes. This adds up to 16 teaching hours each week. Usually I rest during these classes. Sometimes he leaves me working. After he comes back he'll start again in the afternoon. He's trying to use *HyperCard* to organize files of English sounds to help the students with the English sounds that trouble them. So far he's just set it up to make minimal pairs easy to play sequentially with pauses between them for practice. Maybe this work will develop more with time. It's slow because it takes time and understanding to know what will help the students. From reading some of the things he's written I believe that few foreign teachers have any understanding of what they should be doing, or how to do it. A Chinese Ph.D. candidate wrote a thesis that suggests that 1 foreign teacher in 8 in China actually does a good job.

Now in the evenings we usually won't do much. They eat about six and they almost always eat out. This is a matter of time mostly as his wife has studied Chinese the last two years and this is extremely time intensive and difficult for a Westerner. I did do my small part to help (ahem!) by supplying her many hours of practice with the *Rosetta Stone* for Chinese and also *HyperChina*.

But back to dinner. Chinese food is really good and healthy food and quite tasty. If you follow the stu-

dents and working people you will find cheap restaurants that supply that food. The price is only slightly higher than cooking it yourself (and maybe even lower if you can't bargain well in the marketplace). So by the time they go out, eat, and come back, it's usually time to start getting their daughter ready for bed. And then the internet is really slow. Because the owner is an early riser and a morning person he's slowing down by now. Maybe a student or two will come by and visit for a time. Then its to bed and I'm turned off.

Once a month we write an article about beginning to learn the *PERL* programming language. There is a great Macintosh port (*MacPerl*) that is a real programming language and easy to do quick jobs with. It excels at text work (does most of your stock quotes from the net, for example, and ties the data from the Human Genome Project together). It gives you a powerful group of tools that are very robust and quick to learn enough about to do simple jobs. All free!

So once a month we send an article to the Mad(ison, Wisconsin) Macintosh Newsletter. For 5 years we lived there and were a member of the club. Now we're a member from China.

Sometimes there's a window of internet download opportunity in the afternoon so we may look for that. There's a 14 hour time difference from where I am to CDT so it's hard to get a time for fast transfers. We look for lyrics for songs the students like as an ongoing project.

When students come over to visit they often just talk and that leaves me out (I don't have any speech recognition software installed). Just today the noise of my fans became annoying and they turned me off. To really get the room quiet we need to turn off the voltage stabilizer also. Until about 14 months ago this part of the school campus was the quietest. Then they started an apartment project just outside the campus and this area became the noisiest. This year another construction project is underway nearby and also makes the area noisy. My owner thinks the big electric motors on the tower cranes cause power surges. Oh, by the way, do you know what the national bird of China is? It's the crane (but not the kind that flies).

The construction work starts between 4:30 and 5 AM and continues until 10 or 11 at night, 7 days a week. The workers come up from the south of China in the spring and work until cold weather starts, about November. Then they go back home. They must finish the outside construction before really cold weather so that work can continue inside during the winter. This is Manchuria and the winters can be rough (earlier writ-






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"Once a month we write an article about beginning to learn the PERL programming language. There is a great Macintosh port (*MacPerl*) that is a real programming language and easy to do quick jobs with."

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ers used the word "brutal"). We are not in the worst part by any means. We're on the coast and in the southern part of Manchuria.

Let me tell you what happened to my owner on day in one of his favorite little restaurants. He had gone there numerous times over several months with his wife and daughter but they always did the talking in Chinese. Then came the day when my owner went in alone to eat. The place was noisy and almost full. He sat down and thought for a minute or two, then inhaled to start to order. At that instant the entire restaurant became completely quiet. There wasn't a single sound and everybody was listening! My owner noticed but wasn't unnerved by it. He ordered and soon received and ate a delicious plate of mu4 er2 chou3 rou4 (the numbers indicate the correct Chinese tones). Everyone went back to what they were doing before, my owner ate his bowl of rice and plate of sauce and everybody was happy.

Technical details: Umax SuperMac S900 200 MHz 604e, 160 MB RAM, 2.1GB Quantum Fireball HD (original), 4.3GB Seagate HD, Matshita 8x CD-ROM (original), Yamaha CRW4416S burner, 2 port USB card, MacOS 8.5.1. Externals are a Yamaha CDR-6416SX burner (currently not used), a 5x7 inch drawing tablet (Kidboard Sketchboard), and a Umax page scan device scanner. The scanner is a black and white only, 10 sheet batch feed scanner. It's very fast and great for text so I use it a lot for that with Xerox *Textbridge* OCR software. I've probably processed 1000 pages of Spanish and half that many of English. I'll try OCR with Chinese when I find reasonable and reasonably priced OCR software for that.

Hope you enjoyed this window on the life of a Mac (clone) and its owner in China. ■

*The writer is a foreign teacher at a university in China.*

## Review: Abvent Art•lantis Rendering

by Paul Gerstenbluth

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### "Serious Art Model Rendering" What is Abvent Art•lantis 4?

**A**RT•LANTIS IS a 3D-model rendering, ray tracing, and shading application. Abvent Art•lantis software is French made and aimed at international graphic artists, architects, and multimedia designers. Art•lantis software is written for English, French and German speaking designers.

Four key elements sum up the performance of Art•lantis

- 1 Modeling software integration
- 2 Ease of use
- 3 Quality
- 4 Performance

The new Abvent Art•lantis 4.0 features Include:

Self Memory Management  
One document format  
New Productivity Tools  
New Lighting Model and Improvements Depth of Field  
New Lighting Model and Improvements Soft Shadows  
VR Object Sliders have a brand new look; and Speed rendering has been improved up to 7 times.

### Who uses Art•lantis?

Professional graphic artists and designers want high-end power but don't want to spend thousands of dollars to get it. The answer is Art•lantis for their 3D model rendering projects.

Art•lantis has been around for nearly ten years is now available on both Macintosh and PC. The stunning realism of the images rendered by Art•lantis has made Abvent's Art•lantis a leader in the world of 3D software.

Art•lantis is one of the best solutions for those wishing to transform their 3D CAD data into a more visually appealing medium. Rendering includes ray tracing at high resolution, and an intuitive graphic interface. Art•lantis offers the fastest speed on the mar-



# Washington Apple Pi Winter 2001 Computer Show and Sale

an elegant, relaxed daytime gathering  
of old and new friends, old and new  
hardware, old and new software, and  
an array of club wizards prepared to do  
digital computer health checkups, all in  
the grand tradition of Washington Apple Pi

"a fine tradition spanning two millennia" - Stan Jobs

"more fun than an Apple I" - Stan Wozniak

**December 8, 2001**

**9 a.m. to 2 p.m.**

Check the Pi Web site in November  
for the latest news.



Members: \$5/person  
Non-members: \$6/person  
Tables: \$15 (plus deposit)  
\$30 with electricity





ket, plus Animation and Virtual reality.

Art•lantis offers Shadow Casting, Real-time preview and Drag and Drop. In addition, Art•lantis offers designers the use of Shaders, Reflectivity and Transparency, and multiple Lights and Cameras simulations.

### Abvent Awards

Abvent products have earned international recognition and a wide range of awards, from the 1985 Prize for Technical Innovation for the Simul program to the SVM Mac Mouse Award, and the Macworld Editor's Choice Award.

The Architectural Record "Best Rendering Software" award in 1998 was awarded to Art•lantis for Art Rendering on both Mac and PC platforms. Abvent has become one of the leading developers and distributors of professional computer generated imagery and design software.

### Pro Reaction

Abvent Art•lantis is the fastest way to create photo real presentations. The textures can be applied by simply dragging and dropping images from the shader library onto the object.

The Animation tools include 360-degree perspectives, full editing feature for animation sequences, camera type and behavior.

The 375 page Art•lantis Tutorial and User Manuals is well illustrated. Written in plain English are the helpful six tutorial projects. The tutorial manual takes new and experienced users by the hand for learning how to make and use Art model rendering.

The Art•lantis Tutorial and User Manuals are available in Acrobat's pdf format with color graphics.

### Con Reaction

Art•lantis is not aimed at the casual home user nor is it a particularly simple package to pick up and learn. Missing from the Art•lantis Tutorial and User Manuals is book printed color graphics.

### Final Remarks

Art•lantis lets you create impressive effects. Available for both Mac and Windows platforms, Art•lantis Renders unique interface, speed and ease of use have made it one of the most popular rendering programs for ArchiCAD users.

Art•lantis rendering engine incorporates atmosphere functions, ray tracing, anti-aliasing, bump mapping and other image enhancing features. Files can be

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"Art•lantis has been around for nearly ten years is now available on both Macintosh and PC. The stunning realism of the images rendered by Art•lantis has made Abvent's Art•lantis a leader in the world of 3D software."

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saved in common file formats such as PICT, TGA, BMP, QuickTime VR, AVI, and RealSpace.

Art•lantis lets you create impressive effects. Available for both Mac and Windows platforms, Art•lantis Renders unique interface, speed and ease of use have made it one of the most popular rendering programs for most popular modeler such as: ArchiCAD, VectorWorks, AutoCAD, Form Z.

Free Art•lantis demos are available from the Abvent website at

<http://www.abvent.com>

Price: \$495 US 30 Day Money Back Guarantee MC/VISA Accepted FREE Fax and E-mail Support

Company: USA: ABVENT, Inc.

Phone: 514-842-1050

Toll free number is: 800-452-9241

E-mail: [usa\\_sales@abvent.com](mailto:usa_sales@abvent.com).

Phone: 415-431-3412

E-mail: [usa\\_sales@abvent.com](mailto:usa_sales@abvent.com)

URL: <http://www.abvent.com>

Graphic samples of Art Rendering can be seen on the web site at: URL: [http://www.abvent.com/us/gallery/gal\\_art2.asp](http://www.abvent.com/us/gallery/gal_art2.asp)

### Macintosh Configuration

Power Macintosh OS 8.5 (Mac OS 9 recommended)

64 MB RAM (128 MB recommended)

50 MB free disk space for a full program installation, QuickTime 4.0, 24-bit Video Card recommended, CD-ROM drive. ■

*Paul Gerstenbluth is President of the ARIE Foundation. The ARIE Foundation's mission is to provide VA hospitalized patients with hobby materials and laptop computers that help in their stay and recovery.*



# DoubleClick

by Dave Ottalini and Derek Rowan

Dear Derek and Dave:

**T**HANK YOU for a helpful column. My problem is this:  
The power indicator in the power button of my Monster 550 e-machine is acting up at shut down. The power indicator, at shut down, should be off (non-glowing) until the computer is restarted.

Lately, the power indicator at and/or after shut down can continue blinking. In addition, at times an audible and consistent beat beat beat is present.

I can shut down the machine and think all is well, when several hours later I discover the power indicator is doing the things aforementioned.

I now turn off my surge protector when not using the computer, which seems to alleviate the problem. However, the problem needs solving. Appreciate your suggestions.

*Sincerely, Anna Owens*

**Derek:** Anna, your computer is possessed. I would drive a steel lance through its CPU. You may want to consider burning it at the stake too. Or, it could just be your power settings on the PC. First off after shut down, there is no problem with turning off the power to the PC through the surge protector. You normally don't want to do this while it's on of course, but after shut down it's OK.

Anna, in your case, I'm fairly certain your problem can be solved by changing your power management. Basically you can set up some computers to operate like laptops. In suspend mode, they don't really completely shut down. There are also other power management features that can cause weird problems like this. However, I really don't know how to tell you to do that, without actually seeing it or walking you through on the phone. However, Emachines can probably help.

**Dave:** It sounds like it's time for my standard solution for PC folks when trouble strikes - get a new machine, wipe the drive, reinstall new system software and don't

forget to turn on the power. But then, Derek would get mad at me, so I'll just agree that a call to EMachines may well be in order. It could be something as simple as replacing the power button.

**Question:**

**Dear Derek:**

I read your article about "Dwindling Resources" in the Fairfax Journal with great interest. I believe I have found another cause of "lost" resources.

Slightly over a month ago I cranked up my brand-new Micron 800 Mhz computer with 128 SD RAM. Imagine my surprise when my ISP connection to Erols (right around the corner from me) dropped from the usual 50,222 down to 46,000 and sometimes down to the 44,000 range or less. Furthermore, when I used Win 95, I watched my resources very closely because I ran a graphics program, a real-time stock ticker, an internet connection to my broker, scanned other news sources on the web and operated my Email software at times during the day. Add opening and shutting Microsoft Word (which does not give up all resources after closing Word), my system gets a real workout during the day. Consequently, I checked "My Computer" (right click) | properties | performance often during the day to avoid unwelcome "freezups" with Win95.

I checked with Micron and discovered that many new computers are equipped with a "Software Modem". Quite a surprise for me. Such a modem gobbles resources, (memory, etc.) from Windows, as I noted from my resource check. Since I needed all the resources I could get, I purchased a "hardware" modem which does not use Windows resources. It was not difficult to install. Software modems are used as an "economy measure" by the manufacturer. Had I known before the purchase I would have specified an installed "hardware modem".

Depending on how intensively your readers plan to use their computers, it would be a good idea to check this out before buying a new computer. While on the subject of buying a new computer with a new operating system, there is the question of "legacy" hardware. This leads to the subject of "buyer beware". Shortly after my purchase, I discovered a new computer equation: New Computer+WindowsME+HP Scanjet 5200C = \$250 paperweight + \$100 in telephone calls to tech support! The scanner works fine with Win95, but not in WindowsME. It seems that hardware manufacturers are having real problems writing updated software for their "legacy" products that will make their products compatible with WindowsMe. Either Microsoft



held back information on their code, or the manufacturers are not adequately testing the software update. There is also the matter of spending all my spare time last month on four phone calls to HP for which they want to charge me \$100 for zero service rendered. This also included several Emails back and forth to HP, two phone calls to Micron, changes to the BIOS, endless install/uninstall/reinstall routines plus obtaining a new CD installation disk and a new parallel port bi-directional cable. All to no avail. If their highly-skilled and highly-trained tech support people can't fix the problem, how is the consumer to make the hardware work? I may contest the charges. Possibly in small claims court. Hewlett Packard is welcome to send their lawyers!

And, oh yes! HP's last Email was a zinger. Their Email "support" person suggested I call their excellent tech support team, because it was beyond the scope of an Email fix! — This was their solution after four expensive phone calls, plus the last and the fifth call, when the technician admitted that there was nothing they could do!

*All the best, Nick Pishvanov*

**Derek:** Nick, you make lots of good comments here. We've talked about resource issues time and again here in DoubleClick because of these kinds of problems. Also, your point about hardware not being able to be used when you upgrade the operating system is very true. For those that remember, 'drivers' are the little pieces of software code that are used to \*connect\* a hardware component to the operating system. What that means is basically each piece of hardware requires a program in order to read data from it and send data to it. OK, that makes sense, but why can't the operating system just handle it you may ask? Because there are gazillions of different hardware chips, circuits, designs, etc. out there that there is no way an operating system can speak to every one especially for the ones that haven't been invented yet. So the solution is the driver. This small piece of software is designed to bridge the communication gap between the hardware device and the operating system. You see, your applications (such as Internet Explorer, Microsoft Word, Quicken, etc.) communicate with the operating system, then the operating system communicates with the driver, which talks to the hardware. This way, as you add new hardware, you just change your driver and it will work fine with your applications! OK, that's the theory anyway. The main problem is that drivers are made by the hardware companies. Many of these have

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"Mac users have things somewhat better since only one company - Apple - controls both the hardware and software (OS) design. It's that compatibility, and Apple's fairly rigid development rules for third party software developers that helps prevent some of the problems Nick has been having with his PC."

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programmers that may not follow conventions, may not be the best at their job, or may design hardware to work with a particular set of operating system features. Any of these can cause the hardware not to work with the next operating system.

So you have to wait until the manufacturer releases a driver for the new operating system. The next problem can become if the hardware is old the manufacturer may not have the resources to write a driver for it as they are concentrating on only their current products. The result? Orphaned equipment. Ugly isn't it? So in this scenario the best advice is to not upgrade unless you have to.

**Dave:** Mac users have things somewhat better since only one company - Apple - controls both the hardware and software (OS) design. It's that compatibility, and Apple's fairly rigid development rules for third party software developers that helps prevent some of the problems Nick has been having with his PC. That said, Apple tried to foist a software modem off on its users too for a few years and they discovered it never did work as advertised. I use a hardware modem when necessary (a Global Village) and it has always worked like a champ for me.

Trickier problems are also arising for those brave hearts who have tried to use OS X - Apple's new OS. As folks have found with ME - and perhaps will find with XP - developers can't get compatible products - or drivers out in a timely manner. In some cases, like Epson, they're even refusing to write updated drivers for older printers so they'll work with the new OS. Derek's right - it can be ugly at times! ■

*Thanks to the Journal papers for allowing us to reprint this article.*



# DoubleClick

Dear Derek and Dave,

I just bought a new Gateway PC that came loaded with Windows 2000 (I didn't want Windows ME). Anyway, when I boot it up, I get the following message "New Hardware Found: VID-04E6PID-80000004". When I allow it to look for the drivers, none are found. I suspect the hardware is my HP 5100C Scanner, which is set up as a "pass-through" from my HP Desk Jet 722C printer. The printer is working fine.

I tried install the scanner from the original CD, but it only works with Windows 95. I tried two things to fix my problem: 1) I went to the HP website trying to find compatible drivers for this scanner, and 2) I contacted Gateway. Since I am writing to you, I obviously still have a problem. HP's website is utterly confusing. I cannot figure out just what it is I am supposed to download, and when I e-mailed them to get a straight answer, I got a message back that said to check their website, or contact HP to the tune of \$2.50 a minute. Gateway's answer was that they're still working on getting drivers for everything and to check their website regularly.

Perhaps you can tell me what it is I need to install to make my HP 5100C scanner work with Windows 2000. Your help is appreciated!

*Janene in Laurel, MD*

**Derek:** Janene, good question. You know I surf the net quite a bit looking for these kinds of things and it can be extremely frustrating when you can't find the proper driver or other information on someone's site. The reason you couldn't find anything was because the drivers don't exist for Windows 2000 for that printer yet from HP. I went to [www.hp.com](http://www.hp.com), clicked the Drivers button on the front. Entered 722C in the search box, and selected the Deskjet.

**Dave:** Janene, I understand your frustration. There's almost too much information on the web and many web sites are confusing and difficult to figure out. As you've also found, bigbox companies like Gateway have only one real care - to sell you a computer. After

that, you're on your own. Apple is like that in many ways too, although I will tell you their web site is one of the easier to navigate to find information. Sherlock, Apple's search engine that comes with all new Macs also makes searching for things like drivers much easier. Let us know if you were able to get the Deskjet working!

**Hello Derek and Dave,** I have always enjoyed reading your column in the Montgomery Journal every week... I found some of your tips very helpful... As a matter of fact, you and one of your readers assisted me on one issue in regard to old programs for Windows 3.1 a few years ago and I bought the programs and still using them in my old laptop!

Anyway, the question is on taskbar... I am trying to solve this issue for my friend who is a paraplegia and learning to use a pc.. He is using the Windows 98 (400 Mhz with Celeron, 10 GB hard drive and 64 RAM (the pc is about two or three years old)...

Can you tell me what the cause is when a blank program appears in the taskbar? At times, there are three or four blanks in the taskbar... I tried to find where each came from... Could not find the clue but when I clicked on the blank, it disappeared...

Look forward to reading your suggestion on this issue...

*Thank you... Helen*

**Derek:** Hi Helen, the good news is that you're not alone with this problem. It is not uncommon. The bad news is that there is no real solution for it — at least through this column. It will cause no harm however. The problem is basically caused by a program opening up components within them in which it doesn't ask the operating system to do so in the right way. As such a blank button is created by Windows. In most cases, clicking on the button will cause the window to disappear. Most of the times that I see these it is caused by a third party screen saver program. You may be able to determine which of your programs is causing it and trying to get a patch or upgrade for that program. I wouldn't sweat it though if you can't figure it out.

Dave, you know these kinds of little problems can be annoying, but in some cases really aren't worth the effort to figure out. Are there any like this on the Mac? Dave: All our computers have issues at times - and you're right, Derek, some are just not worth the effort to figure out. Most of the problems we see on the Macs (at least pre OS-X) have to do with conflicts of some kind -usually one extension causing a problem with





another. Over the years, I've also seen users remove things from their System Folder - or put things in there that they shouldn't. That's a guaranteed disaster - or at least one waiting to happen. Finally, when hard drives get too full and aren't defragmented on occasion, a crash is just around the corner. Mac users know to have a good utility like Norton or Techtool Pro always on the standby in case of trouble.

**Question:**

Quite awhile ago you published a "keyboard" solution to a "walking Window". I have misplaced it. Could you kindly e-mail it to me or reprint it in the journal. thanks

**Derek:** The walking window problem is where you accidentally place a window outside of your screen and can't drag it back. This can be quite annoying. It will sometimes happen when you change screen resolutions and the program is now \*off the screen.\*

To get the window back into your view, it is a snap. First you must select the window. You can do this with Alt-Tab. Hold down Alt and hit the Tab Key and continue to hold down the Alt. You'll see a little window pop up in the center of your screen allowing you to pick a particular window or program. Each time you hit the tab key while you're holding down the alt, it will select that icon on this window. Try it - it makes more sense while you do it than trying to visualize it. Once you let go of the Alt, it will then make that window the active one. Go ahead and select the problem window. Now of course, this is active, but you can't see it because it's off the screen. At this point, hold down Alt and press the Space bar. A window will pop up at the top left corner of the window you're trying to move. Of course you can't see this, but if you wanted to try this on a sample window first you'll see what I mean. Now press M for move. This will allow you to move the window using the keyboard. Now use the arrow keys on your keyboard to move the window. Now you can move the offending one back. Piece of cake.

Dave, I don't think Macs have this problem do they?

**Dave:** There are times when windows on a Mac are minimalized and then can be hard to find on the Desktop because they're BEHIND something else. But the problem Helen was describing is not something Mac users really have to deal with. In fact, the Mac won't let you move a window completely off the screen. If you have two monitors hooked up (with a graphics card driving it) you'll be able to have open files on both. But walking is not in the Mac vocabulary, I'm afraid (smile). ■

## Tripping with the New iBook (Part I)

A Macsonly.com  
review by Bill Fox  
(bill@macsonly.com)  
(c) 2001 by Bill Fox

**W**E ARE CARRYING one of our new iBooks on a business trip across country by air. This means about 5 hours in the air, plenty of time to do some work if we can get our iBook open in coach and the battery lives up to its billing. We will also be using its modem over the telephone systems of several hotels. In addition, we are making a couple of presentations so we've packed it up in the small Targus carry case, in which we normally carry our PowerBook 2000, along with an InFocus LP130 mini digital projector and an AirPort Base Station. The three together with their AC adapters, cables and case weigh nearly 15 pounds, quite a bit more than the 9 pounds with the PowerBook and its supporting gear. Surprisingly they all fit neatly in the PowerBook's modest Targus nylon case.

How about the "5-hour" battery? We're testing it running Mac OS X 10.0.4. Max OS X through version 10.0.3 had a ravenous appetite for battery juice during sleep with some PowerBooks, our 2000 (Pismo) was one. We don't know if the new iBook was one since we never tried it. We unplugged our iBook and put it to sleep as we left for the airport—the Battery Monitor app said it was fully charged and read 4:55, nearly 5 hours. When we popped it open on the airplane, a little over three hours later, the app read 4:47 after the hard drive spun down so very little juice was lost during sleep. After 90 minute's use (reading some previously downloaded email and typing some correspondence with frequent saves) and with the screen brightness set on the last notch before going blank, the Battery





Monitor said 2:25 was left. It is unlikely that the battery will hold out for five hours if we're to believe Mac OS X's Battery Monitor which we actually find to be a bit flaky. After two hours use the Battery Monitor read 1:47, after two and a half hours it read 1:06, at three hours 0:42 and at three and a half hours 0:18 so we put the iBook to sleep just to see if it would make it in sleep mode for another 5 hours. It did. In fact, after we opened the lid and the hard drive stopped spinning, the battery app read 0.21, more than when we put it to sleep.

What about the size? Fortunately we did not get a middle seat on our flight, in our case a fully loaded 757, as in the iBook commercial. We got our usual aisle seat so that at least one elbow can extend beyond the imaginary DMZ line on each arm rest. The new iBook fits nicely on this aircraft's mini tray. It is a bit deeper front to back than our trusty 2400c, our normal traveling companion, but it fit. It could also be opened when the seat in front was reclined all the way. We would have thanked the gentleman in front of us who kept it all the way back for the entire flight, including during the meal service, for supplying the acid test but we were afraid that we might come through as being as truly grateful for his totally voluntary participation as we actually felt.

The other useful aspect of its size is the iBook's thickness ... er thinness? We always had to put away our 2" thick 2400c to use the tray during the meal service—our legs are too, er thick, to hold it on our lap and open the tray over it. However, the iBook is thin enough to do so with a little extra space to spare the top from getting scratched by the underside of the tray. We still put a blanket over it to be sure. Since it bowed up at the middle hinge we also put a blanket over the tray to keep the bottom of the iBook from getting scratched up. We couldn't use our CoolPad because it raised the screen just a bit too high to fit under the reclined seat back in front of us.

All's well so far, so how about the modem? When we got to our hotel we connected the iBook to the phone and called the local number of our ISP. We got a "56K" connection on the first try and pulled down the email that had accumulated since leaving for the airport some 10 hours previously.

We stopped at Apple's headquarters off De Anza Blvd in Cupertino and spent some time at The Company Store looking at merchandise and trying to pick up some hints on the possible coming of a new iMac. We got some of the former but none of the latter. If a new iMac is coming, Steve Jobs runs a pretty tight ship. No inventory to check up on either since they don't sell hardware there. We hope the Cube is not EOL'd. We are sure it will eventually catch on if modernized and kept in the right price structure, i.e. well below the towers and on par with the iMacs. Even Steve Wozniak, Apple's co-founder turned educator, is claimed in articles about MacHack last week on several web sites to have described the Cube as we have—the best desktop computer ever.

We think that the new iBook may well be the best consumer laptop computer ever. ■

## Hands-On Report—Tripping with the New iBook (Part II)

A Macsonly.com  
review by Bill Fox  
(bill@macsonly.com)  
(c) 2001 by Bill Fox

OUR PRINCIPAL traveling companion on business trips that include long airplane flights for the past 2.5 years has been a PowerBook 2400c. Not many of these diminutive 4.4-pound, PowerPC-fired PowerBooks were sold in the USA despite their perfect size and power for road warriors. It was discontinued after a year in production. Fortunately, a lot were sold in Japan. The 2400c kept pace in CPU speed with its newer and larger PowerBook G3 brethren because Apple (actually IBM Japan) made the 2400c's CPU upgradable and several companies made G3 upgrades for it. In addition, MCE provided a service to enable FireWire, USB and fast ethernet. However, it fell behind in graphics power, batteries became scarce and expensive and its RAM limited out at 112 MB. We were beginning to think that Apple would never make a replacement until the new iBook was recently released. We took one on our West Coast trip this week and put it through its paces running Mac OS X for the most part.

Our observations on the new iBook during travel out to the West Coast were posted on Tuesday. We noted how well it fit into our PowerBook 2000's carry case along with a 3-pound InFocus LP130 digital projector and AirPort Base Station. We also noted its fit on our airline tray in coach plus its battery life and modem performance in our first hotel.





How did it work with Mac OS X and the InFocus projector for our presentations? Not very well. We had two problems but we believe that neither are the fault of the iBook.

First, we tried everything that we could think of, including reading the InFocus projector's manual, to get it to accept the iBooks 1024x768 resolution video output without having to boot the iBook with the projector already connected and on. The InFocus projector has the same problem with our PowerBook 2000 (Pismo). Maybe it is a problem with the projector. However, once booted into Mac OS X with the projector on, the iBook could be disconnected and reconnected with no problem most of the time. Not so with our Pismo. We look forward to trying this with our TiBook when it arrives. When we had plenty of time to set up and weren't trading the projector connection with others, the long Mac OS X boot up requirement was just an annoyance. Since Mac OS X takes so long to boot, including its Classic mode (Mac OS 9.1) as PowerPoint is not yet carbonized, we mostly booted into a stripped Mac OS 9.1 which takes less than a minute.

Second, we got a kernel panic once during practice with Mac OS X when we plugged in the USB connector for the remote controller. Classic mode hangs during boot up if the remote's USB connector is plugged into the iBook so we are forced to plug it in after booting finishes or not use the remote. This made us very leery of using Mac OS X. We noted that there is a firmware update for the projector on InFocus' web site but a PC running Windows is required to install it—grrrrr. Except for the need of a PC to update its firmware, the InFocus LP130 digital projector is marvelous. We will post a complete review on it soon.

Our second hotel had high speed internet service, \$9.95 for 24 hours (noon to noon) usage. The internet service was provided by STNS and was completely plug and play with either Mac OS 9.1 or Mac OS X. TCP/IP just had to be set to Using DHCP server. Ethernet, USB (for Windows machines) and modem cables were available in a plastic bag in the room—very thoughtful. We did not even have to reset the smtp server domain name for each email account. The AirPort Base Station worked fine as a bridge but we really didn't need it since the internet connection was on the desk.

The AirPort Base Station was a super convenience in dial up mode at our first hotel. It freed the iBook for use out on the balcony or on the desk across the room from the phone jack. At first we found that we could not disconnect using Mac OS X. Clicking the "Disconnect" button in the Internet Connect application caused

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the AirPort Base Station to go through the disconnection process but Mac OS X just immediately redialed. We solved this issue by manually disconnecting the AirPort Base Station from the phone jack but later we found that while configuring AirPort for dial up mode (modem) mode we had inadvertently checked the box to "Automatically dial".

On the way back we got an aisle seat on a Boeing 777. This terrific airplane, the world's best in our opinion, has room to spare in coach (on United anyway) to open the iBook on the meal tray even with the seat in front fully reclined. Unlike our trip out on a Boeing 757 (the US's worst airplane in terms of coach space), the lady seated in front of us on the way back kept her seat back up. She kindly fully reclined it at our request to see how well the iBook fit under that circumstance. Our Pismo would not have fit but a TiBook might as there was still a little over an inch to spare between the top of the iBook's screen and the tray notch in the seat back.

Battery life on the way back was similar to on the way out. We had the iBook in sleep mode for about 2 hours before opening it on the plane. Then we worked on the iBook for 3.5 hours. There was still about a half hour left when we put it to sleep for landing according to Mac OS X's Battery Monitor application. It slept another 2 hours before reopening it at home and the Battery Monitor read 0:43.

The new iBook is a very impressive traveling companion. Functionally, it does everything extremely well and looks fabulous too. Mated with an AirPort Base Station and small digital projector like the new InFocus LH130, it is an exceptional road warrior's computer. The new iBook outshines our beloved 2400c in every way except one—exclusivity—and that will surely make Apple a bunch of money. ■



# DoubleClick

## Free ISPs have gone way of the dinosaurs

**Dear Derek and Dave:** I recently canceled my ISP because I have access to a T1 at the office, so I tend to do all of my Internet work there. The high price of the ISP just wasn't worth it for how little I went online from home. However, it would be nice to have access in emergencies.

I looked for a free online service, but all the ones I found were for PCs only and I have a Mac 6100/0. Do you know of any free services for Macs? - Linda

**Dave:** Linda, I wish I could tell you that there are lots of free ISPs for the Mac but, sad to say, there aren't. In fact, the era of free ISPs is quickly going south. It hasn't completely gone away yet, but no one makes money giving away a service and hoping folks will click on banner ads.

Although I was pretty certain that a free ISP offering from KMart was the only Mac service still available, I decided to take a look at [http://www.dailydeals.com/ree\\_internet/ccess.htm](http://www.dailydeals.com/ree_internet/ccess.htm) - a great guide for free Internet service providers. It confirmed that all of the best free Internet access providers have gone bankrupt and closed down or switched to a paid service. Those that are left have severely limited their services and are generally slow and unreliable.

Further reading told me that even the Bluelight service from KMart was discontinued some months ago. NetZero, which offers a free ISP for PC folks, is considering the Mac - e-mail [macdemand@netzero.net](mailto:macdemand@netzero.net) to let them know you are interested.

So the bottom line for Mac users is that there is no free bottom line—you'll have to pay at least something to have access to the Internet. So how about cheap eats at the Internet trough? Dailydeals has a number of suggestions that start at \$12.50 per month. Some offer a free month or two to get you started.

But let me offer you one other alternative—Washington Apple Pi. WAP is the area's Macintosh Com-

"So the bottom line for Mac users is that there is no free bottom line—you'll have to pay at least something to have access to the Internet.

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puter User Group, which offers its own "Explorer" Internet Service. You'll pay an initiation fee to start and a year's fees up front—but once you do, you'll have a relatively cheap service (around \$10 to \$12 per month) for unlimited usage. WAP is run by volunteers, so there is no 24-hour service help. But members will try to help you set things right if there are problems. For more information, check out [www.wap.org](http://www.wap.org) or e-mail [office@wap.org](mailto:office@wap.org). And I'll confess—I'm a member!

One last thing, Linda—it's time for a new computer! iMacs are perfect home PCs and you can get refurbished ones pretty inexpensively now.

### Question:

Derek, my wife uses Juno for free PC service but the banner ads drive her crazy. I know you can pay to "upgrade" to no banners, but I guess she's not that crazy yet. Free ISPs also have had a far-from-perfect reliability record. I guess you have to expect that you'll get what you pay for. ...

**Derek:** Right you are. You and I thought that the free Internet service wouldn't last long and the one company that was giving away free or even-low cost PCs was doomed from the start. Why? It comes down to labor. Computers are very service intensive.

It's not like your car, which, for the most part, runs fine with little maintenance. A computer really requires quite a bit service. Much of it requires help from someone else. In fact, that's why columns like this are so popular. So anytime you need service, you need people skilled in that art. We all know there aren't enough good computer people available, which means their salaries go up so companies can keep them.



"But let me offer you one other alternative—Washington Apple Pi. WAP is the area's Macintosh Computer User Group, which offers its own "Explorer" Internet Service. You'll pay an initiation fee to start and a year's fees up front—but once you do, you'll have a relatively cheap service (around \$10 to \$12 per month) for unlimited usage."

There goes the cheap computer. The entire online advertising system never really caught on with users, so there's no money there. What do you get? Another dot bomb.

So who's left? Well, Dave, you mention Netzero and Juno. They have recently agreed to merge. The new company -United Online - will be the second largest ISP behind AOL in terms of subscribers, but I'm guessing not quite that big in terms of revenue!

In fact, the reason they are merging is survival. Both companies now offer a pay service as you mentioned, and it is necessary for them to stay in business. Consumers just didn't buy the products advertised on their screens with the free service. Although the free service will still be around.

Another idea for our Windows readers is prepaid Internet access. This is a great idea because it's cheap and you only pay for what you use. Slingshot.com offers 600 minutes of Internet access for \$10. You buy a CD and you're on the Internet. It's that simple. No usernames or passwords, etc.

You can buy more time as you need it, either through a retail store or online on the Web site. You can even use the time to connect to a toll-free number if there is no local access number.

Although if you're using the toll-free number, that \$10 will only get you 120 minutes. But there are two local numbers in Northern Virginia and one in Washington. Check 'em out.

Note to readers: We know this is summer and the "livin' is easy," but DoubleClick goes on each week - and we need your questions! We don't discriminate

new users from old, PC or Mac. If you have a question about your computer or the software it's using, shoot it our way. Just send an e-mail to the address below.

*Dave Ottalini is on the board of directors of Washington Apple Pi ([www.wap.org](http://www.wap.org)), the Apple/ac user group based in Rockville, Md. He is employed as a senior producer for CNN Newsource, the affiliate service of Cable News Network.*

*Derek Rowan is president of HLP Associates Inc. ([www.hlp.net](http://www.hlp.net)), a full-service computer, network and Internet firm serving businesses, headquartered in Falls Church, Va., and with offices in Washington, Baltimore and New York City.*

For questions about home computer hardware, software or operation (no question is too simple or geeky), Dave and Derek can be reached by e-mail at [doubleclick@jrn1.com](mailto:doubleclick@jrn1.com); by snail mail in care of The Journal, 6408 Edsall Road, Alexandria, Va. 22312; or by fax at (703) 846-8366.

While all questions and comments are welcome, they cannot promise individual responses.

*Thanks to the Journal newspapers for giving us permission to reprint this article.*

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*Try out the new web TCS—find information on page 17.*

*Write for the journal. We need your help to fill these pages with pertinent information for fellow members.*

*Computer Show and Sale coming on December 8th.*





# Installing OS X on a G3 Accelerated Power Mac 8500

By Steve Watkins  
A MacsOnly.com review  
Copyright 2001

I HAD EAGERLY anticipated the (twice-delayed) date for several months. This was the day that Sonnet made the world of Mac OS X accessible to my G3-upgraded Power Mac 8500. The installer was available as a \$29.95 download from Sonnet's web site. It was posted for all of 24 hours before I decided to take the plunge.

Early on in the development process, Apple had announced that their next-generation OS would only work on "native" G3 or higher machines. At work I have a Power Mac 8500 accelerated with a Sonnet G3/400 card; my home machine is a Power Mac 7500 with a 604e/233 processor upgrade, and my notebook is a PowerBook 3400c. Things did not look promising for my migration to OS X.

My Network Administrator has a 333 MHz iMac on his desk, so we did have an opportunity to look at OS X upon its first release. We were both quickly impressed at the sleekness and stability of the new OS. In fact, we installed OS X on his iMac less than a week after it was released, and it has not crashed even once! If this represents the future of computing, count me in.

Fortunately, Sonnet committed to bringing OS X to machines which had been upgraded with most of their G3/G4 accelerators. I had been monitoring their web site almost daily, keeping a keen eye out for the latest news on their efforts. On June 20, my patience and diligence was rewarded.

Sonnet highly recommends that you install OS X onto a clean hard drive or partition. In fact, they so highly recommend it that they don't give you instructions for doing it any other way. This "clean" disk requirement immediately presented a problem. The 8500 has a single, 9.1 GB SCSI hard drive with about 2 GB used. I had previously installed a Sonnet Tango USB/

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"All things considered, the installation of OS X was remarkably easy. However, if I had not had ready access to the external FireWire drive for backing up and recopying my existing information, the process would have been significantly more complicated. There are also a couple of results that you might not expect."

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FireWire PCI card in the 8500, so I was able to use an external FireWire hard drive to back up my information. As a footnote, I believe one of the greatest tributes to the Mac's ease of use is the fact that all I had to do to back up my hard drive was to plug in the FireWire drive and drag the "Macintosh HD" icon onto the "FireWire HD" icon on my desktop. I went to lunch and when I returned my drive was completely backed up. I then reinitialized the internal hard drive, creating two equal 4 GB partitions. I booted with the OS 9.1 CD that comes with OS X, opened the FireWire hard drive and drug the "Macintosh HD" folder back to the second partition. An hour or so later, my system was completely restored and in perfect working order. Now I also had a clean 4 GB partition to begin my OS X installation.

OS X requires OS 9.1 to have been previously installed. Apple recommends (and my experience confirms) that the version of OS 9.1 on the CD included with OS X be used. I installed OS 9.1 on my clean partition without a hitch. After installation, I had to do a software update to get the latest version of Startup Disk, which is necessary to switch the boot device between OS X and 9.1. I also had to rerun the Crescendo PCI installer for my Sonnet G3 upgrade card. Now I was finally ready to install OS X!

At this point, the installation method diverges from a standard OS X install. You have to put the OS X CD in the drive (note that USB and FireWire CD drives are not supported for installation purposes) and then run the downloaded Crescendo X Install 1.0. The Crescendo X install only takes a few minutes and primarily consists of selecting proper source and destina-





tion disks. When the installation routine is finished, your Mac will reboot using the OS X CD.

From this point, OS X installs pretty much as it would on any native G3/G4. Just be sure not to select the option to "Erase Destination" as necessary files have already been placed there by the Crescendo X install.

I was finally ready for the big moment! The installer finished and I dutifully clicked on "Restart." I was shortly rewarded with a quick and (thankfully) uneventful boot into OS X. I poked around, a bit cautiously at first, but soon took on the enthusiasm of a kid in a candy store. The first thing I noticed was the speed. The Power Mac 8500, in addition to the Sonnet G3 upgrade card, has 256 MB of RAM. It was at least as fast as the iMac 333 on which we had previously installed OS X, despite the 8500's slower bus speed (50 MHz vs. 66). Web surfing was a joy using, first, Internet Explorer 5.1 Preview edition. IE was surprisingly stable; in fact, this "preview" edition was more stable than any "final" versions of IE I have used on the PC. Is Redmond more adept at writing software for the Mac than for their own OS?!? I downloaded what quickly became my favorite web browser, OmniWeb. After a while, I decided to test OS X's "Classic" mode, the 9.1 subsystem which exists with X to run applications not written in Cocoa or Carbon, the native tongues of OS X. This is where I struck my first pothole in the OS X road.

For my test, I installed a previously downloaded version of Nisus Compact, the free version of the venerable word processor. I double-clicked to run the program and waited...and waited...and waited. Classic should have launched automatically. It didn't. Rather, it started to launch, and hung. I tried it several times with the same result. I even rebooted the Mac (knowing from my previous experience with OS X that this was not likely the problem). After a little more poking around under the hood, I discovered the problem. In System Preferences, there is an icon for Classic. This allows you to modify certain parameters for Classic mode. For some reason, OS X was trying to boot from my original 9.1 installation (on the other partition) for Classic. I knew, also from previous experience on the iMac, that this would likely not work. I selected the version of OS 9.1 on the same partition as OS X and it worked perfectly. I also chose to have Classic start automatically when the Mac boots.

All things considered, the installation of OS X was remarkably easy. However, if I had not had ready access to the external FireWire drive for backing up and

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recopying my existing information, the process would have been significantly more complicated. There are also a couple of results that you might not expect. OS X does not support internal floppy drives. This is true even on older G3's with internal floppies, not just on G3 upgraded Macs. This is an OS X issue that is not likely to be remedied. In fact, given the architecture of OS X, it is possible that it can't be fixed. Serial printers are not supported. This is also an Apple issue that likely won't or can't be resolved. OS X is less tolerant of improper SCSI termination than previous OS's. You should verify proper termination of all SCSI devices prior to installation. The USB ports on the Sonnet Tango PCI card no longer function. The FireWire ports continue to work, however. This is a Sonnet issue that I hope will be resolved in the future since this disables the primary method of adding a floppy drive once the internal one no longer functions. Finally, should the installation not finish for any reason, you basically have to restore the Mac to its previous state and start over. Although I did not have an opportunity to encounter this particular problem, it would certainly be a very frustrating state to find yourself in!

I continue to be impressed with OS X. Its stability is unrivaled by any other mainstream OS. The new "Aqua" GUI takes a bit of getting used to, but since most familiar commands are still present (although some are, maddeningly, in different locations), it should not be a big adjustment for the experienced Mac user. I have since purchased the same Sonnet G3/400 upgrade for my Power Mac 7500 at home. Although I will probably wait for more software to become available in native OS X mode before installing OS X at home, I am glad that Sonnet has stepped up to the plate and given those of us with "Low-end Macs" the option! ■



# DoubleClick

## Printer only fussy with AOL jobs

### E-mail bounces

**QUESTION:** I have had my Packard Bell LG SUPRA 1605 computer with Windows 95 for about five years. My ISP is AOL. Something strange has been happening recently: When I download something and try to print it out, the printer prints only the left third of the page.

When I print something in WordPerfect 7, the printer prints the entire page. I am unable to understand why the printer prints only the left third of the page and have been unable to correct it. Any ideas?

- *Puzzled*

**Dave:** Hi, Puzzled! You present yet another interesting AOL problem. I'll throw my two cents in and suspect Derek will have some cogent comments as well. First, I'll remind everyone I work for CNN - a division of AOL Time Warner. With that on the table, let's take a look at what you've told us and see what we can do. The Packard Bell brand was discontinued on Jan. 1, 2000, so you're using what we like to call a "classic" PC. Find more information at [pages.infinit.net/elix/ackardbell.htm](http://pages.infinit.net/elix/ackardbell.htm). I suspect that you bought it new with Windows 95 installed. I also suspect WordPerfect 7 was new with your system too. All that said, you indicate everything was working properly until recently.

It's weird that you seem to only have problems printing with AOL. I searched the Corel Knowledge Base at [www3.corel.com](http://www3.corel.com) (click on Support) and could not find any similar problems listed either under AOL or WordPerfect 7.

So we need to look a little closer at what version of AOL you have installed. You don't say which one it is, but given the system and the software you're using, I suspect that you have an older version. It's important that you download and install the latest version to see if that takes care of your problem. AOL has changed greatly in the last few years, so it's possible something

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changed recently that is causing your print problems.

It's also possible that your printer driver has become corrupted in some manner - you may need to download the latest version and reinstall it.

You know you can use Netscape or Internet Explorer as your browser with AOL, so you might want to try printing from one of those programs while logged into the Internet. That would be a quick and easy fix if it works.

Derek, these kinds of print problems drive me crazy! They happen to us Mac users on occasion too, but there are enough quirks with AOL's software to make me think that has to be the first place to look. I know Microsoft has issued various "Service Pak" upgrades for Windows 95 - would that be of any worth to our reader in solving his problem?

**Derek:** Dave, I agree. If the WordPerfect prints OK, that means the printer is printing properly, the print driver is working and the computer is working. The last element is the software. In this case it must be AOL. It could be an incompatibility between something - especially considering that this is a new problem. Unfortunately, it's going to be difficult to figure out without knowing more specifics.

For example, there are some known problem with Canon bubble jet printers doing similar things when the printer driver doesn't match the print cartridge you put in.

So what do we do? Well, the fact remains that it only happens with AOL, yet it is a new problem and presumably you haven't changed your AOL version. That would mean that something is causing the problem with AOL. A new anti-virus program, a new firewall, something. If you can figure that out, then remove that program. If you can't, I would contact AOL technical support and see if they have a clue.

Do any of our readers have any information on



this one? It's a tough one for sure.

**Question:** Some friends and co-workers have been complaining to me that e-mail they send me bounces back to them. I'm scratching my head because I still receive more than 100 e-mail messages per day (from various individuals and mailing lists). Any idea what could be happening?  
- Phil

**Dave:** Phil, this problem happens to me on occasion too. Web searches indicate that the problem could be as simple as your friends are not typing your e-mail address correctly. As you know, it doesn't take much - a space between names, a capital instead of a lower-case letter. You also could suggest that your friends check their mailbox settings in their control panel (on the PC) or in their e-mail program. According to the site [www.actwdsitehosting.com/elpdesk/mail\\_bounceback.html](http://www.actwdsitehosting.com/elpdesk/mail_bounceback.html), "The most common mistake that causes bounces is users placing the mailname in the mail group and creating a loop." A down Internet relay site also could be to blame (remember messages don't go directly to you but through many computer "relay" sites first).

Phil, you might want to test your address to make sure all is well. To do that, goto [email.about.com/library/eeekly/a081798a.htm?once=true&](http://email.about.com/library/eeekly/a081798a.htm?once=true&) and check out the instructions there. For more information about bounced back messages try [www.webel.co.nz/mail/Derek](http://www.webel.co.nz/mail/Derek): I know how frustrating a bounced e-mail can be. I've found that even when I copy someone's e-mail from their original message, that's not always a guarantee that the message will get there.

This absolutely is a frustrating problem. The bad news is that you'll probably never find the answer! We must accept the fact that e-mail is NOT 100 percent reliable. Let me go through some of the things that will cause this problem:

**Intermittent Internet connection.** This is where your Internet connection goes down for a short time. During this outage, mail won't get through. The sending system almost always will retry and it will work fine. However, sometimes the sending system won't retry. We've also seen this problem when there is too much traffic going over your Internet connection, which will cause some of the mail not to get through either.

The solution to this is what's called a backup mail server. This service usually will be offered by your ISP and in many cases doesn't cost you anything. The backup server will accept your mail if the primary sys-

tem doesn't take it. The backup system will then deliver it at a later time.

**Mistyped e-mail.** Dave pointed this out. My company hosts e-mail and we often get complaints from users saying their mail bounced. We always ask for the bounced mail error and many times the name is spelled wrong - either the e-mail or the domain name. In some cases, the receiver themselves had a mistyped return address so anyone who replied would get a bounce.

**Incompatible mail servers.** While this isn't too much of an issue, it is possible today for two mail servers not to talk to each other and send mail.

**Busy servers.** Many "free" e-mail accounts have a tremendous amount of bounced and undelivered messages. We see this quite a bit. Hotmail is especially bad. We also sometimes see this problem with AOL. The mail just doesn't get there.

**Misconfigured servers.** There are some servers that are set to certain security levels that aren't liked well by other servers. This will cause mail from certain servers to be bounced.

**Stray moon beams and sunspots.** This is our usual answer to many computer problems. Sometimes the technology just fails. Accept it.

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# DoubleClick

## Mac launcher fizzles out during takeoff

**QUESTION:** I've written before and now I'm back again, a few years older, as is my Performa 6300CD with 48 meg RAM.

Since you requested questions to help fill your wonderful column during the slow summer season, I will give you mine.

My lazy nature and the fact that I have managed to work around the problem for the last eight or nine months has kept me from asking for your help so far.

I cannot get the launcher to open no matter what I try. I always get the same dialog box, a Stop Sign with a hand and "The control panel 'Launcher' could not be opened because an error of type -192 occurred."

I work around it by having the Launcher Items window open on startup, which works just fine except my lazy self has to double click the applications to open them rather than single click the regular Launcher buttons. I have tried Conflict Catcher to no avail, mostly it just confuses my 77-year-old mind. All my applications, AOL, Quicken, Claris Works, solitaire, etc., function just fine, although I have to occasionally rebuild the desktop.

I still love my Mac, in spite of the occasional frustrations, and even more so as I read of the weird PC problems in your weekly column.

Keep up the good work, you have helped me a couple of times before while I was getting started with this machine. Thanks to you both...have a great summer.

—Paul

**Dave:** Hi, Paul! It doesn't sound to me like you're all that old at 77. I happen to think that computers age faster than anything. Your Performa was built in 1995 but technology advances have already made it way older than you in human terms. Yet it's still working for you and doing useful things - although with some obvious frustrations on occasion.

The Launcher application you mention is a neat

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little "Control Panel" program that came free with virtually all Macs before OS X. It lets you take your favorite programs and create a menu bar of sorts that is placed on your desktop. Schools love this since they can control the applications available to students. And you're right - one click is all you need on the application's icon to get it running.

So why are you having so many problems? First, we need to know what error -192 is. For that, I used a great little program called MacErrors. Download it at <http://www.mac.org/utilities/acerrors/> Typing in the number, it says that the message you're getting means something is missing - a resource the Launcher needs has been lost somehow (you may have accidentally thrown it away) or it's corrupted.

You didn't say what version of the Mac OS you're running. And while your Performa is a Power PC, it is nearly maxed out at 48 MB of ram (it can take up to 64). LowendMac.com says that you should not be running anything over Mac OS 8.1 on this machine - but that means if you are running anything earlier, it's time for an upgrade - which should also make sure you have all the software parts of the Launcher installed correctly.

That might not be a lazy enough solution, though. So before taking that route, get yourself a copy of Norton Utilities or MicroMat's TechTool Pro. Boot from either disk (press "C" on bootup with the disk in the CD player) and run their repair utilities. I suspect that may fix the problem.

If that doesn't work then you can try the OS upgrade. The folks at Washington Apple Pi over in Rockville, Md., will be happy to help you with this (or running the disk repair program) for a donation any Tuesday night from 7 to 9:30 p.m. or so. Call (301) 984-0300 to make sure the clinic is being held.

Here's one other thought - why not replace Apple's



Launcher with an alternative? I did a search on ZD Net at <http://hotfiles.zdnet.com/gi-bin/exis/wlib/ofiles/earch.html?b mac> and found a great selection of applications that will do what you need. Aladdin also sells a Launcher application called Drag Strip that is more powerful than Apple's. Check it out at <http://www.aladdinsys.com/ragstrip/acindex.html>.

Derek, I know the Start menu is essentially a program launcher - but I believe Windows users also have many options when it comes to running favorite programs from one single application.

**Derek:** Dave, you're right the Windows Start menu is the main program launcher. From here you really do everything. There have been a million or so different program launchers from different manufacturers over the years. The DOS days had its own ones and the earlier Windows had some. Windows 95 and later use the Start menu. Of course, you also can put your programs and files and other things directly on your desktop in Windows.

This is a great place to put things, especially files you access a lot. Just double click on them and you're working. Internet Explorer 4 and later for Windows gave us the Quick Launch toolbar too. This is a little "mini desktop" to the right of your Start button on your task bar. You can put programs and files there too. It is a great little system for programs because it takes only one click and that program pops up.

I use my Quick Launch toolbar for all of my programs. It even comes with a nifty icon that will automatically minimize all windows for you. Sure, you can do that with a right click on the toolbar, but it is faster and easier this way.

I notice that how people use their computers is very personal. There are very experienced people in my office who use the start bar for everything. They go through the menus to launch the application, and then load the document. Others use the desktop and some use the Quick Launch. Having all of these options allows you to find the method that works for you.

**Dave:** Here are some reader comments from recent columns:

I agree with your advice to Chris about the Win98 startup problem in the June 4 column, but I feel you missed a chance to give some good advice. Chris must reformat a whole drive, losing data, installed software, and the operating system. I always partition my hard drives. For example, three partitions work very nicely

- one for Windows/operating system, one for installed software and one for data.

I only ever need to back up one drive, my data drive. In case of problems, I need only format the system and program drives. My data stays. A 6 gigabyte drive can easily be partitioned into the three drives that I mentioned above. I recommend this approach to friends.

Besides being slightly safer and more logical, it removes the clutter of folders that people have on one drive. One more advantage is that very mission-critical data can be saved/acked-up on the other two drives, allowing rapid recovery. I use FDISK for partitioning because I feel comfortable messing with my hard drive, but others can use commercial software, such as PartitionMagic. - John

Derek and Dave: I read with interest the problem with Crashguard intercepting a "rundll32.exe" crash. One useful place to start investigating a Windows error message is the Windows 98 and ME Error Message Resource: <http://support.microsoft.com/upport/indows/opics/rromsg/mresctr.asp> - J.L.

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While all questions and comments are welcome, they cannot promise individual responses. ■

*Our thanks to the Journal papers for allowing us to reprint this article.*



# DoubleClick

By Derek Rowen and Dave Ottalini

**I** WOULD LIKE to scan old negatives and 35mm slides for a family album. What scanners would you recommend that produce quality pictures for a PC.

-Richard Fulton

**Derek:** Richard, that's a great question. However, I don't think Dave and I are the right people to ask for this since neither of us have used any slide scanners. However, come along with us and we'll chat a little about flatbed scanners, slide scanners, and digital photography.

Many of you know that I've been touting the fact that I gave up film. Yep. No more film for me. The only film that I use now is bits and bytes. The Rowan family is all digital. To recap what I've written in this space before, last November my APS (Advanced Photo System) Canon gave up the ghost. I switched to APS a couple of years before and loved the great picture quality that I got. I'm your average family and vacation photography kind of guy. When my daughter was born I used that little Canon camera to snap pictures. I had them developed and placed on disk or CD and then placed up on the ole family website for sharing with relatives and friends out of the area. I'd been thinking about going digital for awhile, but hey, the Canon shot great pictures right?

After it broke and we found out it would cost \$200 to get it repaired, I decided what better time? I had been doing my research and settled on the Sony Cybershot DSC-P1 digital camera and an Epson Photo 875DCS ink jet printer to print out the pictures.

I haven't looked back since. Digital is the only way to go for me. I wouldn't ever considering going back. I get great photos, great prints, easy access to digital form for E-mailing and web publishing, a great way to "backup" and archive photos (by placing them on CD and storing them in my office, so if my computer or my house blows up, I can save the only things that really matter - our pictures.

I have an extra 64MB "memory stick" that I can take with me on vacation. I can store 100 or so high quality (3 Megapixel) images, which is plenty. Remember that you

delete the ones you don't like right away saving space. I bought an underwater housing for it which is great on a boat, the beach, the ski slopes, or even snorkeling and diving. What's not to like?

Next of course is the fabulous feature of EDITING your photos. This really makes it cool. It is now so easy to blow up a particular portion of your picture to have the subject fill the entire frame. If you're like me, you don't naturally take the best pictures. Zooming in on your subject makes a big difference in the perceived quality. It's a snap. Add in the ability to get rid of red eyes, brighten up dark pictures, and occasionally add fun titles, and it really provides a big improvement.

The other benefit of being digital is the fact that it is SO EASY to get FAST prints and to provide prints to family and friends. I had no idea how important this would be. Granny comes over to say hello to our daughter. On the table she notices a cute picture that we snapped that day and printed out. Well she just has to have 3 copies. One for her and a couple to give out to her friends. No problem. Just print off 3 more copies while she's there.

I could go on and on. Trust me, it's the way to go. Of course, there's a downside. Cost. It ain't cheap. No matter what anyone tells you. Why? Well for one thing each print will cost you between \$0.50 and \$1 depending upon your paper and ink combination. Mine are closer to a \$1. Of course you say, well you don't have to buy film any more. That's true, but you'll end up spending more on gadgets, memory chips, blah blah blah. Secondly the real cost comes in the advantage mentioned above. You PRINT WAY MORE than you probably made copies of your regular prints. But to me, that's what makes pictures so much fun! Now, there's nothing that says you have to PRINT out your pictures. You can just snap them and E-mail them or put them on disk or CD to distribute to friends and family. Your mileage may vary.

But what do you do with all of your OLD pictures and slides? Well, you've got to convert them to digital in order to take advantage of all of the cool stuff. That can be done a few ways. One is to take them to a retailer that handles these services. I would probably only recommend a service for 35mm slides assuming you don't have a lot of them. For prints, we'll talk about flat bed scanners. There are quite a few slide scanners out there on the Internet. Again, I have no direct experience and can't recommend one over another. I'm sure it'll pay to do your homework. Also, I'm guessing these would only be cost effective if you don't have a lot to scan. Point your browser to your favorite search engine and search for: 35mm slide scanning



I got quite a few good hits with Altavista.com using that search.

Ok, sending your slides off to someone isn't for you and you want to purchase your own 35mm scanner. My two favorite places to find out about technology is Zdnet.com and Cnet.com. (They are part of the same organization, but seem to have editorial differences)

Cnet has lots of info posted by users about scanning. Zdnet has some good reviews on 35mm scanners. Again just type in 35mm slide scanner in the search box and select the Review section.

Flat bed scanners are something that we do know something about. However, since I've been rambling on and on, I'll let Dave provide a couple of good tips and links. Besides, since he's on vacation now in England, I thought I'd make him work a bit so it wasn't all fun and games.

**Dave:** Hello from York, England, Derek and everyone! I'm writing my part of the column this go-round from an Internet Cafe. They seem to be everywhere here in England and I see lots of folks using them. Of course, why they would be doing THIS when they could be out enjoying "The Minster" and all the other sites around here is beyond me. At least I have an excuse...

I'm writing this on an iMac, by the way - this cafe - called "The Internet Exhchange" has a couple of them. All the rest are Fujitsu's with flat screens. It costs a Pound 50 for 15 minutes (about \$2.00 or so) and 12 pence every minute after that for "Guests" (non-regulars) - not bad considering I was planning on taking my laptop and decided not to because of the extra weight and higher expense of connecting to the Internet from hotels, etc.

Now - about flatbed scanners. I'll just say that the choices these days are getting better and better even as the prices are coming down. I seem to remember paying more than \$250.00 for mine - a Umax SCSI scanner that continues to provide excellent service. But today for that amount, you can get a lighter unit with a film scanner and higher resolution and even more features.

Most folks today would choose a USB scanner since they work on both Macs and PCs and the manufacturer usually provides software that works with both platforms.

You're also seeing more and more Firewire scanners these days, although I can't say that you're going to gain all that much from the speed - scanners by their nature are slow machines (a light bar travels under the glass plate at a speed determined by the resolution you are looking for).

In any case, I would say that most scanners today

by the major manufacturers - HP, Canon, Epson are cost effective and will give you excellent results. The keys are resolution, physical size and do you want USB or Firewire (and there are some still with Parallel but they're hardly worth it anymore).

Check out

<http://www.crev.com/products/showcategory.asp?SiteID=10&CategoryID=251>

for reviews on a number of different scanner brands.

Cnet also has some excellent reviews at

<http://computers.cnet.com/hardware/0-1073.html?tag=st.co.1016.dir.1073>. ■

## DoubleClick

By Derek Rowen and Dave Ottalini

**H**I DAVE AND Derek, I use AOL 6.0 as my ISP. Recently, I've received several e-mails with zip file attachments. After I download, I end up with .bin files, but when I click to open them, they contain gibberish which makes no sense, so I just delete them. What are .bin files and is there a proper way to read them? I frequently get other e-mail attachments which transmit as .txt files.

However, I download, unzip and everything works out fine (they're usually .jpg files) With the .bin files though, it is a different story entirely. Please discuss in your column if you feel this is of sufficient to other people. I would sure appreciate knowing what to do and look forward to reading your comments in one of your columns very soon.

Second question — whatever happened to Anne Meddis? Have really enjoyed reading her online articles over the past year but she seems to have gone away!

*Thanks, Marcy*

**Dave:** Marcy, first off Anne has moved on to bigger and better things. She's enjoying a new job these days which, I might add, includes a new Macintosh.

As for your download problems, let's go over the ways files need to be formatted to be sent over the Internet as attachments. Depending on what you're sending, files (like pictures, pdf files, etc.) may be too big to send in their uncompressed form. Further, remember that the Internet doesn't send your files alto-



gether or as one giant "packet" of data. Rather, the information gets broken up into smaller packets of digital information that shoots around along with everyone else's information and then is reassembled once it's gotten to its destination. If the file is too big, some of those packets may get lost and you don't get your attachment.

You already know that your attachments are being "Zipped." This is a standard PC compression format used to make your files smaller - and thus easier to send over the Internet. Mac users can use Zip technology too, but the standard is called Stuffit by Aladdin Systems. From there, some of your files that were Zipped are being translated into a .bin file. This format - called MacBinary—is native to the Mac. But there are Windows versions too—check out <http://www.natural-innovations.com/boo/binhex.html> for more information.

Sometimes you may also see .hqx or BinHex files. Like MacBinary files, BinHex essentially turns your file into a text file - the easiest way to send material over the Internet. You can usually set your browser (tho I'm not sure this is true with AOL) to recognize these files and run a program to decode them once they're downloaded.

What's the difference between the two? Adobe's website ([www.adobe.com](http://www.adobe.com)) says "The .bin file downloads faster but is less compatible with older systems. The .hqx file takes longer to download but is more compatible with older systems."

Mac users who want to learn more about file compression can go to <http://www.macinstruct.com/tutorials/compression/index.shtml>

Stuffit Deluxe is available for the PC, by the way and should be able to handle these files. You can get a free version of Stuffit Expander for Mac or PC at <http://www.aladdinsystems.com/>. The Internet address above (natural-innovations.com) lists PC programs that can encode/decode these file formats. You can also try WinZip's webpage at <http://www.winzip.com/>. That program does handle binhex files among many others.

Derek, most folks just want to SEE their attachments and DON'T want to hassle with what program to use to decode things. Much of this can be automated if you know how to do it. But I suspect this still goes down in the "needs to be made easier" category.

**Derek:** Dave, you're right. We've probably had more comments and questions about E-mail attachments

than anything else. It really is a frustrating problem. You see, the Internet wasn't designed to carry anything other than text through E-mail. So most E-mail systems can only represent the 127 characters that compose the printable letters and symbols we use for text. Programs, graphics, sound files, and other types of \*binary\* files require a full 256 \*characters.\* We do everything in BASE10 format. They say because we have 10 fingers for counting. Computers do all of their math in binary or BASE2. They can only represent an item as an electrical presence or no electrical presence. Each of these is called a bit. Based on early computer architecture and history that is still with us, 8 of these bits make up a byte. Sort of the basic building block for all computer storage.

Well these 8 bits can represent 256 different combinations, but the E-mail systems were designed to represent 7 bits or 128 combinations. As you can see to send a binary file is kind of like trying to fit 10 gallons of water in a 5 gallon bucket. It just doesn't work. There are quite a few different ways around this problems. Most of these schemes \*encode\* the file so that it can be represented within the 7 bit limitation. So any byte that can't be represented by a regular printable character would be represented by two printable characters. It would then be decoded on the other end. Because of all of these \*standards\* problems emerged between programs and ISPs not sending these files or encoding them or decoding them properly. This is the reason many of us are frustrated with decoding attachments. This doesn't answer the problem of being able to READ the attachments in a program once decoded. This is a separate problem that would exist regardless of how the attachment made it onto your computer. If you don't have the program that reads a particular file, then obviously you can't open it. In the case of .BIN files, there are about a million different programs that put out files with that extension. Many of which aren't compatible with one another. It's just a name they used.

So my take on our reader's question is the fact they can't read .BIN files. Since WINZIP will uncompress regular BinHex files ending in .BIN, I suspect that these files are from a program that has their own format for these files. I would ask the person sending them what they were created with and have them resend them in a format that our reader has. ■

*Our thanks to the Journal papers for their permission to reprint this article.*





# Macintosh Tutorials

## Big Changes in Tutorials!!

### Tutorials Are No Longer to be Scheduled Months in Advance

Tutorials will no longer be pre-scheduled on the calendar. You need to let the office know what tutorials you are interested in taking by either e-mailing the office at <office@wap.org> or phoning the office at 301-984-0300 during normal business hours (Monday-Wednesday-Friday 10 am till 6 pm). *Once enough students have shown interest in taking a tutorial, the tutorial will then be scheduled.*

When informing the office of your interest in a tutorial please be as specific as you can. Your name, e-mail address, daytime and evening phone, the name of the tutorial that you would like take, along with the times that you could take the tutorial is the necessary information the office will need in order to be able to schedule and contact you about a tutorial.

### *Evening Classes Are Now Available*

Any number of people have expressed an interest in having more classes in the evening. Both John Barnes and Jim Ritz have been kind enough to offer to teach evening sessions of their classes.

#### On the Road with Your Mac

Microsoft Word for Office 2001

#### Spreadsheet - Why Do I need to Use One?

Microsoft Excel for Office 2001

#### Brush Up Your Mac Skills

Microsoft PowerPoint

#### Exploring AppleWorks

E-mail with Netscape Communicator

#### Ride the Internet Wave

E-mail with Microsoft Outlook Express

#### Web Pages with Apple's iTools

E-mail with America Online

#### The Mac—Digging a Little Deeper

Using Shareware and Freeware that no Mac should be Without

Beginning AppleScript - Teaching your Mac to "Stay" and "Sit"

Intermediate AppleScript - Teaching your Mac to Fetch the Newspaper

### *Teachers Key*

—John Barnes teaches on Mondays, Tuesdays, Wednesdays, Thursdays, and Fridays either in the Morning or Afternoon AND Monday, Wednesday, Thursday and Friday Evenings

—Mahmoud El-Darwish teaches only in the evenings

—Pat Fauquet teaches on Mondays, Wednesdays, and Fridays either in the Morning or Afternoon.

—**Blake Lange** teaches only in the evenings

—**Jim Ritz** teaches on Tuesdays or Thursday either in the Morning or Afternoon AND Wednesday and Thursday Evenings

—**Paul Schlosser** teaches only in the Evenings

—**Barrett Thomson** teaches only in the Evenings

### *Price Key for Single Session 3 hour Tutorials*

**(G)** General Level: Standard Members: \$35.00, Associate Members and Non-Members: \$50.00

**(M)** Middle Level: Standard Members: \$50.00, Associate Members and Non-Members: \$75.00.

**(H)** Higher Level: Standard Members: \$75.00, Associate Members and Non-Members: \$125.00

**\*\*** Multiple Session classes are double or triple the fees depending on the number of sessions.

## JUST NEAT

### **Lets Burn Some CD's - (M)**

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.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills.

**Number of Sessions:** One

**Price:** Standard Members: \$50.00, Associate Members: \$75.00, Non-Members: \$75.00

**Instructor:** Pat Fauquet

**Scheduling:** M-W-F either Morning or Afternoon

### **Lets Go Wireless - Network Your Macs - (M)**

Do you dream of surfing the web without wires from your lawn chair, printing to that printer downstairs without plugging into it, sharing one internet account on all your computers? That's called networking! In this three hour class we will cut through the technobabble, show you examples of hardware, cables and software that make all your computers work to-





gether and share resources.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills

**Number of Sessions:** One

**Price:** Standard Members: \$50.00, Associate Members: \$75.00, Non-Members: \$75.00.

**Instructor:** Pat Fauquet

**Scheduling:** M-W-F either Morning or Afternoon

### **My Crafty Mac - (G)**

Computers and printers are great for more than letters, web surfing and e-mail! Come spend the day with the Washington Apple Pi folks and let's do a few projects. Our crafting days will be held once each month and Pat promises to have ideas and techniques to get your creative energy flowing. Each month a variety of new materials, software and media will be available for your use in making items to take home for decorating and gifts. Below is a schedule of coming craft days: September—Back to School and Halloween

October—Fall and Thanksgiving

November—Christmas and Hanukkah

December—Holiday Gifts and Calendars

January—President's Day, Valentine's Day, Martin Luther King Day

February—Scrapbooking, St. Patrick's Day

March—Easter, Passover, Spring

April—Graduation and Patriotic Projects

May—Summer Fun

There will be a \$5.00 material fee in addition to the class fee for each session. Bring money and we will order in from one of the area restaurants or bring a sack lunch.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills

**Number of Sessions:** Full Day

**Price:** Standard Members: -Standard Members: \$70.00, Associate Members: \$100.00, Non-Members: \$100.00

**Instructor:** Pat Fauquet

**Scheduling:** M-W-F Full Day

### **On the Road with Your Mac - (G)**

The recent introduction of highly portable, highly capable, and economical laptop computers makes it more of a pleasure than ever before to enjoy the company of your favorite computer when traveling. This course discusses the things one needs to think about before packing the computer to go to some exotic (or not so exotic) destination. Electricity supplies, modem and IP connections, Internet Cafes, file backup, multimedia adapters for use with digital still and video cameras, and physical security are some of the issues that

will be discussed.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills

**Sessions:** 1

**Price:** Standard Members: \$35.00, Associate Members: \$50.00, Non-Members: \$50.00.

**Instructor:** John Barnes

**Scheduling:** M-T-W-TR-F either Morning or Afternoon AND Evenings

### **Have iBook (or PowerBook), Will Travel - (G)**

There are a lot of things to think about before you take your favorite "toy" on the road—power, Internet connections, file backups, critical software, adapters, cases and computer security are just a few. Apple's Location Manager will also make trips easier. Come learn how to make your trip a "computing success."

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills

**Number of Sessions:** One

**Price:** Standard Members: \$35.00, Associate Members: \$50.00, Non-Members: \$50.00.

**Instructor:** Pat Fauquet

**Scheduling:** M-W-F either Morning or Afternoon

## **NEW USERS SET**

### **Mouse Mousse - (Intro to New User Set) - (G)**

Your new pet needs care and training. This two hour class with one hour lab session will teach you how to tame the little beast! Tricks such as clicking, double clicking, pointing and dragging will be taught along with hints for care and feeding. If you own an iBook and would like to use that during the class, please bring it to class with you. This class may be retaken for free by members if further training is needed.

**Prerequisite:** None.

**Number of Sessions:** One (2 hours of class time and 1 hour of lab time)

**Price:** Standard Members: \$35.00, Associate Members: \$50.00, Non-Members: \$50.00

**Instructor:** Pat Fauquet

**Note:** Since most members can use the mouse effectively, this class is not required before taking Write It! - Save It! - Print It! and is only run when the office has enough students to schedule a class.

### **Write It! - Save It! - Print It! - (Part 1 of 4 Part New User Set)- (G)**

This introductory class will focus on using AppleWorks to write, print, and save your first com-





puter documents. Write It! will include elementary text formatting skills. Save It! will help you learn to save documents in a central location and then find them again. Print It! will help you set up your printer, preview your document, make choices about color, and paper quality.

**Prerequisite:** None.

**Number of Sessions:** One (2 hours of class time and 1 hour of lab time)

**Price:** Standard Members: \$35.00, Associate Members: \$50.00, Non-Members: \$50.00

**Instructor:** Pat Fauquet

**Scheduling:** M-W-F either Morning or Afternoon

#### **Finding Your Way Around the Finder - (Part 2 of 4 Part New User Set)- (G)**

Your computer desktop fills with windows and icons quickly! Learn the secrets of the Finder to deal with them!

**Prerequisite:** None.

**Number of Sessions:** One (2 hours of class time and 1 hour of lab time)

**Price:** Standard Members: \$35.00, Associate Members: \$50.00, Non-Members: \$50.00

**Instructor:** Pat Fauquet

**Scheduling:** M-W-F either Morning or Afternoon

#### **Surfing 101 - (Part 3 of 4 Part New User Set)- (G)**

Learn how to catch your first Internet wave! This class will give an introduction to the browser window, show you some great Internet sites, teach you how to make bookmarks to find your way back and send your first e-mail messages.

**Prerequisite:** None.

**Number of Sessions:** One (2

## **Some Specifics**

**Who**—Standard members are those who have paid the standard membership dues and includes all family members living within the household of a standard member. Associate members are those who have only paid the associate membership dues.

**What**—The tutorial program of Washington Apple Pi is hands-on training for our members in the use of Macintosh computers. The tutorial room is furnished with computers so that each student has the use of a computer during class.

**When**—Classes are no longer scheduled months in advance. You need to contact the office via snail mail, email or by phone to tell the office what classes you are interested in taking and what times you are available to take the classes.

**Where**—Unless otherwise stated, all tutorials sponsored by Washington Apple Pi are given at the office located at 12022 Parklawn Drive in Rockville, Maryland. A map to the office may be found on the web site at <http://www.wap.org/info/about/officemap.html>.

**How**—After enough students have stated their interest in taking a specific class the interested students will be contacted and the class will be scheduled. If you would like to inquire about the current level of interest for a specific class please either call the office during business hours or send email with the classes you wish to know about along with a daytime phone number. The office will get back to you either by email or by telephone.

**Fees**—Class fees vary due to the level of the class. Please see the specific class description for the fee for that class. Pre-registration and Pre-Payment must be made to hold a seat.

**Class Size**—Class size is limited to 6 students per class.

**Instructor Cancellation**—If a class is canceled by the instructor, all students will be notified of the cancellation. Please check your home answering machine and email if you have not given a work number for notification.

**Student Cancellation**—A student cancellation must be received 72 hours prior to the scheduled class time. Student Cancellations may only be made via telephone during Washington Apple Pi's business hours or via email to the email address of [office@wap.org](mailto:office@wap.org). The office does not have an answering machine - only an announcement machine.

#### **Office Information**

Washington Apple Pi  
12022 Parklawn Drive  
Rockville, MD 20852  
[www.wap.org](http://www.wap.org)  
email: [office@wap.org](mailto:office@wap.org)  
Office Hours:

Monday - Wednesday - Friday (10 am - 6 pm)





hours of class time and 1 hour of lab time)

**Price:** Standard Members: \$35.00, Associate Members: \$50.00, Non-Members: \$50.00

**Instructor:** Pat Fauquet

**Scheduling:** M-W-F either Morning or Afternoon

### **Simplify Your Computer Life - (Part 4 of 4 Part New User Set)- (G)**

Are you tired of having to open so many folders to get to AppleWorks or the Internet? Do you save things only to lose them? Can you throw something away when the trash can is covered? This class will teach you how to make your computer easier to use!

**Prerequisite:** None.

**Number of Sessions:** One (2 hours of class time and 1 hour of lab time)

**Price:** Standard Members: \$35.00, Associate Members: \$50.00, Non-Members: \$50.00

**Instructor:** Pat Fauquet

**Scheduling:** M-W-F either Morning or Afternoon

## **UNDERSTANDING THE MAC**

### **Brush Up Your Mac Skills- (G)**

This class is meant for the new user as well as the user who has just upgraded to a new computer and wants to learn more about the basic operation of the Macintosh. This class is also recommended for Macintosh owners who are new to Mac OS 8.0 and above or those who have never really learned all the things that the Mac OS has to offer to the computer user. In addition to start up, sleep and shutdown procedures, the student will learn how a computer works and common Macintosh terminology. The Finder and its basic operation will be fully covered. This discussion will include the menu bar, Apple menu and the Application Switcher. Students will learn how to access and use the built-in help application on the Macintosh. Error messages, dialog boxes, icons, folders, and view options will be discussed. You will learn the basics of word processing and text formatting. Copying, cutting, pasting, dragging and dropping will also be covered. Basic system and mouse maintenance will be included. The fundamentals of searching for files will also be covered.

**Prerequisite:** 4 part New Users Set or a good general understanding of the Mac OS.

**Number of Sessions:** Two.

**Price:** Standard Members: \$70.00, Associate Members: \$100.00, Non-Members: \$100.00

**Instructor:** Jim Ritz

**Scheduling:** T-TR either Morning or Afternoon AND Evenings

### **The Mac—Digging a Little Deeper- (M)**

The Mac—Digging a Little Deeper will follow up on the concepts taught in Brush Up Your Mac Skills. You will learn more advanced Macintosh skills and terminology including contextual menus and advanced Finder options, the custom installation of software and updating software applications. Students will learn about memory error messages and how to deal with them. Hard drive organization, archiving and backup strategies will be discussed. An introduction to managing system extensions and control panels will be covered along with virus protection, system enhancements and Macintosh "housekeeping" philosophies. Students will learn how to use Disk First Aid, how to deal with system crashes and what causes them. They will also learn to use Sherlock to find files on the computer, to find text phrases in saved data, and to find items on the Internet.

**Prerequisite:** Brush Up Your Mac Skills

**Number of Sessions:** Two

**Price:** Standard Members: \$100.00, Associate Members: \$150.00, Non-Members: \$150.00

**Instructor:** Jim Ritz

**Scheduling:** T-TR either Morning or Afternoon AND Evenings

### **Making your Mac Sing- (M)**

Making your Mac Sing will follow up on the concepts taught in The Mac—Digging a Little Deeper. In this hands-on class students will learn how to back up the essential data and settings files, then how to install, update and upgrade system software. They will learn the difference between clean and dirty system installations and when to use them. They will learn how to remove installed software, manage system conflicts, and troubleshoot crashes. Software such as Norton Utilities, Tech Tool Pro, Conflict Catcher, Spring Cleaning, and Disk Warrior will be demonstrated and used to fix computer problems. Hard drive initialization, partitioning, defragmentation and optimization will be discussed and demonstrated. Students are encouraged to bring their Macs to use in class to actually troubleshoot and update their own computers. iMac owners should bring their computer, keyboard and mouse. All others should bring only their CPU and modem. If students own Zip drives or Super Drives they should also bring those to back up important data.





**Prerequisite:** The Mac—Digging a Little Deeper

**Number of Sessions:** Two

**Price:** Standard Members: \$100.00 Associate Members: \$150.00, Non-Members: \$150.00

**Instructor:** Pat Fauquet

**Scheduling:** M-W-F either Morning or Afternoon

### **Hanging Ten**

Now that Apple's state-of-the-art operating system is pretty much ready for prime time, OS X is the place to be. With its outstanding stability, robust software, seamless multitasking, clean program development environment, and many other features, X is the way to go if your computer can support it. This class provides tips gathered from experienced OS X users and "hands on" experience with the new environment and applications that live within it. Learn the distinctions between Cocoa, Carbon, and Classic. Learn how to set up OS X and Classic on your own (qualifying) machine. Tour some of the new and upgraded applications.

**Prerequisite:** Digging Deeper

**Sessions:** 1

**Price:** Standard Members: \$50.00, Associate Members: \$75.00, Non-Members: \$75.00.

**Handout Fee:** \$5.00

**Instructor:** John Barnes

**Scheduling:** M-T-W-TR-F either Morning or Afternoon AND Evenings

### **Using Shareware and Freeware that no Mac should be Without- (M)**

What is shareware and freeware and why do you need to know about it? What are all the neat files and programs that make your Mac more user friendly? Learn how to find these files and software on the Internet, how download them, how to install and use them. How susceptible is the Mac to viruses, and how do you combat them? This one session class is for students who want to learn more about the various software resources such as graphic reader/converter software, fonts, plug-ins, Applescripts, and system resources.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills.

**Number of Sessions:** One

**Price:** Standard Members: \$50.00, Associate Members: \$75.00, Non-Members: \$75.00

**Instructor:** Jim Ritz

**Scheduling:** T-TR either Morning or Afternoon AND Evenings

## **WHY APPLEWORKS**

### **Exploring AppleWorks- (G)**

Now that you can type a report or letter, learn more about margins, indents, tabs, dictionaries, sections and columns. Learn how to add graphics, tables, graphs and spreadsheets to your basic AppleWorks document. Learn how to use the templates and assistants included in the program.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills.

**Number of Sessions:** One

**Price:** Standard Members: \$35.00, Associate Members: \$50.00, Non-Members: \$50.00

**Instructor:** Jim Ritz

**Scheduling:** T-TR either Morning or Afternoon AND Evenings

### **AppleWorks Can Do That?- (M)**

In addition to word processing functions AppleWorks contains presentation, database and spreadsheet modules. Learn to use these tools for slideshows, mail merging, certificates, and labels in this three hour class.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills

**Number of Sessions:** One

**Price:** Standard Members: \$50.00, Associate Members: \$75.00, Non-Members: \$75.00.

**Instructor:** Pat Fauquet

**Scheduling:** M-W-F either Morning or Afternoon

### **AppleWorks and Newsletters- (M)**

Learn how to use the newsletter assistant in AppleWorks to easily produce newsletters for a variety of audiences. In this class participants will produce a basic newsletter, then learn how to use the Mac OS stationery pad function to speed the production of future newsletters. Basics of graphic design, layout, typography, writing style and suggestions for economical reproduction will also be covered. This class is not an introduction to AppleWorks.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills. In addition Exploring AppleWorks class or a good working knowledge of another word processing application is suggested before attending this class.

**Number of Sessions:** One

**Price:** Standard Members: \$50.00, Associate Members: \$75.00, Non-Members: \$75.00

**Instructor:** Pat Fauquet





**Scheduling:** M-W-F either Morning or Afternoon

## GENERAL GRAPHICS

### **We Need a Picture Here- (M)**

Calling all people who don't want to be graphic professionals, but who would like to be able to put Photos, Clip Art, Draw, Paint, Vector, and Bitmap into an e-mail, flyer or newsletter. In this three hour class students will be introduced the secrets of drawing and paint programs for the computer. They will learn how to use graphics from computer programs, clip art CDs and the Web to enhance their documents. They will learn how to re-size and re-color graphics that are "just about right" to make them "just right." Elementary retouching of photos will also be covered.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills.

**Number of Sessions:** One

**Price:** Standard Members: \$50.00, Associate Members: \$75.00, Non-Members: \$75.00

**Instructor:** Pat Fauquet

**Scheduling:** M-W-F either Morning or Afternoon

### **Fun with Your Scanner- (M)**

Bring your scanner, its software, cables and power supply and explore what you can do with it. Bring a few pictures that you would like to fix, some printed material you would like to convert to text and bring a few small items you would like to have "pictures" of. We will have a "scanning" good time!

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills.

**Number of Sessions:** One

**Price:** Standard Members: \$50.00, Associate Members: \$75.00, Non-Members: \$75.00

**Instructor:** Pat Fauquet

**Scheduling:** M-W-F either Morning or Afternoon

## USING THE INTERNET

### **Ride the Internet Wave- (G)**

This three hour class, intended for users of all Internet browsers, will introduce you to the World Wide Web. Learn what the various buttons on the browser window do. Learn to customize the browser window to meet your visual needs. Learn how an Internet address works and how to deal with error messages that appear. You will learn how to use Sherlock, search engines, directories and metasearch sites to find the

information you seek. Learn how to capture pictures and text from the Internet and how it print web pages. This class is appropriate for all users of the Internet including America Online customers. It is suggested that all participants enroll in one of the e-mail courses to complete their introduction to the Internet.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills.

**Number of Sessions:** One

**Price:** Standard Members: \$35.00, Associate Members: \$50.00, Non-Members: \$50.00

**Instructor:** Jim Ritz

**Scheduling:** T-TR either Morning or Afternoon AND Evenings

### **E-mail with Netscape Communicator- (G)**

Anyone can send and receive e-mail, but some would like to do more like attach and download files, send documents that anyone can read, import their Palm data into their address book or perhaps export their address book to their Palm. Some would like to know how archive e-mail, search it, and perhaps even dress it up. Are you one of those people? Come learn how to really use Netscape for e-mail!

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills

**Number of Sessions:** One

**Price:** Standard Members: \$35.00, Associate Members: \$50.00, Non-Members: \$50.00.

**Instructor:** Jim Ritz

**Scheduling:** T-TR either Morning or Afternoon AND Evenings

### **E-mail with Microsoft Outlook Express- (G)**

Anyone can send and receive e-mail, but some would like to do more like attach and download files, send documents that anyone can read, import their Palm data into their address book or perhaps export their address book to their Palm. Some would like to know how archive e-mail, search it, and perhaps even dress it up. Are you one of those people? Come learn how to really use Outlook Express for e-mail!

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills

**Number of Sessions:** One

**Price:** Standard Members: \$35.00, Associate Members: \$50.00, Non-Members: \$50.00.

**Instructor:** Jim Ritz

**Scheduling:** T-TR either Morning or Afternoon AND Evenings





### E-mail with America Online- (G)

Anyone can send and receive e-mail, but some would like to do more like attach and download files, send documents that anyone can read. Some would like to know how archive e-mail, search it, and perhaps even dress it up. Are you one of those people? Come learn how to really use AOL for e-mail!

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills

**Number of Sessions:** One

**Price:** Standard Members: \$35.00, Associate Members: \$50.00, Non-Members: \$50.00.

**Instructor:** Jim Ritz

**Scheduling:** T-TR either Morning or Afternoon AND Evenings

## WEB PAGE CREATION AND DESIGN

### Web Pages with Apple's iTools- (G)

Want a web page, but don't want to have to buy new software, learn HTML, learn about FTP, and find a page host? Let Apple do it for you! In this three hour class you can make a web page and publish it on the web! Use that page to show off family pictures or items you want to sell on eBay, post a family newsletter, put your resume online for all to see, post an invitation to a party or even make a place to share files with other people. The techniques used in this class require Mac OS 9 OR X if you plan to continue your pages at home.

Bring a few photos to scan and leave with your pages on the Web!

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills

**Number of Sessions:** One

**Price:** Standard Members: \$35.00, Associate Members: \$50.00, Non-Members: \$50.00.

**Instructor:** Jim Ritz

**Scheduling:** T-TR either Morning or Afternoon AND Evenings

### Web Pages-The How To Dos- (M)

When your web page grows to more than two pages, its time to get organized!

Learn how web pages differ from printed documents, what you can and can't control in web page design. Learn how to organize your files to make it easier to update your pages. Learn how to register a domain, upload pages to a web server and how to get people to visit your site. Learn about graphic types and when to use them. This class replaces Web Page Workshop and is the prerequisite for all other web page classes at Washington Apple Pi.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills.

**Number of Sessions:** One

**Price:** Standard Members: \$50.00, Associate Members: \$75.00, Non-Members: \$75.00

**Instructor:** Pat Fauquet

**Scheduling:** M-W-F either Morning or Afternoon

### Washington Apple Pi Tutorial Registration Form [www.wap.org](http://www.wap.org)

Washington Apple Pi  
12022 Parklawn Drive  
Rockville, MD 20852

301-984-0300 Office@wap.org

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Phone (day) \_\_\_\_\_ (Evening) \_\_\_\_\_

Member Number \_\_\_\_\_ Non-member \_\_\_\_\_

Email address \_\_\_\_\_

Times when your are available for classes \_\_\_\_\_

\_\_\_\_\_

Type of class wanted \_\_\_\_\_

Please fill in the name(s) of the class(es) that you wish to attend.

Class #1 \_\_\_\_\_

Class #2 \_\_\_\_\_

Class #3 \_\_\_\_\_

Class #4 \_\_\_\_\_

Class #5 \_\_\_\_\_

Class #6 \_\_\_\_\_

Mail registration and payment to the above address.





### **Making Web Pages with Free or Inexpensive Software- (M)**

Learn how to make web pages, format the text, add pictures and link pages together. Learn about tables and how to use them. Learn about the site management features of these programs and how to upload your pages to the web server.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills along with Web Pages-The How To Dos or the permission of the instructor.

**Number of Sessions:** Full Day

**Price:** Standard Members: \$100.00, Associate Members: \$150.00, Non-Members: \$150.00.

**Instructor:** Pat Fauquet

**Scheduling:** M-W-F Full Day

\*This class has a break for lunch. Please either bring your lunch or money for take out.

### **Web Page Decoration- (M)**

In this all-day workshop students will learn how to make and prepare backgrounds, headlines, clip art, buttons, rules, dividers and animation's for web pages. They will also learn how to construct graphic sets. Students will learn about the GIF, JPEG and PNG formats and when to use them. If you want to use these projects in an actual web page, please sign up for a web page class in addition to this class.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills along with Web Pages-The How To Dos or the permission of the instructor.

**Number of Sessions:** Full Day

**Price:** Standard Members: \$100.00, Associate Members: \$150.00, Non-Members: \$150.00.

**Instructor:** Pat Fauquet

**Scheduling:** M-W-F Full Day

\*This class has a break for lunch. Please either bring your lunch or money for take out.

### **Adobe GoLive 1: Introduction- (H)**

This class will cover the first three lessons in the Adobe GoLive Classroom in a Book. Students will learn to start a page, add and format text and pictures, use tables, and link pages together. They will learn about dynamic components, templates, and image maps. They will also learn elementary site management.

**Prerequisite:** Web Pages-The How To Dos OR Making Web Pages with Free or Inexpensive Software OR the permission of the instructor.

**Number of Sessions:** Full Day

**Price:** Standard Members: \$150.00, Associate Members:

\$250.00, Non-Members: \$250.00

**Book Price:** \$10.00 to be paid with class registration.

**Instructor:** Pat Fauquet

**Scheduling:** M-W-F Full Day

\*This class has a break for lunch. Please either bring your lunch or money for take out.

### **Adobe GoLive 2: Frames, Animation and Site Management- (H)**

This class will cover lessons four, five and eight in the Adobe GoLive Classroom in a Book. Students will learn how to build a web page using frames. They will learn how to use rollovers and floating boxes to add interest to their web pages. They will also learn how to use the site management tools in Adobe GoLive to convert old site and update sites easily.

**Prerequisite:** Adobe GoLive 1: An Introduction OR the permission of the instructor.

**Number of Sessions:** Full Day

**Price:** Standard Members: \$150.00, Associate Members: \$250.00, Non-Members: \$250.00

**Book Price:** same book as for Adobe Go Live 1.

**Instructor:** Pat Fauquet

**Scheduling:** M-W-F Full Day

\*This class has a break for lunch. Please either bring your lunch or money for take out.

### **Adobe GoLive 3: Editing QuickTime Content- (H)**

Adobe GoLive has a great QuickTime editor built into the program. This class will cover its use in making and editing QuickTime movies. Instruction will also be given for how to add QuickTime VR scenes, panoramas, and objects to web pages

**Prerequisite:** Adobe GoLive 1: Introduction OR the permission of the instructor.

**Number of Sessions:** Full Day

**Price:** Standard Members: \$150.00, Associate Members: \$250.00, Non-Members: \$250.00

**Book Price:** same book as for Adobe Go Live 1.

**Instructor:** Pat Fauquet

**Scheduling:** M-W-F Full Day

\*This class has a break for lunch. Please either bring your lunch or money for take out.

## **OFFICE AND HOME PRODUCTIVITY SOLUTIONS**

### **The Enterprise Mac (M)**

Many mom and pop businesses, craft workers, one-person consultancies, or small offices use Macintosh





computers to support their income-producing activities. This tutorial is designed to provide such users with a basic overview of Macintosh applications and hardware suitable for such business uses. The tutorial will also present security procedures and disaster recovery methods so that enterprise users will have access to their valuable data whenever and wherever they need it. The knowledge gained in this course will help save money on service calls and help users to build integrated IT strategies for their small businesses.

**Prerequisite:** Brush Up Your Mac Skills

**Sessions:** 1

**Price:** Standard Members: \$50.00, Associate Members: \$75.00, Non-Members: \$75.00.

**Handout Fee:** \$10.00

**Instructor:** John Barnes

**Scheduling:** M-T-W-TR-F either Morning or Afternoon AND Evenings

#### **Microsoft Word for Office 2001- (M)**

This class will introduce the student to the fundamentals of the Microsoft Word software package. The course is designed for those with very limited or no previous knowledge of Word. Topics that will be covered include: reviewing the screen elements of a basic new Word document (the standard and formatting toolbars and the menu bar); setting default options such as spell checking and document editing choices, paragraph formatting (fonts, type styles, etc.); creating, editing, saving and deleting a simple Word document; using the on line help function; simple formatting using tabs and setting margins; creating a simple table; and reviewing predefined templates such as the letter template that are included in Word.

The classroom emphasis will be on Word 2001. Differences between Word 2001 and Word 98 may be discussed if students' needs warrant.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills

**Number of Sessions:** 1

**Textbook:** To Be Determined by Instructor

**Price:** Standard Members: \$50.00, Associate Members: \$100.00, Non-Members: \$100.00.

**Instructor:** John Barnes

**Scheduling:** M-T-W-TR-F either Morning or Afternoon AND Evenings

#### **Microsoft Excel for Office 2001- (M)**

This class will introduce the student to the fundamentals of the Microsoft Excel software package. The course is designed for those with limited or nonexistent

knowledge of spreadsheet software. Topics that will be covered include: an overview of spreadsheet applications, designing and creating a new worksheet, calculations; editing, saving and deleting a simple Excel document; using the on line help function; creating a simple table; adapting predefined templates, and data importing and exporting.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills and

Access to Microsoft Excel application on an office or home computer

**Number of Sessions:** One (2 hrs class time, 1 hr lab time)

**Textbook:** To Be Determined by Instructor

**Price:** Standard Members: \$50.00, Associate Members: \$100.00, Non-Members: \$100.00.

**Instructor:** John Barnes

**Scheduling:** M-T-W-TR-F either Morning or Afternoon AND Evenings

#### **Microsoft PowerPoint- (M)**

This class will introduce the student to the fundamentals of the Microsoft PowerPoint software package. The course is designed for those with very limited or no previous knowledge of presentation software. Topics that will be covered include: designing a presentation using the outline, slide viewer and slide show modes, the use of page masters (title and slide masters), importing pictures and charts. Transitions, timing, and control of presentations will also be covered. Design assistants and predefined themes will be discussed as aids to effective design. Preparation of transparencies, notes, and handouts will also be discussed.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills and

Access to Microsoft PowerPoint Application on an office or home computer

**Number of Sessions:** One (2 hrs class time, 1 hr lab time)

**Textbook:** To Be Determined by Instructor

**Price:** Standard Members: \$50.00, Associate Members: \$100.00, Non-Members: \$100.00.

**Instructor:** John Barnes

**Scheduling:** M-T-W-TR-F either Morning or Afternoon AND Evenings

#### **Spreadsheet - Why Do I need to Use One?- (M)**

While optimizing the use of a Spreadsheet can make our work life less stressful and more productive, Spreadsheets aren't just for work anymore. Come learn the different parts of our lives that can be made more productive through the use of spreadsheets. From





learning the basic spreadsheet concepts, to setting up a spreadsheet, entering and editing numbers and words, entering basic formulas and make basic charts and graphs. Come find out how to sort data and how to print the whole spread sheet or only a portion of it. Class will show concepts that can be used in either the spreadsheet module of AppleWorks (ClarisWorks) or Excel. This class is not meant for persons who are intermediate or advanced users.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills.

**Number of Sessions:** One

**Price:** Standard Members: \$50.00, Associate Members: \$75.00, Non-Members: \$75.00

**Instructor:** Jim Ritz

**Scheduling:** T-TR either Morning or Afternoon AND Evenings

#### **Introduction to FileMaker Pro- (M)**

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.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills.

**Number of Sessions:** One

**Price:** Standard Members: \$50.00, Associate Members: \$75.00, Non-Members: \$75.00

**Instructor:** Pat Fauquet

**Scheduling:** M-W-F either Morning or Afternoon

#### **Advanced FileMaker Pro and Clinic- (M)**

This class is for those who have some experience with FileMaker Pro and need to learn more for specific projects. Questions are welcome and students specific problems will be discussed. The class will be explanations with a strong questions and answer format. You should bring along on floppy/zip a sample of things you would like help.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills.

**Number of Sessions:** One

**Price:** Standard Members: \$50.00, Associate Members: \$75.00, Non-Members: \$75.00

**Instructor:** Pat Fauquet

**Scheduling:** M-W-F either Morning or Afternoon

## **CAMERAS AND VIDEO**

#### **Digital Video Cameras and iMovie- (M)**

Join with other Pi members as we explore the world

of digital video cameras. Learn shooting, composition and lighting techniques. Learn how to upload footage to your computer, how to edit it, add music tracks from CDs, MP3s or midi files, how to add narration, still clips and special effects. The class will conclude with uploading the edited video to the camera or rendering. Bring your camera, music, video and still images you might like to include in your project

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills

**Number of Sessions:** Full Day

**Price:** Standard Members: \$100.00, Associate Members: \$150.00, Non-Members: \$150.00

**Instructor:** Pat Fauquet

**Scheduling:** M-W-F Full Day

\*This class has a break for lunch. Please either bring your lunch or money for take out.

#### **Fun with Your Digital Camera- (M)**

Bring your digital camera and accessories to class and learn how to use it. Learn about media types, batteries, card readers, flash units, accessory filters and lenses and tripods. Learn shooting, lighting and manipulation tips, how to print photos, how to attach them to e-mail, and how to put them on web pages. If you do not have a digital camera, come anyway and learn how to choose one. Several digital cameras will be available for student use during class.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills.

**Number of Sessions:** One

**Price:** Standard Members: \$50.00, Associate Members: \$75.00, Non-Members: \$75.00

**Instructor:** Pat Fauquet

**Scheduling:** M-W-F either Morning or Afternoon

#### **Using Photo Elements to Improving Digital Photos and Scans- (M)**

Now that you have scanned that photo, taken a picture with a digital camera, or had photo disks made, learn how to improve your photos using inexpensive programs like Adobe PhotoShop Elements and GraphicConverter. Learn to lighten, darken, crop, and combine pictures to make them ready for printing, emailing and putting them in web pages.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills.

**Number of Sessions:** One

**Price:** Standard Members: \$50.00, Associate Members: \$75.00, Non-Members: \$75.00

**Instructor:** Pat Fauquet

**Scheduling:** M-W-F either Morning or Afternoon





### QuickTime VR—Making a Panorama- (H)

They're showing up everywhere—tours of homes, museums, businesses and scenic spots. Learn how to shoot a panorama, how to stitch one together, and what software and equipment is needed. This class will include the use of freeware shareware and commercial software. Students will use a range of digital cameras to produce several panoramas that will be stitched into tour with nodes linking the panoramas. Pan heads and leveling devices will be used and discussed. Adding panoramas to web pages will complete the day.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills along with Web Pages-The How To Dos or the permission of the instructor.

**Number of Sessions:** Full Day

**Price:** Standard Members: \$150.00, Associate Members: \$250.00, Non-Members: \$250.00

**Instructor:** Pat Fauquet

**Scheduling:** M-W-F Full Day

\*This class has a break for lunch. Please either bring your lunch or money for take out.

### QuickTime VR—Making a Virtual Object— (H)

Imagine being able to manipulate a picture of a three dimensional object! Rotate it, turn it, bring it closer. Learn to produce object movies that can be placed on web pages. This class will include the use of freeware shareware and commercial software. Students will use a range of digital cameras to produce several VR objects. Adding these object movies to a web page will complete the class. This is a three hour class. -suggest it is offered at higher price level.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills along with Web Pages-The How To Dos or the permission of the instructor.

**Number of Sessions:** Full Day

**Price:** Standard Members: \$150.00, Associate Members: \$250.00, Non-Members: \$250.00

**Instructor:** Pat Fauquet

**Scheduling:** M-W-F Full Day

\*This class has a break for lunch. Please either bring your lunch or money for take out.

### Beginner Final Cut Pro - (H)

This three hour beginning Final Cut Pro class is the jump off point for people who would like to start using this powerful program for making videos. Topic to be covered are listed below.

Hardware and Software Setup: System/Memory settings; Camera/Deck/Monitor connections; Scratch Disk setup; Final Cut Pro preferences.

Final Cut Pro — The Interface: Browser; Viewer;

Timeline; Toolbar.

Logging and Capturing: Setting the log bin; Transport controls; Ins and outs of timecode; Selected capture; Handles.

Editing: Trimming clips; Keyboard shortcuts; Transitions; Dynamic previewing and rendering.

Titles: Title and action safe areas; Drop shadows.

Filters and Effects: Applying.

Audio: Importing from audio CD.

Final Output: Print to Video vs. recording from Timeline; Exporting QuickTime file.

Special Instructions: Students should bring their Digital Video Camera, cables and software with them to class.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills.

**Number of Sessions:** One.

**Price:** Standard Members: \$75.00, Associate Members: \$125.00, Non-Members: \$125.00

**Instructor:** Barrett Thomson

**Scheduling:** Evenings

## GRAPHIC DESIGN

### Fast Track to Dreamweaver (H)

Fast Track to Dreamweaver is a 3-session course that teaches Intermediate Macintosh users to build websites the Macromedia way. Some of the skills you'll learn include:

Topics

- Basics of site architecture and HTML
- Working with Graphics
- Creating Links
- Elements of Page Design
- Creating Frames
- Fireworks and Dreamweaver combined

Objectives

Upon completion of this course, you should be able to:

- Use the fundamental features of Dreamweaver and the basic skills of adding text, graphics, and links to your page, along with instantly adding Flash files.
- Create simple tables, insert text or graphics, and moving or sizing the box to get just the look you want.

### Fast Track to Dreamweaver (H) Sessions 1: Learning the Basics

Organizing Your Site, Dreamweaver Basics, The Document Window, The Objects Panel, The Property Inspector, Dockable Panels, Defining a Local Site, Specifying Preview Browsers, Saving Your File, Naming an





HTML File, Giving Your Page a Title, Specifying a Background Color, Specifying the Default Font Color, Specifying Link Colors, Using a Background Graphic, Placing Text on a Page, Adding Text in Dreamweaver, Indenting Text, Making Lists, Ordered Lists, Unordered Lists, Definition Lists, Nested Lists, List Tips, Character Formatting, Positioning Text, Changing Font Properties, Changing the Font Face, Changing the Font Size, Changing the Font Color, Cleaning Up Word HTML, HTML Styles, Switching Document Views, Adding Horizontal Rules, Adding E-mail Links, Adding a Date Automatically.

**Prerequisite:** Digging Deeper and Experience using the World Wide Web

**Sessions:** 1

**Price:** Standard Members: \$75.00, Associate Members: \$125.00, Non-Members: \$125.00.

**Instructor:** Mahmoud El-Darwish

**Scheduling:** Evenings

#### **Fast Track to Dreamweaver (H) Session 2: Working With Graphics**

Placing Graphics on the Page, Wrapping Text Around Images, Modifying the Space and Adding a Border Around Images, Aligning Images and Text, Image Alignment Options, Adding Flash Objects.

**Prerequisite:** Digging Deeper and Experience using the World Wide Web

**Sessions:** 1

**Price:** Standard Members: \$75.00, Associate Members: \$125.00, Non-Members: \$125.00.

**Instructor:** Mahmoud El-Darwish

**Scheduling:** Evenings

#### **Fast Track to Dreamweaver (H) Session 3: Creating Links**

Creating Hypertext Links, Targeting a Link, Creating Image Maps, Linking to Named Anchors, Using Tables for Page Design.

**Prerequisite:** Digging Deeper and Experience using the World Wide Web

**Sessions:** 1

**Price:** Standard Members: \$75.00, Associate Members: \$125.00, Non-Members: \$125.00.

**Instructor:** Mahmoud El-Darwish

**Scheduling:** Evenings

#### **Adobe Photoshop Part 1- (H)**

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.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills.

**Number of Sessions:** One

**Price:** Standard Members: \$75.00, Associate Members: \$125.00, Non-Members: \$125.00

**Book Price:** \$10.00 to be paid with class registration.

**Instructor:** Paul Schlosser

**Scheduling:** Evenings

#### **Adobe PhotoShop Part 2- (H)**

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 covered in the Classroom in a Book, Lesson 8.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills along with Adobe PhotoShop Part 1 or a knowledge of the topics covered in that class

**Number of Sessions:** One

**Price:** Standard Members: \$75.00, Associate Members: \$125.00, Non-Members: \$125.00

**Book Price:** \$10.00 to be paid with class registration.

**Instructor:** Blake Lange

**Scheduling:** Evenings

#### **Adobe InDesign 1- (H)**

Work through a demonstration of Adobe InDesign providing an overview of the key features. Get to know the navigation features for using the drawing, layout, and editing capabilities. Learn the work area including the document window, the pasteboard, the toolbox, and the floating palettes. This class covers "A Quick Tour of Adobe InDesign" (the same as Chapter 1 in the User Guide) and "Lesson 1: Getting to Know the Work Area" from the Adobe Classroom in a Book.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills.

**Number of Sessions:** One

**Price:** Standard Members: \$75.00, Associate Members: \$125.00, Non-Members: \$125.00

**Book Price:** \$10.00 to be paid with class registration.

**Instructor:** Blake Lange





**Scheduling:** Evenings

### **Adobe InDesign 2- (H)**

Learn to use the tools for setting up pages to ensure a consistent page layout and to simplify your work. Learn how to set up master pages and use columns and guides. Work with frames to hold either text or graphics. Learn how InDesign gives you flexibility and control over your design. This class covers "Lesson 2: Setting Up Your Document" and "Lesson 3: Working with Frames" from the Adobe Classroom in a Book.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills along with Adobe InDesign 1 or a knowledge of the topics covered in that class.

**Number of Sessions:** One

**Price:** Standard Members: \$75.00, Associate Members: \$125.00, Non-Members: \$125.00

**Book Price:** Same book as used with Adobe InDesign 1.

**Instructor:** Blake Lange

**Scheduling:** Evenings

### **Adobe Illustrator: Mastering the Bezier Curve- (H)**

Illustrator has become so feature laden that current tutorials are just overviews of the product; they do not present the fundamental workings of the program in depth. The Bezier curve, otherwise known as a vector graphic, is the primary building block of Illustrator (and many other drawing programs). Mastering its use will fundamentally change your view of the power of the program. The way the Bezier curve works, however, may seem alien at first with its points and vectors, an approach to illustrating many find counter-intuitive. This class will start with creating and editing the simplest lines and curves and build up to the creation of complex illustrations. By the end of the class you should feel comfortable editing any illustration based on the Bezier curve, for example, all clip art that has the eps extension in its file name. This class serves as both a good introduction to the program and as a help for the more advanced user to become adept in its use.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills.

**Number of Sessions:** One

**Price:** Standard Members: \$75.00, Associate Members: \$125.00, Non-Members: \$125.00

**Book Price:** \$10.00 to be paid with class registration.

**Instructor:** Blake Lange

**Scheduling:** Evenings

### **Introduction to Quark XPress- (H)**

Learn the basic fundamentals of Quark Xpress, the

most widely used page layout program. Learn the proper way to configure the Xpress preferences and how to use the tool, measurement, color and documents palettes. You'll learn how to properly create new documents, define four-color process and spot colors, create master pages and manipulate text and graphic objects. Learn how to correctly use Xpress font and picture usage windows and how to configure the document for the laser printer or high-resolution imagesetter.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills.

**Number of Sessions:** One

**Price:** Standard Members: \$75.00, Associate Members: \$125.00, Non-Members: \$125.00

**Instructor:** Paul Schlosser

**Scheduling:** Evenings

### **Quark Xpress Clinic- (H)**

This class is for those who have some experience with Quark Xpress and are interested in asking questions and having specific problems discussed. The class will be a question and answer format and you should bring along on floppy a sample of things for which you would like help. **Prerequisite:** Introduction to Quark XPress or a good working knowledge of QuarkXpress and its interface.

**Number of Sessions:** One

**Price:** Standard Members: \$75.00, Associate Members: \$125.00, Non-Members: \$125.00

**Instructor:** Paul Schlosser

**Scheduling:** Evenings

### **Introduction to PageMaker- (H)**

Using the basic commands, tools, and palettes, you will import, format, and position text and graphic elements needed to assemble a single-page, black and white flyer. This project will cover the following topics: Restoring default PageMaker settings. Changing the view of a publication. Creating a new publication. Opening an existing publication. Setting up the horizontal and vertical rulers. Displaying and hiding guides. Positioning the zero point. Using the pointer tool, the text tool, and the zoom tool. Specifying multiple columns. Locking the guides. Creating, placing formatting, and positioning text and graphic elements. Creating a drop cap. Applying a tint to text. Specifying a hanging indent. Creating ruler guides. Drawing circles, rectangles, and lines. Adjusting the stacking order of elements on the page. Range kerning text. Using the Snap to Guides option.





**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills.

**Number of Sessions:** One

**Price:** Standard Members: \$75.00, Associate Members: \$125.00, Non-Members: \$125.00

**Book Price:** \$10.00 to be paid with class registration.

**Instructor:** Blake Lange

**Scheduling:** Evenings

#### **PageMaker Clinic- (H)**

This class is for those who have some experience with PageMaker and are interested in asking questions and having specific problems discussed. The class will be a questions and answer format and you should bring along on floppy a sample of things for which you would like help.

**Prerequisite:** 4 Part New User Set or Brush Up Your Mac Skills along with Introduction to PageMaker or a good knowledge of the basics of PageMaker and its interface.

**Number of Sessions:** One

**Price:** Standard Members: \$75.00, Associate Members: \$125.00, Non-Members: \$125.00

**Book Price:** Same book as used with Introduction to PageMaker.

**Instructor:** Blake Lange

**Scheduling:** Evenings

## **BEGINNING PROGRAMMING**

#### **Beginning AppleScript - Teaching your Mac to "Stay" and "Sit"- (M)**

AppleScript is the Macintosh technology for automating repetitive tasks. It comes preinstalled and is available to any Mac user who wants to teach his/her Mac to do simple chores. This 1 session course starts by introducing the concepts behind AppleScript. We then use the Script Editor to explore the scripts that Apple provides. Users then create simple Finder scripts using the "record" feature of the Script Editor. Finally, students are provided with more complex scripts to use as starting points for developing their own solutions to simple system maintenance problems.

**Prerequisite:** Demonstrated advanced Mac OS user skills, 5-part New User Set, or Brush Up Your Mac Skills

**Number of Sessions:** 1

**Price:** Standard Members: \$50.00, Associate Members: \$100.00, Non-Members: \$100.00.

**Instructor:** John Barnes

**Scheduling:** M-T-W-TR-F either Morning or Afternoon AND Evenings

#### **Intermediate AppleScript - Teaching your Mac to Fetch the Newspaper- (H)**

Building on the knowledge gained in "Beginning AppleScript", this 2 session course, helps the user develop AppleScripts to automate workflow in more complex environments. We learn to exploit the scriptability of major Mac applications. Advanced AppleScript programming environments are used develop full-blown applications. Examples include AppleScript applications for system maintenance, database management, desktop publishing, and similar tasks in work environments.

**Prerequisite:** Beginning AppleScript

**Number of Sessions:** 2

**Textbook:** To Be Announced

**Price:** Standard Members: \$100.00, Associate Members: \$150.00, Non-Members: \$150.00.

**Instructor:** John Barnes

**Scheduling:** M-T-W-TR-F either Morning or Afternoon AND Evenings ■

## **Other Educational Opportunities**

**Apple Computer Inc.**

Reston, VA 703-264-5100 or

[www.seminars.app.com](http://www.seminars.app.com)

**MacBusiness Solutions**

301-330-4074 or

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

**Mac Upgrades**

301-652-5108

**Micro Center 703-204-8400**

or [www.microcentereducation.com](http://www.microcentereducation.com)

**Piwowar & Associates 202-223-6813**

or [www.tjpa.com](http://www.tjpa.com)



United States Postal Service

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**Washington Apple Pi, Ltd.**  
**12022 Parklawn Drive, Rockville, MD 20852**

Editor (Name and complete mailing address)

**Kathryn Murray**  
**Washington Apple Pi, 12022 Parklawn Dr. Rockville MD 20852**

Managing Editor (Name and complete mailing address)

Same as Editor

10. Owner (Do not leave blank. If the publication is owned by a corporation, give the name and address of the corporation immediately followed by the names and addresses of all stockholders owning or holding 1 percent or more of the total amount of stock. If not owned by a corporation, give the names and addresses of the individual owners. If owned by a partnership or other unincorporated firm, give its name and address as well as those of each individual owner. If the publication is published by a nonprofit organization, give its name and address.)

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<b>Washington Apple Pi, Ltd.</b>	<b>12022 Parklawn Drive</b>
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11. Known Bondholders, Mortgagees, and Other Security Holders Owning or Holding 1 Percent or More of Total Amount of Bonds, Mortgages, or Other Securities. If none, check box ☒ None

Full Name	Complete Mailing Address

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☐ Has Changed During Preceding 12 Months (Publisher must submit explanation of change with this statement)

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	(3) Sales Through Dealers and Carriers, Street Vendors, Counter Sales, and Other Non-USPS Paid Distribution		
	(4) Other Classes Mailed Through the USPS	<b>150</b>	<b>147</b>
c. Total Paid and/or Requested Circulation [Sum of 15b (1), (2), (3), and (4)]		<b>2350</b>	<b>2195</b>
d. Free Distribution by Mail (Samples, complimentary, and other free)	(1) Outside-County as Stated on Form 3541		
	(2) In-County as Stated on Form 3541		
	(3) Other Classes Mailed Through the USPS	<b>100</b>	<b>151</b>
e. Free Distribution Outside the Mail (Carriers or other means)		<b>725</b>	<b>524</b>
f. Total Free Distribution (Sum of 15d and 15e.)		<b>825</b>	<b>675</b>
g. Total Distribution (Sum of 15c and 15f)		<b>3175</b>	<b>2870</b>
h. Copies not Distributed		<b>25</b>	<b>30</b>
i. Total (Sum of 15g and h.)		<b>3200</b>	<b>2900</b>
j. Percent Paid and/or Requested Circulation (15c divided by 15g, times 100)		<b>74.96</b>	<b>76.90</b>
16. Publication of Statement of Ownership <input checked="" type="checkbox"/> Publication required. Will be printed in the <b>Nov/Dec 2001</b> issue of this publication. <input type="checkbox"/> Publication not required.			
17. Signature and Title of Editor, Publisher, Business Manager, or Owner <b>[Signature] office Manager</b>			Date <b>9/17/2001</b>

I certify that all information furnished on this form is true and complete. I understand that anyone who furnishes false or misleading information on this form or who omits material or information requested on the form may be subject to criminal sanctions (including fines and imprisonment) and/or civil sanctions (including civil penalties).

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PS Form 3526, October 1999 (Reverse)



# *December Computer show & sale on the 8th.*

## *Check our website for upcoming tutorial schedule.*

*Write for the  
journal.*

*Share your  
computer  
experiences!!!*

## 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

#### **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.)

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First consultation free and discount  
rates with valid Pi membership  
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### 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](http://www.v-one.com), or e-mail HR at [pauge@v-one.com](mailto:pauge@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](mailto:info@idactix.com).

—**Volunteers Needed:** Recording for the Blind and Dyslexic of Metro Washington is looking for volunteers who can read technical books (currently working on data structures in c++ for example). We are located in Chevy Chase at the Friendship Heights Metro, 5225 Wisconsin Ave. NW (at Jennifer Street- across from Mazza Gallery). We need computer literate folks willing to volunteer for 2 hours a week, to help read textbooks onto tape. The tapes are used by students borrowers. Interested folks can come by on Wednesday evening, January 20th, between 6-8pm for an open house orientation. Else, they can call Laurel after 3pm at 202-244-8990 and get more info. Evening sessions start at 5:30 and 7pm, Monday-Thursday. ■



# Membership Application

☐ **New Member**      ☐ **Renewal**

*Please print or type:*

Name \_\_\_\_\_ Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ Email \_\_\_\_\_

Home Phone \_\_\_\_\_ 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           | <input type="checkbox"/> IBM, PC clone |
| <input type="checkbox"/> Apple II GS        | <input type="checkbox"/> PowerBook     |
| <input type="checkbox"/> Apple III (SARA)   | <input type="checkbox"/> Centris (all) |
| <input type="checkbox"/> Mac Plus, SE       | <input type="checkbox"/> Quadra (all)  |
| <input type="checkbox"/> Mac SE30, Mac IIfx | <input type="checkbox"/> Power PC/Mac  |
| <input type="checkbox"/> Mac LC (series)    | <input type="checkbox"/> G3            |
| <input type="checkbox"/> Mac II             | <input type="checkbox"/> iMac          |
| <input type="checkbox"/> Performa (all)     |  |
| <input type="checkbox"/> Other _____        |  |

**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 |

**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 Central America \$20
- ☐ Airmail to Europe & South America \$38
- ☐ Airmail to Asia & elsewhere \$48
- ☐ Surface to Europe, Asia & elsewhere \$18

**Total enclosed \$ \_\_\_\_\_**

\*Please enclose photocopy of current student ID.

\*\* Access to the TCS is contingent on WAP having a current home telephone number for the member.

*Indicate desired New Member Kit (1 only)*

- ☐ Mac 400k
- ☐ Mac 800 k
- ☐ Mac 1.44 k
- ☐ Mac CD

**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.

Applicant signature and date \_\_\_\_\_



# Pi Fillings - The CD: Version 8

*What could possibly have happened to warrant a new edition of our world famous CD? Well, it turns out that your computing needs have changed—and you told us so:*

■ you are intrigued by many of the new web applications that are out there and want to try them;

■ you are one of the millions of Palm or HandSpring owners and want it to interoperate with your Mac;

■ you want a handy references of Macintosh user groups;

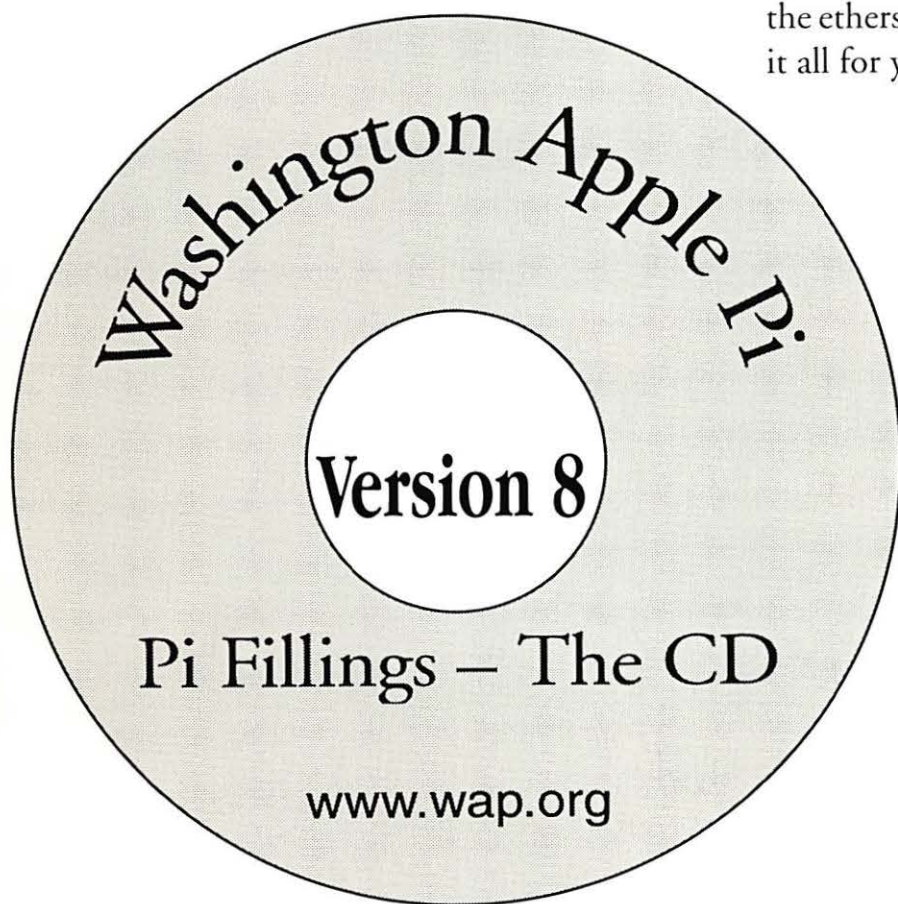
■ you want to get smart about how to do things with your Mac;

■ you've updated your operating system or purchased lots of new attachments. Now you need the newer drivers to get them working;

■ you know that your existing utilities are getting out of date and want the new versions;

You could go out and pluck that stuff out of the ethers — or let “Pi Fillings- The CD” do it all for you.

*And all that in one little CD -- what will the Pi think of next? Stick around!*



**How to get it:** *Pi Fillings—the CD, version 8 is available for \$10 at Pi General Meetings, or for \$12 via snail mail. Call the Pi office at 301-984-0300 and place an order, or send a check to the Pi office. You can also place an order over the Internet by visiting the Pi store at <http://store.wap.org>*

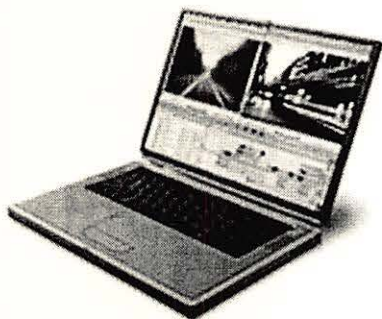


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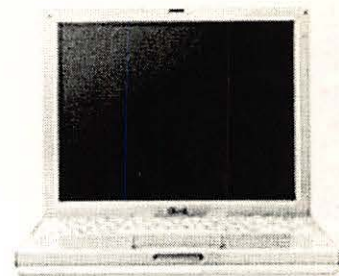
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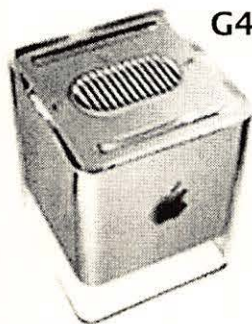
500MHz/256MB/20GB/DVD/56k \$3,499



**iBook:** Just **\$1,299** (in stock now)

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Add DVD for \$200 or CD-RW for \$300



**G4 Cubes**, just **\$1,299**

**G4 Tower** - all models include:

CD-RW, Gigabit Ethernet, 56K Modem, OS X

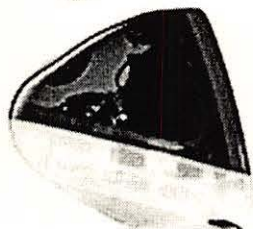
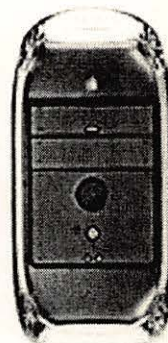
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