ATPM

About This Particular Macintosh: About the personal computing experience™

Cover Art

Copyright © 2001 by Jamal Ghandour[1]
We need new cover art each month. Write to us![2]

Editorial Staff

Publisher/Editor-in-Chief	Michael Tsai
Managing Editor	*Vacant*
Associate Editor/Reviews	Paul Fatula
Copy Editors	Raena Armitage
	Johann Campbell
	Ginny O'Roak
	Ellyn Ritterskamp
	Brooke Smith
	Vacant
Web Editor	Lee Bennett
Publicity Manager	*Vacant*
Webmaster	Michael Tsai
Assistant Webmaster	*Vacant*
Beta Testers	The Staff

Contributing Editors

At Large	Robert Paul Leitao
Desktop Pictures	Daniel Chvatik
General	Dierk Seeburg
Graphics	*Vacant*
How To	*Vacant*
Interviews	*Vacant*
Legacy Corner	*Vacant*
Music	David Ozab
Networking	Matthew Glidden
Opinion	Tom Iovino
	Mike Shields
	Vacant
Reviews	Eric Blair
	Jamie McCornack
	Gregory Tetrault
	Christopher Turner
	Vacant
Shareware	Brooke Smith
Technical	Evan Trent

Artwork & Design

Graphics Director	Grant Osborne
Graphic Design Consultant	Jamal Ghandour
Layout and Design	Michael Tsai
Cartoonist	Mike Flanagan
Blue Apple Icon Designs	Mark Robinson
Other Art	RD Novo

Emeritus

RD Novo
Robert Madill
Belinda Wagner

Contributors

Eric Blair
Paul Fatula
Mike Flanagan
Matthew Glidden
Tom Iovino
Robert Paul Leitao
Dierk Seeburg
Brooke Smith
Gregory Tetrault
Evan Trent
Michael Tsai
Macintosh users like you

Subscriptions

Sign up for free subscriptions using the
Web form[3] or by e-mail[4].

Where to Find ATPM

Online and downloadable issues are
available at http://www.atpm.com.

ATPM is a product of ATPM, Inc.
© 1995–2001, All Rights Reserved
ISSN: 1093-2909

Production Tools

Acrobat
AppleScript
BBEdit
CVS
Disk Copy
FileMaker Pro
FrameMaker+SGML
iCab
ImageReady
Interarchy
ListStar
MacPerl
MacSQL Monitor
Mailman
Mailsmith
Mesh
NiftyTelnet
StuffIt

The Fonts
Cheltenham
Frutiger
Isla Bella
Marydale
Minion

Reprints

Articles and original art cannot be reproduced without the express permission of ATPM, unless otherwise noted. You may, however, print copies of ATPM provided that it is not modified in any way. Authors may be contacted through ATPM's editorial staff, or at their e-mail addresses, when provided.

Legal Stuff

About This Particular Macintosh may be uploaded to any online area or included on a CD-ROM compilation, so long as the file remains intact and unaltered, but all other rights are reserved. All information contained in this issue is correct to the best of our knowledge. The opinions expressed in ATPM are not necessarily those of this particular Macintosh. Product and company names and logos may be registered trademarks of their respective companies. Thank you for reading this far, and we hope that the rest of the magazine is more interesting than this.

Thanks for reading ATPM.

Sponsors

About This Particular Macintosh is free, and we intend to keep it that way. Our editors and staff are volunteers with "real" jobs who believe in the Macintosh way of computing. We don't make a profit, nor do we plan to. As such, we rely on advertisers to help us pay for our Web site and other expenses.

• • •

After many years of fruitful collaboration, ATPM is parting ways with [Small Dog Electronics](1), our exclusive sponsor. We wish them good luck for the future and thank them for their support. Many of our readers and staff members have become devoted Small Dog customers, and we will miss their friendly style. We are now accepting inquiries from interested sponsors and advertisers. We have a variety of programs available to tailor to your needs. Please contact us at advertise@atpm.com for more information.

• • •

You can help support ATPM by buying from online retailers using the following links: [Amazon.com](2), [MacConnection](3), [MacMall](4), [MacZone](5), and [Outpost.com](6).

1. http://www.smalldog.com
2. http://www.amazon.com/exec/obidos/redirect-home/aboutthisparticu
3. http://service.bfast.com/bfast/click/mid9452939?siteid=13311227&bfpage=machom epage
4. http://www.commission-junction.com/track/track.dll?AID=53427&PID=297078&URL=http%3A%2F%2Fwww%2Emacmall%2Ecom%2Fmacaffiliate
5. http://service.bfast.com/bfast/click?bfmid=1942029&siteid=26240435&bfpage=mac _zone
6. http://www.linksynergy.com/fs-bin/stat?id=N00D3BtDeo0&offerid=2161&type=3

Welcome

Our condolences go out to all people affected by the tragedy that occurred in New York, Washington, and Pennsylvania. We are with you in spirit.

To the Mall!
Now that Apple's retail stores are opening across the country, Tom Iovino braves the crowds at the Tampa Bay Area's newest mall to see what the hubbub is all about. Will the experience leave him clamoring for more, or will Apple's newest sales tactic fall flat?

Mac OS X 10.1—First Impressions
Michael Tsai takes a critical look at Mac OS X 10.1. He finds it a bit improvement over 10.0.4, in most respects. However, he disagrees with Apple's stance on file name extensions and find some other usability problems lurking beneath the surface of Apple's slick new OS.

Housekeeping
Dierk Seeburg reminds us that good housekeeping is good business, taking us through a tour of basic hardware cleaning and wire maintenance, anti-virus measures, backing up, operating system upkeep, installations management, system and file integrity maintenance, and file organization—facilitated by some essential utilities.

Segments: DSS and SMTP Authentication
Evan Trent starts off with a rant about Windows-only satellite Internet access. He then segues into a discussion of why ISPs' restrictions on outgoing mail don't serve their intended purpose and only annoy legitimate users. And is spam really so bad?

Segments: Software License Agreements in Everyday Language
Robert Paul Leitao pokes fun at software license agreements: "You have just shelled out really big bucks for something you really don't own. We own it….if our product causes your computer not to work, it's not our problem because you own the computer and our lawyers can prove that you should have taken better care of it."

Networking: Switches and Hubs
Matthew Glidden covers the difference between switches and hubs and how they fit into your network. There are also a few bits about connecting LocalTalk and Ethernet, since adding a hub or switch to your network often brings this issue to the forefront.

Networking: Ethernet Faux Pas: Home Phone Networking
When it's too difficult or expensive to set up a home Ethernet network, a good alternative is to use the existing phone lines in the walls of your home. Matthew Glidden explains what you need to do to get this working, from commercial solutions to do-it-yourself ones.

Desktop Pictures: The House on the Rock
This month's desktop pictures were taken at a museum in Spring Green, Wisconsin called The House on the Rock.

Shareware Roundup: Screensavers
This month's shareware review looks at a few screensavers to help you out. Check out Whalesaver, courtesy of Greenpeace, or choose from a variety of screensavers in Setting Sun. Don't worry, there's a screensaver out there for everyone.

Review: AppleScript in a Nutshell (book)
Gregory Tetrault finds that *AppleScript in a Nutshell* is a good and well-organized reference for intermediate to advanced scripters on how to use AppleScript with Mac OS software. However, it contains no information on scripting common business or graphics applications.

Review: Pong: The Next Level
Paul Fatula reviews this modern version of Pong that features many different variations. He likes the updated graphics but finds that the slow gameplay prevents it from being addictive.

Review: StuffIt Deluxe 6.5
Michael Tsai reviews the latest version of StuffIt, which brings Magic Menu to Mac OS X and adds the StuffIt Express drop-box making utility. The improvements from 6.0 are nice, but was update rushed out before its time?

Review: Super Get Info 1.0.2
Eric Blair takes a look at Bare Bones Software's newest offering, Super Get Info. Although not a replacement for OS X's Info window, this utility gives users more information about and control over their files.

E-Mail

Takin' Care of Business (and Workin' Overtime)[1]

I just read your last article in ATPM, and I wanted to give some news from a Belgian reader. I am located between the German and Dutch frontiers, and be sure that there are a lot of Mac freaks here! I personaly own serveral Macintoshes, and try to create a group of Mac users[2].

It's funny that I will soon come to Chicago, for a training course for the company that just hired me. I wish you good luck in your new business.

—*Pierre-Yves*

• • •

You've said what I've been preaching—without much success. Sometimes I wonder at how obtuse my fellow workers can be—the last time the office moved, the majority were switched over to PCs. About a dozen of us remained on Macs. When we got to the new office, the PCs (and our Macs) were sitting, dead, on our desks. It took me 30 minutes—some galah had stowed the cables in the wrong box!—to have all the Macs and our printers up and running (and I'm the statistician in the crew!). Some of the PCs are still not working, a fortnight later—and I'm sick and tired of having to share my Mac with idiots who don't know how to use a one-button mouse, because that's the only way they have of getting their work done. Will management take note? Not on yer Nellie!

—*George Carrington*

• • •

I was reading with no small amount of amusement your article detailing what could be called the 'efficient simplicity' of Macs.

I recently flogged everything vaguely IBM compatible I ever had, and grabbed myself a Cube. Bye Bye Win2K/98 dual boot, hello Mac OS 9.1 (X on order through up-to-date, still waiting). Here I was, comparing 9.1 to 98, when in fact it crashes about as much as Win2K. Admittedly, the first thing I did was lash half-a-gig of RAM in it—it ran like a *dog* with 64 MB and VM—but I never turn the damn thing off—just put it to sleep (and watch my room glow as I drop off).

Having been at the point where 98 forgets what a CD drive is (it's a real/protected mode drivers thing) and been ferreting around looking for drivers to make my modem work properly, I understand what you're saying. I took my Cube out of the box. I plugged it in. I attached a network cable, gave it my proxy settings and an IP address and blammo—there I was. Admittedly, our home Win2K server needed a bit of

coaxing to give up it's filesharing joys to me, but that's Microsoft's fault, not Apple's.

In short, I now do on my Cube exactly what I did on my PC—and I've only had the thing about two months. I would *never* go back to the layered garbage of 98, nor would I want to run Win2K as my primary OS. Macs are easier to keep running, period.

—*Simon King*

P.S. After I sold my PC and bought my Cube, my housemate became besotted with it. After a few days of him wandering into my room and saying "I want one of those" I told him to go and buy his own. He did.

Playing Recordable CDs in the Car

I'm having trouble using music CDs that I've burned. They work fine in my computer and in my home system. When I try to listen to them on my car CD player, sometimes they play, sometimes not. Store bought CDs work just fine. Any ideas?

—*Tim*

Try burning the CDs at a slower rate. Most car CD players have wimpy lasers and transports and they tend to not be able to handle anything faster than a 2X burn.   —*Evan Trent*

Running an iBook Closed

I recently took my new iBook on the road. I was happy to be able to use iTunes with the car stereo, but encountered a small obstacle. Is there any way to keep the iBook on when closed? With it open it just presents too much of a target in a disorganized car.

—*James*

The only solution I can think of is to tape the clasp so that it does not make contact and induce sleep mode on your iBook. I have never tried it but it may work. However I would caution you that the new laptops from Apple generate an awful lot of heat, and with the lid down there is less dissipation because much of the heat escapes up through the keyboard (which sits on top of the processor). Apple has made it clear that they don't want users closing the lids on their laptops while they are operational. The only exception is when the machines are in disk mode (either SCSI or FireWire), but in that mode there is less heat generated.   —*Evan Trent*

Sony DPP-SV55 Printer[3]

I love the printer but the default settings cause the printouts to be too red. I can go to a screen and adjust, but on an

---

1. http://www.atpm.com/7.09/segments.shtml
2. http://www.nous.be/mac

3. http://www.atpm.com/7.04/dpp-sv55.shtml

individual picture basis. Does anyone know how to set the defaults for the printer? Does anyone have this same color balance problem? Is it just me and I should have the thing repaired?

For the record I am using it hooked up to the TV and the memory stick for input, which was captured on my Sony DCRTRV20 camera.

—*Kathryn Wagner*

Backyard Football[1]

Hello, I have started a Backyard Football league. The league currently has 12 members and is growing. If anybody has played Backyard Football on the Internet, you know that it is very challenging. That is why I created a BYF league so that the best players can compete against each other. My coach name on JRSN is Kingkai. If you want to know more information about my league, just e-mail me at Conker251@aol.com.

Check out my league Web site[2]. Or, you can simply go to my club Web site[3].

Thank you for reading, and I hope you will be able to play in my BYF league.

—*Brian Jones*

Hard Drive Jumper Settings

My B&W G3 350 tower is aging, and I'm fast running out of HD space (currently have two 11 GB drives). I thought I'd give myself some breathing room, and purchased a Maxtor 40 GB ATA hard drive.

I set its jumpers up to be master drive and set the old master drive (an IBM) up as a slave drive. I formatted it Mac OS HFS+ (extended) and checked everything with Disk First Aid, TechTool Pro, and DiskWarrior. Then I installed OS 9.0 from CD. So far, so good.

Now the bad news: upon restart, total chaos. I get the little folder with the blinking question mark. After a bit, it gives the happy Mac and starts up *except*…I *always* get the "system error occurred"—usually bus error or illegal instruction.

What the heck did I do wrong? Can anyone help? I thought this was going to be a 30-minute thing—so I allowed an hour. :) It's toast.

—*Steve Bohne*

From: Edward Goss <egoss@atpm.com> Subject: Re: FW: jumper settings on hard drive

Unfortunately, there are "1" and "2" versions of the B&W G3s. Rev 1's don't take slave jumper settings. All the info is on the most excellent XLR8YourMac.com (link 1[4], link 2[5]).

A snippet: "Adding a 2nd IDE Drive to B&W G3 rev 2 Systems I've posted a Photo Illustrated Guide to adding an IDE slave drive to the rev 2 B&W G3 systems which have the stacked bracket and dual drive cable. This original article (below) was for the first B&W G3s without the stacked bracket. The new guide also applies to G4 systems which have the same dual drive/stacked bracket. [11/5/2000]"

Caution is needed here as there have been some data corruption issues. —*Edward Goss*

---

1. http://www.atpm.com/5.12/byf.shtml
2. http://members.aol.com/~Vjardell/the_new_season_2001.htm
3. http://clubs.yahoo.com/clubs/thebackyardfootballseason

4. http://www.xlr8yourmac.com/G3-ZONE/yosemite/IDE/
5. http://www.xlr8yourmac.com/IDE/add_2nd_drive/index.html

What's in Store?

Going to brand new malls is a pain in the rear.

Oh, sure, everything at a new shopping mall is all fresh-out-of-the-carton new. The stores are new. The sales staffs seem especially interested in serving you. Even the food court doesn't have that greasy, eaten-in look you come to expect in an older shopping mall. It would almost make going to the mall a fun experience.

No, what kills me are the crowds that flock to the new mall in droves. I mean, come on, people. What's so exciting about another Gap?

I bring this to your attention because on Saturday, September 15th, I was in the rush of shoppers to open the latest and greatest shopping experience in the Tampa Bay area—the International Plaza shopping center, which stands close to Tampa's International Airport.

After the events of the week preceding the mall's grand opening—the terrorist attacks in New York and Washington, D.C. on the 11th, and the landfall in the Tampa Bay area of Tropical Storm Gabrielle on the 14th—my wife and I unanimously decided that a little diversion was in order for our family. After reading multi-page inserts produced by the local papers and being bombarded by television ads hyping the grand opening, we all hopped into the minivan and headed directly to the shoppers' paradise.

Never have I seen a parking lot so jam packed in all my life. Every single parking spot in the lots was full. People were parking on the sidewalks, on abutting construction sites, even in the medians of roadways leading to the mall. It was a madhouse. Typically, once I see a parking lot in such a state, I'll suggest that perhaps we could do something a little more fun than waiting a few hours looking for a parking spot. But not that day.

No, that day I was on a mission.

In addition to the grand opening of the mall, it was also the grand opening of the Tampa Bay area's first Apple store. As part of the agreement struck after hours of delicate negotiations between my wife and me, our first stop in the mall was going to be the Apple store.

Opening retail locations is a new tactic by Apple Computer. The reason why Apple is now pursuing this marketing strategy is spelled out on their Web site:

> Apple currently has around 5% market share in personal computers. This means that out of one hundred computer users, five of them use Macs. While that may not sound like a lot, it is actually higher than both BMW's and Mercedes-Benz's share of the automotive market. And it equals 25 million customers around the world using Macs.
>
> But that's not enough for us. We want to convince those other 95 people that Macintosh offers a much simpler, richer and more human-centric computing experience. And we believe the best way to do this is to open Apple stores right in their neighborhoods. Stores that let people experience firsthand what it's like to make a movie right on a Mac. Or burn a CD with their favorite music. Or take pictures with a digital camera and publish them on their personal Web site. Or select from over 500 software titles, including some of the best educational titles for kids. Or talk to a Macintosh "genius" at our Genius Bar. Or watch a demonstration of Mac OS X, our revolutionary new operating system, on our theater's giant 10-foot diagonal screen.
>
> Because if only 5 of those remaining 95 people switch to Macs, we'll double our market share and, more importantly, earn the chance to delight another 25 million customers.

Sounds great, doesn't it? I mean, hey, it's awesome to get folks out and give them a hands-on look at how the Macintosh works. And, I was duly impressed when we arrived. The place was brightly lit. G4 towers spun on platforms in showcase displays much like the ones you see cars turning on. A movie theater–style queue stood empty outside the store's entrance (ironically, when we arrived at the mall at 2:30 PM, it was the first time all day that there wasn't a line of people waiting to get in).

Once inside, I was even more impressed. Blocked beech floors; white walls lined with iMacs, iBooks, and G4 towers; and black shelves stocked with hundreds of software titles—all for the Mac. One of the features my son Dominic liked the most was the kid's area, featuring eight iMacs on a low table with some unique black spherical seats for the younger shoppers to try out their favorite software. Eventually, I had to coax my son away with the promise of stopping at a nearby toy store.

But, even with all the excitement and hoopla surrounding the opening of Apple stores around the country, I have to question Apple's decision to go this route.

First, while I believe that the Apple store concept is awesome in theory—allowing consumers to see how the Macintosh line performs without uninformed salespeople steering them towards cheaper, more plentiful PC's—in practice, it's just not reaching enough people.

Think about it. Here's an Apple store in one of Florida's largest metropolitan areas. But, where's the Apple store location in other areas of the state? I'm sure one has to be coming for Orlando, Jacksonville, and Miami, but what about the Tallahassee area? Pensacola? Fort Myers? It might be a long time before people in, say, Sarasota can go to their local mall and visit their friendly neighborhood Apple store.

Second, opening these retail locations in some prime storefronts in top-of-the-line shopping centers costs quite a bit in lease agreements. One figure I saw showed Apple committed to nearly $300 million in lease agreements to keep their storefronts open. Wow. That's quite a bit of money to tie up in lease space. Add on the fact that now you have to pay a corps of employees—some of whom will require a full benefits package and all of whom will require workman's comp—maintain an inventory, cover store maintenance, etc. Well, those figures are going to add up.

Having mall locations for Apple stores also makes them vulnerable to the intricacies of the economy and mall traffic. A trip to some of our local malls in the Tampa Bay area shows me a number of vacant store fronts, which will probably grow if we slip deeper into an economic recession. Since luxury spending is the first thing people cut out of their budgets, traffic at high-end malls typically drops off with worsening economic times.

Being someone who cut his teeth in advertising, I think it's only fitting that I offer a suggestion to Apple. A better tack than opening the retail locations would be for Apple to invest their substantial retail investment into a fun, exciting ad campaign.

Flood the airwaves. Buy lots of ink space in newspapers across the country. Put the Macintosh message in front of as many consumers as possible to get the word out that Apple has the fun, exciting, powerful, educational computers.

I know what you may be thinking. "What about all of those Jeff Goldblum ads that I see on TV?" Well, I don't want to insult those of you who may be fans of them, but they bore me to tears. There's nothing funny, creative, or memorable about them. And, they are trying to appeal to an audience that is far more computer-savvy than the folks Apple should be targeting. I'm ashamed to admit that I didn't even understand what the "Rip" in "Rip. Mix. Burn." meant until it was explained to me.

Apple needs to get an ad campaign that grabs attention, gives consumers a catch-phrase or slogan they can remember, and is memorable. Then, they need to plaster it all over the place.

Just think about a big company like Coca Cola. They dominate the soft drink industry, leading rival Pepsi in sales. But, look just about anywhere and you can see ads for Coke. It reinforces the message.

"Wait a minute!" you shout in protest. "There's a huge gulf of difference between a 50-cent can of soda and a $1,000 computer!" Sure there is. But the principles of advertising still apply. Think about the new Volkswagen Beetle. Here's a product which consumers clamored for even before it hit the showroom floor. People got onto waiting lists for a car they had only seen on commercials—never on the road. And that car easily cost 15 to 20 times as much as an iMac.

This ad campaign would reach everyone via their TVs. It would hit people in Peoria, Illinois. It would hit people in Lake Charles, Louisiana. It would hit people in Juneau, Alaska. Then, if Apple were to push their partnerships with Comp USA and Sears, Apple would just have to provide the inventory—and perhaps a few Apple-trained employees—the way cosmetic manufacturers do in retail stores—to steer people to a Mac.

Our trip to the new International Plaza was a great experience. We learned how to find a parking space in hostile territory. We learned how to push our way to the front of the food-court line. And, I got a chance to see Apple's newest marketing strategy up-close.

Now, Apple just needs consumers to shop 'til they drop!

Mac OS X 10.1—First Impressions

Mac OS X 10.1 is the most anticipated software release from Apple in recent memory. Sure, everyone was excited about 10.0, but it was clear that it wasn't the kind of release that you just install without thinking. Call it a second public beta or simply a one-point-oh, but most everyone agrees it was *rough*. Now the spotlight is on 10.1. This is the first release that Apple isn't stealth-marketing, and they'll probably make it the default OS on new machines soon. Let's see how it stacks up.

Speed

For me, the most annoying part of 10.0.x was how slow it was. Classic applications were more responsive than native ones, the Finder list view was unusable, and I dreaded the appearance of the Spinning Pizza Of Death (as Bare Bones Software calls it). 10.1 is faster across the board, from launch times, to pulling down menus, to Classic. In some cases, the improvement is quite dramatic. On a newish Mac, OS X is now plenty fast for everyday use, although in most cases it's still not as responsive as OS 9. The Finder, though vastly improved, still locks up much more than the OS 9 Finder, especially when dealing with iDisks (despite all the hype about how WebDAV would make them fast).

Feature Reinstatement

I never understood why Apple got so much flak when 10.0 couldn't burn CDs or play DVDs out of the box. These are certainly important features, but in my opinion there were far more critical things to fix. In any case, 10.1 can burn CDs *and DVDs* from the Finder, and it can play DVDs. The new DVD Player application is a big improvement over its OS 9 counterpart because it can play in the background without skipping. Unfortunately, it doesn't let me move the Viewer window onto my second monitor and it spontaneously quit the first time I launched it.

Mac OS 9 has a feature called the Notification Manager that, among other things, lets an application get your attention by flashing its icon in the application menu. This feature returns in 10.1 in the form of application icons that bounce in the dock. This makes sense visually, but unfortunately the bouncing is so extreme that I feel obligated to tend to the application immediately to make it stop. (Hiding the dock doesn't hide the bouncing icon.)

The OS X version of Disk Copy can finally *create* disk images. Alas, Apple somehow left out the ability to make an image from a folder. In OS 9 you could drag a folder onto the Disk Copy window, pick a name, and be done. In 10.1 you have to first figure out how big the folder is, then ask Disk Copy to create an image of the proper size, then copy the files onto the image, then have Disk Copy convert the read/write image to a read-only compressed one. This is particularly bad because disk images are about the only way to archive files while preserving Mac metadata, resource forks, and long file names.

File Name Extensions

As I wrote in May[1], Mac OS X departs from the friendly and functional world of Mac OS type and creator codes, instead favoring Windows and Unix-style extensions at the end of filenames. Apple was widely criticized for this, because most Mac users find the classic Mac OS way superior. The best discussion I've found on this topic is John Siracusa's ArsTechnica article on metadata[2]. Further thoughtful discussion can be found in the archives[3] of Apple's Human Interface Developers mailing list.

Anyway, this criticism appeared to fall on deaf ears. Apple was working on an improved solution and didn't want to discuss the issue until they had worked out the details of their new system, an alleged improvement over both the OS 9 and OS 10.0.4 schemes. This spiffy new system for keeping track of file types is part of 10.1. The details are explained in a long e-mail from Apple's User Experience Technology Manager. To read them, go to this archives page[4], type in "archives" for both the username and password, and scroll down about halfway to where it says "File Name Extension Guidelines."

The title of the document gives it all away: Apple's usability breakthrough isn't a revolutionary new way to keep track of file metadata. It's not even a reinstatement of the popular Mac OS 9 system. Nope, the new system is that file extensions are now *mandatory*. It's actually worse than that, if you can imagine. With 10.0.x, Apple recommended that applications add file extensions in addition to the type and creator codes. With 10.1, file extensions are required and developers can set the type and creator *if they want*. Of course, some won't bother and others will interpret this new guideline as an implication to only set file extensions. This will further degrade the user experience and reduce compatibility with Mac OS 9. There are many examples of this, but one of the

---

1. http://www.atpm.com/7.05/paradigm.shtml
2. http://arstechnica.com/reviews/01q3/metadata/metadata-1.html
3. http://www.lists.apple.com/mailman/listinfo/apple-hi-developers
4. http://www.lists.apple.com/archives/cocoa-dev/2001/Sep/8.html

most striking is that a file without a type code cannot be opened by many Carbon and Classic applications because they intelligently filter their Open dialogs to display only the files that they know how to open. If a file lacks a type code, the applications won't know that they can read it.

Apple's own TextEdit still doesn't set the type or creator code. This means two things. First, if your default text editor isn't TextEdit, saving text document from TextEdit will create a file that opens in a *different* application when double-clicked. Second, if you remove the ".txt" or ".rtf" extension from a TextEdit document, Mac OS X *forgets* what kind of file it is.

Some of you who have already played with 10.1 or read the aforementioned File Name Extension Guidelines are probably wondering why I've so far not mentioned Apple's solution for hiding file name extensions so that users don't have to see them. The reason is that the issue of hiding extensions is separate from the issue of type and creator information. Apple presents hidden file extensions as its answer to complaints about missing type and creator codes, but it misses the point. It's not that we don't want to *see* file extensions, but rather that they don't include enough information and shouldn't be needed in the first place.

That said, Apple expended a lot of effort on the new system, so it's worth discussing the system's goals and how it stacks up. Apple feels that it needs to support file extensions so that Mac users can exchange files with users of other operating systems. In Mac OS 9, InternetConfig maps file extensions to outgoing files based on their types. InternetConfig works well; however it's not perfect, and not all outgoing files pass through it. To ensure that every file that leaves your Mac has a valid extension, Apple decided that every file should be created with an extension and that the OS should prevent you from deleting it accidentally. This reasoning makes sense to me, though I think the behavior should be optional for those of us who don't value easy Windows file exchange above all else.

Combine this questionable, but reasoned, decision with the feedback from users who don't like to see file extensions, and Apple's next move makes a lot of sense. Since file extensions are required but users don't want to see them, they should be hidden. So, naturally, Apple created the best system in existence for hiding file extensions. Reading through the gory details, I was impressed with how much Apple thought everything through. The new system is *almost* as friendly has not having extensions in the first place, and it avoids *almost* all of the well-documented problems that extensions cause on Windows. (Most notably, Apple can't get around the fact that, file extensions, unlike type codes, will always be ambiguous.)

Nevertheless, the system is really just a clever hack. Since periods are legal file name characters, Mac OS X can never be sure what's an extension and what isn't. Sometimes it will guess wrong, as it does with an application I have whose name ends with ".0a9" (part of a version number). Sometimes

hiding extensions will make several files in a folder appear to have the same name. The elaborate system of rules and guidelines is just that—elaborate. Most of the time the system will work as people expect, but sometimes a subtlety in one of the rules won't match the user's mental model. When the computer does something unexpected, the user feels like he isn't in control.

Even though the system can never handle hidden file extensions perfectly, I think there's value in providing the hiding as an option. If people want to use extensions for increased compatibility, the new system is a good alternative. However, there should be a way to disable (not just hide) extensions for those who don't want them, and *all* Mac OS X applications should set type and creator codes so that the traditional Mac OS experience is possible. With these simple changes we could truly have the best of both worlds.
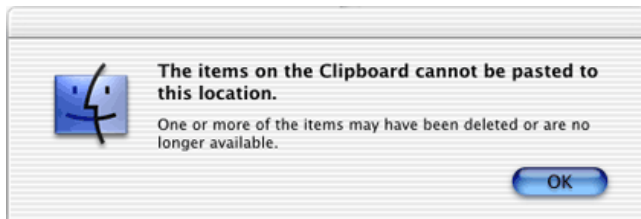
Finder

The Finder is much improved from 10.0.x, especially with regard to its speed. The list view is now fast enough to use. Navigating the column view from the keyboard is easy and quick (though keyboard navigation of the very similar Open/Save panels is still broken). The columns can now be resized, which is nice, but the resizing behavior still doesn't feel right to me. I typically want all but the rightmost two columns to be narrow. That way I can see many levels of folders, yet still see the full names of the files I'm focused on. Unfortunately, this behavior is not possible in 10.1 because column widths are associated with folders, not columns of the browser. It's possible to set everything up the way I want for a given display, but if I then drill down another level I have to resize the columns again. The other problem with the new column view is that the leftmost column often gets partially cut off, so that I can only see the second half of the file names. This happens even if it is the active column, i.e. the active column doesn't automatically scroll into full view.

As I mentioned, the list view is very responsive now, but it's still not as polished as in Mac OS 9. First, the default width for the file name is too short and there's no way to increase it. Second, it still doesn't remember which folder triangles have been expanded.

The icon view is also improved from 10.0.x in that the grid size now adjusts in tandem with the icon size—no more swaths of white space between small icons. However, it's not usable for me because arranging by name is still broken. In Mac OS 9, an icon view that's arranged by name will keep the icons arranged in columns that fill the vertical extent of the window. Make the window shorter and the columns get shorter as the contents fill out more to the right. In Mac OS X, if you make the window shorter the icons don't rearrange themselves and you're stuck with a single column that's many times the height of the window.

Finally, I now realize that I gave Apple too much benefit of the doubt regarding features from the Mac OS 9 Finder that

were missing in action in 10.0.x. File and folder labels and the awesome Put Away command are still absent from 10.1.

Mac OS X 10.1 introduces copying and pasting of files. Unfortunately, it doesn't behave like copy and paste in other applications; it's possible to paste a newer version of a file that you copied, or to "save" a file on the clipboard only to find out that you can't paste it.

Fonts

Opinions are divided about the fonts that Mac OS X uses. Many find them to be beautiful and very readable. Others of us find it much easier to read sharp, unsmoothed text. (A separate issue is the *size* of fonts in Mac OS X. I'm continually frustrated that the Finder views font takes up so much space and yet is less readable than good old Geneva 9.) Anyway, 10.1 at last makes font smoothing somewhat configurable: as in Mac OS 9, it can be disabled below a certain point size.

Unfortunately, the font smoothing preference is indicative of many other "choices" in OS X. Apple lets you choose between icon, list, and column views in the Finder, but the former are so crippled that most users end up "choosing" column view (thus "proving" that the NeXT way is better). The same thing goes for icons on the desktop and multi-window versus in-place tunneling through folders. These are not choices between the OS 9 way and the OS X way, but choices between the OS X way and pale imitations of the OS 9 way.

OS 9: For example, if a user tries to save a TextEdit document as "MyFile.jpg", the alert reads, "You cannot save this document with the extension '.jpg' at the end of the name. The required extension is '.rtf'. You can choose to use both, so that your file name ends in '.jpg.rtf'." (from the aforementioned file extension guidelines)

OS X without antialiasing: For example, if a user tries to save a TextEdit document as "MyFile.jpg", the alert reads, "You cannot save this document with the extension '.jpg' at the end of the name. The required extension is '.rtf'. You can choose to use both, so that your file name ends in '.jpg.rtf'." (from the aforementioned file extension guidelines)

OS X with antialiasing: For example, if a user tries to save a TextEdit document as "MyFile.jpg", the alert reads, "You cannot save this document with the extension '.jpg' at the end of the name. The required extension is '.rtf'. You can choose to use both, so that your file name ends in '.jpg.rtf'." (from the aforementioned file extension guidelines)

Which do you prefer?

The pattern extends to font smoothing in the sense that you get to choose between blurry smoothed fonts and hard-to-read unsmoothed fonts. Why are unsmoothed fonts in 10.1 hard to read? There are two reasons. First, small fonts tend to be displayed on top of OS X's standard striped background. Without the smoothing, the letters are skinnier and don't stand out as much from the background. Second, the horizontal spacing of unsmoothed letters is off. As you can see in the screenshots, the same font (Geneva 9) looks worse in OS X than in Classic, with the letters running into each other.

Verdict

I've spent most of this article critiquing Mac OS X 10.1, because most of the improvements are already well documented elsewhere—and, frankly, Apple still has a lot more polishing to do. Not surprisingly, 10.1 did not magically fix all the problems in the original release. Nevertheless, I'm really impressed with it. Apple has come a long way in only six months. The low-level plumbing and performance issues are being resolved, and Apple is clearly beginning to spend more of its energies on the user experience. I'm hopeful that the next major release will continue this trend and that continued <u>user feedback</u>[1] will alert Apple to the areas that need attention.

1. http://www.apple.com/macosx/feedback/

Copyright © 2001 Michael Tsai, mtsai@atpm.com. *Michael has been waiting for* AppleScript Studio[2] *for nearly a decade.*

2. http://www.apple.com/applescript/macosx/ascript_studio/

Housekeeping

Good Housekeeping

It's that time again: a wannabe-pundit, yours truly, is going to tell you what you have heard from many people before: back up. But that's not the only thing I'm going to write about—this month is housekeeping month. Spring cleaning isn't limited to just Spring. Take charge and do what you know is best in the long run: use the diagnostic tools, the cleaning tools, the organizational tools, and the safety devices you already have on your hard drive, but hardly ever use. Trust me, I'm a professional. Then again, remember that I cannot be held legally responsible for any of the advice I am dispensing here—*caveat emptor*.

Computers Are Like Cars?

Like your car, your computer wants you to look after it. Cars need maintenance, and so does your computer. If your car is like a well-oiled machine, it runs well and gets you to the places you want to go quickly, comfortably, and safely. In a figurative sense, your computer does the same thing: if your computer is well-maintained, it runs well and does the stuff you want it to do quickly, comfortably, and safely. So you will be reading about basic hardware cleaning and wire maintenance, anti-virus measures, backing up, operating system upkeep, file integrity maintenance, and file organization, all facilitated by some essential utilities.

Spring cleaning isn't limited to just Spring.

Adventures in Consulting

What prompted this, you ask? Well, my recent adventures as a consultant have made me realize that too many of you like to live on the edge: you go about getting your work done, as any other professional using Macs would, but don't take care of the tools you need to get your work done. Problem is, tools wear out. I know, Craftsman Tools last forever and all, and if not, they have a lifetime guarantee, and that's why we use Macs. But sometimes your Craftsman tool doesn't hold up under the pressure, and that holds for your Mac, too. Now, don't get all defensive on me: I'm just trying to help—honest. Plus, it doesn't mean that I have always followed my own advice to the 'T', by any means. On the other hand, I have seen enough dust accumulate, both figuratively and literally, that I thought it would be a good idea to write about it. So, let's get to it then.

Elbow Grease

The first thing about good computer maintenance is that the hardware be kept in order. The first thing about that is that it needs to be kept clean (don't oil it now to make it that well-oiled machine I was using as a figurative example only!). Whenever you make that annual dentist appointment (and you do make that at least once a year, hopefully twice, right?), mark your calendar to make some time for cleaning your computer.

Go ahead and open your computer to vacuum it, but make sure you have it unplugged before you open it. Buy one of those tiny vacuums that look as if you stole it from your kids' play house. You can get one at a computer store or electronics store like Fry's. Sometimes a brush will help get dust off those parts that are hard to access or from which you can't suck it off. Some of those tiny vacuums even come with an assortment of brush attachments. So, what happens if you don't do this? You could ask the people who have never cleaned the inside of a still heavily-used Quadra 900 they bought in 1991, and they might tell you that the computer guy to whom they took their machine told them, no, the motherboard is still fine, it's just that the CPU was

overheating from the inch-thick layer of dust that was baked onto it.

I sure hope this is not what your computer fan looks like.

So use some elbow grease and clean out your computer's dust bunnies. When you do, be careful to follow the instructions that come with the electronics vacuum you're using and watch out not to touch anything you shouldn't be touching on the inside of your computer.

Now you may ask, what can you do to prevent all this dust from accumulating in your precious investment in the first place? Well, I recommend getting a combination air/HEPA filter for the room that houses your computer(s). Ever since I installed mine in our office, the dust bunnies have been visiting far less regularly than before I had it.

Give Your Wires Some Slack

Whenever my wife happens to look behind the metal rack shelf on which I have placed some of my computers and accessories, she exclaims, "it seems humanly impossible to find your way through that wire clutter behind there." If you have several desktop units along with corresponding monitors, keyboards, and mice, as well as the networking equipment to tie them all together, their external accessories like hard drives, removables, modems, scanners, printers, antennas, cameras, and hubs and switch boxes including the one for the telephony equipment, it's no small wonder that the space behind my rack shelf looks like a snake pit! What's my point in all this? The more wires and cables you have in a confined area, the higher the likelihood that some of those wires get pulled on too hard, to the point that the connector develops a loose contact. Let me tell you, that's a tough thing to track down, if and when you notice that your machine is acting up and you are trying to figure out why. So, give your wires some slack; they deserve it.

Virus Checking

Fortunately, virus-checking can be automated these days. Most, if not all anti-virus programs have a scheduling utility built in that you can customize to your needs. Although Macs are considerably less vulnerable to viruses than Windows PCs (Nimda is still a painful memory these days), they *can* be infected. Moreover, they can be used as carriers and spread infections to other computer users, especially when your system is connected to a network like a local area network (LAN) or the Internet. Do yourself a favor and get yourself some peace of mind by buying a good anti-virus program. Check VersionTracker and search for anti-virus software[1].

Backup

I'm not going to go into backup strategies; many other people have done that before me. What I want to emphasize is the essentials, because that's what I'm using as a hook to get you to do it. If there is some interest, I can pick up on backup strategies in a later column.

Too many people still don't back up, even businesses for which I do consulting. Their livelihood depends on their computers' running smoothly, yet they have come to rely on MTBFs of tens of thousands of hours for their equipment. Problems is, MTBF means Mean Time Between Failure; things break after so many hours on average, but you don't want to be surprised by a hard drive that breaks before its MTBF is up, right? I can sort of understand it that some people don't back up the drives on a machine that is not used for important stuff, maybe set up for gaming where a complete system reinstall would do some good to begin with, and the games are on CDs anyway. But essentials? Some people back up the absolutely mission-critical hard drives, but neglect the other drives. Why not make it a regular thing and back up your stuff on a set day or, if your stuff is mission-critical, every day or more often still? Why not use a backup program that can automate the whole thing for you for the few dollars you pay for the shareware or commercial license? Search VersionTracker for some examples of backup programs[2]; some are even free, albeit with fewer bells and whistles, of course. Of course, a hard drive mirror of a RAID (Redundant Array of Independent or Inexpensive Disks) or network backup drive adds additional safety in case something goes wrong. And it will, because, as you may have heard, there are two groups of people: those who *have* lost data and those who *will*.
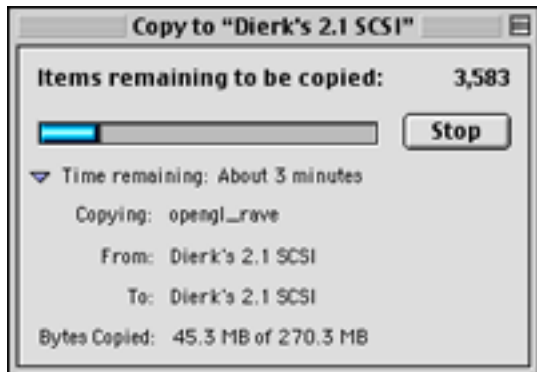
Operating System Upkeep

I have to preface the following by stating that I am still waiting for that lump of money to fall into my lap which would afford me a machine on which I can run Mac OS X, so

---

1. http://www.versiontracker.com/mp/new_search.m?productDB=mac&mode=Quick&OS_Filter=MacOS&search=virus
2. http://www.versiontracker.com/mp/new_search.m?productDB=mac&mode=Quick&OS_Filter=MacOS&search=backup

take what follows with a grain of salt and adapt it to Mac OS X accordingly, where possible.

Something I have been doing for a long time is availing myself of one aspect of the simplicity of the Macintosh operating system: you can just copy an entire system folder to a different location, and when you copy it back to the original location, it will function as it should. Try that with Windows. Start right after you have made a fresh system install off your system CD: duplicate the System Folder. It's as easy as selecting the System Folder by clicking on it once and selecting "Duplicate" from the Finder menu. Or just hit Command-D for "Duplicate" on your keyboard.

Copying the System Folder as fresh backup copies.

Wait until copying is done and rename the new copy something more appropriate, like "fresh Mac OS 8.6". If you have another hard drive, copy the newly renamed folder to that drive. Now, whenever you need a fresh System Folder you don't need to reinstall anything from CD, a major time saver.

Installation Management

I have made it a habit of backing up my System Folder whenever I'm installing new software. With today's fast hard drives it's well worth the time to wait for the copying to complete, possibly in the background while you're finishing up something else. The Mac OS automatically names this folder "System Folder copy." If anything should go wrong with or after the installation, you can delete the "System Folder" after a new installation and replace it with the old, working "System Folder copy." In order to do that, however, you cannot just drag the System Folder into the Trash, (the OS will complain, and rightfully so: why would you want to throw away the current system software?) you have to drag out the Finder separately, and then drag the System Folder into the Trash. Rename the working "System Folder copy" to "System Folder" again and restart before doing anything else.

Whenever I have some certainty that my System Folder is in good working order, i.e. no crashes or corruptions, I use a small utility I have grown to love: Installer Observer[1]—it works well and it's free! What can you do with it? Basically,

you can take a snapshot of the files in your system folder (or any other folder, in case you need that functionality) and you can save that snapshot as a file. Then, whenever you invoke Installer Observer again, it can compare which files have been added, removed, or changed since you last saved a snapshot. How handy is that!

Installer Observer helps you keep track of System Folder changes.

I have made it a habit of copying the System Folder and taking a snapshot of it before I perform a software installation, and taking another snapshot after the installation. Now, if something goes wrong after the installation, I may be able to track down what file addition, removal, or change was the culprit.
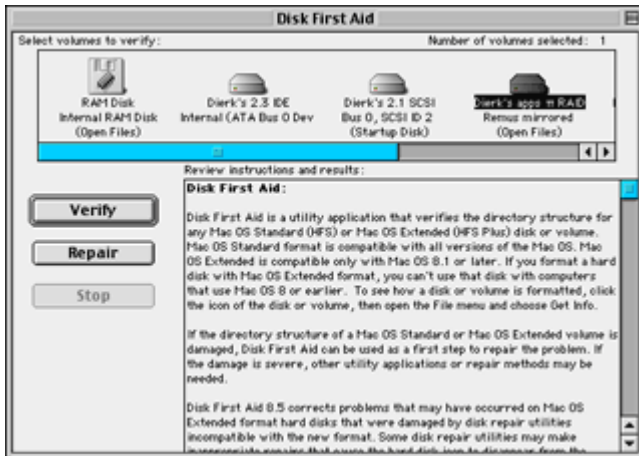
File Integrity Maintenance

When my machine starts crashing more than from the usual Java or JavaScript bug in Netscape when it encounters a site that isn't up to snuff, I follow a certain routine and sequence, part of which may be helpful to you, as well:

1. Use Apple's first tool of choice to check your hard drives: Disk First Aid. It ships with your system software and can usually be found in your Utilities folder. Select the hard drives you want to check and/or repair. Remember that volumes that have the active System Folder or any open files on them
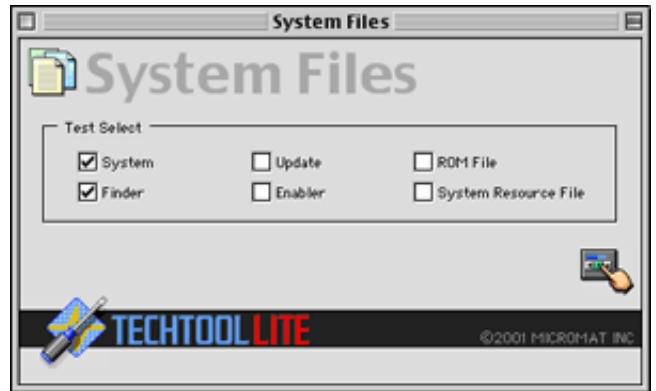
----

1.   http://pubWeb.nwu.edu/%7Ezps869/io.html

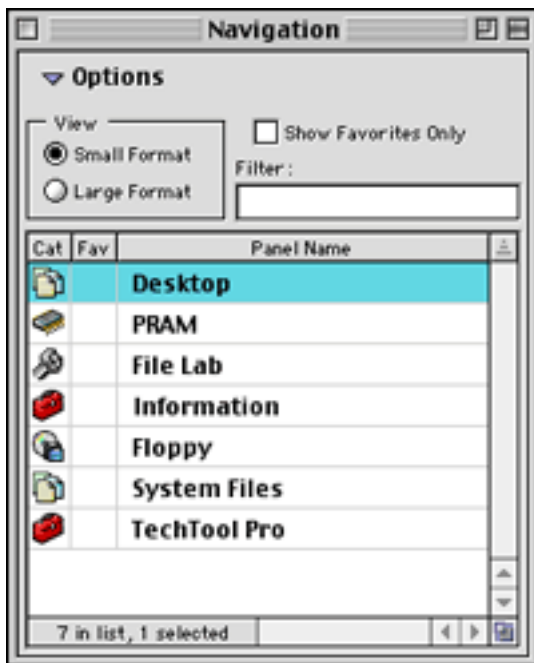cannot be fully repaired, which means that you need to use another startup disk to start from.

Disk First Aid is the first line of defense when checking your hard drive.

2. If all checks out, use [TechTool Light](http://www.micromat.com/techTool_Lite/main_techTool.html)[1] (free) or [Pro](http://www.micromat.com/techTool_Lite/main_techTool.html)[2] (commercial software) to check the next few items that may be giving your system the hiccups.

TechTool Light offers a variety of basic tests.

First, check the basic system files and make sure those are in good order. If TechTool finds them corrupt, replace them with a fresh copy. Where do you get a fresh copy? Right, from

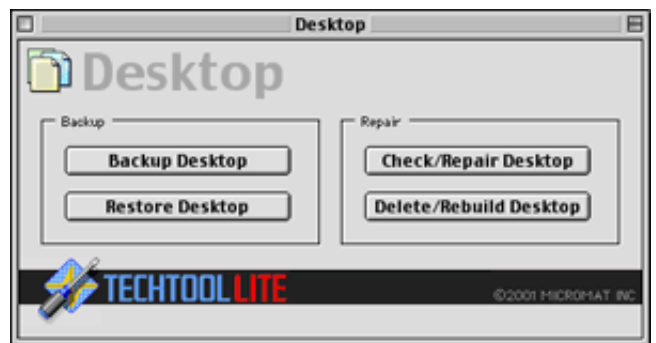the copy of the System Folder that you saved earlier as "fresh Mac OS 8.6"

TechTool Light can test system files for integrity.

Next, check the desktop database, which the operating system uses to keep track of files on your hard drive. If it is corrupt, delete it and restart your system to have it rebuilt automatically by the Mac OS at restart. Be sure that you have gone through the previous checks so your desktop database is not rebuilt using a corrupt file structure.
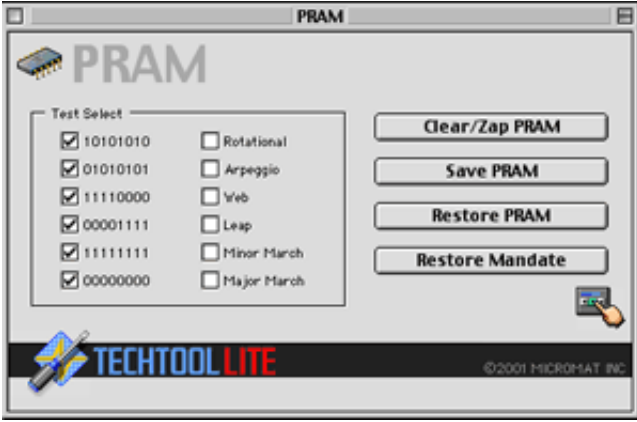

TechTool Light helps you manage your desktop database.

Finally, let's turn our attention to your computer's PRAM. According to the maker of TechTool, Micromat, PRAM, pronounced "pea-ram," is the parameter RAM, a non-volatile RAM chip residing on your Macintosh motherboard. This device holds special parameters independent of the system or hard drive. Some of these settings include mouse speed and designated startup device. This information is stored in the standard area of PRAM (the high 128 bytes). Below the upper 128 bytes is an area of PRAM that contains more critical settings like boot services, manufacture date and hours of use (mandate information), and other reserved areas used by the system software.

The traditional method of zapping the PRAM—holding the command, option, P, and R keys at startup—only clears the upper bytes of PRAM where problems may not reside. Historically, the only way to correct lower PRAM problems was to open up the computer and momentarily remove the PRAM battery. This would clear all of the PRAM memory

---

1. http://www.micromat.com/techTool_Lite/main_techTool.html
2. http://www.micromat.com/techTool_Lite/main_techTool.html

allowing the Mac ROM to replace the data with default settings.

TechTool Lite will clear *all* of the PRAM without the need to disassemble the computer. The program also offers the ability to save the PRAM data before it is cleared, and restore this information should the need arise. TechTool Lite also allows you to test the physical memory that comprises the PRAM.

TechTool Light helps you manage your PRAM.

That's a great tool, if used wisely, but dangerous, if used precipitantly. You need to proceed using a certain strategy—here's how and why:

a) If you don't experience any problems with your computer, chances are your PRAM is fine. Go ahead and have TechTool save the PRAM in a settings file.

b) If you do experience problems with your computer and everything else has checked out A-OK, clear or zap the PRAM and restart your computer, at which point it will be reset by your Mac ROM. Right after your computer restarts reset your mouse settings, reset your keyboard settings, designate your startup device, etc., reopen TechTool, and save your PRAM in a settings file.

c) If your computer is acting up again, and you have boiled it down to the PRAM, use TechTool to restore the PRAM to the settings you saved in the settings file earlier. If you follow this sequence, it can save you possibly hours of work and headache trying to figure out what may be at the root of your troubles.
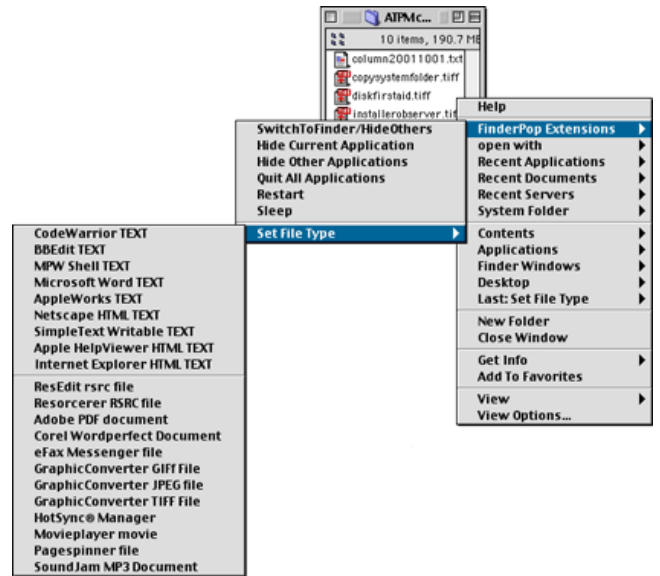
File Organization

File organization is another area in which house cleaning is an excellent way to increase your efficiency and decrease the amount of headache. Are you one of those people who can never find the file you're looking for? By investing maybe a couple of hours in a decent file structure, you will save hours of time accumulated over the years spent searching for that elusive file. You may have to start by partitioning your hard drive into several partitions which hold particular files and folders, e.g., system-related files on a system partition,

applications on an applications partition, and data on a data partition. Next could be folders that hold particular files only.

I know that sounds like the most basic concept that everyone is already aware of anyway, but usually that doesn't hold much water. Half the trick is to make sure your folder names are specific enough, but not too specific. The other half is to make sure that no folders have any overlap so that there is no doubt about where a particular file resides.

Of course, you may want to add some additional software to help you out in this endeavor. One piece of shareware I have already praised in a <u>previous column</u>[1] is <u>FinderPop</u>[2]. It's an excellent organizing tool that lets you simplify copying, moving, duplicating, and trashing files in one location or another. All this is at your fingertips through Apple's built-in contextual menu. I have added aliases to my hard drives to it so that they show up in the top contextual menu—very handy indeed.

FinderPop enhances your contextual menu to give you more organizational options.

Another gem for your organizational needs is the shareware <u>DragThing</u>[3]. It's a docking program that lets you create quick access points to files and folders all over your local or network hard drives. I use it to hold pointers to frequently used documents, applications utilities, network volumes, etc.

DragThing—a staple for organizational efficiency.

If you don't want to spring for the shareware fees for these tools, which are minimal for what you get, make intelligent use of a feature built into the Mac OS: popup folders. Drag frequently used folders to the bottom of your screen and

---

1. http://www.atpm.com/7.07/my-apple-wedge.shtml
2. http://www.finderpop.com/
3. http://www.dragthing.com/

watch the title bar change and the window stick to the bottom of the screen. Now when you click on the title bar of the window that's stuck at the bottom of the screen, it pops up and you can view or manipulate its files. How about creating a folder with aliases to the utilities I mentioned in this column and making a popup folder out of it? Try it out and let me know how you're doing. Really. No more excuses.

DSS and SMTP Authentication

Now I don't want to get off on a rant here, but…

It now seems inevitable that I will hereafter establish myself as the Dennis Miller of the computer world, ranting on a regularly scheduled basis with little or no regard for political correctness. The voice of sanity, however, must be heard from time to time even when it does little more than bitch and moan. Wouldn't you agree?

That said, welcome to this month's edition of ramblings and frustrations fresh from ATPM's technical wizard. The topic of the moment is the lack of Mac and LAN support for a broadband Internet access system that shows enormous potential for the huge numbers of folks in areas where DSL and cable are not available; and the latest moronic implementation of anti-spam technology that set me off like the ranting techno weenie firecracker that the ATPM community has come to know and love.

A Brief History

Last month I helped my parents install a Digital Satellite System (DSS) for Internet access. They live in rural Vermont and do not receive cable, cannot benefit from DSL, and would have to spend a lot on a repeater as part of an ISDN installation. The only solution, aside from dialup access, is DSS.

As they already have a DSS television service they decided to investigate their options. Pegasus Express presented itself as the best choice. Their satellite system is bi-directional, so you no longer need an analog modem for upstream data transfer; this is a serious improvement over the original DirecPC system. Simply hook up a USB modem to the dish, and—hey presto—you have high-speed Internet access that you can use for both downloads and uploads.

The Catch

The problem is that, as with most things in life, Pegasus Express (and every other DSS system) is only compatible with Windows. It is also designed for use on only a single machine and not in a network environment. So regardless of platform, you will need to rig up a soft router if you want to share the connection over a local area network. My parents use a Mac, like all good citizens, so I had to set up a Wintel box as a headless soft router in the basement, sitting next to the USB modem for the DSS system.

The PC maintains a download speed of around 200KB/s, sometimes more. Upstream speeds aren't quite so fast but still pack a punch. Yes, it really is that fast. I was amazed. I have a very zippy DSL line here in Chicago, essentially the equivalent of a T1 in both directions, and this thing was getting better speeds than my DSL line from time to time. Pretty groovy for rural Vermont.

Hey…I Thought PCs Were Fast?

As if the platform restriction weren't bad enough, sharing the connection knocks the speed down several notches. I had trouble transferring more than 40KB/S on any client connected to the PC, regardless of operating system.

There aren't a lot of options out there for folks using a DSS such as Pegasus Express, because it relies on the Windows TCP stack. You cannot use a product such as Vicom's Internet Gateway (an industrial strength, speedy product which I highly recommend), because it uses its own proprietary TCP stack and turns off Microsoft's. As a result it is only compatible with Ethernet-based devices. Oops! No USB devices with proprietary drivers allowed.

My eventual solution was to download a slick little product called SatServ[1], a soft router designed specifically for DSSs. It is reliable, flexible, and faster than Microsoft's Internet Connection Sharing (ICS); but it still won't allow me speeds even close to what I enjoyed on the PC connected directly to the satellite.

If you really want to use a DSS with your Mac, you can hook your Mac up directly to the USB modem and run Virtual PC. I haven't experimented much with the configuration, but there are shortcomings. For one thing, your Mac doesn't see the Internet connection, so you have to use Virtual PC with PC software to do all your Internet chores, unless you try to set up ICS or some sort of soft router within Virtual PC and then access that from your Mac, an ugly scenario. Although download speeds under Virtual PC aren't up to snuff with a "real" PC, they are however faster speeds than your Mac would enjoy under a shared connection hosted by a PC soft router.

The Solution

Even a die-hard Mac advocate such as myself can understand how Pegasus (or DirecPC) could be lame enough to shun anybody not using Windows (Unix, Linux, and Mac users to name but a few). Realistically it would be trivial to write a driver for the Mac that would support the Pegasus Express hardware, but be that as it may, I am sure that from an MBA's

---

1. http://www.getsatserv.com

standpoint it isn't a fiscally sound pursuit. Bean counters…sheesh.

However, the fact that the DirecPC system is only compatible with single terminal environments is a major shortcoming. Every other broadband Internet technology has an Ethernet router. Such support under DirecPC would fix the speed problem, eliminate the need for software altogether, and thus resolve any platform compatibility issues.

Pegasus claims it is working on a solution (Pegasus Express Pro) that will be designed for multiple users on a LAN, but it will be for business accounts. This of course means you would have to buy an expensive piece of software, plus a PC to run it on, and an overpriced service plan. An Ethernet router would be cheaper, faster, more reliable, platform independent: just plain better.

The Straw that Broke the Camel's Back

As if the folks at Pegasus weren't already dense enough, having developed a product that delivers the speed of a T1 but only to one computer at any given time, they have also made an incredibly obnoxious decision in their capacity as an Internet Service Provider (ISP).

The latest version of Pegasus' software will only let you send an e-mail if your "From" address ends with "@pgtv.net." In other words, you can only use their mail servers to send mail using a Pegasus e-mail account (the service plan comes with ten accounts, which is nice). This proves highly problematic, however.

If you are like me, you have more than one e-mail account. My local ISP here in Chicago, for example, is Verio. Verio will only let me use their outgoing mail server if I am connected to their network (via dialup or my DSL line). So if I want to send mail (or respond to a message) from my Verio e-mail account when I am in Vermont at my parents' house, I can't.

This effectively made it impossible for me to deal with my e-mail while I was in Vermont. I could not respond to mail on most of my accounts (and I have many). A lot of people keep their existing e-mail accounts when they upgrade to a broadband Internet connection, and to expect these people to give up those accounts or stop sending mail from them is just plain silly.

So I made a quick call to the folks at Pegasus. A nice gent picked up the phone after a couple of rings. I played dumb. I love to play dumb when I call up tech support people. It's always incredibly amusing.

"Hi! I can't send mail. I am getting some weird error about relaying or something, whatever that means."

I was given an explanation of the new Pegasus policy not to relay mail (in other words, to not let you use the Pegasus mail server to send mail from non-Pegasus e-mail accounts).

"But how do I send mail from my other accounts?"

Get this—he suggested that I dial into my ISP(s) to send mail from those accounts.

Riiiiiight.

That makes a lot of sense. Pay money to install the dish, pay money for the monthly service, and then when you want to send mail using an existing e-mail account, plug in ye olde reliable analog modem? I think not.

Spam

The reason that Pegasus has implemented such a harsh and overbearing policy regarding the sending of e-mail is spam. To prevent spam, many ISPs have taken steps to tighten up their mail servers and prevent them from being used by would-be spammers.

The most common tactic employed by ISPs is to only allow users to send mail through their mail server if the user is on the same network. This is the case with my ISP Verio; if I wish to send mail using their mail server, I must be on their network (and thus presumably a customer). Otherwise I am denied access. Most ISPs operate in this fashion.

Pegasus does not. Instead, what they have done is completely brain-dead. Rather than checking to see if the user sending mail is on the Pegasus network, they check to see if the "From" address contains an e-mail address ending in "@pgtv.net." Faking a from address isn't terribly difficult; anyone wanting to use the Pegasus mail server to send spam simply needs to format the header to read "From: spam_guy@pgtv.net," for example. If you have a functioning keyboard and a brain stem, you're good to go.

So, what Pegasus has done is make it impossible for me, a paying customer, to use their mail server to send mail from any account but theirs, and completely trivial for a spammer to use their server to send spam. Good job boys. That's high tech.

Easy Now

In all fairness I should take it easy on Pegasus. They're not the only buffoons on the Net. A lot of folks are going off the deep end with anti-spam mentality and screwing everything up in the process. Even ISPs such as Verio—that operate in a fashion which allows me to use their mail server to my heart's content when on their network—do not make it easy for me to use it when not on their network, even if I am sending an e-mail from my Verio-provided e-mail account.

If more outgoing mail servers implemented SMTP authentication then there wouldn't be a problem. SMTP authentication is a technology which lets you send mail using an SMTP server, regardless of whether you are on the same network, if you have successfully negotiated a POP logon recently (you can define the timeout on the server). Typically this allows a user to check mail and then send mail directly afterwards, ensuring that only a user with a valid POP name and password can send mail. This technology would let me use Verio's SMTP server while connected via Pegasus.

Get Real

The reality of the situation is that we will never eliminate spam. Sorry folks, but that's the truth. Every mail server from here to kingdom come has spam filters in place and has taken anti-spam precautions. Every e-mail client has spam filters in place. And guess what? We still get lots and lots of the stuff every single day. All that has been accomplished merely makes it that little bit more difficult for normal law-abiding Net users to check and send e-mail, and gives mailing list administrators such as myself huge headaches through having to deal with novice users who don't know how to properly configure their e-mail client to filter out spam.

Incidentally, the only way I managed to send e-mail while I was in Vermont was to set up an open relay mail server on my PowerBook and send mail through it. This was not a solution; this was a hack, but it worked, and I suspect that spammers across the globe are doing the same thing. ORBS and other anti-spam databases are doing their darndest to keep those servers blacklisted, but it isn't even terribly difficult to convince ORBS that your server is doing its job correctly; all you need to do is filter out the IP address of their test engine and you will pass their test. No technology is going to eliminate spam.

People get so infuriated over spam and I've never understood it. Talk about a non-intrusive and generally amusing form of mass marketing—how can you complain? The higher tech these people get, the less of a pain in the neck they become. It's just spam—it's not a telemarketer from the Publisher's Hotline telling you how they'll send you ten magazines per month for the rest of your life if you just send them $1000 per year. You don't need to hang up on anybody and feel guilty about your lack of manners. Spam is not a junk fax advertising cheap airfare to Hawaii. It's not wasting paper or forcing anybody to even read its contents.

I respect the fact that for folks with slower connections, spam makes checking for e-mail a longer and more painful process than it already is, but even when I'm on a dialup modem overseas I'd rather deal with spam than some yokel calling me up to tell me about some new credit protection plan. Spam is just e-mail—a bold title. Press the delete key. Problem solved.

And don't even talk to me about wasted bandwidth or network congestion. In the broadband age you have people downloading MPEGs of Pamela Anderson on her honeymoon doing, er, typical honeymoon stuff, and you're complaining about a couple of bytes of text? Get a grip.

Software License Agreements in Everyday Language

You have just shelled out really big bucks for something you really don't own. We own it. We also own you and everything you own in the event that we can prove that you have in any way distributed pirated copies of this product; we have reverse-engineered this product (looked at our secret code—similar to the "secret sauce" in the burger business but not quite as tasty) to come up with a product that you claim to own; we can do anything that you might do with anything you really do own. Not only don't you own this product, you don't even own the media it came on. We own all that too.

In exchange for your big bucks we'll give you a limited warranty that the product has a theoretical chance of working on your computer (our view of things, not yours) and a modicum of telephone support for 30 days via of our Byzantine customer service voice mail system.

We admit that you may own the computer that you are using to install our software. But if our product causes your computer not to work, it's not our problem because you own the computer and our lawyers can prove that you should have taken better care of it. We may from time to time issue an "update" for our product. We'll most likely charge you for that too. You might resent paying more bucks for what you consider to be a 'bug fix.' We're charging you more bucks because we call it a 'product enhancement.' We can call it whatever we want. After all, we own it.

How to Become a Network Guru

by Matthew Glidden, mglidden@atpm.com

Switches and Hubs

Why Switch? Why Hub?

The short story is that a switch is better because it allows any port to use the complete bandwidth (100BaseT, etc.) of the switch, as opposed to hubs that split the bandwidth across all ports. Switches also better handle different network speeds, so that two higher speed devices (100BaseT, for example) use the higher speed when talking to each other, even if they need to use 10BaseT to talk to slower devices.

Switches used to be significantly more expensive than hubs, but the price difference has dropped considerably in the last couple of years so that you should now be able to pick up a multi-port 10/100BaseT switch for $50 or less. Most home networks probably won't see a difference in performance between a hub and a switch, because home network use is very sporadic compared to the business world, where connections are constantly in use.

How Much Faster Is 100BaseT (or 1000BaseT) Than 10BaseT?

Although the numbers increasing by a factor of 10 seem to imply performance leaps of 10, that's not actually the case. Typically, 100BaseT runs four to five times the speed of 10BaseT in a similar network configuration. There are so many factors involved in the typical network that it's almost impossible to determine how fast it *should* be running (better to focus on a comparison of before and after).

What's the WAN Port for on My Hub/Switch?

WAN stands for Wide Area Network and allows the hub to connect to other networks, typically other switches or "upstream" connections. When you use a hardware router to share a high-speed Internet connection (cable, DSL, etc.), you typically connect the high-speed modem to the router's WAN port.

LocalTalk and G3/G4 Macs

Built into all Mac models from the Plus to the beige G3s and Wallstreet PowerBooks, LocalTalk was the original method of Macintosh networking. Though it was slow (about 20 kilobytes per second), its ubiquitous nature made it the choice for the casual network user until Ethernet prices finally came to Earth in the last couple of years. Since LocalTalk used the Mac serial (printer and modem) ports to communicate, this networking option was abandoned with the debut of color-case Macs in 1998. The beige desktop G3s were the last new model to use LocalTalk, but even they didn't use it well. You had to download a software update (LocalTalk G3) from the Apple site to fix a multitude of printer and connection problems that cropped up after the initial release.

Although LocalTalk is gone from new Macs, there are still a great number of systems out there that use it, usually because an Ethernet upgrade is either unavailable or prohibitively expensive. LaserWriters are still common in home and business, and many models require LocalTalk connectivity.

The easiest way to connect LocalTalk devices to a Mac without serial ports is to obtain a hardware LocalTalk-to-Ethernet adapter, which translates the network signal in both directions without extra effort on your part. The main difficulty here is adapter availability, as the adapters have become scarce with the passing of LocalTalk from the new computer scene. Your best bet for older hardware are sites like MacResQ or the auctions of eBay. Since the types of adapters varies, get as many details about what you're buying as possible, to make sure you end up with the right thing.

Software is also an option here, as Apple provides a control panel (and free download) called LocalTalk Bridge that will connect an Ethernet and LocalTalk network. The downside of this is that you need to have a computer capable of connecting to both networks that can act as an intermediary. If you only have an Ethernet Mac, LocalTalk won't do you any good.

Faux Pas Ethernet: Home Phone Networking

Setup Options Overview

Although used fairly infrequently, it's possible to set up a home network using the existing phone lines in the walls of your home. You won't run as fast as Ethernet, but some people are happy to sacrifice the speed for the ease of setup.

Networks across home phone lines function at approximately 1 megabit (about 125K) per second, which is slower than *10BaseT Ethernet*, but generally fast enough for home network use. The transmission band is higher than that used for voice calls, allowing you to use your network and talk on the phone at the same time.

Farallon's HomeLine

Farallon makes HomeLINE[1], a PCI-based networking system that connects the jack on its expansion card to a phone jack. Connecting to the phone line doesn't mean you have instant Internet access (you still need a modem), but HomeLINE also comes with trial versions of programs like Miramar Systems's[2] PC MacLAN and Vicom Tech's[3] SurfDoubler, allowing you to share files between Macs and PCs and share a single Internet connection across a network. For more info, check out the HomeLINE FAQ[4] and product info[5] pages.

Diamond Multimedia's HomeFree

Diamond Multimedia makes HomeFree[6], which works via an external adapter that connects to your Mac's USB port. You then connect the adapter to the nearest phone jack.

HomeFree works with both Macs and PCs, but requires additional software for actual file sharing (such as the software mentioned above). For more info on HomeFree, check out the HomeFree FAQ[7] and product info[8] pages.

Want to Wire the House Yourself?

Before the release of the aforementioned home phone line products, the only way to use your home phone lines for a network was to do it yourself. The process is (unfortunately) rather technical in nature and takes some tinkering, since things probably won't work exactly right the first time.

To perform this setup, you need a *120-ohm resistor* and extra *RJ-11 phone jack* for each phone jack in the house, a *LocalTalk* adapter for each computer you wish to connect, and a screwdriver.

Caution: The setup steps mentioned here are for the adventurous and I don't guarantee the results. Suffice to say you've been warned.

Is your blood pumping faster now? Okay, here's the basic process.

1. Remove a phone jack cover. You should see four wires: red, green, yellow, and black. Think of the wires as two pairs, red/green and yellow/black. The red/green pair is being used for your phone line, so you need to leave it alone. *If your yellow/black pair is also in use (for a second phone line), you won't be able to perform this setup.*

2. *Perform this step on jacks you'll connect to LocalTalk adapters.* Connect the yellow/black pair to the extra RJ-11 phone jack. Examine the red/green pair, which connects to two of the four wire slots in your voice line jack. You need to connect the yellow/black pair to the *other* pair of slots in the extra jack. It may help to closely examine the plug on the LocalTalk adapter, to determine exactly which wires need to make contact.

3. *Perform this step on jacks NOT connected to LocalTalk adapters.* Connect the ends of the yellow/black pair using the 120-ohm resistor.

That's it. You should now be able to connect your Macs to each other through the LocalTalk adapters and extra phone jacks.

If it doesn't work right away, don't panic. This isn't super easy. Recheck your wire connections to make sure each wire is where it should be. The unhappy news is that this kind of setup is easier to plan for in advance. Sometimes, it just turns

1. http://www.farallon.com/products/homeline/
2. http://www.miramarsys.com
3. http://www.vicomtech.com/
4. http://www.farallon.com/support/homeline/faq.html
5. http://www.farallon.com/products/homeline/
6. http://www.diamondmm.com/products/main/homefreepnausb.html
7. http://www.diamondmm.com/products/main/faqrev.htm
8. http://www.diamondmm.com/products/main/homefreepnausb.html

out that wiring your home for LocalTalk is impossible because of the home's internal wiring structure.

Extras: Desktop Pictures

The House on the Rock[1]

These pictures were taken at a museum in Spring Green, Wisconsin called The House on the Rock. While it began as a residence built by and for Alex Jordan, a student of Frank Lloyd Wright's, it evolved into a huge and eclectic museum featuring collections of everything from carousel horses, to self-playing instruments, to dollhouses. To find out more about it, check out its Web site[2].

Paul Fatula writes:

> I took the pictures using a Sony DSC-P1, set to take images at a 3:2 ratio for later printing on my DPP-SV55[3], and later cropped them down to 1024x768 with an old copy of Photoshop to make desktop images. Low (or otherwise strange) lighting in much of the museum section of the House made me wish my camera had more manual controls, or that I had brought a tripod along, so the pictures here focus on the house itself rather than the museum areas.

Previous Months' Desktop Pictures

Pictures from previous months are listed in the desktop pictures archives[4].

Downloading all the Pictures at Once

iCab and Interarchy (formerly Anarchie) can download an entire set of desktop pictures at once. In iCab, use the Download command to download "Get all files in same path." In Interarchy, use HTTP Mirror feature.

Contributing Your Own Desktop Pictures

If you have a picture, whether a small series or just one fabulous or funny shot, feel free to send it to editor@atpm.com and we'll publish it in next month's issue. Have a regular print but no scanner? Don't worry. E-mail us, and we tell you where to send it so we can scan it for you. Note that we cannot return the original print, so send us a copy.

Placing Desktop Pictures

Mac OS X

Switch to the Finder. Choose "Preferences…" from the "Finder" menu. Click on the "Select Picture…" button on the right. In the Open Panel, select the desktop picture you want to use. The panel defaults to your "~/Library/Desktop Pictures" folder. Close the "Finder Preferences" window when you are done.

You can also use the pictures with Mac OS X's built-in screen saver. Choose "System Preferences…" from the Apple menu. Click the screen saver button. Then click on Custom Slide Show in the list of screen savers. If you put the ATPM pictures in your Pictures folder, you're all set. Otherwise, click Configure to tell the screen saver which pictures to use.

Mac OS 8.5–9.1

Go to the Appearance control panel. Click on the "Desktop" tab at the top of the window. Press the "Place Picture..." button in the bottom right corner, then select the desired image. By default, it will show you the images in the "Desktop Pictures" subfolder of your "Appearance" folder in the System Folder, however you can select images from anywhere on your hard disk.

After you select the desired image file and press "Choose," a preview will appear in the Appearance window. The "Position Automatically" selection is usually fine. You can play with the settings to see if you like the others better. You will see the result in the little preview screen.

Once you are satisfied with the selection, click on "Set Desktop" in the lower right corner of the window. That's it! Should you ever want to get rid of it, just go to the desktop settings again and press "Remove Picture."

Mac OS 8.0 and 8.1

Go to the "Desktop Patterns" control panel. Click on "Desktop Pictures" in the list on the left of the window, and follow steps similar to the ones above.

Random Desktop Pictures

If you drag a folder of pictures onto the miniature desktop in the Appearance or Desktop Pictures control panel, your Mac will choose one from the folder at random when it starts up.

DeskPicture

An alternative to Mac OS's Appearance control panel is Pierce Software's DeskPicture, reviewed[5] in issue 5.10 and available for download[6].

---

1. http://www.atpm.com/7.10/house-on-the-rock/
2. http://www.thehouseontherock.com
3. http://www.atpm.com/7.04/dpp-sv55.shtml
4. http://www.atpm.com/Back/desktop-pictures.shtml

5. http://www.atpm.com/5.10/roundup.shtml
6. http://www.peircesw.com/DeskPicture.html

Screensavers

One of my first screensavers was AfterDark—you know, the one with the flying toasters. If truth be known I used to make those toasters flap their little wings really fast. Then I'd want calmness, and would change to the swans who swam gracefully in the black water that was my monitor.

I can't say I've used screensavers much these days. Actually, as the Read Me document from Setting Sun notes: "Although screen savers are not strictly necessary (since most modern monitors can turn themselves off when idle), they still provide a nice distraction from a blank screen…" So true. And, it's always fun to check out what's out there in screensaver land, especially if it's free!

By the way, if you don't like these selections, check out more screensavers at VersionTracker[1] and click on the Screensavers link.

1. http://www.versiontracker.com

Dilberito Screen Saver 1.5

Developer: Scott Adams Foods[2]
Price: free
Requirements: System 7.1

Watch Dilbert as he is chased by various colorful foods: a green string bean, a yellow clove of garlic, two purple beans, and one red tomato. These represent the four different types of food respectively—Indian, Garlic & Herb, Mexican, and Barbecue. (This is connected with the Scott Adams Foods company, which produces the Dilberito, a "delicious hand-held meal that's fun to eat and filled with yummy tasting veggies, rice." But I'll let you read more about that online.)

Hit Escape to quit the screensaver. Although it's very colorful, it's not overly exciting, but a true Dilbert fan might like it.

2. http://www.dilberito.com/fun/fun.htm

Whalesaver 1.5

Developer: Greenpeace (product page[1])
Price: free
Requirements: Mac OS 8

From Greenpeace, this is a screensaver with, yup, you guessed it, lots of pictures of whales. The background of this screensaver is blue, and the pictures (centered on your screen) change every few seconds. This may not be much in the way of exciting, with things flying across the screen, but nonetheless, it's a very peaceful and soothing screensaver. You'll like it whether you're a whale lover or not.

One thing to note: on the product page, Greenpeace mentions the following: "These screensavers are for enhancing your computer, they are not intended to be used to prevent your screen suffering from burn out. Every effort has been made to ensure these screensavers function correctly, however Greenpeace cannot be held responsible for the installation and download of these screensavers onto your computer. Greenpeace will not be providing any technical support for these screensavers."

Setting Sun 1.6.1

Developer: Purple Shark Software (product page[2])
Price: $20
Requirements: Mac OS 8.1; 3D modules require QuickDraw 3D and OpenGL
Trial: Fully featured (30 days)

Setting Sun uses plug-ins (called faders) to draw cool images when your computer is not being used. This is the most versatile of the programs I looked at, because you can choose what type of screensaver you'd like. There's the Typewriter (it begins to type a note across your screen, e.g. "I will not cut corners"), and the Matrix (the green symbols and numbers drop from the top of your screen just like in the opening of the film), and Roller Coaster (this one simulates a roller coaster ride). Warning: the roller coaster might make you queasy.
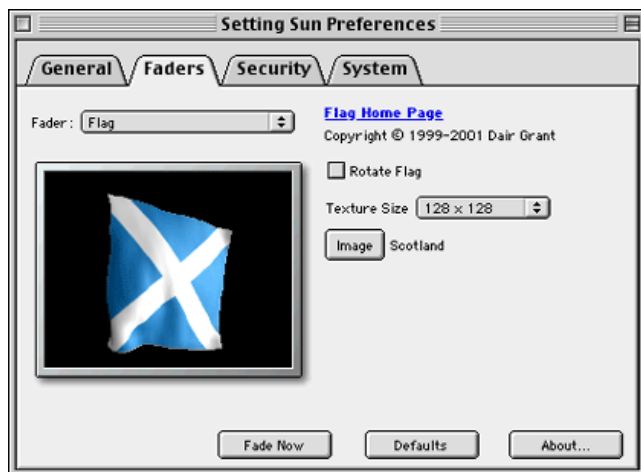
---

1. http://whales.greenpeace.org/screensaver.html
2. http://www.Webthing.net/settingsun/

Setting Sun is certainly worth the $20 shareware fee, just because of the variety you have. It's very cool and there are many options within each fader. Select Preferences from the Edit menu to change faders or keep your system secure by creating a password to wake up.

Here's a screen shot of the Flag fader with a choice of flags. I've chosen the Scottish flag (must be something to do with the name Smith).

Scary Blinky 1.0

Developer: MacScreenSavers ([product page](1))
Price: free

In case you're one of those I've-got-to-decorate-my-computer-for-Halloween types, try this spooky screensaver. A moon and a tombstone in the upper right hand corner remain constantly on a black background as ghouls and monsters pop up from the bottom of your screen. Watch for the flying witch (Blinky in disguise) on a broomstick, ghosts, rolling clouds, a haunted house…and more. Lots of fun!

Imagine Journey 1.0.0

Developer: Imagine Media ([product page](2))
Price: free
Requirements: G3-based Mac, Mac OS 8.5

Basically a promo for Imagine Media, this screensaver may not have very exciting graphics, but the idea is different. When the screensaver kicks in you'll see a picture of a monitor on your screen. Within that screensaver monitor, there's a little animation involving the earth, a window, and two desks with computers. Choose different buttons on the

1. http://www.macscreensavers.com/halloween.html
2. http://www.imaginemedia.co.uk/html/goodies.htm

on-screen monitor to do different things; for example, reduce or increase image quality, what else can we do (this will show you other services by Imagine Media), fill the screen (to get rid of the monitor), or turn the sound on or off. If you want to quit the screensaver hit Escape or point your mouse to the button with the green dot.

Actually, when you begin to move the mouse, a hand with a pointing index finger appears and moves as the mouse would. Definitely imaginative.

Review: AppleScript in a Nutshell: A Desktop Quick Reference (book)

by Gregory Tetrault, gtetrault@atpm.com

Developer: Bruce W. Perry, O'Reilly and Associates, Inc. (product page[1])
Price: $29.95 (direct from publisher); $20.96 (Amazon.com)
Trial: sample chapter[2]

Overview

This is the only book in print that covers the recent AppleScript 1.4 changes for Mac OS 9.1 and Mac OS X. This AppleScript reference book is geared towards network support personnel, power users, and graphics professionals. The press notice also claims it is aimed at "script novices," but this book is not for people who have never programmed in AppleScript or HyperTalk.

Layout and Organization of the Book

The soft cover book measures 6" by 9" and has 499 pages. The book has six parts, including the appendices. You can view the table of contents[3]. The book's organization works well and is better than other programming guides I have used. The 23-page index is comprehensive and helpfully identifies OS X–specific page references when appropriate.

Observations and Opinions

The introductory chapter focuses on Apple events. This unusual introduction exemplifies why this book is inappropriate for novice scripters. However, non-beginners can appreciate the good overview of Apple events and how AppleScript works with them. The second chapter describes Script Editor, Apple's application for composing and running scripts. It does not discuss alternative environments such as Smile, Facespan, or Scripter.

Part II, "AppleScript Language Reference," contains seven chapters. The "Data Types" chapter contains great information on the numerous AppleScript data types and about "coercion" of data into a different type. Chapter 5, "Reference Forms," has a nice overview of how AppleScript references work. Chapter 6, "Variables and Constants," covers variable creation and the use of predefined constants. It also taught me the difference between the *set* and *copy* commands in AppleScript. You can look at Chapter 7, "Flow Control Statements[4]," online. Chapter 8, "Subroutines," suffers from a dearth of examples. I wished for examples of calling subroutines and passing labeled parameters. Chapter 9, "Script Objects and Libraries," also suffers from inadequate explanations and examples. I did not get a good feel for the utility of creating objects or libraries.

Part III, "Scripting Mac OS 9 Applications," contains nine chapters about scripting Apple's OS 9 applications. There is no information on scripting third-party applications such as BBEdit, Photoshop, or Microsoft Office. Instead, the author devotes space to describing how to script Apple System Profiler and the Desktop Printer Manager. These chapters mostly summarize and reorganize the information found within the scripting dictionaries of Apple's applications. However, the two chapters related to the Finder contain good scripting examples and excellent discussions of the Finder's object model and the inheritance structure for Finder elements. The Finder classes chapter can be difficult to follow because the only visual difference between a description of a class versus its elements is the degree of indentation (the font sizes and styles are the same).

Part IV, "Scripting Mac OS 9 Control Panels and Extensions," contains 13 short chapters. I felt much of this was a waste. Why describe such trivial tasks as scripting the Appearance Manager or the Location Manager? Experienced scripters can just examine the AppleScript dictionaries to learn how to script these items.

Part V, "Scripting the Mac OS X System," includes three chapters on scripting the Desktop, Mail, and Text Edit applications. A fourth chapter describes how to run scripts with the Terminal application. This will be useful for people who long for command-line interfaces.

---

3.   http://www.oreilly.com/catalog/aplscptian/toc.html

4.   http://www.oreilly.com/catalog/aplscptian/chapter/ch07.html

1.   http://www.oreilly.com/catalog/aplscptian/
2.   http://www.oreilly.com/catalog/aplscptian/chapter/ch07.html

Strengths of This Book

- Up-to-date AppleScript reference book.
- Well organized.
- Covers the common applications, control panels, and extensions included with Mac OS 9 and OS X.

Weaknesses

- Not enough scripting examples.
- No coverage of scripting third-party applications.

Alternatives

Peachpit Press plans to publish <u>Applescript for Applications: Visual QuickStart Guide</u>[1] by Ethan Wilde (Editor) in late October. However, its predecessor, "Applescript for the Internet Visual QuickStart Guide," received mixed reviews. I hope this new book will be better. Danny Goodman wrote a

second edition of his *AppleScript Handbook* in 1998, which was republished last year by toExcel via <u>iUniverse</u>[2]. It doesn't include the latest scripting information for OS 9.1 and OS X, but it is an excellent guide for the intermediate to advanced scripter. This is a handbook, not a reference book, and includes more explanations and examples.

AppleScript is wonderful technology, but it gets used by a very small proportion of Macintosh users. I hope that the increased use of OS X triggers more interest in AppleScript. An increase in AppleScript users will inspire authors to write more AppleScript books.

Summary

AppleScript in a Nutshell is a good reference for programming Mac OS software for intermediate to advanced scripters. However, it contains no information on scripting common business or graphics applications.

---

1.   http://www.peachpit.com/books/catalog/71613.html

2.   http://www.iuniverse.com/marketplace/bookstore/book_detail.asp?isbn=096655141 9

Review: Pong: The Next Level

by Paul Fatula, pfatula@atpm.com

Developer: MacSoft (product page[1])
Price: $29.95
Requirements: G3-based Mac, Mac OS 8.6, 64 MB of RAM
Trial: none

I can't help but be struck by the minimum requirements to play Pong: The Next Level. Born in 1958, the game of Pong is considerably older than I am, and it was first played on a computer both larger and less powerful than any Macintosh ever conceived. Yet here I am, reviewing a version requiring a G3 processor, which installs from a CD-ROM with 720 files, resulting in a 264 MB folder on my hard drive. And it still requires the CD ROM in order to play. We're all familiar with the basic Pong concept, using a moving paddle to hit a ball across the screen to an opponent; what does this version have to offer?

How It Begins

When you double-click on the game's icon, you are prompted for your name, so your progress can be saved. After that, you're subject to a seemingly endless barrage of animations celebrating the various companies involved in making the game, which you can't click through. After about 45 seconds of this, you're presented with a screen where the options are Select and Options.

From Options, you can change the number of players (Pong can be played against the computer or up to three human opponents, in person or over a really fast Internet connection), and set up controls. The game can use the keyboard, mouse, or a joystick. Unfortunately, keyboard controls are only configurable in a multi-player game: if it's you against the computer, you've no choice but to use the arrow keys, which can be somewhat uncomfortable.

Once you hit Select (and wait out even more animation), you are presented with a menu letting you choose from a few possible scenarios in which to play. There's only one option if you're a new player, but as you play, harder versions of games will become available.

Finally, you've selected a game. Before you can start, however, you have to wait out yet more animations, panning around the field of play at different angles, and a slow countdown showing 3–2-1-GO. It's not that the animation is bad: it's kind of cute, really. It's that Pong becomes a game that consists largely of waiting. If you fail to win the round, you're asked whether you'd like to try again. If so, you have to sit through the same old opening animation. It gets old really fast.

Game Play

The first field of play you hit has an Arctic sort of theme, taking place on a plate of ice floating freely in the sea. It's not stationary: it slowly twists around as the game continues,

---

1. http://www.wizardworks.com/macsoft/pong/pong.htm

which either looks cool or makes you nauseous, depending on how long you play. In the middle of the play field are two penguins walking about: hit one with a ball and the penguin lays another ball in the direction of your opponent. I've seen up to four balls on the field at once. If the last ball falls off the screen before either player has won, you wait through more animation as the field of view pans toward your opponent, which does a little dance before the game can continue.

Most of the rounds also have tops that occasionally appear in the center of the play field, referred to in the manual as *Power Ups*. Hit one with the ball, and it moves towards you. If you catch it, it gives you some sort of help, once you select it. You might get a character standing behind you to help keep the ball in play if you miss, or the ability to slap the ball, or to catch it and release where you like.

Depending on the game you're playing, there may be a special *play off* that takes place if you and your opponent are tied at nine-all. In the soccer-themed game, you're essentially screwed: your opponent takes a shot at a goal, which you're tending. The paddle you control moves hopelessly slowly. Unless your opponent shoots the ball directly at you, you don't stand a chance at stopping it. When it's your turn to shoot, there's no graphical representation showing in which direction you shoot the ball, though it's controlled by the arrow keys. When the ball shoots, the computer opponent moves to stop the ball quite easily. If I'm missing something

about how to work this scenario, it's not for lack of consulting the manual.

Strange Variations

After several rounds of Pong, you're faced with a rather un-Pong-like round. No longer is there any computer opponent moving around across from you. You're on a platform, a ball rolls toward you, and you have to hit it into each of eight boxes. When you move, the platform tilts to that side. Sometimes if your ball fails to fall into a box, you're given another chance, no harm done. Other times, the game ends and you're asked to start again. In a lot of cases, the ball looks like it's going into a box and doesn't, or it looks like it's not and it does, so the round becomes largely luck.

Fortunately you're not stuck with that round; you can go back and select some other game to play, one that's more Pong-like and based more on skill than chance.

Conclusion

43 years after its initial invention, this version of Pong is loaded with graphics and animations. While it's easily more pleasant to look at than a handful of ASCII symbols, overall gameplay ends up much slower, because you're frequently stuck waiting for animations to play out. For an arcade-type game to gain that coveted quality of addictiveness, you have to be able to build up momentum, and the animations in Pong: the Next Level make that absolutely impossible.

Review: StuffIt Deluxe 6.5

by Michael Tsai, mtsai@atpm.com

The latest version of Aladdin's StuffIt compression suite arrives just in time for the flood of users who will likely upgrade from Mac OS 9 to Mac OS X 10.1. The package includes separate sets of applications for Mac OS 8/9 and Mac OS X. I've covered previous versions of StuffIt[2] before, so this review will concentrate on what's new since version 6, with emphasis on the OS X version.
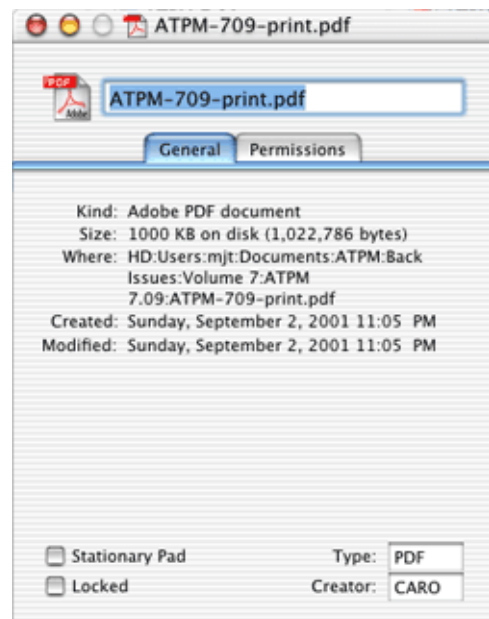

Magic Menu

Improved Mac OS X Support

The most important change in StuffIt 6.5 is that Magic Menu now runs on Mac OS X. Magic Menu X is a background application that makes the common StuffIt commands available in a menu in the Finder. Choosing a command from the menu causes it to act on the selected files. I've always found this more convenient than using the drag-and-drop applications (StuffIt Expander, DropStuff, and DropZip). The common commands are accessible from the keyboard, and the infrequently used commands are easy to find in the menu, but stay out of sight until needed.

Magic Menu X has several advantages over its OS 9 counterpart. Since it's an application rather than an extension, it won't conflict with your other software, and works without a reboot. Unlike the OS 9 version, Magic Menu X doesn't tie up the Finder while it's busy working on a file. Unfortunately, it still allows only one operation at a time. StuffIt Browser, Archive via Rename, and the StuffIt contextual menu plug-in remain OS 9-only, but I don't miss them.

Magic Menu's Get More Info

Magic Menu X also includes a Get More Info feature. Unlike the Mac OS X Finder, it lets you open more than one info window at once. There are text boxes for editing file types and creators (essential since many OS X applications don't set them) and for editing file permissions, Unix-style.

---

2.   http://www.atpm.com/7.01/stuffit-deluxe.shtml

1.   http://www.stuffit.com/stuffit/deluxe/index.html

Get More Info doesn't have as many features as Bare Bones Software's Super Get Info[1], but it's included with StuffIt Deluxe and is easily accessible with Command-Shift-I.
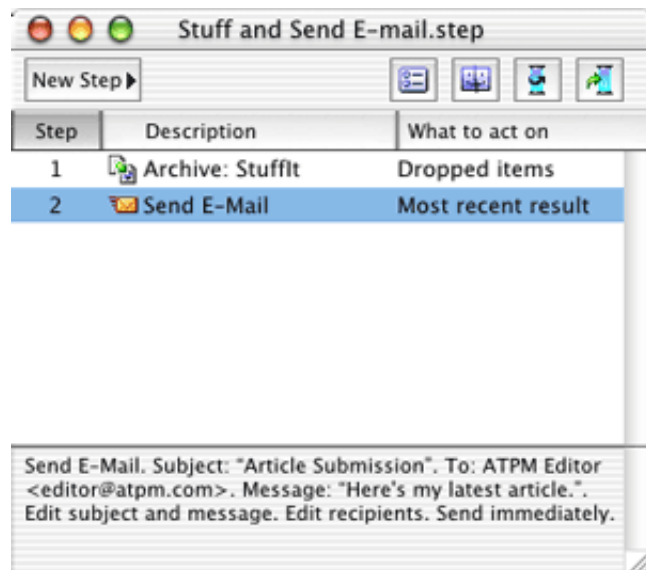
DropTar

DropTar is new in this version. As its name implies, it's a drag-and-drop utility for creating and expanding files in the popular Unix Tape ARchive format. These archives aren't savvy about Mac metadata and resource forks, but DropTar includes an option to preserve them by running the files through MacBinary before tarring them. Alas, this option also makes the files unreadable on Windows and Unix machines.

Unlike StuffIt archives, tar archives do not include compression; however, DropTar can optionally compress its archives with Unix Compress, GZip, or BZip. (These commands are also available in the StuffIt Deluxe application and Magic Menu, as they were in version 6.0.) BZip is a relatively new format that's very impressive. It's especially useful for Web server logs because Summary[2] can process BZipped logs in compressed form. BZip squeezed one of my log files down from 155 MB to 8.7 MB, compared to 9.2 MB for StuffIt's best.
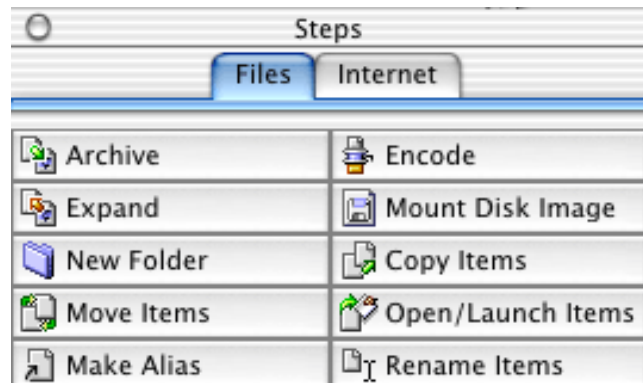
StuffIt Express Personal Edition

Also new in version 6.5 is StuffIt Express PE, which is an updated and rebranded version of Aladdin's Transporter utility. Express lets you create drop box applications for automating file operations. Drop boxes apply one or more actions in sequence to the files that you drop on them. There are sixteen actions, which include compression, file copying and renaming, FTP and HTTP transfers, and e-mailing files.

Making a drop box in StuffIt Express.

Express includes some wizards for automating common tasks, and you can also chain together the actions manually. Drop boxes created using the personal edition of Express will only run on machines with Express installed, and the ability to run AppleScripts from drop boxes is conspicuously missing. For these features you'll have to purchase the full version of Express. Overall, I found Express PE to be powerful and easy to use. For many tasks, it's a quick and easy alternative to AppleScripting. Though I never found a use for Express in my workflow, I can see it being popular with many users.

The Steps palette holds the actions that StuffIt Express lets you combine into drop boxes.

Rough Edges

I get the feeling that Aladdin rushed this release out the door so that it would be available in time for Mac OS X 10.1. The release notes list all kinds of oddities and limitations. On 10.0.4 the Magic Menu key commands apply in every application, not just the Finder. On 10.1 Magic Menu conflicts with the Full Keyboard Access feature. Magic Menu doesn't work on packaged applications (whose names end with ".app"), files whose names contain Unicode characters, or files that contain "~" as the first part of any path component. It also can't mount ShrinkWrap disk images on Mac OS X.

StuffIt archives still do not support file names longer than 31 characters. Long file names have been available to users since the Mac OS X Public Beta last year, and they are also supported (though not displayed) in Mac OS 9. Since switching to OS X, I've created many files with names in the 40-character range. Such files must be archived on disk images[3] or using the command-line gnutar utility (preferably made into a drop box with DropScript[4]). Likewise, I've relied on OpenUp[5] for expanding tar archives because StuffIt Expander can't handle long file names in them, either.

---

1. http://www.atpm.com/7.10/sgi.shtml
2. http://www.summary.net

3. http://www.atpm.com/4.09/page8.shtml
4. http://www.apple.com/downloads/macosx/development_tools/dropscript.html
5. http://www.versiontracker.com/moreinfo.fcgi?id=3285&db=mac

The OS X version of StuffIt 6.5 is a bit of an improvement in that it can transparently act as a graphical user interface for the command-line tar and gzip utilities, which *do* support long file names. However, this only works if said utilities are installed, and niceties like progress bars are nowhere to be found. I consider it a glaring limitation that the StuffIt engine itself has no knowledge of long file names. Aladdin's StuffIt Program Manager told me that they are currently rewriting the StuffIt engine to add this support, and I can only hope that it will be available in a free update. I can excuse this feature's omission from last year's StuffIt 6.0, but it really should have been in 6.5.

Conclusion

Although StuffIt Express is a nice addition, the main attraction of this release is Magic Menu for OS X. Thus, it seems unfair for Aladdin to charge for reinstating this feature after we already purchased an OS X compatibility release last year. Nevertheless, Magic Menu X is very nice and StuffIt Deluxe remains a solid product.

Review: Super Get Info 1.0.2

by Eric Blair, eblair@atpm.com

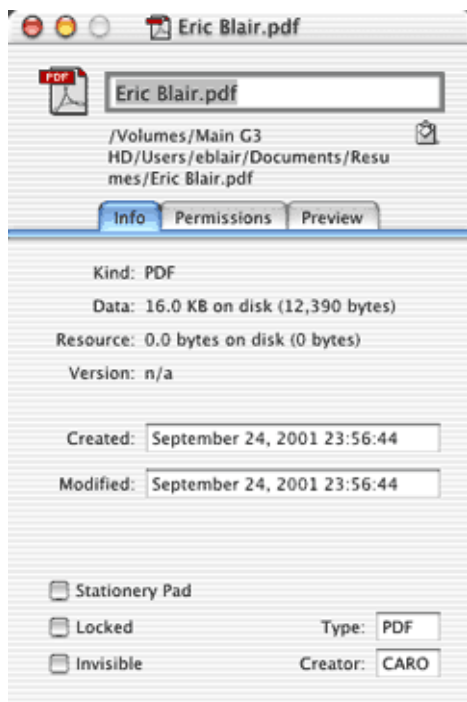**Developer:** Bare Bones Software (product page[1])
Price: $20
Requirements: Mac OS X 10.0
Trial: Fully featured (14 days)

As with many features of OS X, the new Info window acts differently from its OS 9 brethren. Some of the implemented changes are quite nice—the ability to preview certain types of files and to change which application opens a file, for instance—but some of the restrictions imposed, such as only being able to open a single Info window, can become quite maddening.

To combat these limitations, Bare Bones Software created Super Get Info. This program attempts to combine the powerful features of the Info window in OS X with the usefulness of OS 9's Get Info window.

A file's basic information.

File Information

For starters, one of Super Get Info's major advantages over the Info window is that more than one Super Get Info window can be displayed at once. No more selecting three

items, pressing Command-I and seeing an Info window that says, "3 items are selected," instead of something remotely useful.

A Super Get Info window consists of four parts: a Name section, which is always visible; an Info section; a Permissions section; and a Preview section. The latter three sections are tabbed panels, which the user can switch between at any time. Personally, I prefer the tabbed view over Info's Show menu because I can always see what's available. Of course, the items in Info's Show menu change based on the selected item, while Super Get Info's tabs are the same for all.

The Name section contains both the file's name and path. The name field is editable, but the path field is not; you can however select all or part of the path information and drag or copy it to the clipboard.

The Info section contains all of the file's basic information, such as file size, creation and modification dates, and type and creator codes. There are checkboxes for using the file as a stationary pad, locking the file, and changing the visibility.

One nice touch is that the sizes of both the data fork and the resource fork are shown. Some applications store extra information in the resource fork, but some Unix utilities such as "cp" disregard resource forks and will strip this information from files. Now, it's easy to check whether or not a file has a resource fork.
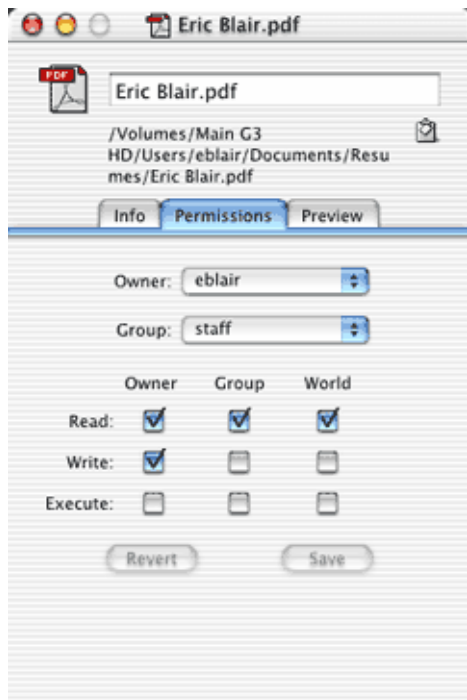
Both of the date fields can be modified. They even support relative time, so "yesterday," "today," and "tomorrow" are valid input values. Also, you can use "now" or "touch" to set the date to the current time.

You can also change a file's type and creator codes. Under OS 9, I found this useful because I would occasionally need to change which files were associated with which program. Under OS X this is extremely useful, as some OS X applications do not set these codes. Yes, you can use the built-in Info window to set an application for a file, but the file's icon does not change—meaning you might double-click on a file with an Acrobat icon, but it could open in Preview.

---

1. http://www.barebones.com/products/supergetinfo.html

File Permissions

In my opinion, the Permissions area in Super Get Info is light years ahead of its Info counterpart. The Info window only gives you menus for changing owner, group, and guest permissions. Furthermore, your only options are "Read & Write," "Read only," and "None." You cannot control the setting of the execute flag.

Setting permissions in Super Get Info.

Super Get Info uses a checkbox layout for setting Owner, Group, and World permissions. Read, Write, and Execute can all be set independently. Also, the Permissions section gives you the option of changing the Owner and Group, two things that could previously only be done from the command line.
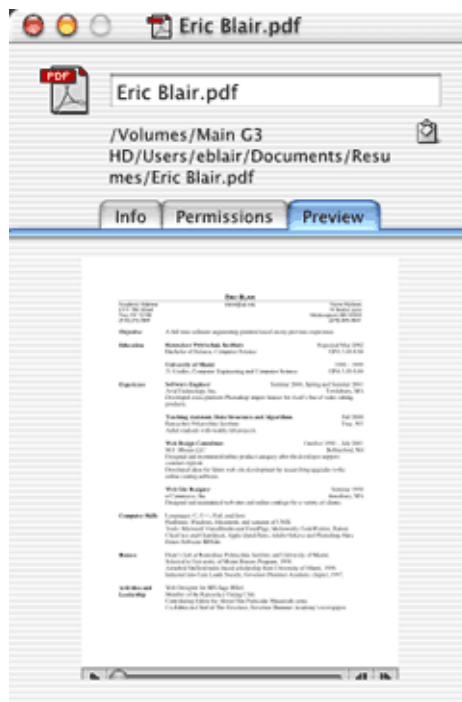
Previewing Files

The Preview section acts exactly as you'd expect it to. If Super Get Info can display the file type in question, you will see a small preview of the file's contents. If not, the file's icon is shown.

When I first saw the Preview section, I thought it exactly mirrored the preview in the Info window. After using the application, I now believe that's not the case. In some ways, Super Get Info's Preview section is better than the Finder's, but in others it is lacking.

Super Get Info can preview HTML and RTF files, which the Finder just represents with an icon. On the other hand, Super Get Info was not able to display the contents of an AppleWorks file, which the Finder was able to display.

I also noticed some oddities with file types that Super Get Info was able to handle. MP3s with the file type "MP3 " were

represented by an icon in the Preview section, while MP3s with the file type "Mp3 " displayed a player bar. In both cases, the "mp3" file name extension was used. Also, files that had no file type but had the correct file name extension worked properly.

See an overview of a file without opening it.

Finally, Super Get Info was able to preview a PDF file, but for some reason, a player bar also appeared below the preview.

Odds and Ends

Unfortunately, Super Get Info is not able to intercept the Command-I shortcut from the Finder, so you need to bring up Super Get Info in one of four ways: drag an icon to the Super Get Info icon (either in the Finder or in the Dock); use the "Open Finder Selection" command; or use the "Open…" or "Open Hidden…" commands from within Super Get Info. According to a MacCentral forum message[1] by Rich Siegel, intercepting Command-I from the Finder just was not possible with the current state of OS X.

Because OS X uses Unix permissions, you may sometimes run into a situation where you don't have permission to empty the trash—like if it contains a file owned by "root" (the Unix super user account). Super Get Info contains an "Empty Trash" command that gets around this by prompting you for an administrator name and password before it empties the trash.

---

1. http://maccentral.macworld.com/storyforum/forums/2001/07/06/supergetinfo/?read=5

If you find your Super Get Info Windows becoming spread all over the place, you can use either the "Bring All to Front" command to make all your Super Get Info windows visible, or the "Arrange in Front" command to line your Super Get Info windows along the top of the monitor.

Conclusion

I like the general idea of OS X's enhanced Info window. It certainly offers more information and control over its OS 9 counterpart. However, Super Get Info does this and more. It gives access to Mac features like type and creator codes. It puts a useful interface on Unix-isms such as file permissions. The only things keeping this product from getting an Excellent rating are its previewing issues and the way in which you open a file. If OS X is changed to allow Super Get Info to use Command-I, it will be that much easier to use. Until then, it garners a Very Nice.

FAQ: Frequently Asked Questions

What Is ATPM?

About This Particular Macintosh (ATPM) is, among other things, a monthly Internet magazine or "e-zine." ATPM was created to celebrate the personal computing experience. For us this means the most personal of all personal computers—the Apple Macintosh. About This Particular Macintosh is intended to be about your Macintosh, our Macintoshes, and the creative, personal ideas and experiences of everyone who uses a Mac. We hope that we will continue to be faithful to our mission.

Are You Looking for New Staff Members?

We currently need a Managing Editor, several Contributing Editors, a Copy Editor, and a Publicity Manager. Please contact us[1] if you're interested.

How Can I Subscribe to ATPM?

Visit the subscriptions page[2].

Which Format Is Best for Me?

The Online Webzine edition is for people who want to view ATPM in their Web browser, while connected to the Internet. It provides sharp text, lots of navigation options, and live links to ATPM back issues and other Web pages. You can use Sherlock to search[3] all of the online issues at once.

The Offline Webzine is a HTML version of ATPM that is formatted for viewing offline and made available in a StuffIt archive to reduce file size. The graphics, content, and navigation elements are the same as with the Online Webzine, but you can view it without being connected to the Internet. It requires a Web browser.

The Print PDF edition is saved in Adobe Acrobat format. It has a two-column layout with smaller text and higher-resolution graphics that are optimized for printing. It may be viewed online in a browser, or downloaded and viewed in Adobe's free Acrobat Reader on Macintosh or Windows. PDFs may be magnified to any size and searched with ease.

The Screen PDF edition is also saved in Adobe Acrobat format. It's a one-column layout with larger text that's optimized for reading on-screen. It may be viewed online in a browser, or downloaded and viewed in Adobe's free Acrobat Reader on Macintosh or Windows. PDFs may be magnified to any size and searched with ease.

What Are Some Tips for Viewing PDFs?

- You can download[4] Adobe Acrobat Reader for free. If you have a Power Macintosh, Acrobat Reader 4 has better quality and performance. ATPM is also compatible with Acrobat Reader 3, for those with 680x0 Macs.
- You can zoom the PDF to full window width and scroll through articles simply by single-clicking anywhere in the article text (except underlined links).
- You can quickly navigate between articles using the bookmarks pane at the left of the main viewing window.
- For best results on small screens, be sure to hide the bookmarks pane; that way you'll be able to see the entire page width at 100%.
- Try turning Font Smoothing on and off in Acrobat Reader's preferences to see which setting you prefer.
- All blue-underlined links are clickable. Links to external Web sites are reproduced in footnotes at the bottoms of pages, in case you are reading from a printed copy.
- You can hold down option while hovering over a link to see where it will lead.
- For best results, turn off Acrobat's "Fit to Page" option before printing.

Why Are Some Links Double-Underlined?

In the PDF editions of ATPM, links that are double-underlined lead to other pages in the same PDF. Links that are single-underlined will open in your Web browser.

What If I Get Errors Decoding ATPM?

ATPM and MacFixIt readers have reported problems decoding MacBinary files using early versions of StuffIt Expander 5.x. If you encounter problems decoding ATPM, we recommend upgrading to StuffIt Expander 5.1.4 or later[5].

How Can I Submit Cover Art?

We enjoy the opportunity to display new, original cover art every month. We're also very proud of the people who have come forward to offer us cover art for each issue. If you're a

---

1. editor@atpm.com
2. http://www.atpm.com/subscribe
3. http://www.atpm.com/search

4. http://www.adobe.com/prodindex/acrobat/readstep.html
5. http://www.aladdinsys.com/expander/index.html

Macintosh artist and interested in preparing a cover for ATPM, please e-mail us. The way the process works is pretty simple. As soon as we have a topic or theme for the upcoming issue we let you know about it. Then, it's up to you. We do not pay for cover art but we are an international publication with a broad readership and we give appropriate credit alongside your work. There's space for an e-mail address and a Web page URL, too. Write to editor@atpm.com for more information.

How Can I Send a Letter to the Editor?

Got a comment about an article that you read in ATPM? Is there something you'd like us to write about in a future issue? We'd love to hear from you. Send your e-mail to editor@atpm.com. We often publish the e-mail that comes our way.

Do You Answer Technical Support Questions?

Of course. Email our Help Department at help@atpm.com.

How Can I Contribute to ATPM?

There are several sections of ATPM to which readers frequently contribute:

Segments: Slices from the Macintosh Life

This is one of our most successful spaces and one of our favorite places. We think of it as kind of the ATPM "guest room." This is where we will publish that sentimental Macintosh story that you promised yourself you would one day write. It's that special place in ATPM that's specifically designated for your stories. We'd really like to hear from you. Several Segments contributors have gone on to become ATPM columnists. Send your stuff to editor@atpm.com.

Hardware and Software Reviews

ATPM publishes hardware and software reviews. However, we do things in a rather unique way. Techno-jargon can be useful to engineers but is not always a help to most Mac users. We like reviews that inform our readers about how a particular piece of hardware or software will help their Macintosh lives. We want them to know what works, how it may help them in their work, and how enthusiastic they are about recommending it to others. If you have a new piece of hardware or software that you'd like to review, contact our reviews editor at reviews@atpm.com for more information.

Shareware Reviews

Most of us have been there; we find that special piece of shareware that significantly improves the quality our Macintosh life and we wonder why the entire world hasn't heard about it. Now here's the chance to tell them! Simply let us know by writing up a short review for our shareware section. Send your reviews to reviews@atpm.com.

Which Products Have You Reviewed?

Check our reviews index[1] for the complete list.

What is Your Rating Scale?

ATPM uses the following ratings (in order from best to worst): Excellent, Very Nice, Good, Okay, Rotten.

Will You Review My Product?

If you or your company has a product that you'd like to see reviewed, send a copy our way. We're always looking for interesting pieces of software to try out. Contact reviews@atpm.com for shipping information.

Can I Sponsor ATPM?

About This Particular Macintosh is free, and we intend to keep it this way. Our editors and staff are volunteers with "real" jobs who believe in the Macintosh way of computing. We don't make a profit, nor do we plan to. As such, we rely on advertisers to help us pay for our Web site and other expenses. Please consider supporting ATPM by advertising in our issues and on our web site. Contact advertise@atpm.com for more information.

Where Can I Find Back Issues of ATPM?

Back issues[2] of ATPM, dating since April 1995, are available in DOCMaker stand-alone format. In addition, all issues since ATPM 2.05 (May 1996) are available in HTML format. You can search[3] all of our back issues.

What If My Question Isn't Answered Above?

We hope by now that you've found what you're looking for (We can't imagine there's something else about ATPM that you'd like to know.). But just in case you've read this far (We appreciate your tenacity.) and still haven't found that little piece of information about ATPM that you came here to find, please feel free to e-mail us at (You guessed it.) editor@atpm.com.

---

1. http://www.atpm.com/reviews
2. http://www.atpm.com/Back/
3. http://www.atpm.com/search