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About This Particular Macintosh: About the [personal](#) computing experience™

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Welcome

It's September. That's means the month that parents get their lives back. No more cross-county treks to summer camp or round-robin child-care arrangements with other parents thinly disguised as "parties." Back To School season has begun! It's time once again to pack up the summer leisure stuff and get ready for the demands of autumn and the lack of a real break from work until the holidays.

What's on your Back To School shopping list? If you're like most consumers these days the list doesn't contain any reference to a new Mac or PC. That's a problem for most of the major PC makers, Apple included. It may also mean that next year at this time there may be one fewer major PC maker in America. Which PC maker won't be around next year? The editors of *ATPM* are here to help sort out the facts. We'll give you a hint: Apple may soon be America's #3 PC maker.

A Long, Dry Summer

Late last month HP released its quarterly earnings. Thanks to the recent HP-Compaq merger, the world's largest PC maker recorded a \$2 billion loss, mostly from extraordinary charges relating to the largest PC industry combination in history. Apart from the extraordinary charges, the company made about \$420 million including a profit of more than \$800 million from its flagship printer division. How did the printer division make more than \$800 million but the company report a net profit from operations only of \$420 million? You guessed it! HP's PC division continues to lose lots of money. Still, HP will most likely be around next year.

Our friends at Dell (we use the term "friends" quite loosely) have seen over the past twelve months or so about \$3 billion disappear from the company's balance sheet. Where did the money go? Over the past year Dell has been aggressively repurchasing the company's stock as a way to invest its corporate bankroll at a time of extraordinarily low interest rates and prop up the company's earnings per share. The fewer shares outstanding, the more earnings attributable to the remaining shares.

Mac users may not be fans of Dell Computer or its products, but we must give the entity often derided as the "anti-technology" company credit for its consistent profitability and uncanny ability to gain market share. Dell lost the worldwide PC sales crown to HP following the merger with Compaq, but the Texas-based company is on the verge of regaining the PC sales top spot as the executives at HP continue to focus their time and attention on merger-related issues. Dell is one of only two of the major PC

companies with profitable PC sales. The other company that has been able to report a profit from PC sales in a very challenging market is...Apple Computer.

That's right. The Mac maker, despite its challenges, is one of the most efficient PC makers on the planet. In mid-August, to comply with new SEC regulations and anti-corruption corporate legislation, Apple certified its financial statements from last year's annual report to the present time more than four months early. Apparently Apple can do things quickly (when it chooses to do so)!

Over the summer Apple earned the ire of its customers with the conversion of the free iTools service to the subscription-based .Mac service. Further, the company decided to charge its customers for the Mac OS X 10.2 upgrade. Apple stated at the end of the last fiscal quarter that the three-month accounting period to end in September might result in a loss. The reason for the loss is that Apple must write-down the sale of its investments in EarthLink and Akamai due to the long-term drop in the share prices of the two companies.

Apple will be taking an extraordinary charge for layoffs at its Sacramento manufacturing facility and job cuts at its Cupertino headquarters. Despite the layoffs Apple's employee head count continues to grow. The extraordinary charges should total in the area of \$30 million to \$40 million. The revenues generated from the sales of Mac OS X 10.2 and sales of .Mac subscriptions may compensate for the extraordinary charges. Apple, Dell, and HP should all be around next year.

So who is left? Actually who won't be left next year? Gateway, which has ceased its overseas operations and recently closed several money-losing Gateway Country Stores, may have trouble remaining in business for another twelve months. The company entered the calendar year with well over \$1 billion in cash but has yet to figure out a way to return to profitability. In an unusual move, Gateway has chosen to take on Apple in an expensive media campaign comparing its all-in-one PC to Apple's iMac.

Gateway is a Windows PC maker and was beginning to hold its own in battling Dell and HP in the enterprise market. Now Gateway wishes to challenge Apple in the consumer sales arena. Gateway's new ad campaign is both expensive and risky. If the campaign fails to revive Gateway's slumping consumer sales, the expense of the campaign and the diversion of the company's scant resources to a consumer push, at a time when most consumers aren't considering a new PC, may accelerate the company's demise. Apple already outsells Gateway in the worldwide market and is gradually gaining ground on Gateway in US sales.

While the PC industry plays its own game of “Survivor,” please take a look through our September issue. It’s full of news, views, and reviews about products for the Mac. No matter the travails of the PC industry, please rest assured that 12 months from now Apple Computer and the Macintosh platform will still be standing.

The ATPM Staff

Our September issue includes:

The Candy Apple: Home Is Where the Heart Is

Ellyn Ritterskamp takes on some high points and low points of being a member of an online community.

The Personal Computing Paradigm: Mac OS X 10.2—First Impressions

Michael Tsai looks at Jaguar, covering installation, a Radeon incompatibility, the improved Finder, and the new font smoothing options.

Profiles in Networking: The Audio/Video Quadras (660av, 840av)

Jaguar and Rendezvous are here, but we still have not forgotten that some older Macs still want to talk to each other. Matthew Glidden explains the networking options for the A/V Quadras, the first Macs with special hardware for multimedia processing.

Roll Your Own: Charting Your Success

An algorithm is not a new Latin beat. Chuck Ross continues his series by explaining what such a beast really is, and how you can use it to create your own software.

How To: What’s Under the Hood

Mac users are renowned for wanting to customize their computers, either for efficiency or for fun. This month, Robert Lewis tells us what he uses in Mac OS X and Mac OS 9.2.2. This may help you discover some software to improve your computing experience.

Cortland

Deadlines, you say? Matt Johnson’s Cortland cartoon gives us his take on how some bosses “delegate.” A second Cortland shows how the design and sales departments interact.

Desktop Pictures

Anthony Peelen sure gets around! He sends us snaps of his recent trips to Croatia, Mexico, and Andalusia.

Review: Anonymizer Ultimate Security Suite

Gregory Tetrault reviews Anonymizer, a security suite (software and service) that not only keeps your identity secret while you’re browsing, but also encrypts your network activity, preventing others from eavesdropping on you.

Review: Auto Charger for iPod

The Auto Charger for iPod gets tested out by Ellyn Ritterskamp. This piece of hardware allows you to use your iPod to recharge your car battery if you find you need a jump. Or maybe it’s the other way around.

Review: Forma 2.0.7

Forma 2.0.7 may look like Tetris, but as Brooke Smith found, it’s far from it. Actually more complicated and challenging, Forma is also less addictive than Tetris, so you can play the game and still get some sleep at night.

Review: LeatherPod

Chris Lawson checks out the LeatherPod, a simple and stylish case for your iPod. If your iPod is scratched up, it may be too late for a case to be much help; but if your iPod is relatively new, consider protecting it before it’s too late.

Review: The Missing Sync 3.0

If you have a Sony CLIÉ and need to sync it up with your Mac, Chris Lawson will tell you that what you need is The Missing Sync 3.0. Now the most stylish PDA and the most stylish computer can work together.

Review: Optical Elite

Eric Blair reviews Kensington’s Optical Elite mouse, which goes well beyond the Pro Mouse that comes with new G4s. It offers four well-placed buttons and a scroll wheel, as well as an illuminated optical sensor.



Shareware and AppleScript

I can't believe I only just discovered AT^{PM}. I have been a Mac user forever. As a shareware developer I have been lobbying the print Mac media to give more coverage to shareware in their magazines. I am delighted to see that *Shareware Roundup* is a regular feature in your publication. I also like that you provide useful instruction and articles related to AppleScript.

In my opinion, shareware and AppleScript are both fundamental to the Macintosh community and, therefore, to the Macintosh platform itself. Shareware provides inexpensive solutions for everyday users while AppleScript gives those same users the power to interact with their computer in very personal and powerful ways.

Overall, AT^{PM} seems to me to be perfectly attuned to the needs of everyday Macintosh users, providing up-to-date, pertinent information while avoiding all the technobabble that often accompanies this kind of reporting. I will miss no more issues of AT^{PM}. I have subscribed and look forward to future issues as well as browsing through the [back issues](#)¹. Thanks for providing such a valuable resource. And for free too!

—Terry Findlay

Multiple Monitors on a Notebook

I have a Mac PowerBook G3 (Bronze Keyboard) and have one external VGA CRT monitor attached to the VGA out. Is it possible to connect a second VGA CRT or LCD for a total of three monitors, each acting as one virtual desktop (vs. mirroring)? Is it possible with this notebook? Also, is it possible with the new Titanium PowerBooks?

—brockstr

No—you can only use one external monitor with your laptop. If you want to use more than one, you would have to rig up something fancy with the PC card slot. You could either find a video PC card compatible with the Mac, or you could use a PC card expansion chassis that provides PCI slots, and then you could plug one or more video boards into the PCI slots. This would not be a portable setup, but it would work. —Evan Trent

ATPM Reviews

My two cents worth: your reviews of new software programs are the best thing about AT^{PM}. The freeware application Locator, [reviewed](#)² in your latest issue for example, is a jewel.

Sherlock on my G3 is sloooooow to launch and sloooooow to search my hard drive. On the other hand, Locator is close to instantaneous.

If you haven't reviewed Carbon Copy Cloner or LiteSwitch X, may I recommend that you do so. I use them both; others would probably find them very worthwhile to download and use.

—Bob Gerard

LiteSwitch X is mentioned in this month's "What's Under the Hood," and an article slated for October will discuss Carbon Copy Cloner. We welcome reader submissions, so if you know of a cool product that we haven't reviewed, e-mail us at editor@atpm.com. —Eds

Switching to Mac OS X³

You've expressed my concerns quite well.

—Jack Waller

...

I upgraded to OS X, no matter what I had to do. I bought a new printer and will buy a new scanner. I also bought a new eMac. Not having a "frozen" Mac since December is priceless.

—Gustavo J. Llawaneras S.

...

One thing I disagree with is the "high prices" [that you say] developers are charging for their Mac OS X upgrades. Please take in to consideration the *major* development time and energy involved in revamping software for this new OS. There's a lot of engineering, testing, etc. and time that goes in to it. I'd argue that it is a bargain to get some of these upgrades.

—Jennifer Watson, Aladdin Systems

...

Yeah, why doesn't OS X support my Apple II? Why doesn't Apple put tons of time and labor into producing completely free operating systems that support every Mac ever made?

Get a grip!

—Les Brown

...

OS X really looked like it was going to be absolutely revolutionary...Unix with Apple's ease of use and polish. Wow!

Unfortunately, after using OS X, I have found it to be a second-rate OS.

1. <http://www.atpm.com/Back/>

2. <http://www.atpm.com/8.08/locator.shtml>

3. <http://www.atpm.com/8.08/segments2.shtml>

Don't get me wrong, I like all the promises of Unix and I have owned Macs since 1988. In fact, I liked my Macs so much that I actually worked at Apple for three years. Because of my experience at Apple, I started my own business doing network consulting and I have Apple to thank for it all.

I would be willing to fully upgrade to OS X if I felt it were superior. The money doesn't bother me in the least.

However, the major problems I have with OS X are:

- It's slow (yes, my optimized OS 9 machine is faster).
- It includes features that I don't want to have installed on my computer, namely a Web server, an e-mail server, etc.
- It's not more stable than a well-set up OS 9 machine. In fact, I have had numerous freezes where OS X couldn't respond or even force quit.
- It's complicated. Most users don't need or care about multi-user computers or logins for that matter. This feature should be optional.
- OS X is huge in terms of the sheer number of files that make up the OS. I don't know how many of you have noticed but OS X is roughly 40,000 tiny files. This takes a huge amount of time to run a disk utility on to make sure everything is OK.
- OS X doesn't make it easy to see the crucial files and folders. Most of them are hidden but shouldn't be.
- Finally, and I know most of you will not like to hear this, I believe that Windows XP is a better-executed OS than OS X currently is. Microsoft did a really good job of migrating and unifying their code base while permitting most of their users to be able to use all their learned skills. With OS X, almost all of the knowledge that I've gleaned over 14 years of using the Mac OS is nearly useless. I can't use any of it to clean up the OS and make it faster or more stable.
- And finally...in Apple commercials and print advertising, wasn't it Apple that made fun of DOS users by saying that you'd never have to memorize a string of text to control or use your Mac? What do they consider the Terminal to be? Unless I've missed something, I can't use my mouse in the terminal, but instead I need to memorize a bunch of Unix commands to get to some of the most basic commands [like empty the trash —Eds]. Why? Is this progress? Also, it was Apple that pioneered the use of [metadata](#)¹ to associate documents with applications. Now Apple wants to obliterate that and go to using file extensions. *File extensions? On my Mac? Apple used to make fun of this as well on Windows computers. Apple said that to use a Mac you'd never have to use a file extension.*

I guess things really have changed...and not for the better.

—Walter

...

1. <http://arstechnica.com/reviews/01q3/metadata/metadata-1.html>

I am ashamed to read all of the garbage written by these so-called Mac users. All right, don't upgrade your Mac. OK, don't move to OS X. And then when you have your way and spread your doom and gloom and all of us other Mac users are following you instead of the path to the future, please don't complain when Apple is broke and you *have* to buy a PC and join the glorious alternative and become a slave to Bill Gates and Microsoft.

The only way Apple can continue to be a lone beacon of elegance and humanity in the world of personal computing is if the company continues to make a profit. And no company stays in business if they don't make a *real* profit, and they don't stay in business for long if they gouge their regular customers.

From my scant knowledge of the costs involved in developing an OS, I think that OS X is a bargain. Sure, I have had to buy new software, but in almost every case the change has not only been to accommodate the new OS but has also brought new features and usability.

I have bought all of the OS X versions including the public beta and have found them all interesting and exciting to use. I run three business and have two Macs and will soon dispense with OS 9 altogether when Canon produces a driver for their N650u scanner.

—Richard Dalziel-Sharpe

...

Hmm, where to begin. I am a photographer and freelance retoucher and use my G4 400 (AGP) and iBook (600) just about all day long. I was extremely skeptical of OS X when it was first released. I flat out rejected it. I figured I know every little inside and outside to OS 9 and every way to fix it when things went wrong! Well, when I bought my iBook, it came with OS X, so I figured I'd give it a try. As much as I knew OS 9, it is total crap when compared to OS X. I no longer need to know how to fix problems because my computer is more stable than ever. I have been running X for about eight months now and have not even looked back. I have now installed Jaguar and it did speed up my machine incredibly. This is a *great* operating system, people. You just have to get beyond rejecting it and you will embrace it.

—Steve

Dear ATPM Readers:

As expected, my August column, [Why I Haven't Switched to Mac OS X²](#), generated numerous responses. Some readers misunderstood my purpose for writing that column and some of the points that I made. To put things in context, in July, a top executive at Microsoft openly complained about poor sales of its OS X version of Microsoft Office. He blamed the poor sales on the fact that many Macintosh users failed to upgrade to OS X. My column pointed out some reasons why Mac users have avoided OS X.

In response to Gustavo J. Llanerías S.: Avoiding a few OS 9 crashes is not "priceless." Even if you are willing to spend

2. <http://www.atpm.com/8.08/segments2.shtml>

hundreds or thousands of dollars to avoid freezes and crashes, OS X was not the solution. The initial versions of OS X crashed at least as frequently as a stable installation of OS 9.1 or 9.2.

In response to Jennifer Watson of Aladdin Systems: Why am I not surprised that a software developer argues in favor of high-priced upgrades?

In response to Les Brown: My column explained that one reason why many Mac users stick with OS 9 is that their Macintosh hardware is not supported by OS X. I did not expect Apple Computer to make OS X backwards compatible with 680x0 CPUs or even the original PowerPC (G1 and G2) CPUs. I did expect Apple to make OS X compatible with all G3 CPUs, especially since Apple promised us it would be.

In response to Richard Dalziel-Sharp: Macintosh users have no

obligation to buy unneeded or overpriced software just to help Apple Computer's cash flow. First, Apple Computer is sitting on over four billion dollars in cash and liquid assets. It doesn't need \$129 from me to stay operational. Second, Apple Computer is the vendor and we are the customers. It is the vendor's responsibility to produce products that appeal to customers. Buying unneeded, shoddy, or overpriced goods is also bad economics: it rewards a company for doing the wrong thing.

In response to Steve: I am glad your OS X experience was so good. However, I do not feel that I rejected OS X. I believe that OS X rejected me and my beige G3s. [An aside: I believe that Apple's rev 2 beige Power Macintosh G3 is one of the best desktop computers ever made. Full OS X support for those computers would be icing on the cake.] —Gregory Tetrault, *ATPM Writer*

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Home Is Where the Heart Is

This month I want us to think about the nature of community, especially cyber communities. There are ways in which online communities are like real-life groups and ways in which they are very different. Some of us, in fact, spend more time and energy in online villages than we do in real-life communities, and it's worth thinking about the pros and cons of this lifestyle.

I'm a member of two online communities. One is the staff community of this e-zine. We are linked by group e-mails and occasional private e-mails. Sometimes, several members of the staff converse over several days about various topics, most of which are Macintosh- or computing-related. Once such a discussion gets down to only two interested parties, we usually take the conversation to individual e-mail, to spare the rest of the staffers from having to read stuff they're not interested in. There's also a bandwidth issue; not everyone cares to download a bunch of messages they already know they won't read. In this group, for instance, once the topic turns to anything about programming or writing code, I know I don't need to bother because I won't understand it. Half our staff, though, thinks that stuff is fascinating and can chat about it all the time. That's why they're good at what they do— they Get It.

So, in order to be courteous to everyone on the list, it's important to put some sort of informative subject title in the header. So if I see an e-mail from a staffer that says, "OS X Griddits and Friddists," I know I don't need to even open it. That's easy. That's just courtesy we've all learned to extend to each other. We've also worked out a way to alert each other of non-computing topics. We just put "OT" at the beginning of the subject line, for Off Topic. That way, if three or four people want to send notes about a movie they've seen recently, they can. Mostly they don't, because members of this staff are also members of other communities where such conversations feel more congenial. But if we want to talk about what we got for a birthday present or something, we just call it "OT: New Bike for My Birthday." Those who want to read it, read it, and those who don't, don't.

So this community of ATPM staffers is one with a clear common goal: we're here to learn and teach about Macs, Apple, and computing, and to put out an e-zine every month. That gives us a fairly specific focus, and the nature of our community is shaped by that focus. In some (good) ways it feels like a corporate work environment, even though we're all volunteers.

The Tavern Analogy

The other online community of which I'm a member is very different from the one at ATPM. It includes maybe 150 active members who make about 800 posts a day to a message board. Of those 150 active members, perhaps 40 do much of the posting, with the others making more occasional posts. This online community feels more like a real neighborhood or, as one member put it a few months ago, like a tavern. You wander in for the evening, make small talk with the person next to you, and either stick around for a long talk or leave early. Whatever you want.

There are some people you like and some you don't like. That's the way life is. That's the way the tavern is. You figure out which ones make you crazy and you don't talk to them. The great thing about having so many people in the group is that you're bound to find someone you like. Several someones, even.

The corollary to this is that when you make a friend online, unless you're being deceived (more on that later), you're somehow getting to know the real person in ways that aren't as easy in real life. It's true that we give up the ability to read body language and to see people's winks and smiles, but over time, a person's words usually present a very clear picture of what's important to them. You get to know the deep-down stuff and not just the superficialities of appearance. I have one online friend I know better from a year or so of exchanges than many people I know in real life. I like her better than some of them and I've never spoken to her or even seen her picture. I have no idea what she looks like, but that's part of the fun. I'm connecting with a real person and not just whatever role she has to play in society.

The same goes for lots of other members of this group. Sure, sometimes we play roles of joke tellers, or quiz masters, or dirty old men, or whatever, but over time, the genuineness of good people shines through. We all gravitated toward this message board because we're fans of a particular television show, but when that show wasn't renewed, many of us remained with the group. We couldn't just walk away from months and years of hanging out with each other.

Now we get pregnancy updates, and people post pictures of their babies and pets. We celebrate when someone gets a new job, and grieve with them when they suffer personal losses. These relationships have required as much energy to nurture as any flesh-and-blood relationships.

This makes it just as tough when something goes sour. We all post under anonymous handles, and sometimes to have fun, people create additional handles to play with. Once in a while the extra layer of anonymity tempts people to say things they don't want to say "as themselves," and the play gets out of hand. Something like that happened in our group a while back, and recently someone figured out who it was, and that a third person had helped cover it up.

There have been a few awkward days of revelations, and some tiptoeing around while people figured out how to reattach themselves to this suddenly more fragile community. It's been this process that got me started thinking about how and why our online society is like and not like our real-life society.

For the most part, in contemporary America we're allowed to choose which groups we want to be part of. We can be leaders in one group, followers in another, and only casual participants in others. Schools, churches, work groups,

sports-themed groups, dance clubs, whatever. We enter and leave groups as we like. John Dewey said something important about our ability to move among groups, but I can't remember the exact context. He probably thought it was what separated us from other species, and I mean that in a good way.

So just like a neighborhood group, my online community dealt with its little transgressors. The responsible parties stood up and apologized for their actions and took responsibility for them. Most everyone involved had begun with good intentions, so a little time will take care of any leftover wounds. Everyone had the courage to own their actions and to answer as best they could why they had done what they did. The rest of us kept in mind that the sense of community we gain from each far outweighs any temporary hiccups along the way. And after all the hemming and hawing, accusations and mediations, it made sense to say...

Onward.

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The Personal Computing Paradigm

by Michael Tsai, mtsai@atpm.com

Mac OS X 10.2—First Impressions

My copy of Mac OS X 10.2 didn't arrive until September, so this article will only cover my very first impressions of it. For now, I will focus on how the basics have improved since 10.1.5. Perhaps next month I'll take a look at the exciting new technologies like Rendezvous.

Installation

Although I've never had trouble in the past, it's always a good idea to preserve your old system installation when upgrading to a new version of an the operating system. One way to do this is to rely on your normal backup, but be careful if you go this route. It may take many hours to reinstall your system software and backup program, and then to restore everything from the backup. If you can, it's better to make a separate clean installation to test the waters. Since Mac OS X doesn't support multiple installations on a single partition, you'll need either two partitions or two drives.

My Macs are a year-old Quicksilver G4 and a 600 MHz iBook. While I was working on the G4, I used the iBook to install 10.2 on an external FireWire drive. Perhaps it was the [new CD](#)¹ I was listening to, but the 10.2 installation didn't seem to take very long, even though it required two CDs.

Speed

Pretty soon, I was running Jaguar on the iBook. Even though Quartz Extreme doesn't support my iBook's video card, performance is much improved. The Finder is more responsive, and list view is actually usable when you sort by something other than name. Applications load faster. Menus don't seem as sluggish. Browser windows resize more smoothly. BBEdit's Find & Replace window draws faster. There's no more delay when opening the Startup Disk preference pane. OS X still feels slow compared to OS 9 running on the same hardware; it probably always will because it's *doing more*. But with 10.2 it runs at what I consider to be an acceptable speed on an iBook. If you're running Mac OS X on a G3 today, the 10.2 upgrade is worth it for the speed increase alone.

Prudence Pays

The next step was to attach the external drive to my Quicksilver to try 10.2 there. The boot process started normally, but then the old 50% gray halftone replaced the normal boot screen and the machine froze. Luckily, I was able

to unplug the external drive and reboot with 10.1.5 from the internal drive. The problem was that 10.2 is [incompatible](#)² with the PCI Radeon video card that I use to drive my second display. Sure enough, after I removed the PCI card 10.2 booted fine on the Quicksilver. Given that Apple shipped this Radeon on its own build-to-order machines, I've got to wonder how they let Jaguar out with such an obvious flaw. Well, I guess they can say that they didn't miss their release date.

Finder

Spring-loaded folders are back, right? Wrong. The more useful aspect of spring-loaded folders *is* back in that you can drag files onto a folder to tunnel down and find where you want to drop them. Not back, are the spring-loaded folders that you activate with a click-and-a-half to browse when you aren't dragging anything. Apple evidently wants to replace this with Columns view. However, Columns view takes more screen space than the other views and can only sort by name.

I already mentioned that Finder responsiveness is much-improved. Other parts of the Finder are also improved. It now provides the option of using normal Get Info windows that always track the same item. The 10.1 "inspector" window that always tracks the current selection is available if you hold down Option.

The Finder has a new Find command that harkens back to the System 7 days. It's both faster and easier to use than the travesty that was Sherlock on OS X. Unfortunately, some of the familiar search criteria are gone, so you may have to resort to a utility like File Buddy.

Although 10.2 continues to rely on filename extensions more than it should, the Finder now has an Open With command that lets you open a file with a non-default application. Holding down Option is supposed to change the application binding permanently, but it saves the setting in the fragile Launch Services database rather than using the file's creator code.

The other main problem with the 10.1 Finder was that the Icon and List views didn't work as well as their Mac OS 9 counterparts. A major improvement in 10.2 is that you can now adjust the font size of these views (as well as Column view), down to a minimum of 10pt (instead of 12). This makes it possible to see more files at once. Unfortunately, one aspect of List view is actually worse than in 10.1 With only a

1. <http://www.amazon.com/exec/obidos/ASIN/B000056T6C/aboutthisparticu>

2. <http://www.macnn.com/news.php?id=16112>

single column showing, I was unable to get the right edge of the column to stick to the right edge of the window. It always seemed to be too wide or too narrow for the window.

Other, long-standing problems with the OS X Finder windows persist. If you save a file from an application, you have to click in the Finder window before the file shows up. The windows sometimes forget whether the toolbar was visible and how the icons were arranged. Making a new folder in List view sometimes causes the Finder to scroll the window horizontally, even if the folder name already fit in the displayed part of the view.

Fonts

When 10.1 was released, I [complained](#)¹ that its font smoothing made small text look blurry. You could turn off the smoothing at smaller font sizes (except in the Finder), but then you'd run into OS X's poor spacing of screen fonts. It was a [choice](#)² between letters running together and blurry text.

With 10.2, two changes help resolve these font issues, though not completely. First, the 10.2 Finder obeys your font smoothing preferences. Second, the system now lets you choose among four different levels of font smoothing. The first, known as Standard, is the font smoothing present in 10.1. The other three are known as Light, Medium, and Strong. They incorporate [sub-pixel font rendering](#)³ and give you some control over the darkness of the text.

It's difficult to compare the levels live, because you have to quit and relaunch applications before they notice that the setting has changed. Below is an image that shows the way Finder text looks in System 7, Mac OS 8/9, Mac OS X 10.1, and Mac OS X 10.2.

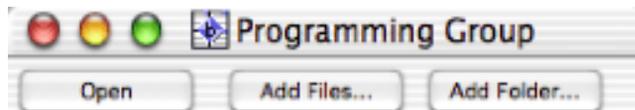
Mac OS X 10.2 has four levels of font smoothing.
Mac OS X 10.2 has four levels of font smoothing.
Mac OS X 10.2 has four levels of font smoothing.
Mac OS X 10.2 has four levels of font smoothing.
Mac OS X 10.2 has four levels of font smoothing.
Mac OS X 10.2 has four levels of font smoothing.
Mac OS X 10.2 has four levels of font smoothing.

The first two lines show Geneva text rendered by QuickDraw at 9pt and 10pt. The first line is the default Finder font size in System 7; the second is the default in Mac OS 8 and 9. The third line shows 12pt Lucida Grande with Quartz's Standard font smoothing. This is the default Finder font in Mac OS X, and the only one available prior to 10.2. The next four lines show Lucida Grande 10pt with Standard, Light, Medium, and Strong font smoothing.

The last line shows Lucida Grande 10pt without font smoothing.

1. <http://www.atpm.com/7.10/paradigm.shtml>
2. <http://www.atpm.com/7.10/images/pcp-fonts.gif>
3. <http://grc.com/ctwhat.htm>

10.2 is an improvement over 10.1 in that the Medium and Strong font smoothing options allow for blacker text that's easier to read. Unfortunately, the stronger font smoothing tends to make the text look thicker. This is especially apparent in the menu bar. Overall, my Finder has gone from the third line (in 10.1) to the last line (in 10.2). I find this a big improvement, though Lucida Grande still doesn't look as good at small point sizes as the Geneva of the first two lines. The "X" in particular is oddly formed, and examples with other letter sequences show that Quartz still fails to put any horizontal space between certain characters.



The new 10.2 sub-pixel smoothing adds colored artifacts, which are visible even on LCD screens. In this example, look at the second half of the word "Programming," the middle of "Files," the "d" of the second "Add," and the "l" and "d" in "Folder."

Conclusion

There are far more changes in Mac OS X 10.2 than I have mentioned above. Apple's developer [Technical Note](#)⁴ lists many of the bugs that were fixed. There are also major improvements to many of the bundled applications. Preview now shows thumbnails for multi-page documents. Mail has improved filtering and spam features, though its inexact search engine and poor support for message threading continue to make it unsuitable for heavy use. Sherlock 3 brings [Watson](#)⁵-style Internet services to everyone, though Watson is faster and has more tools. Though there are still lots of problems with Mac OS X, most things are improved in 10.2. (The notable exception is open and save dialogs, which *still* aren't properly navigable from the keyboard.) 10.2 won't get everyone to switch from OS 9, but it's a no-brainer for users of 10.1 and well worth the upgrade price. I'll be happy to use it once Apple resolves the hardware incompatibilities.

4. <http://developer.apple.com/technotes/tn2002/tn2053.html>
5. <http://www.karelia.com/watson/>



The Audio/Video Quadras (660av, 840av)

First announced as an extension to the Centris and Quadra series in 1993, the Quadra 660av and 840av models were among the first Macs with integrated audio and video processing, a fairly novel concept for the 1993 consumer. The 660av boasted a 25 MHz CPU, but its 840av bigger brother was the fastest Mac at the time, clocking in at 40 MHz. Form factors differed, with the desktop 660av taking after the aforementioned Centris series and the tower 840av taking a page from the Quadra 800's book. Geeks and artists alike coveted the audio and video capabilities and the models' popularity continued far beyond Apple's 1994 discontinuation date. These features were forefront in my mind when I picked up a Power Mac 8500 (the next generation 840av) in 1996.

Quadra 660av and 840av models have 68040 processors, so they can use up to Mac OS 8.1. They differ in internal expansion options, which impacts their network use. The Quadra 660av has one 7" NuBus slot, one processor-direct slot (PDS), and an external AAUI connector for an Ethernet transceiver. The Quadra 840av has three full-size NuBus slots and an external AAUI connector. Both models support LocalTalk networking through the serial (modem and printer) ports.

Adding Ethernet Network Support

Many vendors produced NuBus and PDS Ethernet cards and Ethernet transceivers during the Quadra model lifetime. Though the cards are now discontinued—like the models themselves—some are still available through parts resellers. Adding a NuBus or PDS card requires opening the Quadra's case (Oh boy! High voltage!), so check the yellow pages for a local Apple Service Center if you're not sure how to proceed.

Selected List of Internet Parts Sources

- [eBay Macintosh Hardware Auctions](http://pages.ebay.com/catindex/catapple.html?ssPageName=CompHubRevAppAll)¹
- [Small Dog Electronics](http://www.smalldog.com)²
- [MacResQ](http://www.macresq.com)³

When shopping, check the Networking or Communications section, or search the parts list for Ethernet. Remember that you need plain PDS or 7" NuBus (not LC-PDS or full-size

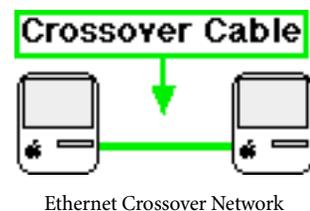
1. <http://pages.ebay.com/catindex/catapple.html?ssPageName=CompHubRevAppAll>
2. <http://www.smalldog.com>
3. <http://www.macresq.com>

NuBus) for the Quadra 640av. The 840av will use 7" or full-size NuBus, but not PDS. Both models can use AAUI Ethernet transceivers. Look for these card types in the item description, or check to see if they list your Mac as a supported model. The Quadra 660av and 840av both support 10BaseT Ethernet using an AAUI transceiver, so that's the least expensive option. Upgrading to 100BaseT requires an expansion card.

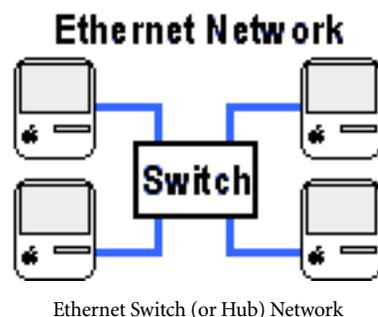
Most cards include support software, such as drivers and diagnostics. Many cards require their software to function properly, so be cautious when purchasing used cards that don't have the original software. The card manufacturer's Web site can be a saving grace, as many companies post their support software online, even for discontinued products.

Ethernet Network Setup

The cheapest networking setup uses a single Ethernet crossover cable, enabling two (and only two) Macs to talk to each other. New Mac models have auto-sensing Ethernet ports and can use regular or crossover cables for this connection, but older Macs like the Quadra 660av and 840av lack this feature and need a crossover cable specifically for this two-Mac network.



Networks with more than two Macs need an Ethernet switch or hub at the center. Connect each Mac to the switch with a piece of regular Ethernet cable.



Network Software

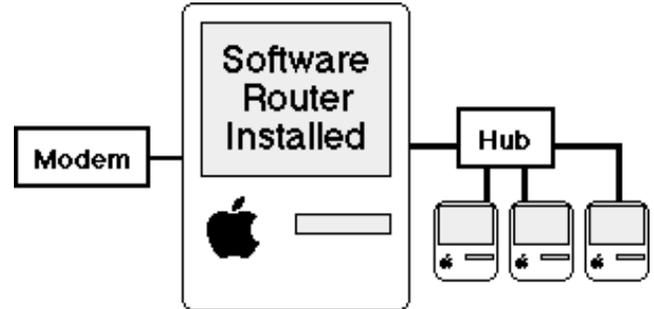
Once the cables are in place, install any software that came with your Ethernet card, then restart. Also check that you have the necessary Mac OS software. For Mac OS 8, that's three Control Panels (AppleTalk, File Sharing, and Users & Groups) and one Extension (AppleShare). If any of these are missing, download the [Open Transport 1.1.2 installer](#)¹ from the Apple Older Software Downloads page. For help sharing files between networked Macs, see the [ATPM/Threemacs Mac File Sharing page](#)².

Shared Internet Setup

If you install an Ethernet card in two of the available slots, or use an AAUI transceiver and an Ethernet card, you can share an incoming high-speed Internet connection with other networked Macs. You'll need a software router like

1. http://download.info.apple.com/Apple_Support_Area/Apple_Software_Updates/English-North_American/Macintosh/Networking-Communications/Open_Transport/
2. http://atpm.com/network/files/file_sharing.htm

Sustainable Softworks' IPNetRouter or VicomTech's WebDoubler to handle the exchange of Internet and network information. For more information on sharing Internet connections to your network, see the [ATPM/Threemacs Sharing an Internet Connection page](#)³.



Sharing an Internet Connection to Your Network

3. <http://atpm.com/network/internet/index.html>

Copyright © 2002 Matthew Glidden, mglidden@atpm.com. Matthew Glidden is the webmaster of Threemacs.com, a guide to constructing and maintaining home and small-office Macintosh networks. He can also tango and juggle, not necessarily at the same time.



Charting Your Success

This week we're going to cover some generic programming topics in addition to some specific AppleScript syntax. I had mentioned last month that I was planning to delve further into the `try...on error...end try` block this time, but the topic of algorithms and flowcharts is so large that we'll leave `try` blocks for next time.

Algorithms

Building complex software is no easy task. There are so many things to think about and keep straight. Over the decades, programmers have come up with tools to help them through the process. One of these tools is the algorithm.

An algorithm is simply a defined set of steps that accomplish a goal. My good old [DK Illustrated Oxford Dictionary](#)¹ describes it as “a process or set of rules used for calculation or problem-solving, esp. with a computer.” For instance, if the goal is to reach a friend's home, the algorithm is going to be the directions that he gives you. A common example to introduce students to algorithms is describing a system one might use for going through the mail.

Step 1: Get the mail from the mailbox.

Step 2: Go to your desk.

Step 3: Take the piece of mail on the top of the pile.

Step 4: If the mail you have is a bill, file it in “To Be Paid.”

Step 5: If the mail is a letter, read it. If not, go to step 7.

Step 6: Write a reply to the sender.

Step 7: If the mail is junk mail, throw it away.

Step 8: If the mail is a magazine, place it in the magazine rack.

Step 9: If there is more mail in the pile, take the next one and go to Step 4.

Step 10: All Done!

Obviously this algorithm doesn't cover all of the possibilities, but you get the idea. By giving these steps to someone else, they would be able to duplicate the actions needed to sort through the day's mail.

Algorithms are actually more abstract than this. The above list of steps is one way to express the algorithm for sorting through the mail.

When beginning to write software, the first thing you need to ask yourself is, “What will this software accomplish?” That is your goal. Now that you have the goal in mind, how is it going to be accomplished? Remember, computers are really stupid and have no intelligence whatsoever. When defining

what the steps are to solve a software problem, the steps have to be precise and detailed. Think through the problem slowly, making sure that you haven't left out some obvious step. For instance, in the above algorithm, what happens if there is no mail in the mailbox? The algorithm doesn't cover that possibility. Or what if the person reading the algorithm doesn't have a desk? In such cases the algorithm breaks.

This is one of the sources of bugs in systems: not thinking the problem through enough for the computer to understand. Most of the time the first algorithm that you create for a problem will not be complete, and will need to be refined as you begin testing your software. If you've been working with the sample program that has been featured for the last few columns, perhaps you caught the early trouble with entering text into the displayed dialog box instead of a number. Our [original program](#)² didn't handle this eventuality very well, although the [refined version](#)³ we wrote last month does a better job.

While an algorithm does eventually need to be very detailed for it to be of true assistance, you don't need to worry about all the details at once. Our mail sorting algorithm doesn't cover the details of filing a bill in “To Be Paid,” but we can refine our algorithm to cover that later.

Let's take a software problem and translate the solution to it into an algorithm. We will express this algorithm as “pseudocode.” Pseudocode expresses the algorithm with sentences that can be easily translated into computer language code. My background is in mathematics, so I hope those of you who hate math will forgive the problem I select, but we're going to build an algorithm that determines if a given number is a prime number or not. Non-prime numbers are also known as composite numbers.

A prime number is a positive whole number that is evenly divisible by exactly two numbers: itself and 1. Another way to put it is that prime numbers have only two factors. Given this definition, the first 4 prime numbers are 2, 3, 5, and 7. 1 is not a prime number because it is evenly divisible by only one number, itself. 4 is divisible by 1, 2, and 4, so it isn't a prime number either, and 6 is excluded because it is divisible by 1, 2, 3 and 6. In fact, with the exception of 2, no even numbers are prime because they will all be evenly divisible by 1, 2 and themselves, which is at least three factors.

1. <http://www.familyhaven.com/bookstore/reference/0789435578AMUS.html>

2. <http://www.atpm.com/8.06/roll.shtml>

3. <http://www.atpm.com/8.08/roll.shtml>

OK, so now that we know what a prime number is, let's try building an algorithm that determines if a number is prime.

First of all, we know that if the number is negative, then it isn't prime.

Step 1: If the number is negative, then it isn't prime.

What if the number is 0. 0 isn't prime because it's evenly divisible by everything (0 divided by anything is 0).

Step 2: If the number is 0, then it isn't prime.

We already covered the number 1, which isn't prime.

Step 3: If the number is 1, then it isn't prime.

Normally, if the number is even, it isn't prime, but 2 is a special case, so we'll cover it by itself.

Step 4: If the number is 2, then it is prime.

So here's what we have so far:

Step 1: If the number is negative, then it isn't prime.

Step 2: If the number is 0, then it isn't prime.

Step 3: If the number is 1, then it isn't prime.

Step 4: if the number is 2, then it is prime.

Hold on a second. We can refine our algorithm right away. The first three steps all determine if the number isn't a prime number in special cases, but all three cases can be covered with one test!

Step 1: If the number is less than or equal to 1, then it isn't prime. All Done! Otherwise, go to step 2.

Step 2: If the number is 2, then it is prime. All Done!

OK, we've finished with the special cases. Now let's get more general. For all the other numbers, we need to test them somehow. The way we test is to begin counting from 2 up to the number. If we ever reach a number while counting where the number we are testing divided by the number we are counting with is a whole number, then the number we are testing isn't prime, since if we had divided the test number by the counting number and gotten a whole number result, the test number would be a third factor. If we count all the way to the prime number and we never see a whole number quotient, then the number is prime.

Step 3: Begin counting at 2. Call the number you are counting with X and the number you are testing Y.

Step 4: If Y divided by X is a whole number, then X is not prime.

Step 5: Increment X by 1.

Step 6: If X is equal to 1 less than Y, the number isn't prime.

Ah! We're using variables! Remember [variables](#)¹ from our earlier column? Actually, we could use another variable, and let's give our variables some meaningful names. And let's include the step where we actually get the number from somebody. Also, let's include some more flow in our algorithm (remember [flow](#)² from last column?). After all, if we figure out if the number is prime in step 4 then we don't have to do step 5, do we?

Step 1: Get a number from the user and store it in the variable `theNumber`.

Step 2: Set a variable called `isPrime` to false.

Step 3: If `theNumber` is less than or equal to 1, go to step 10.

Step 4: If `theNumber` is equal to 2, set `isPrime` to true and go to step 10.

Step 5: Set a variable called `testDivider` to 2.

Step 6: If `theNumber` divided by `testDivider` is a whole number, go to step 10.

Step 7: Increment `testDivider` by 1.

Step 8: If `testDivider` is 1 less than `theNumber`, set `isPrime` to true. Go to step 10.

Step 9: Go to step 6.

Step 10: Tell the user the value of `isPrime`.

Let's test out the algorithm now and see how it does. We know that 7 is a prime number. Does the algorithm give this result? Well, step 1 stores 7 in `theNumber`. Step 2 stores false in `isPrime`. Step 3 checks if the number is less than or equal to 1, which it isn't, so we go on to step 4, which tests if the number is equal to 2. Also not true, so we go to step 5. We store 2 in `testDivider`. In step 6 we see if $7 / 2$ is a whole number. $7 / 2$ is 3.5, which is not a whole number, so we go on to step 7. After incrementing `testDivider` by 1, it is equal to 3. 3 is not equal to $7 - 1$, so we go to step 6 again. $7 / 3$ is 2.333, which isn't a whole number, so we increment `testDivider` again and get 4. $7 / 4$ is 1.75, also not a whole number, so we increment again and get 5. $7 / 5$ equals 1.4, again, not a whole number. Then we try $7 / 6$, which is 1.167, still not a whole number. This time, however, `testDivider` is equal to one less than `theNumber`, so we go to step 10. The variable `isPrime` never changed from the false we originally set it to, so we tell the user that 7 is prime.

It worked! But it sure took a lot of counting. Once you have an algorithm that works successfully, you can begin to think about how it can be improved. Often, an easy area for improvement is speed. Can we make the algorithm faster? Let's think about it for a minute.

If a number isn't prime, how soon can we guarantee that we will reach a factor? Factors are always going to come in pairs. Take the number 24, for instance. Its factors are 2, 3, 4, 6, 8, and 12. Each of those numbers can be paired with another of the numbers. 2 times 12, 3 times 8 and 4 times 6 are all equal to 24. Where does the pairing break?

It turns out that the square root of 24 is about 4.8, and half of the factors are less than that and half of them are greater than that. So if we increment the `testDivider` and it's greater than the square root of `theNumber` and we haven't yet found a factor, we know the number is prime. That means that we can break out of our testing earlier than we thought. Here's the revised algorithm:

Step 1: Get a number from the user and call it store it in the variable `theNumber`.

Step 2: Set a variable called `isPrime` to false.

Step 3: If `theNumber` is less than or equal to 1, go to step 10.

1. <http://www.atpm.com/8.06/roll.shtml>
2. <http://www.atpm.com/8.08/roll.shtml>

Step 4: If `theNumber` is equal to 2, set `isPrime` to true and go to step 10.

Step 5: Set a variable called `testDivider` to 2.

Step 6: If `theNumber` divided by `testDivider` is a whole number, set `isPrime` to true and go to step 10.

Step 7: Increment `testDivider` by 1.

Step 8: If `testDivider` is greater than the square root of `theNumber`, set `isPrime` to true. Go to step 10.

Step 9: Go to step 6.

Step 10: Tell the user the value of `isPrime`.

Notice how easily this pseudocode can be translated into AppleScript syntax. By thinking things through before we actually begin to write any code, we have made the code writing very easy. This is how programming works. After defining a problem and creating a solution in the form of an algorithm, all that's left is to translate the algorithm into code the computer understands. We'll wait to actually do that translation until we cover the next programming tool, flowcharts.

Flowcharts

Another useful tool for programmers is the flowchart. The flowchart is closely related to the pseudocode. In fact, they provide the same information, but in different forms. Whereas pseudocode is written down as the steps to perform, a flowchart shows how the steps fit together in a graphical format. Both express the algorithm in a human understandable format.

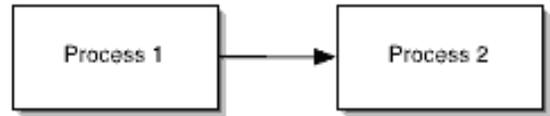
There are standard symbols that are used in flowcharts to signify different kinds of steps. The algorithm we've been working on has at least four different types of steps: input, output, processes, and decisions. Each of these type of steps has a different symbol in a flowchart. There are many other symbols that are standard for flowcharts, but these are the ones we'll work with for now.



You don't have to use these symbols, but they are helpful when reading the flowchart. Also, if you're passing your flowchart on to others they'll be able to read it more easily. Some of the symbols are ambiguous. For instance, what I've labeled as Input is sometimes also used for output, with a different symbol for manual input. In other words, the symbol I use for input is used for disk input or network input rather than user input. And the symbol I use for output is sometimes used only for output that is put on the screen, with different symbols for writing to disk. But most of the programs I write have the majority of their output to the

screen, and the output symbol I have decided to use (being similar to an arrow) helps me visually see that this is what is happening.

Symbols in a flowchart are connected with arrows to indicate the flow of the program.

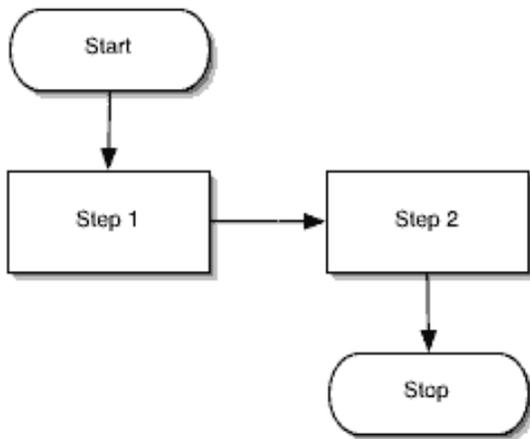


Here we see that Process 1 is followed by Process 2. Most symbols have two arrows connected to them, one coming in and another going out. However, the decision symbol is an exception to this rule. Like most other symbols, it has one arrow leading to it, but it had two arrows leading out, one for if the decision returns a "Yes" answer and another if the decision returns a "No." Each of the arrows that leads out of a decision symbol is labeled with either "Yes" or "No." When the arrow leading from a decision symbol meets another arrow in the flowchart, the flow of the program continues in the direction of the met arrow.



There is one special symbol that appears twice in every flowchart, the start/stop symbol. There will be one at the beginning of the flowchart and it should be labeled "Start" or

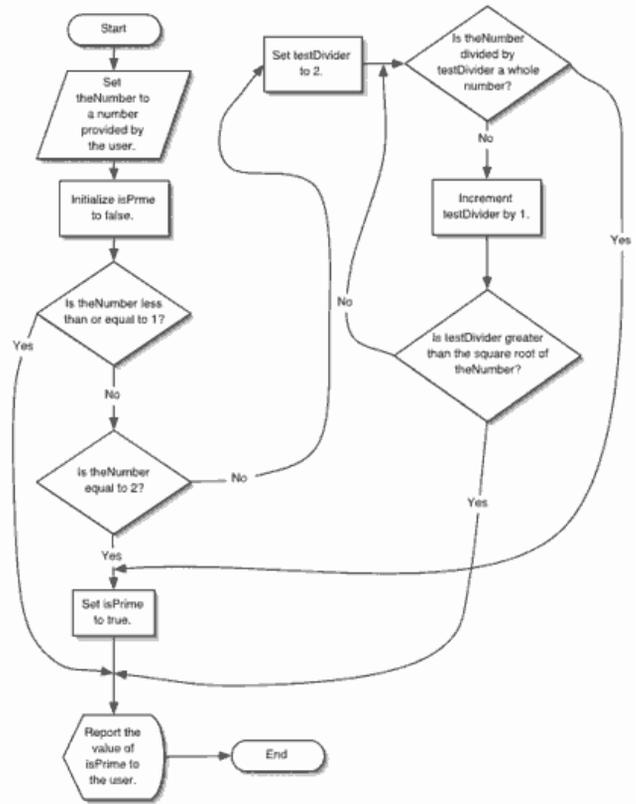
“Begin” and another at the end of the flowchart labeled “End” or “Finish.” The flowchart always begins at the “Start” symbol and execution must always end up at the “End” symbol.



As you can see from the flowcharts that I’ve given as samples, the flow of the flowchart tends to move from top to bottom and left to right.

Flowcharts can be built with any drawing program such as [AppleWorks](#)¹ (review²) or [Illustrator](#)³ (review⁴). You can even use the drawing tools included with [Microsoft Word](#)⁵. However, there are a couple of programs that have been built specifically for building flowcharts. If you’re using Mac OS X, I can highly recommend [OmniGraffle](#)⁶ from The Omni Group. The Omni Group is well known for publishing beautiful software for Mac OS X. Available for Mac OS X or Classic is [ConceptDraw](#)⁷ from Computer Systems Odessa, which we published a [review](#)⁸ of last year. On the Mac Classic side, [MacFlow](#)⁹ from Mainstay is also available, which I used for years before migrating to OmniGraffle.

Now that we have the basic symbols needed to create flowcharts, let’s take a look at our prime number algorithm when it is translated into a flowchart.



Which to Use?

You’ve got two new tools on your belt now—pseudocode and flowcharts. Which one of them should you use when building software? It’s a matter of personal preference. Which do you find easier to understand? Which do you find easier to create? I use both of these tools, although my preference tends to lean toward flowcharts. Try them both out and see which you prefer. The point of these tools is not that you must use one or the other, but that you must think about your program before you actually begin to write code.

Since we’ve got the pseudocode set and we’ve got the flowchart to reference, let’s translate our two tools into AppleScript code. After all, this is a programming column. I suppose we should have some code in it this month.

1. <http://www.apple.com/appleworks/>
2. <http://www.atpm.com/6.05/aw6.shtml>
3. <http://www.adobe.com/products/illustrator/main.html>
4. <http://www.atpm.com/8.04/illustrator.shtml>
5. <http://www.microsoft.com/mac/wordx/default.asp?navindex=s2>
6. <http://www.omnigroup.com/applications/omnigraffle>
7. <http://www.conceptdraw.com/en>
8. <http://www.atpm.com/7.07/concept-draw-x.shtml>
9. http://www.mstay.com/fl40_ab1.html

```

-- Get a number from the user and store
-- the number in the variable theNumber.
set theNumber to text returned of ¬
    (display dialog "Please enter a number to test:" ¬
        default answer "" ¬
        buttons {"OK"} default button 1)
-- Initialize isPrime to false.
set isPrime to false
-- If theNumber is less than or equal to 1,
-- we don't need to do anything
-- since isPrime is already set to false.
if theNumber is less than or equal to 1 then
    -- Don't do anything here.
    -- if theNumber is 2, change isPrime to true.
else if theNumber is equal to 2 then
    set isPrime to true
    -- If theNumber is greater than 2,
    -- enter a loop that tests for factors.
else
    -- Initialize testDivider to 2.
    set testDivider to 2
    -- Enter a repeating loop.
    repeat
        -- The following if tests whether
        -- enter a loop that tests for the quotient
        -- of theNumber and testDivider is a whole number.
        if (theNumber / testDivider) = ¬
            (round (theNumber / testDivider) rounding down) then
            -- If it is, we can exit the loop.
            exit repeat
        else
            -- Otherwise increment testDivider.
            set testDivider to testDivider + 1
            -- If after incrementing testDivider it is greater
            -- than the
            -- square root of theNumber, we have a prime number.
            if testDivider is greater than (sqrt (theNumber))
            then
                set isPrime to true
                exit repeat
            end if -- testdivider is greater than
            (sqrt(theNumber)) then
                end if --(theNumber / testDivider) =
                --(round (theNumber / testDivider)) then
                end repeat
            end if -- theNumber is less than or equal to 1 then
            if isPrime then
                display dialog theNumber & ¬
                    " is prime." buttons {"OK"} default button 1
            else
                display dialog theNumber & ¬
                    " is not prime." buttons {"OK"} default button 1
            end if -- isPrime then

```

Reading through this program, you can see that it follows the flowchart and pseudocode pretty closely. But you may also notice that the program isn't as compact as it might be. For instance, we have an if statement that doesn't do anything if it's true. The truth is that no matter how well you build your algorithm, the computer doesn't always think in the ways the tool does. Although we can force the AppleScript language to follow the algorithm, we could probably create a more compact program by taking better advantage of the AppleScript language.

However, creating a working program was easy once we had the logic of solving the problem taken care of with our programming tools. From here we can modify the program as we like to make it more efficient for the language that we have decided to use, in this case, AppleScript.

One last item to note: the program code is another version of the algorithm. Just like the pseudocode and the flowchart, it expresses in human readable format the logic of the algorithm. If you gave any one of these versions of the algorithm to someone (and they understood the AppleScript language), that person could translate the algorithm to another language, such as C or REALbasic.

That's it for this month. Join us again next time when we'll cover some more AppleScript syntax in the form of `try` blocks and handlers, and how these AppleScript features relate to programming in general. As always, e-mail me with any questions or suggestions. Your comments are always welcome.

Copyright © 2002 Charles Ross, cross@atpm.com. Charles Ross is an independent programmer and author. He's written articles for ISO FileMaker Magazine and is currently writing a book on creating applications with AppleScript.



What's Under the Hood

For the last few years I have been working with a Mac that had grown gray behind the ears. This prevented me from moving up to OS X. I was unable to use all the new utilities that were becoming available for both OS 9 and X. In April I became the proud owner of a Mac Quicksilver G4/733 MHz with 768 MB of RAM. Since then, I have had the chance to look at over 400 MB of different utilities for both systems.

Utilities can be broken into three categories: Freeware, Shareware, and Commercial. Freeware software is programs that are distributed for free, as implied in the name. Shareware is software that is made available initially for free, but if you find that you like it, you are expected to pay a fee to continue using it. The amount of time you have is normally a month. If you go beyond the time limit, you will start to get messages asking you to pay, the program may deactivate itself, or key features of the software may become locked out until you pay for it. The fee is usually 35 dollars or less. Both freeware and shareware can be obtained on the Net at sites like versiontracker.com and macupdate.com.

Commercial programs you normally find at stores like CompUSA, Micro Center, Fry's, and Internet outlets. In some cases you can get demos of commercial software to try like shareware programs. In this case, though, at the end of the trial period the program will deactivate itself. The other difference is that the price of most commercial software usually ranges from 70 dollars and up. Now that we know what denomination utilities can come in, let's look at what's under my hood.

Note: Except for the commercial software, all other software mentioned can be found on the Web at either versiontracker.com or macupdate.com. All you have to do is do a search (for the appropriate operating system) and you will be taken to the download site.

[Conflict Catcher](#)¹ (commercial, OS 9)—I have used Conflict Catcher (CC for short) as long as we had to deal with control panels and extensions. To me it is a must-have for Mac OS 9 or earlier. Besides having the ability to change the order of your system extensions and control panels, you can also disable them on the fly. But the real power of CC is the ability to isolate system conflicts. I load over four lines of startup files when I boot Mac OS 9. If a conflict arises, there is no way I could do the necessary set of tests on my own. CC automatically will turn your startup files on and off as it isolates the file or files that are causing your dilemma. You can

download a demo of CC to try for seven days. If you like it, you can then pay Casady and Greene to get the code to unlock it and keep it running. It is also available in stores if you want a hard copy of it.

[Norton System Works](#)² (commercial, OS 9 & X)—This is preventive medicine for your Mac. Version 2.0 is designed to work in OS 9 & X. System Works provides tools for optimization, file recovery, volume recovery, virus prevention, and a disk doctor that checks media, directory, system files, and more. They even include a little extension called Disk Lite for OS 9 that allows you to see when your drive is in use. Recently I found Volume Recovery to be a lifesaver. I made the mistake of not moving all my files from one drive to another before reformatting one of my drives. Volume Recovery was able to restore my drive back to its original state before I formatted it. All the files that I forgot to move were recovered. Norton Anti Virus (NAV) software is a must if you use the Internet. Norton updates this application each month so you are up to date on any new viruses. NAV can also be bought separately if you do not want the full package. This is one software bundle that all Mac users should have under their hood.

[Speed Download](#)³ (Shareware, OS 9 & X)—If you are still using a 56K modem like me, then this program is just the answer for downloading software. First, it has the ability to increase your download speed by as much as three to four times. It can also do segmented downloads, multiple downloads, resumable downloads if you get bumped off line and much more. I like the multiple download feature a lot. Sometimes I will set my Mac to do multiple downloads before I go to bed. When I get up in the morning, all the files have been downloaded. This is a real time-saver. Even if you use high speed cable or DSL modems, you may find many of its features useful.

[Action Menus](#)⁴ (Freeware, OS 9)—This particular utility was offered by *Mac Addict* a few months ago for free. Action Menus allows you to customize your menu bar under OS 9. One feature that I find most useful is the ability of an active application to “branch out,” and show and access any open documents you are working with. I find this particularly useful when I am using AOL and have several windows open at the same time. You can also create menus that keep track of recent documents and applications you have used, and set

2. <http://www.symantec.com/sabu/sysworks/mac/index.html>

3. <http://www.yazsoft.com>

4. <http://poweronsoftware.com/products/actionMenus/>

1. <http://www.conflictcatcher.com>

how many to keep track of. Another menu option allows you make a menu for mounted volumes. If you were not one of the lucky people to get it from *Mac Addict*, you can still go to Power On's site and either download it for a 30-day trial or buy it for \$29.95. The file is only 2.2 MB so it will not take that long to download even at 56K (about 20 minutes).

Default Folder (Shareware, OS 9¹ & X²)—Default Folder is a navigation utility that you use in conjunction with the “Save As” and “Open” dialog boxes. One function allows you to go to your favorite and recently used folders. If you have a favorite folder you normally “Save,” “Save As” or “Open” to, Default Folder allows you to set that folder to open each time you do one of those commands. Other features allow you to rename files, move files to the trash, keep track of recent folders you saved to or opened, and directly access to all mounted volumes. Simply, Default Folder takes the pain out of navigating through your system, especially if you have multiple volumes.

Flavor Saver³ (Shareware, OS 9)—Flavor Saver is a screen saver like After Dark. It is designed to prevent phosphor burn-in when you leave your monitor on for long periods of time. Unlike other screen savers, this one comes with over fifty different modules that you can choose from. Flavor Saver is designed as a stand-alone application so that it does not interact with your system folder. This way it prevents any type of system conflict. Although it is written for OS 9, it does run well in OS X when Classic is running. After the commercial demise of After Dark, Flavor Saver is an excellent replacement for a once great screen saver. Hopefully they will update it to run in 10.2.

Super Get Info⁴ (Shareware, OS X)—How many times has this happened to you? You try to drag a file from one folder to another only to be told that you do not have the privileges for it, or you try to open a folder or volume and you are told the same thing. You go to Show Info to access the privileges window but all is grayed out and the owner and group designations are wrong. From what I have seen, this seems to be a common glitch in OS X. It happened to me. One way of fixing it is by using the terminal if you understand how to script the correct Unix commands. Since I am not very versed in Unix, I decided to look for an easier way to rectify the problem. After referring to [Mac OS X: The Missing Manual](#)⁵, I read about a program called Super Get Info. This little utility has the ability to let you manually reassign the user and groups and reset the read/write privileges. It took me about an hour to reset the privileges to my system, but it was a lot less painful than trying to do it with the terminal. If you do not know Unix, then I advise using Super Get Info. Another feature is its ability to trash files that are either

locked, or that you do not have privilege to open even when you are the administrator. You can download it and try it out free for 15 days. After that it will disable itself until you pay for the code to unlock it. The only question now is whether OS X 10.2 will finally resolve this glitch once and for all.

BatChmod⁶ (Freeware, OS X)—Performs most of the same functions as Super Get Info except it is not quite as elegant. On the plus side it is free.

MacJanitor⁷ (Freeware, OS X)—If you're like me, you probably don't keep your Mac on when you go to bed. One night while watching The Screen Saver's on Tech TV I discovered that the Mac runs certain diagnostics early in the morning if your Mac is on. Since I do not keep my Mac on, these processes do not get a chance to run. By not running, old data created in the Unix layer begins to accumulate to the point that it will slow your Mac down. MacJanitor allows you to run these procedures when you want to. By one click of a button, MacJanitor will delete all the excess logs and scripts created in the Unix layer. I run it each time I boot up in OS X and I have noticed a performance boost since I started using it. This program is a must for anyone who does not keep his Mac awake at night.

TinkerTool⁸ (Freeware, OS X)—When Apple wrote OS X, they decided to leave certain features within it disabled. When I downloaded TinkerTool for the first time, I was amazed at the number of functions Apple had disabled in OS X. It would take a page to list all the features TinkerTool offers, so I will go over some of the most useful features. On the Finder level you can turn on or off the rectangle zoom effect, invisible files, add Quit to the Finder menu, set the number of label lines, and decide how a picture should be laid out on your desktop. On the Dock level, you can set the position and placement of the Dock, enable Dock shadows, and use transparent icons for hidden applications. Other features include placement of scroll arrows, the ability to play audio or video automatically, and the ability to set the screen shot format. There are also features that allow you to control your system and application fonts, font smoothing, and terminal settings. The one thing that really amazes me about this product is that it is free. 'Nuff said.

Monolingual⁹ (Freeware, OS X)—Did you know that when you do a clean install of OS X you wind up with over 300 MB of foreign languages? Due to the way OS X installs these files, there is no easy way you can sort through your Mac in order to delete them. Monolingual solves this dilemma by allowing you to select the languages you wish to delete and then removes all the files related to them. Since I only need English on my Mac, I deleted all other languages for a total of 300 MB of freed-up space on my drive. I also recommend that you run it when you install new applications as well, since they

1. <http://www.stclairsoft.com/DefaultFolder/index.html>
2. <http://www.stclairsoft.com/DefaultFolderX/index.html>
3. <http://www.chaoticsoftware.com/ProductPages/FlavorSavers.html>
4. <http://www.barebones.com/products/supergetinfo.html>
5. <http://www.atpm.com/8.03/manual.shtml>

6. <http://www.macchampion.com>
7. http://personalpages.tds.net/%7Ebrian_hill/macjanitor.html
8. <http://www.bresink.de/osx/TinkerTool2.html>
9. <http://homepage.mac.com/jschrier/>

also tend to install different languages without giving you a choice. If you do not want to waste space on your hard drive, then this little utility is right for you.

[Fishpad](#)¹ (Freeware, OS X)—If you are like me, you have probably found that Stickies is not the same as our trusted Notepad was in OS 9. Fishpad is a clean, simple replacement for Notepad. Fishpad also gives you a few features that were not found in Notepad. These features include font selection, style, point size, alignment, and ruler settings. It can also has a find feature and a spelling checker, and it can tell you when you make a spelling error. I guess you could call this little application one step below a standard word processor. The Notepad is not dead, it just went fishing.

[MoosePad](#)² (Shareware, OS X)—Like Fishpad, MoosePad is an alternative to the dreaded Stickies. When you first examine MoosePad you will quickly discover that all the features I mentioned for Fishpad are found here as well. But that is where the similarities end. One of the most powerful features of MoosePad is the ability to create additional databases. Although “database” may sound fancy, all that means is that you can create multiple pads. This is a great feature since it allows you to categorize each of the pads and not clump all your data into one pad. You can also create auto fill tasks (i.e. name, address, etc.) so you do not have to keep retyping them over and over again. A date/time stamp is also included. Other features include font color, page color, table of contents, auto software update, number of databases to keep track of, and much more. As you can see, this is a very powerful replacement for the old Notepad. Like other shareware, you can download it for a 15-day trial.

[ASM](#)³ (Donationware/Freeware, OS X)—Remember the application menu in Mac OS 9 and below? Well the Dock was designed to take the place of it in OS X. Although it is a great idea, I have found in practice that I would rather have the application menu instead. The reason is because I tend to keep the dock hidden most of the time and don't like to have to search for a specific application icon in a sea of tiny icons due to the number of items residing in the dock. ASM resolves that problem by recreating the application menu in the upper left hand corner of the menu bar. All the features that were found in the classic version are here as well. You can also customize how the menu looks, by setting the applications to be shown in alphabetical order, show whether you wish to have the applications listed by name, icon or both, adjust icon size, and many other features. ASM is a much better way to keep track of what applications you have up and running. ASM is a combination of Freeware and Donationware. That means if you like it, you can either decide to donate to help ensure further development of ASM

or pay nothing at all. Apparently ASM was written for a philosophical reason and not to make money on it. Thanks, Mask Man.

[LiteSwitch X](#)⁴ (Freeware, OS X)—LiteSwitch X is an application switcher for OS X. By preselecting either the Command, Option, or Control keys, in conjunction with the Tab key, you bring up a dialogue box that lets you move from one open application to another. Once invoked, you can also press other keys to perform other commands. Pressing F will Force Quit an application while M will bring up the current application's contextual menu. There are other keys that do other functions and they are well explained within the program.

[Classic Menu](#)⁵ (Shareware, OS X)—This utility restores the OS 9 Apple menu to OS X. You can add aliases to the menu from within the program or by drag and drop. It also gives you the ability to restore the old tried and true rainbow apple. If you place a folder or mounted volume in it, the menu will tree out allowing you to access the contents within. From what I read online, currently Classic Menu may not run under OS 10.2.

[Dock-It](#)⁶ (Shareware, OS X)—Although the Dock in OS X is a great idea, I am sure many of you have found that it does not take much to fill it up. Dock-It adds additional functionality to the Dock by giving you multiple docks to work with. When you launch Dock-It for the first time, you will be presented with its default dock. Within the dock you will find all mounted volumes and your Home folder. Clicking any of these items will cause them to tree out allowing you to navigate within each item. You can also make multiple docks as well. This is a very useful feature because now you can tailor the dock to the specific needs of what you are working on. Another excellent feature is its shelf area. The shelf area in the dock makes it easier to move a file or folder from one place to another. What you do is first drag the item to the shelf on the dock. Then you locate the destination folder (or volume) you wish to move that item to. Then drag the file (or folder) from the shelf to that destination and that is it.

[Eject Me! and Trash It!](#)⁷ (Freeware, OS X)—These two items are simple AppleScripts that perform what their names describe when all else fails. Eject Me! takes over when pressing the Eject key fails. Now that there is no paper clip hole to force the CD/DVD drive door to open, Eject Me! will execute an emergency command that will force the drive to eject. This is a much better alternative than taking your Mac to the shop. Trash It! is designed to get rid of those nasty files that refuse to trash. Most of the time this is because the files are locked. Under OS 9 you were able to get around this by

1. <http://www.fishbacksw.com/>

2. <http://www.wundermoosen.com/wmMacXProducts.html#MP>

3. <http://asm.vercruesse.de>

4. <http://www.proteron.com/liteswitchx>

5. <http://www.sigsoftware.com/classicmenu/>

6. <http://www.gideonsoftworks.com/dockit.html>

7. <http://nonamescriptware.com>

pressing the option key as you selected the trash command. Since this feature is not in OS X, Trash It! takes the place of it. I keep these two little scripts in my dock at all times.

[Visage](#)¹ (Shareware, OS X)—One feature I have always liked about the Mac is the ability to customize the look of it. Visage allows you to change the skins for the Boot Panel, Login Panel, Login Background, and Dock. If you are like me and like to give your Mac a personality unique unto itself, then give Visage a try.

[Duality](#)² (Shareware, OS X)—Duality is the perfect companion to Visage. It allows you to customize Finder themes or skins. It is also the first application to change Icon Sets. This ability opens up an entire new area to developers. Duality also lets you preview any changes before you apply it. One word of warning: although Duality is already 10.2-compatible, older themes may not be, and can corrupt the 10.2 Finder to the point that you may have to reinstall it. There is an application called Theme Fur that is suppose to upgrade old themes so they run under 10.2. Since I do not have 10.2 yet, I have not had the chance to test Theme Fur. I recommend that you go to resexcellence.com after you get 10.2. They have sections that are devoted to all types of skins and other types of applications for OS 9 & X. I go there every day to see what material has been contributed to their libraries.

[MoonDock](#)³ (Freeware, OS X)—We all enjoy watching the moon going through its phases each month. With the help of MoonDock, you can now watch it from your desktop. MoonDock places a moon on your desktop that you can position wherever you want with your mouse. You can also

1. <http://www.stanford.edu/%7Ekeaka/sanity.html>
2. <http://www.conundrumsoft.com/Duality/duality.html>
3. <http://www.geocities.com/garycmartin/osx/>

set the size and transparency level of the moon. If you double-click on the moon, a data sheet will come up telling you about what phase it is in, surface visibility, and dates for the next full and new moons. If you like looking at the moon, then you will enjoy watching it go though its paces on your Mac.

[Xounds](#)⁴ (Shareware, OS X)—Do you miss the system sounds you had in OS 9 when running 10? I hated it. The lack of these sounds seems to take the life out of my Mac. Xounds restore these sounds to OS X. The only thing I do not like is that you cannot assign sounds to specific functions. You can also go online and find other sound sets that work with Xounds. If you want to restore some personality to your Mac, then Xounds is a great choice.

Closure

This concludes our look at software I keep under the hood of my Mac. Everything I have listed will work with OS 9.2.2 and 10.1.5. I have not seen any degradation in the performance at all. I cannot predict how these OS X applications will work with 10.2. I plan on installing 10.2 on one of my other volumes so I can slowly test to see what works with it without damaging my 10.1.5 system. I strongly recommend that if you have another volume to install 10.2 onto, that you do the same. We like to think that Apple has gotten all the bugs out of it, but I am sure we will see an update to it within the first few weeks of its release. Whether software is freeware, shareware, or commercial, it still comes down to user beware. Make sure your most critical data is backed up before you ever venture into unknown waters. 'Nuff said.

4. <http://unsanity.com/haxies/xounds/>

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5. http://www.haugnet.org/frame_c.htm

Cartoon: Hambone

by Mike Flanagan, sensible@sensible.screaming.net



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Cartoon: Cortland

by Matt Johnson, <http://www.cornstalker.com>

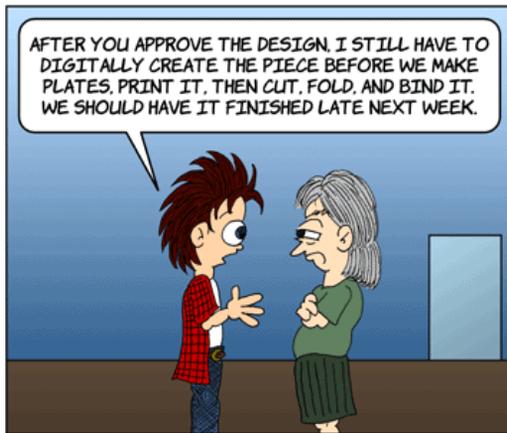
Cortland



Matt Johnson



Cortland



by Matt Johnson



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Extras: Desktop Pictures

[Croatia, Mexico, and Rhonda](#)¹

This month's desktop pictures were taken [Anthony Peelen](#)² on his various travels around the world.

Croatia

These pictures were taken during a trip to Croatia in 2001, in the mediaeval town of Groznjan. He used a HP315 digital camera and didn't feel the need to adjust the pictures with a photo editing program like Photoshop. Anthony is happy with his digital camera because he dislikes the work in the darkroom. The pictures went straight from the camera into his iMac.

CroatianVillage1.jpg: Groznjan is one of the oldest and smallest cities of Croatia, high on a hill top. There is only one road to it. It is past noon, and everybody is inside for lunch and a little nap.

CroatianVillage2.jpg: In Groznjan the cats stay outside while everybody is inside escaping the afternoon heat.

CroatianVillage3.jpg: This old cat found a place in the shade to sleep and to watch the tourists visiting Groznjan.

Mexico

These pictures were take during an eight-day, 4,000-mile car trip from Florida to Puerto Vallarta in the summer of 2002. The lodging town picture was taken from inside the car just after passing a military road block. The fishermen's village pictures were taken away from the crowd beach. Again no adjustments were made to the pictures. The camera was an HP315.

MexicoBanderasBay1.jpg: Boca de Tomatlan is a quiet fishing village 10 miles south of Puerto Vallarta. Boca de Tomatlan means Mouth of Tomatlan. Tomatlan is the river that you see. There are only two restaurants and it is a departing point for passengers and freight to Yelapa, a tiny village that is only reachable by boat. You see a few houses that are rented out. It is really a nice quiet beach away from the crowd.

MexicoBanderasBay2.jpg: Here you see the restaurants and some of the boats in Boca de Tomatlan.

MexicanVillage1.jpg: The road from Durango to the coast is a winding road through high mountains covered with woods. Half way there was this logging village, unorganized and chaotic like a last frontier town.

Rhonda

This picture was taken during a short trip to Andalusia in January 2002, from the bridge over the gorge leading into town. It was the only sunny day during that trip. The camera was an HP315 and no adjustment to picture has been made.

Rhonda.jpg: A very old little city in Spain Andalusia. It is considered to be the first city to have a bull fighting ring. You can see that it is situated high on the cliffs.

Previous Months' Desktop Pictures

Pictures from previous months are listed in the [desktop pictures archives](#)³.

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 consider publishing 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 10.1.x

Choose "System Preferences..." from the Apple menu and click the Desktop button. With the popup menu, select the desktop pictures folder you want to use.

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 X 10.0.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

1. <http://www.atpm.com/8.09/croatia-mexico-rhonda>

2. panthony@comcast.net

3. <http://www.atpm.com/Back/desktop-pictures.shtml>

to use. The panel defaults to your “~/Library/Desktop Pictures” folder. Close the “Finder Preferences” window when you are done.

Mac OS 8.5–9.x

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](#)¹ in issue 5.10 and available for [download](#)².



1. <http://www.atpm.com/5.10/roundup.shtml>
2. <http://www.peircsw.com/DeskPicture.html>

Review: Anonymizer Ultimate Security Suite

by Gregory Tetrault, gtetrault@atpm.com

Developer: [Anonymizer, Inc.](#)¹

Price: \$100 (includes [F-Secure SSH Client](#)² software version 2.1, an e-mail account, and one year of Anonymizer access)

Requirements: Mac OS 8, 6 MB of application RAM

Recommended: Latest version of Open Transport compatible with your operating system.

Trial: None



Overview

The Ultimate Security Suite includes:

- Anonymizer Secure Tunneling encryption service.
- F-Secure SSH Client 2.1 DSA edition software.
- Anonymizer e-mail account.
- Anonymous newsgroup access.
- Anonymous e-mail.
- Anonymizer Private Surfing with full-time SSL and options such as: encrypted URLs, encrypted Web page titles, cookie blocking or encryption (with no long-term tracking), banner ad blocking, referrer hiding (Web site cannot see what site you clicked from), hiding of OS and browser information.

You can use your Anonymizer Secure Tunneling account to encrypt the Internet activity between your computer and Web servers. This prevents any servers between you and them, such as your ISP, from monitoring your activities. Anonymizer Secure Tunneling accounts allow you to encrypt your incoming and outgoing e-mail, surfing, and news posts through a method known as *port forwarding*. This service can be used independently of or in conjunction with Anonymizer Private Surfing.

Why Use Secure Tunneling?

Secure tunneling to a private server prevents anyone on your private or corporate network or at your Internet Service Provider (ISP) from intercepting your e-mail, newsgroup, or browser communications.

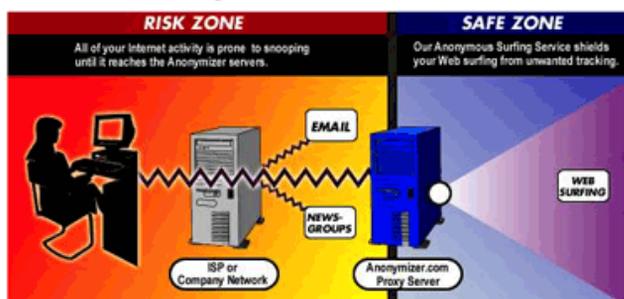
WITH Secure Tunneling SSH Service:



Cartoon from the Anonymizer Web site

The secure tunneling uses a direct, encrypted connection to the private server. Thus, even people with physical access to your network, telephone, broadband, or wireless communications cannot snoop on your Internet activities. Without secure tunneling, network or ISP administrators (and talented crackers) can see what Web sites you have visited, what newsgroup files you have downloaded, and what e-mail you have sent or received.

WITHOUT Secure Tunneling SSH Service:



Cartoon from the Anonymizer Web site

1. http://www.anonymizer.com/ultimate_security/

2. <http://www.fsecure.com/products/ssh/>

Installation and Setup of F-Secure SSH Client

After you have selected and paid for the service, you establish a username (*Note:* your Anonymizer e-mail address will be “username@mail.anonymizer.com,” so choose an appropriate username) and a password. Anonymizer then sends you to a page for downloading the F-Secure SSH Client software installer. The VISE-based installer allows you to select any location for the F-Secure folder. Installation takes only a few seconds.

You then launch the F-Secure SSH Client application and set it up to connect with the Anonymizer server. [Instructions](#)¹ for this task are available online. The well-illustrated instructions give all the steps necessary to set up secure tunneling for Internet, e-mail, and newsgroup access.

How to setup F-Secure for Anonymizer's Secure Tunneling Service.

This tutorial will show you how to set up SSH for use with the Anonymizer. By using SSH, your connection to the Anonymizer will travel through an encrypted channel, which will protect your surfing activities from being monitored by your internet service provider.

SSH can also be used to secure other kinds of connections, such as news and e-mail.

[Directions for setting up F-Secure for Macintosh](#)

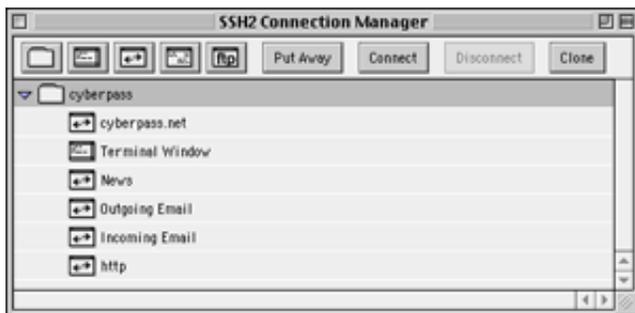
Follow these steps to setup F-Secure:

1. Open F-Secure.
2. If the 'SSH2 Connection Manager' does not automatically appear, select 'SSH' from the menu bar and click on 'Connection Manager'.



Anonymizer's F-Secure SSH Client Setup Page

After configuring F-Secure SSH Client, you should save the settings.



F-Secure SSH Client After Setup Is Done

Users who want the latest version of F-Secure SSH Client (which includes Apple Keychain support) can purchase the version 2.4 upgrade for \$23 directly from [F-Secure Corporation](#)².

Using Anonymizer Ultimate Security

To establish secure Internet connections, you first launch the F-Secure SSH Client by double-clicking on the settings file you created. (You may also launch F-Secure SSH Client and

open the saved settings from the File menu.) Click the Connect button in the Properties window, and then enter your password into the Password Authentication window.



F-Secure SSH Client Password Authentication Window

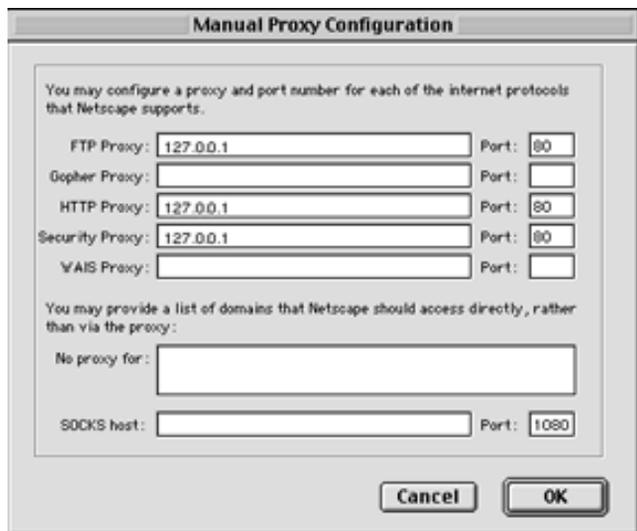
You now need to set up your Web browser, e-mail client, and news reader applications to use the secure tunnel connection. Configuring the Web browser is simple if you do not have firewalls. You need to set your browser's Web proxy to “localhost” and port 80. Internet Explorer allows you to use “localhost” for accessing the F-Secure SSH tunnel.



Proxy Settings for Microsoft Internet Explorer

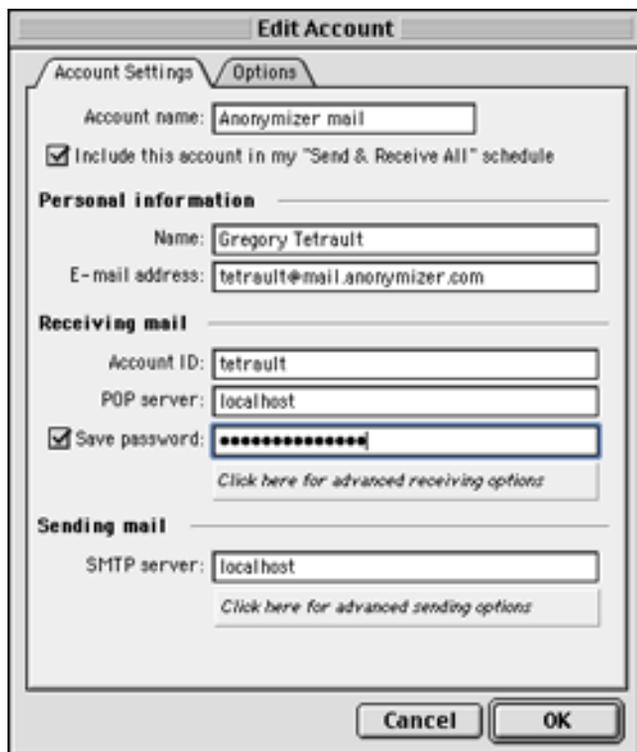
1. <http://rigel.cyberpass.net/%7Eegene/FSecure/Mac/FSMac.html>
2. <http://www.fsecure.com/estore/renewal.shtml>

Netscape Navigator requires that you enter the local host IP address (127.0.0.1). You can now surf the Web securely.



Proxy Settings for Netscape Navigator

Directions for configuring e-mail and news accounts are posted [here](http://www.anonymizer.com/docs/support/ssh/)¹. Basically, you create a new e-mail account and configure it to use Anonymizer's mail server via the F-Secure SSH Client local host. You set your POP server (incoming) and SMTP server (outgoing) to "localhost" or "127.0.0.1".



E-mail Settings for Microsoft Entourage

Your news client is easiest to configure: just set up a new account with "localhost" or "127.0.0.1" as the news server address. You will need to reload the list of available news groups.



News Settings for Microsoft Entourage

At this point, you can surf the Web, get e-mail, and participate in news groups via secure tunneling. Your Web browsing, e-mails and newsgroup discussions and downloads are secure from anyone on your local network or at your Internet service provider. However, Web surfing anonymity is not yet guaranteed because the sites you connect to are in direct communication with your Macintosh computer. Anonymizer Ultimate Security Suite also provides

1. <http://www.anonymizer.com/docs/support/ssh/>

you with fully secure Web surfing via Anonymizer Private Surfing 2.0. This feature is accessed by going to the [member login site](#)¹ and entering your username and password.



Anonymizer Private Surfing Logon Site

You then go to the Members Homepage.

Members Homepage

Attention members: Your service has been upgraded to Anonymizer Private Surfing 2.0. Click [here](#) for more information.

[BEGIN PRIVATE SURFING](#)



Anonymous Private Surfing Launch and Settings Page

I recommend that you read the information about private surfing settings, and customize the settings to meet your security needs.



Security Options for Private Surfing

Note that Anonymizer Private Surfing does not yet support SSL (secure socket layer) encryption for Macintosh. To start surfing securely, enter any Web address into the “Surf Anonymously:” text box. I usually enter “www.google.com.” The top of your Web page will now display an Anonymizer rectangle. You can use this to change the security settings, get help or information, or to manually enter a Web page URL. Most of the time you can just ignore this rectangle. When you are surfing securely, any link that you click on will also be secure, even if you open the link in a new window.



Anonymizer Private Surfing Rectangle

Problems, Bugs, and Omissions

The only technical problem I had was a slight delay in the activation of my secure tunnel. This process is performed only during the working hours posted above. A did encounter a serious non-technical problem. Perusal of newsgroups on the Anonymizer server showed that nearly all binary attachments have been stripped out of the postings. That makes all the “alt.binary...” sites on Anonymizer’s news server essentially worthless. I contacted Anonymizer, Inc. via their e-mail complaint address, and I received a response the next business day. Anonymizer allows you to “port forward” to another news server, as long as that news server does not block port forwarded connections. My ISP’s news server does block port forwarded connections, but numerous free and fee-based news servers are compatible.

I did not encounter any bugs in the F-Secure SSH Client software.

The Macintosh version of Anonymizer Private Surfing lacks two features: SSL encryption of Web page content (not an issue if the Web browser is using your secure tunnel) and the ability to directly use bookmarked URLs. To securely surf

1. http://www.anonymizer.com/member_login.shtml

to a bookmarked site you must either type the URL into the Anonymizer field or open your bookmark, copy its URL, and paste it into the Anonymizer field. I developed a workaround to this problem. You can store truncated URL bookmarks (without the “http://” starting characters) in any document that supports drag and drop. You then can select and drag a bookmark URL onto the Anonymizer field at the top of your browser page.

Documentation

F-Secure SSH Client software from Anonymizer includes no manual. Setup information is available [online](#)¹. The 69-page PDF manual for F-Secure SSH Client is available from the F-Secure Corporation’s [Web site](#)². This manual comprehensively covers the use of F-Secure SSH Client, though it does not have information specific to Anonymizer secure tunneling.

Technical Support

Anonymizer, Inc. provides excellent technical support. They offer e-mail, IRC chat, fax, and live telephone support via two toll-free numbers.

I called Anonymizer just after they opened on a Saturday. A voice messaging system indicated a 10–13 minute wait and gave me the option of leaving a call-back number. I did this, and was called back automatically when the wait time was less than 2 minutes. The support person efficiently answered my questions and activated my new secure tunnel account. I used e-mail support for general questions prior to purchasing anything at Anonymizer, and received replies within a few days.

Security and Anonymity

I contacted Anonymizer, Inc. with questions about security and anonymity. I was told that the only information available on Anonymizer customers is from their billing database. The billing information would be accessible to a law enforcement agency if it had a proper warrant and knew the username of the person being investigated. Complete privacy can be assured by paying for your Anonymizer services with cash or money orders.

Anonymizer’s proxy server does not track or log any connections or transactions. Therefore, even a law enforcement agency with a search warrant would not be able to recreate a customer’s Web site destinations or news group downloads. E-mail messages on the Anonymizer mail server could be accessed, but customers can configure their e-mail clients not to keep a copy of messages on the server.

Alternatives

I found no Macintosh-compatible packages equivalent to Anonymizer Ultimate Security Suite. If your security needs are not comprehensive, there are a few services that may meet your needs.

[JAP](#)³, a free secure tunneling service and client, is available from Germany. It is part of the “Project Anonymity in the Internet” sponsored by the German Research Foundation and the Federal Ministry of Economics and Technology. This system will not work from behind a firewall. It provides no e-mail or newsgroup security. I did not test JAP.

There are numerous Web sites that offer anonymous Web browsing (sometimes at no charge), but these sites rarely use secure tunneling between your Macintosh and their server. There also are sites that offer anonymous or secure e-mail accounts. Information on these types of site can be obtained from the [Electronic Privacy Information Center](#)⁴. I found no free news servers that provided anonymous access to both text and binary newsgroups. There are numerous news servers that will provide anonymous newsgroup access for monthly or annual fees. (Use the phrase “commercial news server” in Google or another search engine to find individual sites and Web sites with ratings and comparisons.) Just make sure that they will accept port-forwarded connections before subscribing.

Summary

The Anonymizer Ultimate Security Suite provides a high level of security and anonymity for a reasonable price. Customers also receive a POP e-mail account that is accessible from anywhere. (You can retrieve mail with most Web browsers from free Web sites such as [accessyourmail.com](#)⁵.) I will use my new Anonymizer e-mail address to replace my no-longer-free mac.com address.

1. <http://rigel.cyberpass.net/%7Egene/FSecure/Mac/FSMac.html>
2. <http://www.F-Secure.com/download-purchase/manuals/>

3. http://anon.inf.tu-dresden.de/index_en.html
4. <http://www.epic.org/privacy/tools.html>
5. <http://www.accessyourmail.com>



Review: Auto Charger for iPod

by Ellyn Ritterskamp, eritterskamp@atpm.com

Developer: [Dr. Bott](#)¹

Price: \$24.95

Requirements: iPod



This is a difficult review to write. This is a simple product that does what it's supposed to do. There's not much I can tell you about it, except that if you need a device to charge your iPod in your car, this one will work.



The Testing Environment

My normal iPod use is three or four times a week, for an hour or so at a pop. It's my exercise buddy. Every now and then I notice the indicator showing the battery charge is not reading full, so when I get home, I plug in the unit to my Mac and leave it there until the next day. As long as I have the Mac in use for a couple of hours, the iPod draws enough charge through the FireWire cable that came with it, and everyone is happy. The iPod is happy because it's full again, and I'm happy because I have my Pet Shop Boys and Ben Folds tunes back for weight lifting inspiration.

So for this test, I waited until the charge ran out completely. Bummer, too; I had just gotten started on that workout and was without Boston's "Don't Look Back" to get me through the bench press. I took the iPod out to the car, as usual, but instead of bringing it inside to charge, I plugged Dr. Bott's charger into the 12 volt adapter in my car. (New Hondas don't have cigarette lighters, but they do come with those outlets). I didn't know if the car needed to be operating, like the Mac, for the iPod to get the charge.

The Result

That question was answered the next day: no, my car does not have to be running for the adapter to work (yours may be different). I left the iPod plugged in from 9:30 PM to 3 PM the next day. When I unhooked it from the adapter, the indicator read full. Mission accomplished. Even though I'd made sure to stash it out of direct sunlight (and out of sight of passers by), the iPod was still very hot. A sunny day with temperatures in the mid-nineties will do that.

So, Dr. Bott's Car Adapter does what it says it will do. It's up to you to figure out if you need it badly enough to pay for it. I don't spend enough time on the road for it to make sense, but lots of people do. You can also get it along with one of Dr. Bott's iPod Connection Kits, which include iPod carry pouches, FM transmitters, and such. Careful, though—you ought to think about the risks of leaving it in the car for others to see (cover it up somehow), and about temperature issues. Perhaps the [LeatherPod](#)² reviewed in this issue of ATPM would be a nice companion, if you don't go the kit route from Dr. Bott.

2. <http://www.atpm.com/8.09/leatherpod.shtml>

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1. <http://www.drbott.com/prod/db.lasso?code=0141-IPAA>

Review: Forma 2.0.7

by Brooke Smith, bsmith@atpm.com

Developer: [Mitchell Haile](#)¹

Price: \$13.95

Requirements: Mac OS 8.1 with CarbonLib 1.1 or Mac OS X 10.1, 12 MB application RAM.

Recommended: Thousands or millions of colors

Trial: Feature limited (only 3 of 17 levels)

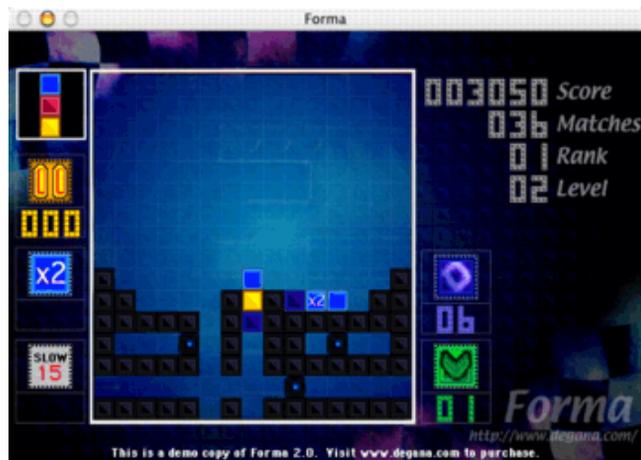


Mitchell Haile's Forma 2.0.7 looks a bit like that classic falling blocks game Tetris. So on initial play, you may (as I did) fall into Tetris mode, trying to eliminate a horizontal line of blocks across the playing board. However, it's far from Tetris!

If you're smart, you'll read the instructions before you play. Although most games are generally intuitive, this one's a bit tricky in that you need to know what the different blocks mean. Once you've got the blocks figured out (or memorized), game play is pretty much smooth sailing.

The Object

The object of Forma is to eliminate the slider blocks (the black and blue blocks that slide horizontally or vertically) from the playing board. Once the sliders are eliminated, you move on to the next level. The difficulty increases as you progress to the next level.



On this Level Two screen, I have dropped the vertical threesome down so it will block the bottom slider (that is, it will only keep to the right of the playing board instead of all the way across).

There are two ways to eliminate the sliders. One way is to "squish them by setting the current active piece down on top of them." However, as the instructions note, this is tricky because sliders can move out from under the piece. The second and best way to eliminate the sliders is to use the fire

blocks (they are orange and look just like little orange flames) to break through the "rocks." The rocks are the dark grey blocks that surround the sliders.

While you attempt to squash the sliders, a threesome of blocks falls from the top of the screen to the bottom. These regular blocks come in various colors: blue, red, yellow, green, grey, and violet. They always fall in a threesome in either a vertical or a horizontal orientation. You can change the position of the blocks from left to right. For example, change yellow, red, blue to blue, yellow, red, but you can't make a vertical block rotate until it's horizontal or vice versa.

To gain points, line up three blocks of the same color either horizontally or vertically to make the group disappear from the screen. (Fire blocks match with the regular red blocks.)

The Forma Web site contains some tips on how to master this challenging game.

New and Improved

This new version of Forma includes the classic game mode (click on Classic Mode under the Settings menu) which is the simple matching of the original Forma game. There are two high scores lists: one for Classic game and one for the Ultra game that was introduced in Forma 2.0. And levels 13 and up are a little slower.

Overall Impression

This is a sharp-looking game and it's very clean and neat. The graphics are very good and sharp. And there are 17 levels to master. Of course, with shareware, you're only able to play three levels until you register.

Overall, I liked Forma. The game converts to the full screen and you can turn on and off the music and sound effects. It certainly was fun and challenging but not nearly as addictive as some other games I've played. This had something to do with the fact that I simply have no patience to figure out what all the blocks mean. However, it was still good and worth trying. Just be patient!

1. <http://www.degana.com/forma/>

Note: As of August 24, Forma 2.0.8 was released. However, there is only a change in the registration dialog box. Mitchell Haile says he has “made this box easier to use when entering your registration code to try to make it a bit friendlier.” Other than that, the game itself has stayed the same.

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Review: LeatherPod

by Chris Lawson, clawson@atpm.com

Developer: e-pac/[Dr. Bott](#)¹

Price: \$29.95

Requirements: iPod



There's something to be said for simplicity. Too many products try to do too many different things. Dr. Bott's LeatherPod case for the iPod isn't one of them. It's basic and stylish, and gets the job done well. It's not perfect, but it's close.

The first thing that struck me about the top-loading LeatherPod case was its snug fit with my Rev. A 10 GB iPod. There's little risk of an iPod falling out, but at the same time, the synthetic felt liner lends itself to reasonably simple removal of the iPod—just push upward on the bottom panel and then grasp the exposed sides of the iPod and pull up. Also worth noting is that most of the friction holding the iPod in place comes from the sides of the case, which means that, should you want a replacement case for your Rev. B 10 or 20 GB iPod, or a case for the 5 GB version, the slightly thinner or thicker form factor shouldn't be a problem.



The clear vinyl over the screen has just enough margin around the screen to allow for some shifting within the case, and the cutout neatly exposes the scroll wheel while covering

the surrounding buttons. Yet these buttons remain functional, thanks to the flexible leather. The belt clip is strong, yet not too stiff, and the detachable neck lanyard (which is synthetic, in contrast to the leather construction of most of the case) is thoughtfully equipped with fully rotating connectors, preventing twists and tangles.

From a protection standpoint, this case is just the ticket for keeping the iPod's screen and classy stainless-steel back from getting scratched. I sure wish I had had this case back in May when my iPod arrived. It would look much nicer now if I had. You shouldn't trust it to save an iPod from a drop down a flight of stairs, but soft cases aren't designed for impact protection, and the nice tight belt clip should prevent such a fall in many cases. The clip has the added benefit of getting the iPod out of your pocket, where, if you're like me, it rubbed up against other items and was generally in the way (unless you put it in a cargo pocket, in which case the headphone cable was just barely long enough). The protective front flap is thick enough that my Hold switch has become redundant—with the flap down, only a very strong impact to the face will accidentally activate any of the five buttons, and the scroll wheel is completely protected.

My biggest complaint is with the outer flap that swings down to cover the face of the iPod. First, with the headphones plugged in, the flap hits the plug on the iPod's stock headphones and has to be tilted slightly to the left in order to close properly. If the flap is closed carelessly and roughly, this might lead to eventual failure of the headphone plug. Nearly as bothersome is the case's inability to act as a stand for the iPod. I recently saw a Motorola cell phone whose belt clip was thoughtfully designed with a small notch and prop so that it could be locked in a sprung-open position, allowing the telephone to be stood on a counter or desk. Either the cover or the belt clip on the LeatherPod could function as a "leg" to allow the LeatherPod to stand nearly upright on a flat surface, useful for those of us who use our iPods while working at a desk. The cover could stand a minor re-design to correct the headphone plug clearance issue anyway.

1. <http://www.drbot.com/prod/db.lasso?code=5834-ILCB>

At \$30, the LeatherPod is a little pricey (quality leather cell phone cases can be had for \$10–20), but compared to Apple's \$39 nylon case that offers *less* protection, it's a good deal. If you're a Rev. A iPod user and want a stylish carrying case and some protection for your baby, or if you're not satisfied with the nylon case Apple provides with the new 10 and 20 GB iPods, this case could be just what you're looking for. A minor re-design could make it perfect.

On a related note, Apple has released the iPod Software Updater 1.2 for [download](#)¹. It brings the software features of the new iPods released at [Macworld NY](#)² to the older iPods with mechanical scroll wheels, and finally brings the Breakout game to a menu.

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1. <http://www.apple.com/ipod/download/>
 2. <http://www.atpm.com/8.08/report.shtml>

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Review: The Missing Sync 3.0

by Chris Lawson, clawson@atpm.com

Developer: [Mark/Space](#)¹

Price: \$29.95 (download); \$39.95 (CD-ROM); \$14.95 (upgrade from 2.x)

Requirements: Mac with USB, Mac OS X 10.1.4, Sony CLIÉ PDA, Palm Desktop 4



While the PDA market may not be something Uncle Steve will ever admit to envying, Sony has certainly gone out of its way to make PDAs that have all the style and panache we Mac users are used to from Apple's products. Not only are the various CLIÉ models the pinnacle of PalmOS PDA style, but they are, in this reviewer's humble estimation, the best value for the money in the low-end and mid-range PalmOS market.

Having recently used a PEG-S360 for a week before trading it in for a PEG-SL10, I found myself in need of some way to sync the CLIÉs to my TiBook so that I could recover the data left by the untimely partial demise of my Palm IIIe. Enter Mark/Space's wonderful software that does exactly what it claims to do: sync a CLIÉ with a Mac.

Reviewing electronic copies of software has its drawbacks. I can't give an opinion on either the CD-ROM or the upgrade version, although I don't anticipate problems with either one. In the interest of full disclosure, there have been comments on message boards around the Mac Web claiming problems with the download; I received the review copy via e-mail with no problem at all but as such, I am unqualified to comment on any download issues.

The software installed without a hitch, although it did require a restart. I don't claim to know all the details of what was installed but I suspect this restart may be avoidable, and if so, it would be prudent for Mark/Space to re-write the installer. Once restarted, I merely had to select the HotSync application on the PEG-S360 and it *just worked*, as smoothly as my IIIe had worked on my Wall Street (although much faster due to the USB connection).

I had tried to sync the S360 prior to installing The Missing Sync and had failed miserably no matter what settings I tried. When I returned the S360 and exchanged it for the SL10, I

immediately brought the SL10 home, hooked it up, and HotSynced again, with no problems at all. I'd love to test the software with every CLIÉ model, but getting Sony to send me a free NR70V is proving to be a bit difficult.

Mark/Space claims the MP3-capable CLIÉs (neither the S360 nor SL10 qualifies) can be used as an iTunes music source; likewise, they claim the photo-capable CLIÉs (including the SL10) can sync with iPhoto. I was unable to test either the iTunes support (still waiting on that NR70V) or the iPhoto support (requires a Memory Stick) but I can say that it didn't like my moving iPhoto out of the root level of the Applications folder in OS X. The Missing Sync iPhoto plug-in got dumped in the root level of my Applications folder; moving it into the iPhoto application's Plug-Ins folder (via Show Package Contents) should remedy the problem.

One final caveat: if you have an original CLIÉ PEG-S300 (or if your 700-series device is still using Palm OS 3.5.x), The Missing Sync will *not* allow USB HotSync under OS X; the OS 9 version, which is included with the OS X version, should allow these devices to work. Mark/Space says Palm OS 3.5 support may be included in a future OS X version of the software.

If you have a CLIÉ or are considering purchasing one, this software might just be the single must-have accessory for your stylish new pocket pal. If you're considering a higher-end PDA, however, check around on the Net and with other users; some field reports indicate you may not need The Missing Sync for USB sync with some of the newest models, although you'll still need it for the iTunes, iPhoto, and Memory Stick features.

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1. <http://www.markspace.com/missingsync.html>

Review: Optical Elite

by Eric Blair, ebclair@atpm.com

Developer: [Kensington](#)¹

Price: \$29.99

Requirements: Mac with USB



When I [visited](#)² the Kensington booth at Macworld in July, I got a look at four or five fairly new input devices. Although the featured device was the \$60 StudioMouse, Kensington did not forget about the consumer who may want a less costly alternative. For half the cost of a StudioMouse, you can get Kensington's Optical Elite. Along with providing a quality mouse at a low cost, Kensington has also upgraded MouseWorks for OS X to version 2.0, which marks the return of some popular features that were missing from version 1.0.



The Hardware

As this mouse is called the Optical Elite, it should come as no surprise that it uses an optical sensor, as opposed to a mouse ball, for its tracking mouse movement. This is really the first time I've used an optical mouse for any sort of extended period and I'm really impressed how smoothly the mouse moves across the mouse pad. It's a definite improvement over the old hockey-puck mouse I was using before.

The Optical Elite features four buttons and a scroll wheel, which can also work as a button. Unlike the Thinking Mouse, which had four buttons laid out in pairs at the top of the mouse, the Optical Elite looks like a traditional two-button scroll mouse. The third and fourth buttons are located on the side of the mouse, right at the curve. Typically, the tip of my thumb rests on the left button and the middle portion of my ring finger is over the right button. As a result, both side buttons are easily accessible, either by pressing with my thumb or flexing my ring finger. This approach seems to work fine, though I would refrain from assigning any function to the lower right button that required me to click and hold.

I like this button layout better than that of the Thinking Mouse. First, I can cover all four buttons at once. Secondly, since the mouse looks and acts like a typical two-button mouse, it's easier for somebody unfamiliar with your setup to just sit down and start working. I've had a Thinking Mouse for about five years now and whenever somebody new sits down at my computer, most of the time he has difficulty figuring out which pair of buttons are the main two.

The Optical Elite is fairly comfortable to use. The two main buttons give you a large target area for clicking, so you can pretty much hold the mouse however you want. Furthermore, the material used in the body of the mouse does a good job of keeping my hand from slipping—a complaint I've heard about other, similarly shaped, mice.

No discussion of the Optical Elite would be complete without mentioning its appearance. Lately, it's become fashionable for optical mice to use the light from the optical sensor to illuminate parts of the mouse casing. The Optical Elite either uses tinted plastic or a separate light source (I haven't figured out which) to light the area around the scroll wheel blue. It adds something to the look of the mouse without being too distracting.

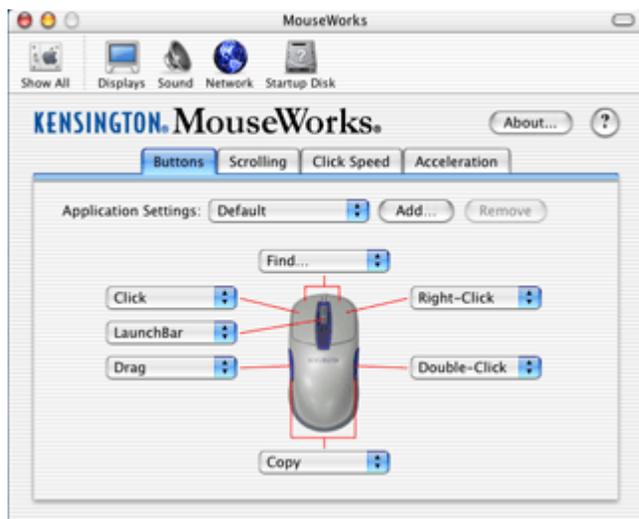
2. <http://www.atpm.com/8.08/report.shtml>

1. <http://www.kensington.com/html/1212.html>

MouseWorks

As I [predicted](#)¹ last year, Kensington has indeed brought back some of the missing features to the MouseWorks software. With version 2.0, MouseWorks is getting closer and closer to the well-rounded driver that worked with OS 9.

The first thing you'll probably notice is that MouseWorks is now a Preference Pane instead of an application. This cuts down on hard-drive clutter and keeps even more of your settings in a convenient place.



The ever-improving MouseWorks for OS X.

Two major items have returned to MouseWorks: Application Settings and Keystrokes. Application Settings allows you to set up the mouse buttons to different commands based on the program. One common thing is setting the third and fourth buttons to the forward and backward commands. In OmniWeb, this means the buttons are mapped to Command-Right Arrow and Command-Left Arrow. In the Finder, they are mapped to Command-] and Command-[. Without Application Settings, this would not be possible. This example also illustrates the Keystrokes feature.

1. <http://www.atpm.com/7.06/turbo-mouse-pro.shtml>

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With the MouseWorks software, the Optical Elite supports the chording of the top two mouse buttons and the bottom two buttons. If you choose to use chording, you end up with a total of seven buttons.

According to the MouseWorks documentation, there are several other additions that, for various reasons, I haven't been able to test. One is the ability to send "raw" responses from the third, fourth, and fifth mouse buttons. Some applications accept raw responses—the Read Me gives the example of Maya treating the scroll-wheel button as a middle-click. Also, the DirectLaunch buttons on the Turbo Mouse Pro can perform any MouseWorks action instead of just launching applications or Web pages.

MouseWorks for OS X is not quite equal to its OS 9 counterpart, though. Snapping to the default button in a dialog, fine tuning the mouse acceleration, axis-only movement, and the various pop-up menus are all still absent, along with several other features. However, Kensington states that it will attempt to add as many features as possible to future MouseWorks versions.

Where the OS X version of MouseWorks is continually evolving, the Classic Mac OS version seems to be nearing the end of the line. It was last updated in late November 2001 and is virtually identical to the version reviewed with Turbo Mouse Pro. The software is still one of the best mouse drivers for the Classic Mac OS, but it's obvious that Kensington is focusing its efforts on OS X.

Conclusion

I've really enjoyed using the Optical Elite. When I think that my Thinking Mouse cost almost \$100 and the Optical Elite costs \$30, I marvel at the way mice have changed over the years. When it was released, the Thinking Mouse was basically the top of the line. The Optical Elite has all the same features of the Thinking Mouse, adds an optical sensor, scroll wheel, and improved button layout. If you are looking for a feature-filled mouse at a reasonable price, check out the Optical Elite. If Kensington stays true to form with its development of the MouseWorks software, then the Optical Elite will become more useful with age.

FAQ: Frequently Asked Questions

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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.

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