

The staff members of ATPM wish to express our heartfelt thoughts, prayers, and condolences to the families of the seven STS-107 crew members who lost their lives while returning home in the Space Shuttle Columbia. Rest in peace: Rick D. Husband, commander; William C. McCool, pilot; Michael P. Anderson, payload commander; David M. Brown, mission specialist; Kalpana Chawla, mission specialist; Laurel Clark, mission specialist; Ilan Ramon, payload specialist & first Israeli astronaut.





*About This Particular Macintosh: About the **personal** computing experience™*

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ISSN: 1093-2909

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Welcome

by Robert Paul Leitao, rleitao@atpm.com

Welcome to the February issue of *About This Particular Macintosh!* February's the shortest month of the year. Therefore we will try to keep our intro as brief as possible. We don't want to run the risk that an expanded *Welcome* coupled with our exhaustive coverage of everything Mac would keep you reading our February issue past the beginning of March. To wit, we declare this issue of ATPM to be our official "sans" publication.

This is not an easy task! January's announcements from Cupertino could fill an almanac, sans the weather forecasts. Speaking of forecasts, Steve Jobs and Co. announced that in the December quarter, Apple's first fiscal quarter, the company shipped 743,000 Macs. This resulted in net profits per share before extraordinary income and expense items of \$.03. This was inline with Wall Street estimates. Extraordinary charges relating to restructuring expenses put the company in the red for the three-month period. The company lost \$.02 per share inclusive of the extraordinary items. The company's cash and investments grew in the December quarter to more than \$4.4 billion.

Where the forecasts come in to play is that Apple executives estimate that the current three-month period will be similar to the past three-month period, sans the extraordinary expenses. This means the company, like most technology companies, won't predict when a turnaround in commercial and consumer technology spending will begin. Sans real estimates, we can expect little more than for the PC industry to continue to tread water while waiting for computer buyers to return to the stores.

Speaking of stores, Apple's retail stores rang up about \$150 million in retail sales in the December quarter. The company continues to aggressively market the stores as a key component of its efforts to lure Windows users to the Mac. Research reports that Apple slightly increased its overall market share in the US in the final half of 2002.

In early January Apple released two new PowerBooks—a 12" aluminum PowerBook and a 17" aluminum PowerBook. In addition to the change in casing material, the new PowerBooks sport faster FireWire ports, internal Bluetooth wireless support, and DDR RAM. Apple claims PowerBooks and iBooks will increase their percentage of overall Mac

sales during 2003. That's one forecast that will probably come true. The mini-tower line has been sans a serious upgrade for quite some time, and at the end of January Apple cut the prices on its mini-tower line.

In other news, Apple released a public beta of Safari, its homegrown Web browser. More than 500,000 free copies of Safari have been downloaded to date. Keynote, an Apple alternative to Microsoft's popular PowerPoint presentation software, debuted during the first month of the year at \$99. Final Cut Express, a \$299 version of Apple's \$999 Final Cut Pro digital editing software, became available mid-month. Final Cut Express is positioned as a product for digital pros and home enthusiasts who want the power of Final Cut Pro but sans some of the high-end editing features used by major production houses and movie studios.

There's more to come in our official "sans" issue of ATPM. This month we'll sans our *Welcome* editor's verbose lead and introduce you to our February release. Please enjoy!

The ATPM Staff

Our February issue includes:

The Candy Apple: St. Valentine's Day Observations

Ellyn decides the only date she needs for Valentine's Day is her very own Mac.

On a Clear Day You Can See the Hollywood Sign

Whether or not you are a football fan, the Super Bowl hype tends to grab your attention at this time of the year. Find out how Apple leveraged this event to go after more Switchers...and not necessarily in the way you think.

Roll Your Own: The Object of Programming

For those of you who been following Chuck Ross' series on writing your own software, this month he introduces a tool to make your job easier—Object Oriented Programming in AppleScript.

What's Under The Hood: Eye Candy for the Mac

Bob Lewis has a new Pismo. Find out about the utilities and other goodies that he finds indispensable...or just plain fun "under the hood" of his latest Mac.

How To: Personalizing Your Mac 101

We all know that the original Mac OS was made for customizing. It was for creative folks, after all. Find out how you can do the same in OS X.

Segments: Switch

Glenn McDonald recounts his switch to the Mac and the larger personal journey that comprises it.

Cartoon: Cortland

Is this the beginning of the end for our friend Bill, at least on the Mac platform? Cortland has a look.

Desktop Pictures: Bora Bora

If it's cold in your part of the world, maybe you should warm up with some pictures from the South Pacific.

Shareware Roundup: Count Your Pennies

In case you plan to do a little traveling this year, find out how much your dollar is worth around the world. Check out these currency converter shareware programs.

Review: Brother HL-1470N

Paul Fatula reviews a personal laser printer that connects via Ethernet or USB.

Review: Inspiration 7.0a

Gregory Tetrault reviews an organization tool that can help you with flow charts, concept maps, storyboards, and other diagrams.

Review: Mac OS X Disaster Relief (book)

Kirk McElhearn reviews this book from Mac troubleshooting experts Landau and Frakes, and finds that it's best suited as a guide to setting up Mac OS X.

Review: SharingMenu 1.0

If you frequently find yourself digging into the System Preferences to turn various flavors of Sharing on and off, this utility is a sanity saver.

Review: SMART Toolkit 1.2

FWB SMART Toolkit tries to give you a heads-up on potential hard drive failures. Eric Blair looks to see whether or not it succeeds.

Review: The Wireless Networking Starter Kit (book)

Kirk McElhearn reviews this cross-platform guide to 802.11 networking.



E-Mail

Disabling the Clear Key

The keyboard that came with my G4 is of the midget variety but works OK for me except for one aggravating problem: the Clear key on the numeric keypad. Every once in a while I'll be entering text at a furious pace on, say, one of the bulletin boards that I contribute to, and without looking I will accidentally hit the Clear button as I'm actually trying to hit the Delete key. All the text that I've typed disappears and cannot be revived with undo. Question: can I neutralize my Clear key to avoid that problem?

—Henry Halem

There is no way to neutralize it without additional software—however a macro suite such as KeyQuencer (shareware), QuicKeys (commercial—slightly more user friendly) would let you do this very easily. You could turn off Clear in all applications, or in a specific application, or you could program it to only function when another modifier is down (say, Shift, Option, etc.). —Evan Trent

Age

I've been using an Apple Mac for the past decade, but now I've decided that I am past it. I am 82. Perhaps a time comes when the brain is no longer capable of taking note of a new way of doing things.

I'm talking about Mac OS X. I've just bought a new computer, an iMac with a flat screen, and it sits on my desk alongside my "old," iMac which of course is operated by OS 9. I cannot do a single thing with my new iMac, nor can I discover any site which will educate me about it. It seems, from reading ATPM and other Mac magazines that thousands of Mac fans just naturally seem to be able to operate it. I'm afraid that this doesn't work for me, nor, I suspect, for other old Mac fans.

I bought the book which claims to be the "missing manual," but I cannot understand it either.

Wouldn't it be a service to your older readers if you'd spell it all out for them? Pretend we're ten-year-old boys and explain simply what it is all about and what we have to do. Then we'd be even more grateful for the existence of ATPM.

—*Marius Pope*

I appreciate where you're coming from. One of my close family members is 83, and although he was once a leading computer designer he now has trouble learning the latest software (Windows, unfortunately). Of course, I would like for us to be able to help you out, but I just don't know how. Nearly everyone I've talked to thinks *Mac OS X: The Missing Manual* is a masterpiece, and I wouldn't know how to improve it. Maybe the problem is that it explains the parts of OS X that are confusing for us, but those may not be the same parts that are confusing for you. The only thing I can suggest is for you to ask some specific questions. We'll try to answer them. —*Michael Tsai*

Routers

My problem is file sharing between my PowerPC 7600 (upgraded to a G3, with Mac OS 9.2.2) and my new iBook with an AirPort card. I had a Linksys BEFW11S4 version 2, but returned it after many days of frustration.

I read in your help page about port mapping to the server. I am not trying to go outside, just share behind the router. Do I need to port something? I want to share files on my G3 with the iBook, which is wireless. I am able to connect to the Internet and e-mail on the iBook, but I can't share files. Whenever I try to connect to the G3 server at the iBook I get a message that say error -36.

I have a Cox cable modem port. I have tried numerous combinations of DHCP IP, manual IP, connect automatically, etc. with no success. Is Linksys the way to go or should I try something else?

—*Phil*

Are you trying to do file sharing via TCP or AppleTalk?

If you're using AppleTalk, you need to put a hub in front of the router since most routers do not forward AT packets. You could use TCP instead, which is faster, FYI.

If you are trying to use TCP, how are your IP addresses set up and which one are you trying to use when you attempt to log on? What I would recommend to make life easier initially, is using manual IP on both machines and following the instruction manual that came with your router to help with assigning IPs to the computers. If you use DHCP the addresses will change periodically and this will complicate the file sharing process since you will have to keep checking to see what the server's address is.

Typically routers use the block 192.168.1.xxx as a range of IP address and the router will be at 192.168.1.1. Sometimes it's 192.168.0.xxx and 192.168.0.1. It depends—it's usually one of these two blocks of addresses but there are exceptions. Assuming it's the first block, pick something like 192.168.1.10 and 192.168.1.20 for your two computers' IP addresses, set the router addresses to 192.168.1.1, 255.255.255.0 for the subnet mask, and use 192.168.1.1 for the name server. Then let's say .10 is the client and .20 is the server, try logging onto 192.168.1.20 from .10 and see what happens. It should work.

Port mapping should not be an issue since both machines are behind the router—you are doing internal peer to peer access and the router should be acting just like a hub, forwarding TCP packets from one machine to another. I am assuming that you are using a wireless router, not a router and then an AirPort Base Station in addition. If you are using a Base Station in addition to a router, we may need to discuss the iBook's configuration in more depth. —*Evan Trent*

E-Mail Archiving

I've used Eudora Pro for many years, but since I began using OS X, I quit using Eudora because I really hate the way windowing works under OS X. After using Entourage for a while and having a database corruption scare, I went to Mail.app in Jaguar and have all of my mail servers configured as IMAP to maintain mail on the server. I also use server-based folders extensively to organize my e-mail.

When I accumulate too much mail, I download it into Eudora for archiving. I find Eudora is, by far, the best and fastest at handling a large amount of e-mail and can search faster than anything else.

—*Mike Cohen*

Allow me to call your attention to a little detail since this once personally affected me. Make sure your host that is holding all your IMAP e-mail and folders has a solid backup policy in effect. A former host of mine had a hard drive crash within their e-mail server and it was at this time I discovered (to my profound dismay) that there were only weekly backups, and it had been six days since the last run! The messages in my inbox seldom resemble the messages that were in there a week ago!

Officially, I changed hosts for one that had more storage for the same money, plus gave me PHP access so I can someday start blogging. But that backup policy was a major *unofficial* reason!

Demand daily backups or, at the very worst, every other day—or find a new host. —*Lee Bennett*

Using a PowerBook to Play DVDs on a TV

I read an old post about playing DVDs on a television routed through a PowerBook G3. How did you do that?

—Jeff Tescher

The PowerBook G3 series featured both VGA and S-Video outputs. The latter enabled you to connect to a TV. An S-Video->Composite adapter was provided by Apple to allow for connecting to TVs without S-Video input jacks. If your TV is so old that it does not even have a Composite input (in other words if all it has is an RF antenna jack) you can get an RF modulator to convert the output of the PowerBook's S-Video. Otherwise, just connect the S-Video or Composite output using the appropriate cable.

Once you have the connection between the PB and TV, power on the TV. Select the appropriate input using your TV's remote (it should correspond to the input jack you're using on the back of the TV, i.e. "Video 1," or "Aux" etc.). Then reboot the PowerBook and fire up the Apple DVD Player. By default the TV will be monitor #2, which is to the right of the built-in screen. So if you drag the window for the DVD player to the right, off of the built-in screen, it will move onto the TV. Once the window is moved entirely onto the TV, if you select Full Screen mode, the DVD player will fill the TV. Then play the movie, and you're all set.

You can also hook up the audio to a hi-fi or home theater. If you need help with this, let me know and I can explain the connections for you. —Evan Trent

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St. Valentine's Day Observations

Why February 14th? Why this date in particular? Is it that birds begin to mate then, or a Roman feast honoring Juno was held on this day in years past? Or is the story of the martyr Valentine's note from jail really true?

I don't know, but St. Valentine's Day observances nowadays only serve to separate us into haves and have nots: those who have people appropriate to do romantic stuff with, and those who don't. The Haves feel obliged to do something with their honeys, and the Have Nots feel other things: cynicism, resentment, scorn, stuff like that. Little of it generates positive energy.

So just like last month, when I declared a moratorium on New Year's resolutions, this month I'm abstaining from Valentine's Day silliness. I'll feel better in the long run.

If I *were* however to salute special qualities about my loved one, here's what I might say...

It's always there whenever I want to turn it on.

It hushes up when I tell it to.

It remembers what I sound like and never has to ask how to spell my name.

I don't have to feed it or change it. It is mostly self-sustaining.

I don't have to compliment it or remember to tell it anything. Mostly, it reminds me of stuff, rather than the other way around.

It plays games with me whenever I want. And sings. And tells the time.

Who could ask for anything more? My Mac does all these things, so why wish for a date on Valentine's Day? This is a whole lot cheaper.

A Step Further

All those assets I just listed of my Mac—efficiency, consistency, and reliability—why are those qualities we wish for in ourselves and in each other? I prize those traits in people, most of the time, but now and then we also have to remind ourselves to play. We have to be careful not to become so blinded by a task that we forget to appreciate all that life has to offer.

These are some of the reasons why ATPM includes cartoons and often-amusing cover art, and makes desktop pictures available for download. We're not just about product reviews and technical tricks; we're about the whole computing experience, so don't forget to snicker a little as you scroll through this issue. If an article or something else in ATPM strikes a chord, take a moment to e-mail the writer or comment at the end of the article on the Web so others can see what you gained from reading it.

St. Valentine's Day might really be about making connections with other people. See what you can do to make a few connections yourself.

Onward.

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On a Clear Day You Can See the Hollywood Sign

by Mike Shields, mshields@atpm.com

Everyone Has a Black Jetta

I drive a '96, what's yours? OK, maybe not everyone has one, however, in the 24-unit apartment where I live, the tenants, myself included, are responsible for six of them. There's another two that park down the street. Driving my kids to school or to the mall (both less than a mile away from my apartment), I see at least five or six. Another three besides my own can be found in my church parking lot. In any case, that's what we in the math trade call a statistical anomaly. It's like when you walk into some office buildings these days, and most desktops have a Mac. Macs apparently account for 5% of sales worldwide, so, you'd figure only every one in twenty computers would be a Mac. Yet you see them everywhere. Well if you haven't guessed already, some of this may be Mac related....

Another word about lead time...since this fine e-zine you're now reading comes out on or near the first, our esteemed publisher (Hi, Michael!) likes it when we get our work in about ten days before the first. This way, we can give you almost up-to-the-minute opinions, reviews, and news, and still have time to put together this dynamite rag we call ATPM. Usually, I ask for a squishy deadline, as various things account for my being late on more than an occasional basis. I could've asked for one this month due to the Super Bowl, however, I chose not to. I figured to prognosticate on whether Apple would dig deep into their pockets, and place an ad. Currently, I think the going rate is \$2 million for a thirty-second spot. Of course, this would finance my film quite nicely, so they should give the money to me. I'm even going to edit with Final Cut Pro, so I could give them the product placement they seek in the end credits, as in a couple of movies I've seen recently.

However, the odds are, the Super Bowl will attract a wider audience; therefore, they'll probably spend the money there—as they did in 1984. Now, I've mentioned the historical significance of the 1984 commercial in this column several times previously, so I won't bring it up again. Many of you Mac faithful already know anyway. So, a simple small reminder that Apple started the big Super Bowl ad push that we now know today is sufficient.

Apple's been conspicuously absent in recent years. Of course, they've more than made up for it—one year even going so far as to host a Super Bowl special show on their Web site, in conjunction with Fox, who was broadcasting that year.

Will They, or Won't They?

Commercials are a tricky thing. The sum mentioned above only gets you the air time to show it to the masses. You still have to put something there. Depending on how fancy you want to get, that could run you another two or three million dollars. Or you could hire Jeff Goldblum to talk for thirty seconds. Of course, Apple should give me the money, and I can make my first two films, but I digress.

We all know we'll have perennial favorites Budweiser and Pepsi advertising, and at the same time, we won't see as many dot com ads, as we did three years ago. In fact, last year's most liked commercial was the ode to the still-current Robot Wars phase the country seems to be in, with the refrigerator vs. the killer robot. It opens, revealing a twelve-ounce bottle of Budweiser, and the killer robot grabs for it. As it gets close, a giant hammer comes out from behind the refrigerator, and smashes the killer robot. Personally, I liked the Visa Check Card Commercial with Kevin Bacon. He left his ID at home, so, he went and got various people that knew him, and each other, until he found someone that knew the salesclerk. And in case anyone asks, my Bacon number is 3.

And for my money, the best commercials out now have been running for a few days previous to the big event. The Coke commercial with Courtney Cox and David Arquette comes to mind. Also, the guy running on the soccer field, wearing only a pair of Nikes and a scarf.

So, the competition is stiff. Would an ordinary Apple Switch commercial get buried? Most likely. But, on the off chance that at least a tenth of the projected sixty million viewers is watching the commercials intently, that's a potential six million new Mac users that can be taken into the fold. Because, they can't all be Mac owners already, can they? Or, they can create a new, never before seen commercial. Are the fine folks at Chiat/Day up to the task?

Well, by now, we know the answer to this, partially because as always, something came up for me. They chose not to spend their money on the Super Bowl itself. And as mentioned above, Budweiser came up with a really funny ad with the Clydesdales and a Zebra. And Yao Ming, 7'5" center for the Houston Rockets, was in an ad for the Visa Check Card. I still like the one with Kevin Bacon.

Apple, thinking quickly, chose instead to advertise during the TV show that came on after the game, *Alias*. It featured the aforementioned Yao Ming, with the new 12" PowerBook, sitting next to Verne Troyer of Mini-Me fame with the new 17" PowerBook, on an airplane. Yao could palm the 12", whereas Verne was dwarfed by the 17". This allowed them to run the same ad the next night during *The Practice*. Smart move. ABC spent all the unsolicited ad time during the game promoting what they called Super Monday, wherein the aforementioned tv show appeared. So, my guess is, I'll have to find financing somewhere else.

We've Fired Our Tech Support Staff

Now, if you walk into the above-mentioned office, you'll notice that everyone's working. And not a harried tech support crew to be seen. I read recently of one company mentioning that *the Switch* allowed them to reduce costs, by removing most if not all of their tech support crew. Another smart move. The math works out to an annual savings of \$200K. Which would finance my office, if not the movie itself. And a statistic I've reported previously: an average of 14 more hours per workstation of actual productivity per month results as well.

Of course, I'll be the first to rail against the mentality of the masses; as far as I'm concerned, when you get to a fork in the road, you should take the third path. And the reality of the situation is, Black Jettas only really account for less than .01% of the cars on the road worldwide. However, when you see everyone else on the road has one, don't you say to yourself, "Maybe they know something I don't?"

72 and sunny in Redondo Beach.

e you next time.

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The Object of Programming

We've come a long way since the [beginning of this series](#) some months ago. We've gone from the very basics of what it means to write a program, to being able to create our own software with nothing more than the computer we already have, and an idea of what a program can do.

That brings me to an idea I had this past week. I'm sure some of you have begun to write software that originated in your own heads. I would love to take a look at what you're doing. If you've created any software with AppleScript by using the concepts taught in this column, please send me a copy of it. I'm very interested in what you're doing with this knowledge.

I mentioned last month that we've pretty much covered everything you need to know to write software with very simple user interfaces. But programmers are always looking for ways to make their jobs easier, and one of the tools they've come up with is Object Oriented Programming, or OOP.

Object oriented programming exists in contrast to a traditional approach called procedural programming. Procedural programming is what we've been using so far, writing software that contains data in variables and writing handlers, or subroutines, that manipulate the data. Procedural programming took software a long way from the original days of punch cards, but as programs grew more and more complex, reaching millions of lines of code, it became difficult to maintain the software, and OOP was created as a tool for helping with this problem.

Procedural programming has two basic entities: variables and handlers (to use the AppleScript language term for functions). Handlers usually exist for the purpose of manipulating some variables in a very specific way. So you might have a variable that holds a list of names called `nameList` and a handler that accepts a list of names and returns it sorted alphabetically, perhaps named `sortNameList(nameList)`. Perhaps there's another

handler for adding a name to the list, and another one for removing a name from the list. There might be dozens of handlers, each one performing a specific action on a list. But all of these handlers are separate from that variable `nameList`.

OOP combines these separate entities into a single new entity called an object. An object is a collection of data and routines to operate on that data. The data in an object are called properties, so rather than referencing the variable `nameList` itself, we would reference the `nameList` property of an object. The handlers associated with an object are called methods, and to call a method, we send a message to the object.

The advantage of objects is primarily portability. After we've created an object and have tested it thoroughly and have ensured that it works as we expect, we can take that object to other programs and have all of its functionality in the new software. This may sound much like one of the advantages of handlers themselves, but there is a major difference. If we create only handlers (outside of any object) and bring those handlers over to the new software, we haven't brought any of the variables or data that the handlers expect. By placing everything in an object, we're able to guarantee that everything we need is in the new software simply by copying and pasting the object's code into the new program, or better, by loading the object from a shared library.

AppleScript doesn't include all of the concepts of OOP, or at least not as much as languages such as Objective-C or C++. If you're familiar with these languages at all, you'll find that AppleScript doesn't support the concept of private and public properties or handlers. All such items in a script object are public. But you can still use the concepts of OOP with AppleScript. AppleScript calls objects *script objects*, as you'll see when we begin creating objects.

In one sense, you're already familiar with objects. AppleScript comes with many different types of data built into the language, such as numbers and strings, and these data types have operations that can be performed on them. The ability to create our own objects gives us a great deal of flexibility in creating our own data types not built into AppleScript, providing the operations that can be performed as we see fit. Later on we're going to create an angle object and define the operations that an angle should have. Then we'll be able to use the angle object later on, whenever we need that type of data for our software.

Just as creating a handler without calling it won't do anything, creating a script object without creating an instance of it won't do anything either. An object is actually sort of like a template or blueprint for instances of the object. You can create as many instances as you like from a single object definition, just as you can create many houses from a single blueprint.

One last word before we delve into some examples: You don't need to know OOP to create programs. You can create any program you want with just the principles of procedural programming, and for small projects, this will probably make sense. But once your software becomes more complex (and especially once you begin building graphic interfaces to your software) OOP can greatly simplify the programming process. Also, if you're using Mac OS X and want to build programs with AppleScript Studio, or if you're using Mac OS 9 and want to build programs with FaceSpan, an understanding of OOP is integral to both of these environments.

OK, so let's build an object. The first object we're going to create in AppleScript doesn't really do anything except demonstrate how to create an object with AppleScript code.

```
on run
    -- Create a script object called MyScript
    script MyObject
        -- MyScript has a single property, myNumber
        property myNumber : 0
        on ReportMyNumber()
            display dialog myNumber
        end ReportMyNumber
    end script -- MyObject
end run
```

Like the program we created [last month](#) with a handler that isn't called, this program when run won't actually do anything, or at least nothing visible. It only declares a very simple script object called `MyObject`. `MyObject` has a single property called `myNumber` which is initialized to 0. `MyObject` also has a single method called `ReportMyNumber` that displays the contents of the `myNumber` property.

I said that the program doesn't do anything visible. What it does do is create an instance of the object defined. If you run this program and view the result window (or result tab in [Script Editor 2](#), recently released as a preview), you'll see that the result of running this script is "script MyObject". Whenever a handler that contains a script object is executed,

an instance of the script object is created. However, I've found that working with objects in AppleScript is easier if you use a handler called something like `makeMyObject` to contain the script object and use code within the handler to return the object to the calling portion of the program. You'll see this demonstrated later.

Note the exception to the "no handler within a handler" rule here. We have the `run` handler, and inside of it is a script object which then has another handler. If the deeper handler is within a script object, then it can (and in fact, must) be contained within another handler somewhere. In fact, we could create another script object within `MyObject` and have more handlers within it, although I've never actually seen this done.

It doesn't make much sense to create a script object and then not use it, so let's create an explicit instance of the `MyObject` object and use its `ReportMyNumber` method to find out the value of the `MyNumber` property.

```
on run
    -- Create a script object called MyScript
    script MyObject
        -- MyScript has a single property, myNumber
        property myNumber : 0
        on ReportMyNumber()
            display dialog myNumber
        end ReportMyNumber
    end script -- MyObject
    copy MyObject to MyInstance
    tell MyInstance to ReportMyNumber()
end run
```

All we've added to the program are two lines. The first new line creates an instance of `MyObject`, naming that instance `MyInstance`. Then we use the `ReportMyNumber()` method of `MyInstance`. Running this program will display a dialog with a "0" in it, which is what the `myNumber` property is equal to.

That last line could also have been written in a number of other ways. The first alternative is `MyInstance's ReportMyNumber()` and the second is `ReportMyNumber()` of `MyInstance`. Both of these are equivalent to `tell MyInstance to ReportMyNumber()`, and as with many things in AppleScript, the way you call methods in an instance is up to you. I prefer the `tell` version in most cases, although when the object's method returns a value I'll often use one of the other forms.

We could also have gotten the property directly without going through the object's method.

```
on run
    -- Create a script object called MyScript
    script MyObject
        -- MyScript has a single property, myNumber
        property myNumber : 0
        on ReportMyNumber()
            display dialog myNumber
        end ReportMyNumber
    end script -- MyObject
    copy MyObject to MyInstance
    display dialog myNumber of MyInstance
end run
```

Many OOP languages let you disallow this kind of statement by making a property private (accessible only within the script object's handlers), requiring that the rest of the program use the provided methods to access the properties. This is known as encapsulation, and although AppleScript doesn't have this ability, you can always act as if it does by using methods to access property values, and this is the path that I recommend. That way if you change how `myNumber` is stored within the script object but still allow the handlers of the script object to be called in the same way, the rest of your program won't have a problem. For instance, perhaps we actually make `myNumber` a list instead of a number, and we rewrite the `ReportMyNumber()` handler to report the contents of the first item in the list. To the world outside of the object, everything works as before, but only if we use the object's methods to access the properties rather than referencing them directly.

Now that we have talked about the basics of creating and using script objects, we're going to create a more complicated object with a number of methods. Our object is actually going to be an angle. An angle only has one property, but there are a number of methods that would be useful to have as well. For example, adding angles works differently than if we simply use a number variable. For instance, it doesn't make much sense (for my purposes anyway) to speak of angles greater than 360 degrees or less than 0, so my handlers for adding or subtracting two angles will work appropriately. Also, an angle can be measured in multiple ways, so we'll use a different property to track each unit. In the same manner that we started with a simple version of our Sum Numbers program, we're going to build this object from rather simple to much more complex. As we edit this script, I'll place the new or changed code in italics.

Here's a first draft of our angle script object.

```
-- Demonstration of AppleScript's object oriented techniques
-- using an Angle as the sample object.
-- Written by Charles E. Ross, 12/26/02
-- Version 1.0v1
on run
  -- Declare a script object called Angle.
  script Angle
    -- Angle has one property, the measurement of the angle in degrees.
    -- The size of the angle in other units is derived from the degrees.
    property degrees : 0.0
    -- Sets the degrees property to the value passed to it.
    on SetSize(theSize)
      set degrees to theSize
    end SetSize
    -- Returns the value of the degrees property.
    on GetSize()
      return degrees
    end GetSize
  end script
  -- Create two instances of an angle.
  copy Angle to firstAngle
  copy Angle to secondAngle
  -- Set the values for our two angles.
  tell firstAngle to SetSize(180)
  tell secondAngle to SetSize(270)
  -- Get the sizes of our angles.
  display dialog "firstAngle has a size of " & ¬
    firstAngle's GetSize() & " degrees."
  display dialog "secondAngle has a size of " & ¬
    secondAngle's GetSize() & " degrees."
end run
```

As you can see, this first version of the `Angle` object is very simple. We have only one property, `degrees`, and two handlers, `setSize()` and `getSize()`. Outside of the `Angle` definition we create two instances of the `Angle` object, set the size of both of them, and then report the size of both of them in a couple of dialog boxes.

Notice how we access the handlers of the `Angle` instances. When we initialize the instances, we use a `tell` statement to send a `setSize()` message to each of them. When we're reporting the size of the angles, we use the possessive form to insert the sizes into a `display dialog` statement.

This brings up an important point regarding the handlers that exist within objects. Our `Angle` object has a `GetSize()` handler. But we could also include a `GetSize()` handler outside of the object which does something entirely independent of the handler within the object. Take a look at the following program.

```
-- Demonstration of AppleScript's object oriented techniques
-- using an Angle as the sample object.
-- Written by Charles E. Ross, 12/26/02
-- Version 1.0v2
on run
    -- Declare a script object called Angle.
    script Angle
        -- Angle has one property, the measurement of the angle in degrees.
        -- The size of the angle in other units is derived from the degrees.
        property degrees : 0.0
        -- Sets the degrees property to the value passed to it.
        on SetSize(theSize)
            set degrees to theSize
        end SetSize
        -- Returns the value of the degrees property.
        on GetSize()
            return degrees
        end GetSize
    end script
    -- Create two instances of an angle.
    copy Angle to firstAngle
    copy Angle to secondAngle
    -- Set the values for our two angles.
    tell firstAngle to SetSize(180)
    tell secondAngle to SetSize(270)
    -- Get the sizes of our angles.
    display dialog "firstAngle has a size of " & ¬
        firstAngle's GetSize() & " degrees."
    display dialog "secondAngle has a size of " & ¬
        secondAngle's GetSize() & " degrees."
    GetSize()
end run

on GetSize()
    display dialog "The size is 42."
end GetSize
```

Now perhaps you understand why we have to specify the object that a particular handler belongs to. This program operates the same as the last one, but after the two dialog boxes appear showing us the size of our two angles, we get another dialog box that says “The size is 42.” That last line of the `run` handler isn’t attached to an instance of the `Angle` object, so the handler that gets called is the one outside of any instance.

Note how we are creating the instances of `Angle`: by using the `copy` command. We are using `copy` so that we are creating two separate instances of `Angle`. If we had used `set` as in `set firstAngle to Angle` and `set secondAngle to Angle`, we would not actually have two instances of the `Angle` object. We would instead have one instance that could be referred to by two names. Go ahead and edit your script to use `set` instead of `copy`, changing nothing else in the script. You’ll get two dialog boxes reporting that both `firstAngle` and `secondAngle` are 270 degrees. That call to `tell secondAngle to setSize(270)` is setting the size of the same `Angle` referred to by `firstAngle`.

Let’s expand our `Angle` object a bit. I’m sure all of you are familiar with using degrees to measure angles, but there are other units available. Mathematicians often use radians or gradians to measure angles. While there are 360 degrees in a full circle, there are 2π radians (about 6.28) and 400 gradians. Radians are useful when calculating the area of an arc (a section of a circle). Gradians come in handy because right angles have a size of 100 gradians, which is a nice round power of 10. Radians are usually expressed as a number times π , such as 2π or $\pi/3$.

We’re going to add to our `Angle` object the ability to report the size in any of these units, including how much we should multiply π by when the angle is expressed in radians, although we’re still going to store the size internally in degrees. Here’s the updated version.

```
-- Demonstration of AppleScript's object oriented techniques
-- using an Angle as the sample object.
-- Written by Charles E. Ross, 12/26/02
-- Version 1.0v3
on run
    -- Declare a script object called Angle.
    script Angle
        -- Angle has one property, the measurement of the angle in degrees.
        -- The size of the angle in other units is derived from the degrees.
        property degrees : 0.0
        -- Sets the degrees property to the value passed to it.
        on SetDegrees(theSize)
```

```

        set degrees to theSize
    end SetDegrees
-- Returns the value of the degrees property.
on GetDegrees()
    return degrees
end GetDegrees
-- Sets the size of the angle by converting from radians,
-- since the internal structure of the angle is stored
-- in degrees.
on SetRadians(theSize)
    set degrees to theSize * 180 / pi
end SetRadians
-- Returns the size of the angle in radians by converting
-- from degrees.
on GetRadians()
    return degrees * pi / 180
end GetRadians
-- Sets the size of the angle by converting from radians
-- divided by pi, since the internal structure of the angle
-- is stored in degrees.
on SetRadiansByPi(theSize)
    set degrees to theSize * 180
end SetRadiansByPi
-- Returns the size of the angle in radians divided
-- by pi by converting from degrees.
on GetRadiansByPi()
    return degrees / 180
end GetRadiansByPi
-- Sets the size of the angle by converting from gradians,
-- since the internal structure of the angle is stored
-- in degrees.
on SetGradians(theSize)
    set degrees to theSize * 9 / 10
end SetGradians
-- Returns the size of the angle in gradians by converting
-- from degrees.
on GetGradians()
    return degrees * 10 / 9
end GetGradians
end script
-- Create an instance of an angle.
set firstAngle to Angle
-- Set the values for our angle.
tell firstAngle to SetDegrees(45)
-- Get the sizes of our angles.
display dialog "firstAngle has a size of " & ¬
    firstAngle's GetDegrees() & " degrees, " & ¬
    firstAngle's GetRadians() & " radians, " & ¬

```

```
firstAngle's GetRadiansByPi() & "pi radians, " & π  
firstAngle's GetGradians() & " gradians."
```

```
end run
```

Notice that the angle's size is still stored internally in degrees, although the user of this object has the ability to get the size in any of the units desired.

This script also introduces the `pi` variable in AppleScript, which is equal to the π we're familiar with. Notice that I didn't say "the `pi` constant." `pi` in AppleScript is a variable, and you could in fact change its value with a `set pi to 3` or something similar.

The current way that a new `Angle` object is created is somewhat awkward. We're going to make it a bit easier to read exactly what is happening by enclosing the entire script object within a handler. Our new handler, `MakeAngle()` will take one parameter, the size of the angle in degrees, and return an `Angle` object. We're also going to add some error checking to make sure that the size passed to our new handler is in fact a number and that the units passed are one of the four possibilities.

```
-- Demonstration of AppleScript's object oriented techniques  
-- using an Angle as the sample object.  
-- Written by Charles E. Ross, 12/26/02  
-- Version 1.0v4  
on MakeAngle(theSize, theUnits)  
  -- Declare a script object called Angle.  
  script Angle  
    -- Angle has one property, the measurement of the angle in degrees.  
    -- The size of the angle in other units is derived from the degrees.  
    property degrees : theSize  
    -- Sets the degrees property to the value passed to it.  
    on SetDegrees(theSize)  
      set degrees to theSize  
    end SetDegrees  
    -- Returns the value of the degrees property.  
    on GetDegrees()  
      return degrees  
    end GetDegrees  
    -- Sets the size of the angle by converting from radians,  
    -- since the internal structure of the angle is stored  
    -- in degrees.  
    on SetRadians(theSize)  
      set degrees to theSize * 180 / pi  
    end SetRadians  
    -- Returns the size of the angle in radians by converting  
    -- from degrees.
```

```

on GetRadians()
    return degrees * pi / 180
end GetRadians
-- Sets the size of the angle by converting from radians
-- divided by pi, since the internal structure of the angle
-- is stored in degrees.
on SetRadiansByPi(theSize)
    set degrees to theSize * 180
end SetRadiansByPi
-- Returns the size of the angle in radians divided
-- by pi by converting from degrees.
on GetRadiansByPi()
    return degrees / 180
end GetRadiansByPi
-- Sets the size of the angle by converting from gradians,
-- since the internal structure of the angle is stored
-- in degrees.
on SetGradians(theSize)
    set degrees to theSize * 9 / 10
end SetGradians
-- Returns the size of the angle in gradians by converting
-- from degrees.
on GetGradians()
    return degrees * 10 / 9
end GetGradians
end script
if class of theSize is not in {real, integer} then
    error "Invalid size" number 101
else if theUnits is not in ~
    {"degrees", "radians", "gradians", "radians by pi"} then
    error "Invalid units" number 102
else if theUnits is not "degrees" then
    if theUnits is "radians" then
        tell Angle to SetRadians(theSize)
    else if theUnits is "gradians" then
        tell Angle to SetGradians(theSize)
    else
        tell Angle to SetRadiansByPi(theSize)
    end if -- theUnits is "radians"
end if -- class of theSize is not in {real, integer} then
return Angle
end MakeAngle

on run
    set newAngle to MakeAngle(30, "degrees")
    display dialog "The angle has a size of " & ~
        GetRadians() of newAngle & " radians."
end run

```

What we've done here is change the way the programmer creates new angles. We've taken the `Angle` object out of the `run` handler and placed it in a new `MakeAngle()` handler. When that handler gets called from the `run` handler, the `Angle` object gets initialized automatically. Then the code in the rest of the handler is run, which does some error checking to make sure that the size and units are sensible. If there's problem with either of the parameters, rather than return a value that's invalid, we call an error, providing an error message and a custom error number. If you'd like to see how this would work, change the first line in the `run` handler to read `set newAngle to MakeAngle(30, "deg")`.

What else can we do to improve our `Angle` object? Well, although strictly speaking, an angle can have any measurement, positive or negative, or even greater than 360, for our purposes, we're going to make sure that, although such numbers can be passed to the `MakeAngle()` handler, internally the angle will always be stored such that its size is between 0 and 360 degrees. If a negative value is passed to `MakeAngle()`, we will add 360 degrees to the size until the value is above zero. If a size greater than 360 degrees is passed, we'll perform a modulus operation.

AppleScript has a `mod` operator which takes the remainder of one number divided into another, so, for instance, `13 mod 6` is 1, because 13 divided by 6 is 2 with a remainder of 1. Similarly, if `MakeAngle()` is pass a value of 1000 degrees, this is equivalent to 280 degrees.

To ensure that the size of our angle is always between 0 and 360, we're going to add a new handler called `NormalizeSize()`, which will bring the angle within the range we want.

```
-- Demonstration of AppleScript's object oriented techniques
-- using an Angle as the sample object.
-- Written by Charles E. Ross, 12/26/02
-- Version 1.0v4
on MakeAngle(theSize, theUnits)
    -- Declare a script object called Angle.
    script Angle
        -- Angle has one property, the measurement of the angle in degrees.
        -- The size of the angle in other units is derived from the degrees.
        property degrees : theSize
        -- Sets the degrees property to the value passed to it.
        on SetDegrees(theSize)
            set degrees to theSize
            NormalizeSize()
        end SetDegrees
        -- Returns the value of the degrees property.
        on GetDegrees()
```



```

    return degrees
end GetDegrees
-- Sets the size of the angle by converting from radians,
-- since the internal structure of the angle is stored
-- in degrees.
on SetRadians(theSize)
    set degrees to theSize * 180 / pi
    NormalizeSize()
end SetRadians
-- Returns the size of the angle in radians by converting
-- from degrees.
on GetRadians()
    return degrees * pi / 180
end GetRadians
-- Sets the size of the angle by converting from radians
-- divided by pi, since the internal structure of the angle
-- is stored in degrees.
on SetRadiansByPi(theSize)
    set degrees to theSize * 180
    NormalizeSize()
end SetRadiansByPi
-- Returns the size of the angle in radians divided
-- by pi by converting from degrees.
on GetRadiansByPi()
    return degrees / 180
end GetRadiansByPi
-- Sets the size of the angle by converting from gradians,
-- since the internal structure of the angle is stored
-- in degrees.
on SetGradians(theSize)
    set degrees to theSize * 9 / 10
    NormalizeSize()
end SetGradians
-- Returns the size of the angle in gradians by converting
-- from degrees.
on GetGradians()
    return degrees * 10 / 9
end GetGradians
-- Ensures that the angle is between 0 and 360 degrees.
on NormalizeSize()
    -- If the angle is negative, add 360 to it until
    -- it is positive.
    repeat until degrees >= 0
        set degrees to degrees + 360
    end repeat
    -- Perform a modulus operation on degrees to ensure that
    -- the size is less than 360.
    set degrees to degrees mod 360
end NormalizeSize

```

```

end script
if class of theSize is not in {real, integer} then
    error "Invalid size" number 101
else if theUnits is not in ⌘
    {"degrees", "radians", "gradians", "radians by pi"} then
    error "Invalid units" number 102
else if theUnits is "degrees" then
    tell Angle to NormalizeSize()
else if theUnits is "radians" then
    tell Angle to SetRadians(theSize)
else if theUnits is "gradians" then
    tell Angle to SetGradians(theSize)
else
    tell Angle to SetRadiansByPi(theSize)
end if -- class of theSize is not in {real, integer} then
return Angle
end MakeAngle

on run
    set newAngle to MakeAngle(30, "degrees")
    display dialog "The angle has a size of " & ⌘
        GetDegrees() of newAngle & " degrees."
end run

```

Notice that adding this new feature changes nothing about how the outside world creates angles using our object. Everything to the programmer using this object is the same as it was before. This is one of the great advantages of objects. So long as we keep the interface to the object the same, the internal workings of how things actually get done is irrelevant to the programmer using the object. One programmer can build the object and, making sure that the interface (i.e., the handlers) remains the same, can tweak it however needed. In fact, later on as we continue to edit this object, we'll make a major design change to the object, but as far as programmers using the object are concerned, it will simply work a bit faster.

This month's column has become quite long, but I hope you haven't minded too much. Objects are a complex topic, but once you get your brain around how they work and what they can do for you, you'll find all kinds of areas in your programs where you will want to use them.

Next month we'll continue working on our `Angle` object, adding more features. Then we'll use it as the basis for another object, learning about another great advantage of object oriented programming: inheritance.

Copyright © 2003 Charles Ross, cross@atpm.com. Charles Ross is an independent developer and author. He's written articles for ISO FileMaker Magazine and is currently writing a book on creating applications with AppleScript.



Eye Candy for the Mac

New Addition

My user group, the [Houston Area Apple User Group](#) (HAAUG), held its semi-annual swap meet in January and I came away with a new (for me at least) Pismo PowerBook. I recently started my own consulting firm and needed something more portable than my G4 tower. The only thing wrong with the PowerBook was that the DVD ROM drive had gone DOA and the person I bought the Mac from told me he would replace the drive for cost. This being my first laptop, it has opened a whole new world of computing to me.

One thing I like is the ability to hook the PowerBook and tower together via FireWire. Once connected, I was able to install OS X 10.2.3 on it plus all the utilities I will need when I make house calls. I was amazed at how well the two Macs communicated and transferred data between them. I also found that I could make the PowerBook the startup disk in the system preferences. Now I will not have to lug my tower to my user group meeting to do my game and utility special interest group (SIG) anymore.

User Groups

This brings me to another point, user groups in general. I have been a member of HAAUG since 1984. Our group has the distinction of being one of the oldest groups in the US. From what the president of the group told me, there are only a few other groups that are slightly older than we are.

User groups have to be the most valuable resource for any Mac (or PC) user. There you will find people versed in all areas of Mac computing. At each of our meetings, we have special presentations by different software and hardware companies where they show off the latest and greatest stuff on the Mac. Before and after the main presentation, we have different types of SIGs. I host the game and utility (surprise) SIG each month. In fact, it was because of me doing these SIGs, that I began writing articles about the Mac back in 1984.

You can find user groups in almost every city, large or small. If you do not already belong to one, you should check into it. Once you locate one in your area, go to a meeting. There is no charge for just attending. If you like what you see, then join. The price for membership will vary. My group charges \$45 for a one-year membership. That may sound high for some, but with that cost, we get a monthly newsletter (The Apple Barrel), free use of our BBS (HAAUG Heaven), a free table at our semiannual swap meets, and many other perks. You can also download copies of our monthly newsletter for free.

When OS X Goes DOA

When I was setting up what I wanted on my Pismo laptop, I decided to load some utilities onto it from Aladdin's 10 for X. Some of the utilities I installed turned out to be haxies. After doing the install, I was no longer able to get my contextual menus to work. I then did everything to remove all the different parts that were installed by 10 for X. Alas, it did no good and I was looking at having to reinstall OS X 10.2 all over again. Normally, to do this, it is best to do it on a clean drive. Doing that would mean having to reinstall all the applications, utilities, and preferences. I talked to a friend of mine who also works on Macs and he told me of a way to do the clean install without having to wipe your drive.

The first step is to boot directly into OS 9 (not Classic). Then move the following folders from the root level of your drive into the trash. They are the Library, System (not System Folder), and Users. Then empty the trash. Now do not get alarmed when you see that you are deleting several thousand files. That is normal. All you have to do is then boot from your OS X 10.2 install disk and reinstall the system. Now because of the folders you deleted in OS 9, you will have to reinstall some applications all over again. However, you will also discover that some of your applications may not need to be reinstalled at all. That is because some programs are able to restore the missing parts as you boot into them. I guess I should go back and reread what I wrote in last month's issue about the use of haxies. In the meantime, 10 for X has been permanently filed away.

Screensavers

Screensavers have been around for as far back as I can remember. Their main purpose was to avoid phosphor burn-in when you left your monitor on for a long time. I remember how my Finder menu bar was burned into my original 128K Mac. Today, screensavers are eye candy since the problem with screen burn-in does not occur any more (except on

LCDs). However, they are nice to run when your monitor is idle. Since screensavers do keep your Mac “awake,” they are not good for laptops when you are on battery; when you are plugged in, go crazy and use whatever screensaver you like.

Make Your Own

One nice feature in the Screen Effects system preferences is the ability to assign a folder filled with pictures to act as a screensaver. It does not even matter what the size of the picture is since you can set it to fit to screen size. However, one thing that is less known is that you can have your pictures categorized and sorted by folders. This way all you have to do is create a folder and call it Screensavers. Drop the different photo folders you wish to have in the Screensavers folder. Then go to configuration to decide if you want the pictures to run in order or randomly, fit to screen, keep centered, and so on.

Now let’s look at some freeware and shareware screensavers that are out there.

EarthBrowser (Shareware, \$19.95)

EarthBrowser is actually two applications. The first part is a screensaver where you fly around the Earth and Moon. If you’re online when you’re running it, you’ll see the Earth with real-time satellite cloud cover. The other part of the program is called EarthBrowser 1.7. This little application can let you check weather conditions from anywhere on Earth, visit webcams all over the globe, see live volcano and earthquake data, and view satellite cloud cover data that is updated day and night. High resolution satellite imaging allows you to zoom into any part of the Earth. This is well worth the \$19.95 shareware fee. Unregistered copies are feature-limited and a small watermark will show up on the screensaver reminding you that it is shareware.

CosmoSaver (Shareware, \$9.95)

CosmoSaver is the logical extension of EarthBrowser, written by the same person. It takes the place of the EarthBrowser screensaver module. Now you are taken on a tour of the whole solar system. All the skins that are used to create all the planets and 29 moons were taken directly from NASA maps created by Voyager, Magellan, Galileo, and Hubble. Believe me, I know: thanks to people I know at NASA, I have acquired most of the images that were taken by these probes. You cannot get more realistic unless you have a spaceship of your own. What Marine Aquarium is to fish lovers, CosmoSaver is to all those who love to look up at the stars, and it only costs \$9.95.

GLTron (Freeware)

Remember the light cycle sequence from the movie Tron? Well, now you can watch it as a screensaver on your Mac. The graphics are really well done. There is even a recognizer floating above the arena and you can view the action from different camera angles. With the sequel to Tron in the making, this is a great way to bring back memories of a film that was ahead of its time. End of line (for now).

Old Glory (Freeware)

This is for all those who are proud to be American (if you are not, better call the FBI). Plain and simple, this is an image of Old Glory billowing in the wind. It is very well rendered and animated. Really, it makes you want to stand up and say the pledge.

Circuit (Freeware)

The next three screensavers come in a package of five screensavers call GL Screensaver. What CosmoSaver is to astronomy, Circuit is for those who dabble into electronics. Basically, Circuit is composed of a circuit board with all different types of 3D electronic parts flying around your screen. There are diodes, transistors, LEDs (light emitting diodes) flashing different numbers on them, and resistors that spin and rotate across your screen. You can set how many parts you want floating around your screen, change the grid rotation, and control whether you want the parts to spin or not.

Impossible Cage (Freeware)

If you are a fan of Escher's art then you will enjoy the Impossible Cage. I wish there were a way to describe it, but like Escher's artwork, you will have to just see it. This one will catch attention from those around you.

Rubik (Freeware)

Remember Rubik's cube. Remember how many hours you spent trying to solve it and just got nowhere with the dang thing? Well now, you can watch your Mac solve it for you and in much less time. Where were you when I needed you (sigh)?

FluffyCubes (Freeware)

FluffyCubes is one of those abstract screensavers with a twist. It is a screen of rotating cubes going across your screen. What I like about it is how you can configure it. First, you have a choice of setting the texture to smoked glass or transparent chrome. The transparent chrome is so cool looking. Then you can set the amount of X, Y, and Z rotation, shifting from one color to another, and the amount of motion blur. Unlike some of the other abstract line art savers (i.e., Flurry, Flux, NewLineArtX, and SolarWinds), FluffyCubes is in a category of its own.

So Not to Bore

Now that you have amassed multiple screensavers for your Mac, now what? All you have to do is select the random function in Screen Effects and all your screensaver modules will play in random order. Now that I'm done talking about screensavers, let's change gears and look at some utilities.

Amadeus II (Shareware, \$25)

If you grew up when CDs did not exist, then there is a chance that you probably still have a LP collection like me. Odds are that some of those albums have yet to make it to CD. That is where the power of your Mac and Amadeus II may help. Amadeus II gives you the ability to record, and also to remove white noise and those ever lovable snap, crackle, and pops that we learned to live with as we grew up. I am not going to go into how to do all this right now. This is just a teaser for my March article that will detail step by step how to transfer those valuable LPs to CDs. Good thing February is only 28 days.

Classic Startup Sound (Freeware)

Remember when you placed your favorite sound bite in the Startup Items folder of OS 9 so that it would play when you booted your Mac? Well, Classic Startup Sound brings that ability back to OS X. All you have to do is select a sound bite you liked to use in OS 9, rename it "defaultsound" and place it in the Classic Startup Sound's folder. Then go to Login Items in your system preferences and add Classic Startup Sound to your startup items. The next time you log in, the startup sound will play. I have the voice of HAL come up each time I boot to the desktop. Now if only someone could come up with a revision of SoundMaster.

Brightness Control (Freeware)

This little application eliminates the need to access your system preferences each time you want to adjust the brightness of your screen. Put Brightness Control in your Applications folder and in the Dock. Then all you have to do is click on it in the Dock and a slider will appear so you can adjust the intensity of your screen.

DMG Mechanic (Freeware)

How many times has this happened to you? You download a DMG file from the Web only to find that somehow it became corrupted and all you have is a generic icon. Then you need DMG Mechanic. DMG Mechanic is composed of two droplets, Device Image and Raw Device Image. The Device Image is designed for read-only DMGs while the Raw Device Image is designed for writable DMGs. When you wind up with what looks like a corrupted DMG file, take it and first drop it on the Device Image. If that does not work, then drop it onto the Raw Device Image. I can guarantee if one does not work, the other will. I have tested it on several corrupted DMG files with great results. Really takes the pain out of downloading a file all over again.

Jaguar Cache Cleaner (Shareware, \$7.95)

If you are experiencing random application crashes, problems with your system preference settings, Internet setting, or just plain sluggishness on your Mac, then JCC may just be the cure. The programmer suggests that before using JCC you should run Disk First Aid (or any other disk utility like DiskWarrior) from your Jaguar install disk. If none of these methods works, then it may be time to try JCC. *Very important:* before running JCC make sure you have quit and saved and documents you may be working on at the time. This is because JCC may issue what is called a BSD “reboot” command that will, as the programmer puts it, “unceremoniously restart your Mac.” Due to this, any unsaved work *will* be lost. When you launch JCC, you will be presented with several options. The Finder Cleaner offers two types of cleaning. First, you can choose to clean out the Finder preferences. This will restore your Finder to its default settings. You also reset all window settings. This will reset the invisible .DS_Store files to their default settings, causing all your windows to go back to the default view setting. As I said before, doing any of these cleanings may cause your Mac to reboot.

The other part of JCC allows you to run maintenance scripts. You have the choice of either running a light cleaning or a deep cleaning. The author recommends that you run the light cleaning first. You are also given the choices to clean out the Local, System, and All User Caches as well. Whether you use the light or deep cleaning will still cause your system to reboot and log off any extra users. Did I already make it clear that all unsaved work will be lost? Just checking. I have used all facets of JCC without any problems. Programs that were crashing did stop, and I noticed an increase in the performance of my Mac as well. JCC come with a very well written manual that clearly explains how and when to use it.

Classic? (Shareware, \$8)

Classic? gives you full control of Classic mode from either your Dock or menu bar. Classic? lets you view your Apple menu items with the ability to launch any of them at any given time. Of course, this will trigger Classic to launch at the same time. Other features include Shutdown and Restart of Classic, windowless Classic startup, RAM & CPU usage statistics in the menu, and faster Classic launching. If you want more control over how Classic mode behaves, then give this little utility a try.

System Manager (Freeware)

There are many different programs out there that try to show what is going on with your system. However, none do as complete a job as System Manager. Some of the features include a CPU monitor, a load monitor (which shows the number of processes waiting for the CPU at any given time), a memory monitor, a process monitor, and a Classic monitor. If you are the kind of person who wants to know exactly what is going on with your system, look no further.

Trash It (Freeware)

Trash It is a simple AppleScript that will delete files that just refuse deletion through the Empty Trash... command. How many times have you received the dialog saying that the system cannot empty the trash because a file or application is in use? Well, just take that pesky file and drop it on the Trash It icon, and *zap* it's gone. It will ask for your administrator password and you will be given a choice to overwrite it three times (for security) or just do a standard delete. I think the author needs to increase the number of overwrites since triple overwrites can still be recovered (remember Enron?).

Trash X (Shareware, \$9.95)

Trash X is the exact opposite of Trash It. It lets you place a trash can on your desktop, or anywhere else for that matter. Trash X uses very few system resources and is a stand-alone application for maximum stability. Trash X behaves just like the regular trash can. You can delete files and folders and eject media. It offers secure deletion for files, folders, and selected drives if need be. You can also set specific times for your trash to be deleted. Trash X is made by the same people who make Jaguar Cache Cleaner and for a limited time if you buy Trash X, you get JCC for free. That is a savings of \$8.

Closure

Well, by the clock on the wall (and a deadline that is breathing down my neck) that wraps it up for this month. Look to next month for an article on how to transfer your valuable LPs to CDs. As usual, my normal word of warning. If at any time you feel uncertain about using new software, make sure you back up any file you just cannot part with. All applications discussed here have been tested on both my Quicksilver G4/733 and my new Pismo PowerBook under OS X 10.2.3. As a matter of fact, I baptized my PowerBook by writing this article on it. As usual, it is always buyer beware. End of line.

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How To

by Sylvester Roque, Roquehead@aol.com

Personalizing Your Mac 101

All right, I admit it. I am just a little jealous. You finally got that new Mac. Either the elves at Cupertino finally came through, although a little late, or you saved enough money on your own. Now that you have the new machine, you're probably wondering what's next.

If you are anything like I am, you did not get right down to work. That quarterly report will have to wait just a little longer. You would like to do a few things to personalize your Mac and give it a personality all its own.

Before we begin, let me say that none of these modifications will involve opening the computer's case, painting the case, or removing any internal parts. If you are interested in this type of modification, I suggest you check out some of the [wild designs](#) at Applefritter. Although I would love to try some of these ideas, my spouse strongly suggests I refrain from using the sharp objects and soldering irons usually needed for such projects. Given my history of tool-related injuries she is probably right.

Homemade Launcher

I have a confession to make. My wife has finally persuaded me to like something from the PC. She liked the taskbar so much that she created a folder in the OS 9 Apple menu and placed an alias there for each program she used regularly. By placing the aliases in folders, she achieved some level of organization. I missed this feature in OS X until I figured out an alternative that uses no software and does not patch the system in any way. Here are the steps:

Open the Users folder of your hard drive. Open the folder that matches your username and press Command-Shift-N to create a new folder. Give this folder any name you like. For the sake of argument, let's call it Launcher. Inside this Launcher folder, I added subfolders for various types of applications: Graphics, Utilities, Games, etc.

Open the Applications folder. Single-click on one of the applications that needs an alias. Then, press Command and Option simultaneously while dragging the icon to whatever subfolder you want to put the alias in.

Now that you have all your aliases where you want them, close any open folder so that all you see is the Launcher folder you created. Drag this folder into the right side of the Dock somewhere between the divider bar and the Trash. When done correctly, you will have one folder in the Dock that has all the subfolders and aliases you created. When you click on the folder, the subfolders pop up just as they used to in the Apple menu. Selecting the alias that you want will launch the program.

To add additional programs later, place the alias in the Launcher folder that you created in your home folder. Any changes you make here will be reflected in the Launcher folder that is in the Dock.

If you place your Launcher folder inside the Shared user folder, the “Launcher” folder will be available to all users. I prefer placing a copy of the Launcher in each user’s folder. In this way, the programs available to each user can be different.

System Preference Panes Are Your Friend

If you have been around the Mac for a while, you know that before OS X, control panels, system extensions, or some combination of the two types of files accomplished most system customizations. Under OS X, most of these settings are controlled by the System Preferences application. This is a good place to start modifying system settings. Access this application by choosing its icon from the Dock or choose it from the Apple menu. I will not go through the settings for each of the panels. Most of the settings are self-explanatory. We will focus on the things that are easy to miss.

Change the Color of Highlighted Text

I have been using OS X ever since 10.0 came out and I like almost everything about it. At first, I did not like the default color for highlighting selected text. I put up with it until this past summer when I had time to poke around and find a solution. Open the preference pane marked General and click on the pop-up menu marked Highlight Color. If you do not like one of these options choose Other.... This will bring up a panel that allows you to adjust color settings until you find a color you like.

While you are here, look at your settings for font smoothing. At the bottom of the window is an option to turn off font smoothing for fonts at or below the specified size. Font smoothing makes text below certain sizes look better, but slows down video performance on some systems. Your options are to turn off font smoothing for sizes of 8, 9, 10, or 12 point and below. Some users have reported that adjusting this setting makes the display seem to run a little faster. You cannot really hurt anything by experimenting with this setting. Experiment a little and find the value that's best for your system.

Saving Your Screen

Until OS X came along, I had not used screensavers in a very long time. Beginning with System 7, every time I used a screensaver application it crashed something on my system. With OS X, screensavers have proven to be a lot more stable for me. Apple includes some neat screen effects as a starting point but you can create some of your own with relative ease. Here are some things to remember once you have opened the Screen Effects preference pane.

By default, the OS looks in your home folder in a subfolder called Pictures. You can use a different location if you wish. Make sure you click the Screen Effects tab. Select Pictures Folder, click Configure, and then click Set Slide Folder. A dialog box will appear allowing you to choose the folder containing pictures you wish to use in your slide show.

Make sure your pictures are in the right format. I have tried JPG, PNG, and TIFF files. These files seem to work fine. I do not recommend using GIF files because they usually do not have a high enough resolution to look good.

Apple's OS X help files suggest that if the pictures look fuzzy to save them at a higher resolution. I usually save pictures I want to use at a resolution that at least matches my monitor's resolution. If my screen is set to 800 x 600, for example, I use the same resolution for my pictures. On some systems the Mac will slow down slightly as it tries to scale lower resolution pictures to match.

Be sure to examine the Activation and Hot Corners tabs to make additional setting changes. These settings are self-explanatory.

Under Jaguar, there is an easier alternative. Put the graphics files you want to use into a folder, then open the root level of your hard drive. Once you are at the Library level, open the Image Capture subfolder and then the Scripts subfolder. Drop your folder full of graphics onto the script that says Build Slide Show and it will take care of the rest. I would love to take credit for this tidbit but I picked this up on the Mac OS X Hints Web site. Check out the [customized screensaver hint](#) for the full details.

You can use the iPhoto import command to import the photos you would like to use in your screensaver slide show. Once you have imported the graphics, click on the share button and then click the Screen Saver icon. iPhoto will put the photos in the right place.

Desktop Pictures

The process for setting a new desktop picture is essentially the same as that used to set up a screensaver. Open the Desktop preference pane and look at the pop-up menu marked Collections. You can either use your Pictures folder or use the Choose Folder... option from this pop-up to select a different location.

You can use the iPhoto import command to import the photos you would like to use as desktop pictures. Once you have imported the graphics, click on the Share button and then click the Desktop icon. iPhoto will put the photos in the right place.

Just as with the screensaver option, JPG, PNG, and TIFF seem to be the best choices. Adjust the resolution of the graphic so that it closely matches your screen resolution.

You can also choose options that will have the chosen picture fill the screen, stretch to fill the screen, appear in the center of the screen, and tile. If a folder full of graphics is chosen you can set the order in which the graphics appear and the time interval that must elapse before the picture changes.

Bring on the Noise

When we bought our Power Mac 6500 I scared my wife half to death. I left a self-playing startup sound of an explosion in the System Folder with the volume cranked to full. I had also added several other sounds to the system. Until recently, I have missed that ability in OS X.

Startup Sounds

When I migrated to OS X one of the things that I missed most was the ability to add new startup sounds to the system. In the past, most startup sounds played as system extensions were loading. Under OS X this is no longer true and until recently I was unaware of an easy way to solve this problem. Now thanks to some ingenious Mac users there are some easy solutions. Here are the tools you need and the steps to take.

First you will need the right tool for the job. I have tested both [Classic Startup Sound](#) and [Quick Startup Sound](#) on my G4, and both programs seem to work well without any adverse effect on the system. Quick Startup Sound is freeware and Classic Startup Sound is donationware. Both programs install in the same way, operate in the same way, and support a variety of sound file formats.

Now that you have got the right tool, install it anywhere on your hard drive that you find convenient. While you are here, go ahead and put your new startup sound in the same folder as the program. The sound file must be in this location for either program to work correctly.

Now that we have gotten this far we are halfway home. The next step is to rename your new startup sound "defaultsound". The filename must be one word with no quotation marks around it. Do not include the file extension (mp3, snd, etc.) as part of the filename.

There is only one step left to perform. Open your Login Items preference pane and add whichever program you are using to your login items. You now have a new startup sound that will play as the desktop loads.

Alert Sounds

If you think the included OS X alert sounds are a little anemic here's how to add your own sounds. In order for this trick to work, a sound file that has been saved in AIFF format is required. This is the file type used for alert sounds in OS X. A variety of programs are available that will manage this type file.

Once you have a file that you would like to use, open your home folder and open the Library folder. Inside the Library folder is a subfolder called Sounds. Drop your sound here and remember the name of the sound.

Now that you have completed that step, open the Sound preference pane and click on the name of your sound. That sound will now play instead of your regular system sound.

Keep the file that you want to use short. Alert sounds play when a system beep or error message needs to occur. I can tell you from personal experience that long sounds are both time-consuming and annoying as alert sounds.

Short files also save disk space. AIFF files are uncompressed and can take up a significant amount of space.



The tips that I have given so far generally make use of software that is on most Macs without any downloading. Because they do not patch the system, these tips also do not seem to adversely affect system performance or stability.

If you want even more customization, it is possible to change a variety of other settings: the boot panel, boot strings, login panels, and login strings. The boot panel is the screen that appears while your Mac is booting and tells you what is happening. For this you need a program such as [Keaka Jackson's Visage](#). I used this program for about two weeks on another Mac and it has performed flawlessly. It's more than worth the \$9.95 shareware fee.



Well, I hope that gives you a few ideas. Maybe you are better at creating desktop patterns, boot panels, and login panels than I am. If not, there are many sites on the Web with these types of files. My favorite is [ResExcellence](#).

Copyright © 2003 Sylvester Roque, Roquehead@aol.com. Sylvester Roque is a long-time Mac user who currently works as a speech-language therapist in the public school system. His hobbies include finding new uses for old Macs and listening to great blues.



Segments: Slices from the Macintosh Life

by Glenn McDonald, twasfeedback@furia.com

Switch

What follows is a short excerpt from the story of Glenn McDonald's switch to the Mac. The [complete story](#), which is about more than just computers, is available on his Web site.

I am typing this on a Macintosh. Actually, it's rather more than that. My PC was already due for a scheduled replacement, budgetwise, but I got some extra money from the acquisition, and Apple now has most of it. Not only did I buy a PowerBook, but I got a big second monitor for it, and a wireless-networking base-station, and an iPod, and a small arsenal of gadgets whose purpose is not obvious from looking at them. And then I bought my sister an iMac, too, and we'll see what it takes to convince my parents. What began as a relatively harmless idea about checking e-mail and watching DVDs in a hotel room has become an upheaval in my belief system, and turned me into a zealot about one more topic. I have Switched. If computers have not been the central mechanical forces in your entire daily adult life, like they have been in mine, maybe you think I just sound geeky when I say this, but I'm telling you there is a real revolution underway. It is actually quite difficult to deduce this by playing with a Macintosh in a store. In five or ten minutes you can tell that there are a lot of colorful icons and shimmery buttons, but Windows XP has colorful icons and shimmery buttons, too. You can open the various built-in applications, but everybody knows that built-in applications are worthless, and even if they weren't, you can't tell much from blank documents and sample data. If you're used to PCs, you'll spend most of your five or ten minutes just trying to figure out where the hell the Start menu is, why you can't see two applications' menu bars at the same time, and why windows keep mysteriously disappearing and how in the world you ever find them again. Even if you get someone who knows what they're doing to show you their own machine, with their real life taking place on it, one by one the details don't seem so incredible. OK, so there's a jukebox program. You can get jukebox programs for the PC, too. OK, so the e-mail program has a button for marking something as junk mail. You can get spam filters for the PC, too. OK, the little icons for applications bounce as they're opening, that's pretty cute, but surely

you'll get fed up and turn that off after a week. And there's finally some kind of command-line thing, but the mouse still only has one button, and only a total moron would fall for the "these computers don't suck as much" line yet again.

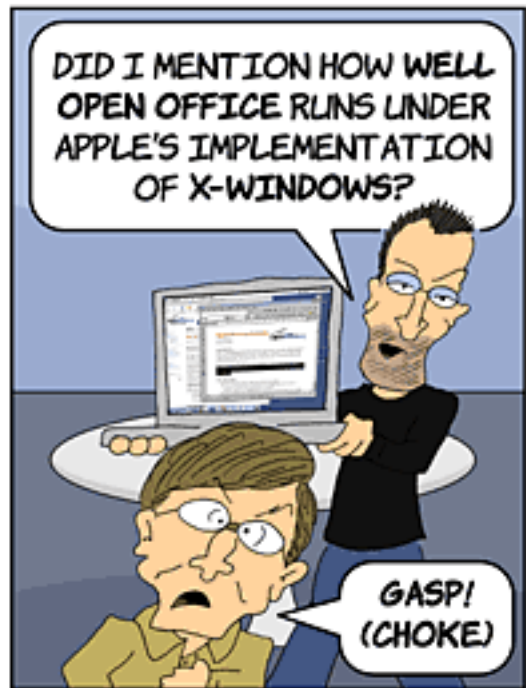
Copyright © 2003 Glenn McDonald, twasfeedback@furia.com. The Segments section is open to anyone. If you have something interesting to say about life with your Mac, write us.

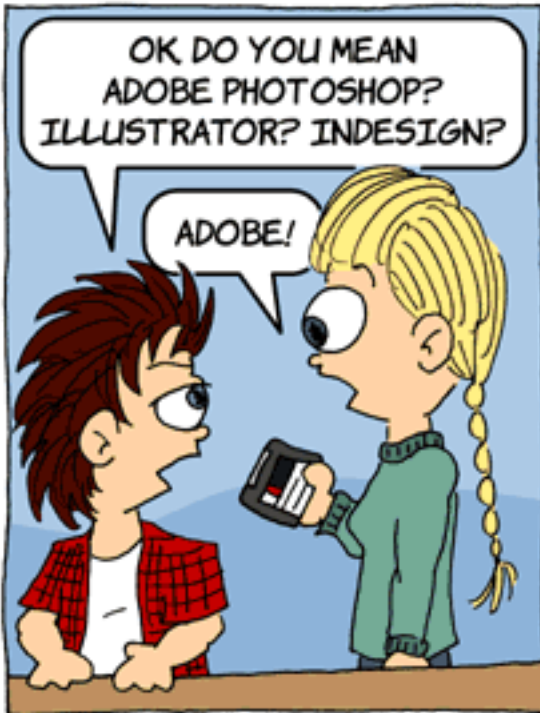
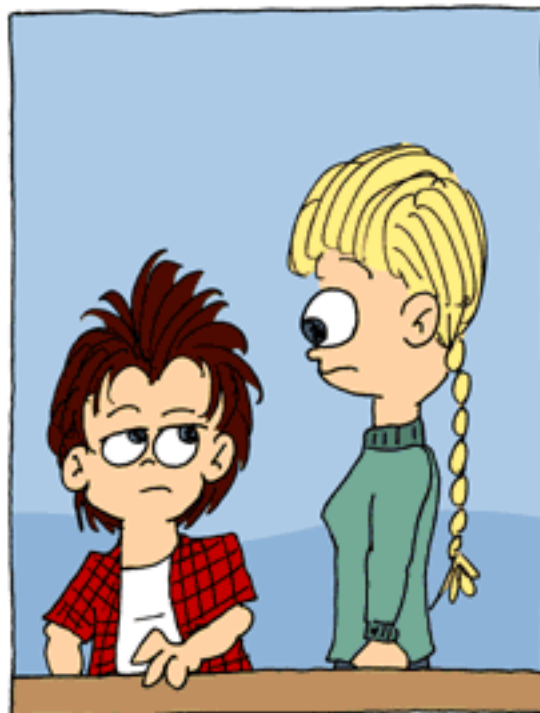
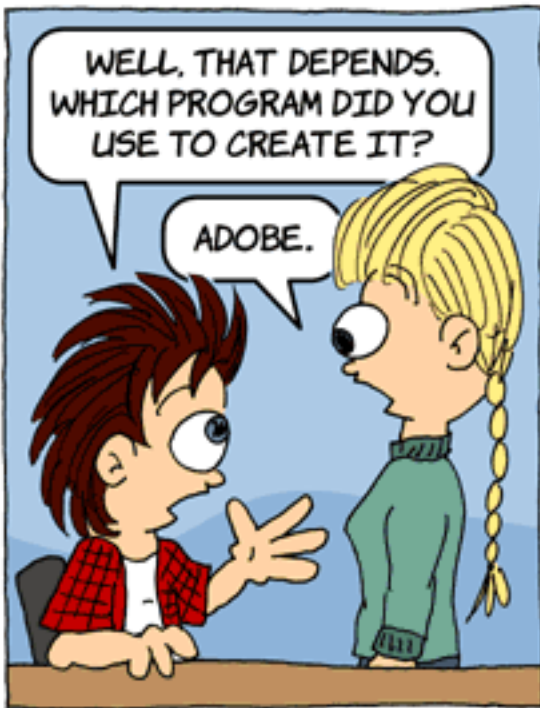
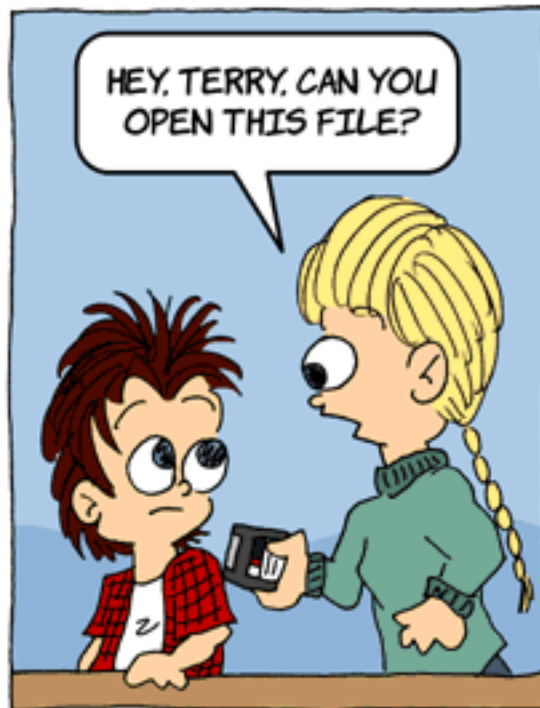


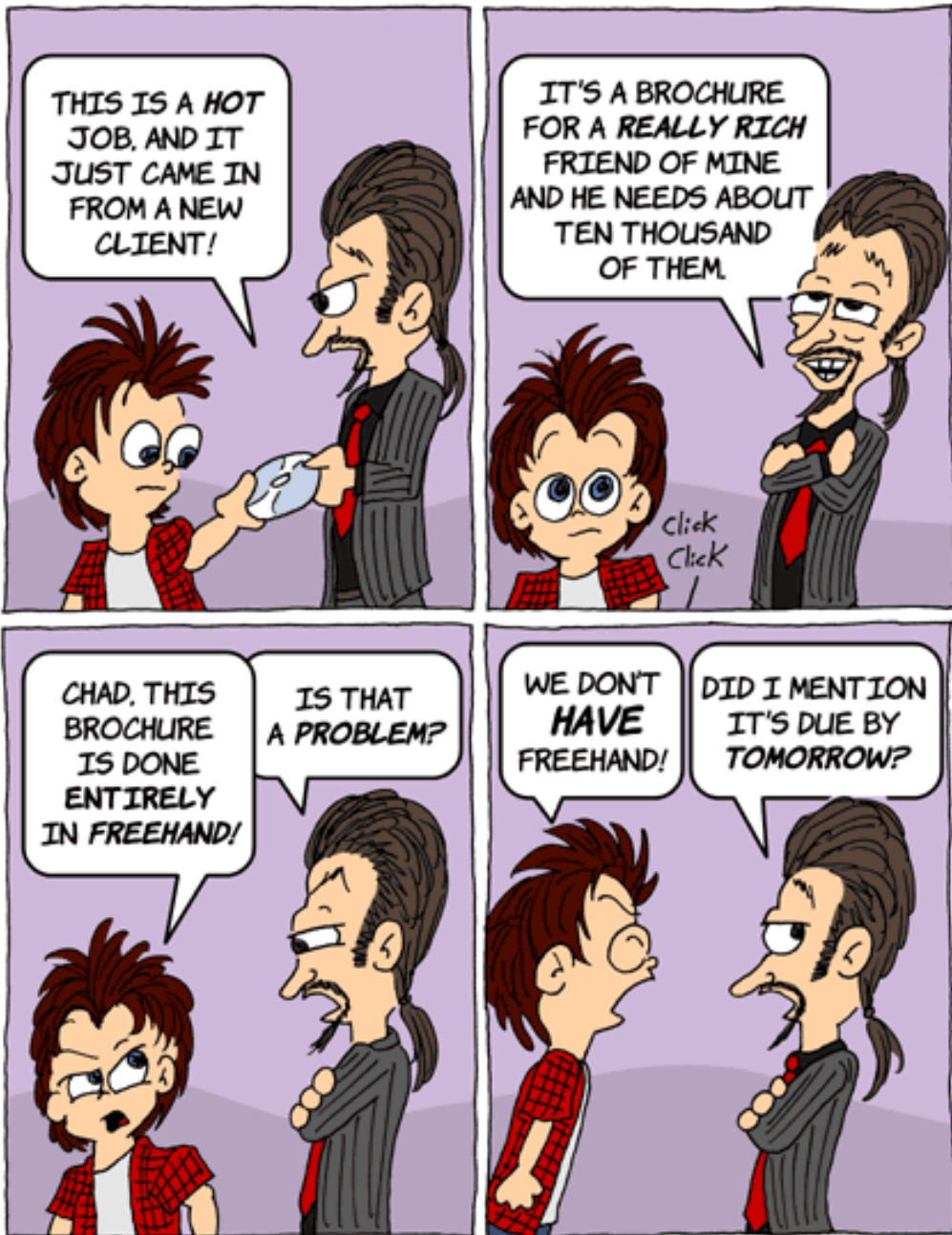
Cartoon: Cortland

by Matt Johnson, mjohnson@atpm.com









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Bora Bora—Part 2

Bora Bora

This month's desktop pictures, submitted by an ATPM reader, were taken on a vacation to Bora Bora and Moorea, two islands in French Polynesia. They look like a bit more fun than [Tropico](#) to us!

Previous Months' Desktop Pictures

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

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 and 10.2.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 (10.1.x) or Screen Effects (10.2.x) 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 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](#) in issue 5.10 and available for [download](#).



Review: Shareware Roundup

by Brooke Smith, bsmith@atpm.com

Count Your Pennies

In case you plan to do a little traveling this year, find out how much your dollar is worth around the world. Check out these currency converter shareware programs.

Sockho Currencies Converter 1.2

Developer: [Sockho Software](#)

Price: \$5.95

Requirements: Mac OS X 10.2, Internet access

Trial: Feature-limited (not all currencies accessible)



Sockho Currencies Converter goes one step beyond currency converter programs. As well as seeing the current conversion rate, you can see how the rate has been doing over a period of time in graph form.

To start, choose your base currency, then choose the currency you want to convert it to. Click the arrow button (it looks like the play button on a CD player) and it will convert the currency and create a chart of the currency's rise and decline. Choose from 1 day, 5 days, 3 months, 1 year, or 2 years. You can drag this chart clipping to the desktop or right into a Word document. Pretty cool stuff.



Here, one Canadian dollar equals 2.45 Polish zloty.

There are a lot of currencies in this program, from the Afghan afghani to the Zimbabwean dollar, but they're not all available until you pay the shareware fee. But, considering the sophistication of this program, I think it is worth the small fee. I was not able to get a chart for 1 day or 5 days, although I believe this is possible because there's a screenshot of the one-day chart on the developer's Web site. Despite this little blip, Currencies Converter is a very nice program.

X-Change

Developer: [Pierre-Olivier Latour](#)

Price: free

Requirements: Mac OS X 10.1, Internet access



Twenty-two-year-old student Pierre-Olivier Latour created this cool program that allows you to calculate the exchange rate between two currencies. Through the Internet, X-Change connects to the European Central Bank to update the currency rates. Under Preferences, click the box to Automatically Update Exchange Rates every day at 15:00 CEST. Or, do it yourself by clicking the Update Rates icon in the upper left hand corner of the window or choosing Update Exchange Rates from the Rates menu.

On first opening the program, X-Change displays a list of currencies. Choose your base currency from a pop-up menu and then select a target currency from the list below. Click on the converter icon in the upper right hand corner; the two-way converter slides out

showing the two currencies you selected. Type in the amount of your base currency (in this case, US dollars) and the target currency automatically appears (in this example, the Icelandic krona).

Amount in Base Currency:
 USD

Amount in Target Currency:
 ISK

Help

To convert amounts between currencies, simply enter the amount to convert in the related currency field.

Use the "Base Currency" popup menu to change the base currency. Click in the currency list to select another target currency.

Symbol	Name	Value
AUD	Australian dollar	1.695
ATS	Austrian Schilling	12.917
BEF	Belgian Franc	37.867
BGN	Bulgarian lev	1.835
CAD	Canadian dollar	1.536
CYP	Cyprus pound	0.543
CZK	Czech koruna	29.379
DKK	Danish krone	6.977
EEK	Estonian kroon	14.688
EUR	Euro	0.939
FIM	Finnish Markka	5.581
FRF	French Franc	6.157
DEM	German Mark	1.836
HKD	Hong Kong dollar	7.799
HUF	Hungarian forint	229.335
ISK	Icelandic krona	79.227
IEP	Irish Punt	0.739
ITL	Italian Lira	1,817.582
JPY	Japanese yen	118.239
LVL	Latvian lats	0.584
LTL	Lithuanian litas	3.241
LUF	Luxembourg Franc	37.867
MTL	Maltese lira	0.395
NLG	Netherlands Guilder	2.069
NZD	New Zealand dollar	1.818
NOK	Norwegian krone	6.869
PLN	Polish zloty	3.814
PTE	Portuguese Escudo	188.193
GBP	Pound sterling	0.623
ROL	Romanian leu	33,535.160
SGD	Singapore dollar	1.732
SKK	Slovakian koruna	39.174
SIT	Slovenian tolar	216.626
ZAR	South African rand	8.844
KRW	South Korean won	1,174.298
ESP	Spanish Pesata	156.187
SFK	Swedish krnna	8.633

Last updated on: Monday, January 20, 2003 (21:09)

This is a sharp-looking program. I especially liked the slide out drawer, which gives the interface a very clean and neat look. And the price is certainly right!

SimpleEuro 1.5

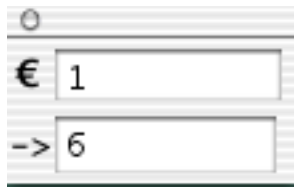
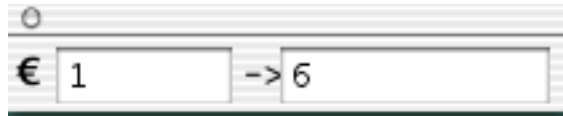
Developer: [Infosoft](#)

Price: free (donations accepted)

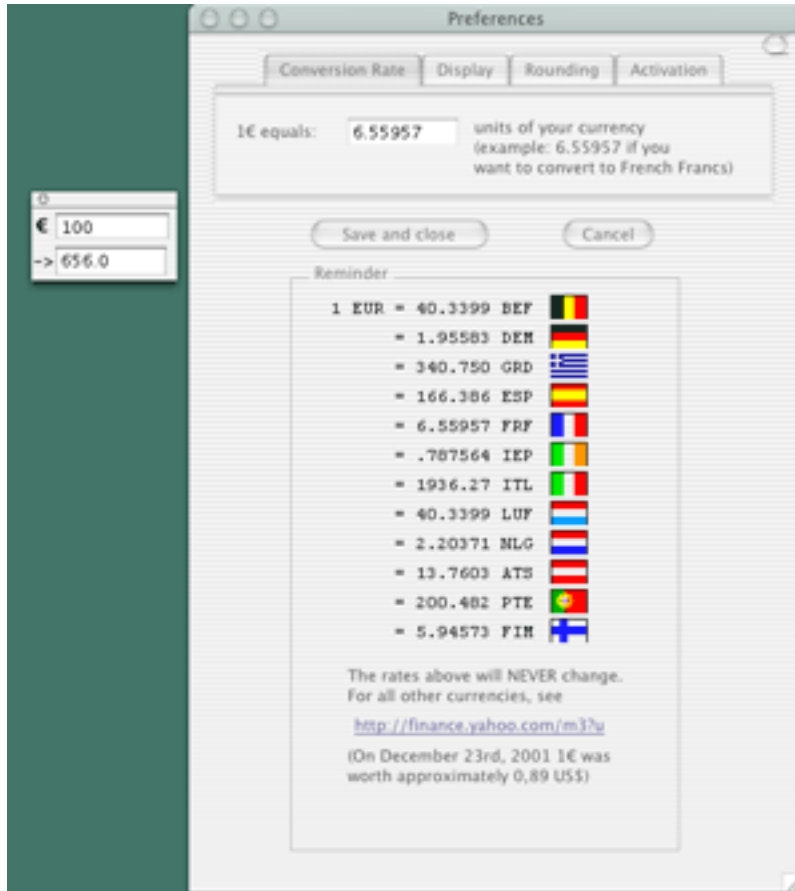
Requirements: unknown



SimpleEuro is just as its name says, simple. But it's a good program nonetheless, considering it's free. The layout is very simple: two boxes in a Standard (a rectangle) or Square setting. You can choose which setting you want.



To get the currency conversion, simply type in the amount of Euros in the first box. Once you're finished typing, the amount in the target currency will appear in the box below. Set the target currency through the Preferences. In the example below, the target currency is French francs—100 Euros equals 656 francs.



Under the Preferences, there are 12 countries (a flag and currency short-form denote the country) with the rate of the currency beside each one. Unfortunately, these rates do not change. Although there's a link to finance.yahoo.com to get live, updated currency rates, it's not as smooth as other programs, where you can update currencies on the spot through the Internet. Also under Preferences, you can choose how many decimal places to round off: no decimal, 1 decimal, 2 decimals, or 4 decimals.

SimpleEuro is OK, but you might want to get a more rounded program. Or at least one with currency update abilities.

EuroConverter 2.7.3

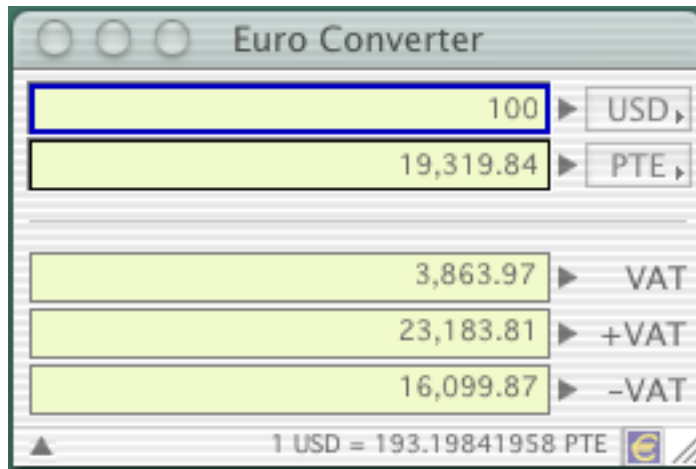
Developer: [Macron Software](#)

Price: free

Requirements: Mac OS 8.1 or Mac OS X



EuroConverter is another sharp currency converter program. Choose the base currency and the target currency from the button menus. In the example below, \$100 US equals 19,319.84 Portuguese escudo.



Open up the window to survey the clean layout. Click on the little Euro symbol in the lower right hand corner of the window and EuroConverter closes up into a simple icon (as seen below). Click the icon to open up the program again.



Under Preferences, select Options and choose the default currencies (the ones that will appear when you open the program). You also have a choice of two Rounding options for the decimals.

Update the currencies from the European Central Bank through the Internet. Choose Update from the Preferences and update currency rates manually or have EuroConverter update them anywhere from every day to every 30 days.

Choose the Currencies option to Remove, Duplicate, Add, or Edit a currency.

According to developer Massimo Valle, the program is available in English, French, and Italian, and Valle encourages you to translate it into your own language. "My hope is to have Euro Converter translated in all European languages," he says.

Sounds like a good idea and a good program. However, the name of this program is misleading. It calculates exchange rates between many currencies, not simply the Euro. A slight oversight, but I wouldn't let that stop you from using this program!

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Review: Brother HL-1470N

by Paul Fatula, pfatula@atpm.com

Developer: [Brother](#)

Price: \$499.99

Requirements: Mac OS 8.5, Mac OS X, or Windows; Ethernet or USB

Trial: None



My HP LaserJet 4ML had been with me for years before it finally croaked, making an awful grinding sound when it attempted to suck paper through, and stubbornly refusing to be fixed. It was only via a Farallon EtherWave adapter that I was able to use the printer over the network anyway, since the printer shipped only with a serial port. I needed a new networkable laser printer. The challenge? It had to be cheap. Speed, DPI, memory...all that was secondary. I needed something that would work with Mac OS 9 and X, and there were very few options out there within my meagre price range.

Flipping through [CDW's site](#), I found three possible matches for my needs. There was Panasonic's KX-P7110, but I couldn't find any mention of OS X compatibility, and I couldn't find any drivers at all for the printer on Panasonic's Web site. Another option was Samsung's ML1651N, but the [fine print on the Web site](#) warns "If you wish to print from your Macintosh to a ML-1650 (with NIC card) or ML-1651N printer on the network, you need to also purchase the optional PostScript SIMM module for the printer." That would bring the price up too high.

The third option was Brother's HL-1470N. I had at least a little experience with Brother; I'd bought a USB laser printer of theirs maybe a year or two before for a coworker, and while it wasn't trouble-free, overall it was (and still is) a decent printer. Brother's Web site offered

current OS X drivers, and openly declared the printer's Mac compatibility. References to not just OS X but to version 10.2.1 let me feel confident that Brother is serious about supporting the platform. So it turned out to be a pretty easy decision.



Interestingly enough, Brother's Web site lists this networkable printer under the category of "Personal" printers, as opposed to "Office." It makes sense, though, to offer a networkable printer for home use; many families have more than one computer, already networked together to take advantage of high-speed connections. Brother is offering a single printer that the whole family can use.

Documentation

Inside the box was the printer, a power cable, a CD, and about the poorest excuse for printed documentation I've ever seen. It consists of two fold-out poster type sheets, one a "Quick Setup Guide" and the other a "Quick Network Setup Guide." Apparently you are supposed to install the software on your computer before hooking up the printer, and you are never warned about all the little bits of tape sticking to the printer that must be removed before use. The documentation answers no questions and provides no troubleshooting section.

Brother also includes two PDF manuals with the printer, cryptically named “Usreng.pdf” and “Nwusreng.pdf.” The former is a generic manual for several Brother printers in the same family, and the second is a Network Users Guide which includes a single 6-page chapter about the Macintosh, explaining installation of the drivers under OS 9 and how to select a printer either in the Chooser or as an LPR printer for TCP/IP printing.

Neither manual is at all well indexed, forcing you to search through in the hope that you’ll chance upon something useful. Worse, the manuals are poorly organized. Chapter 7 of the Networking manual makes reference to using a Web browser to configure the printer, but doesn’t explain at all well: you’ll need Chapter 9 to learn about Web Based Management. The first page of Chapter 9 warns that you’ll need to refer to Chapter 10 “to learn how to configure the IP address of your printer.” Yet it assumed the IP address was already configured back in Chapter 7 where TCP/IP printing was discussed. Maybe I should have read the manual backwards?

Some of the configuration methods offered in Chapter 10 require you to know the printer’s Ethernet address, but nowhere are you told how to get this information. You’ll have to look in the other manual for that; it’s in the index—not under Ethernet address, MAC address, or Configuration, but under Print Configuration. Well, at least I found it. And good thing, because it’s so overly complicated, I’d never have chanced upon it without the manual. (Brother’s [online FAQ](#) says, “To learn how to print a configuration page, click here,” but there’s no link!)

Configuration...or Not?

No OS X drivers are included on the CD, in spite of it saying right on the box, “PC and iMac/iBook/G3/G4 drivers included.” How long has OS X been around? A lot longer than the printer, which was manufactured in June 2002. But I’d checked out Brother’s Web site before buying the printer, so I knew drivers were available there.

Once I got the driver installed (and installed the driver from the CD on my OS 9 computer) and had the printer plugged in to the network, printing over AppleTalk was a breeze. But AppleTalk? Officially, my company’s network hasn’t supported that antiquated protocol for years. And if I can give the printer an IP address, I can easily print to it from anywhere.

Here's where the fun begins. No application is included for configuring the printer from a Macintosh (either 9 or X). I was able to use HP's LaserJet Utility to rename the printer, but I wasn't able to assign an IP address from there.

Brother's documentation makes reference to connecting to the printer's default IP address over a Web browser in order to configure it, but connection failed from browsers running under OS 9 or X. The documentation offers other methods of setting an IP address, including the Unix arp command. OS X is Unix based, so I tried it. Result: "arp: socket: Operation not permitted." The documentation doesn't say anything about that.

Frustrated, I called the company's 800 number, provided on a bright yellow sheet begging me to call them rather than return the printer to the vendor if I have a problem. Well. Calling the number and pressing 1 for printers only played a recorded message saying that they have too many people needing help and to call back later, and stating their busiest times, which didn't happen to be when I called. Gee, thanks.

I called again, and this time didn't press 1 for printers. Eventually it put me into the "hold for our next representative" loop. Half an hour later someone picked up. After taking my phone number, name, address, and company, the representative had a little extra time so he figured he'd ask what product I was calling about, and what problem I was having. He realized I had a Mac the third time I mentioned it, and put me on hold briefly. When he came back, he said the only way to assign an IP address with a Mac is to connect the printer to the Mac with a crossover cable and use a Web browser to contact the default IP address of the printer. Needless to say there's no crossover cable included with the printer. (There isn't even a USB cable!)

No problem, I thought. I don't have a crossover cable, but I'd read that current Macs have the ability to auto-detect the network connection somehow, making a crossover cable unnecessary. I plugged my Ethernet cable between my Macintosh and the HL-1470N, and tried connecting. Nothing. I restarted the computer, cycled power on the printer, and tried again. Still nothing.

Then it occurred to me, maybe I have to change my network settings for this to work? I searched on the Internet for help and what to my wandering eyes does appear but a link to [ATPM's Networking column](#) that showed me exactly what I needed. (Thanks, Matt!) After changing my Mac's Network settings, I was able to connect to the printer ("crossover cable" method) and change the IP address. That done, I could no longer

connect to the printer directly, but once I hooked both it and my computer back into the network, restored my computer's network settings, and restarted my Web browser, connection to the Web-based administration functions worked again.

As expected, there wasn't much configuration to do. I changed the default administration password so no one could change my settings, and turned off unwanted protocols, such as NetWare and NetBIOS. I was also able to change the sleep time, so the printer doesn't drop into energy saving mode after a mere five minutes of idle time.

Printing

Hey, it's a printer review, so I guess I should say something about how HL-1470N prints. On the box it promises "Up to 15ppm print speed" and "1,200 x 600 dpi resolution."

I printed a page from BBEedit under OS X, and it came out of the printer very quickly (under 10 seconds); I'm quite impressed. PDFs mixing text and graphics also come out at a reasonable speed. My initial print from OS 9, however, took about 40 seconds to spit out a page with the word "test" written on it. Since subsequent print jobs were substantially faster, my guess is the font had to be downloaded to the printer. I also experienced dismally poor print speed the first time I printed a few pages from the HL-1470N's manual (it took about three minutes per page), but as with the BBEedit document, subsequent prints were substantially faster. I haven't seen anything approaching 15ppm, but if print speed is an issue for you, you should spend more than \$500 on your networkable laser printer anyway.

Print quality is fine. 600 dpi is plenty of resolution for most purposes, even in a typical office setting. Graphics in the PDF manual came out all right: readable, but not beautiful. Upping the resolution to 1,200 does make a noticeable difference; that's a printer option you can select from the print dialog (and it's available in both 9 and X).

The HL-1470's manual print feed is really manual: there's no tray, so you'll have to stand there feeding the printer single sheets. Its print tray holds 250 sheets (huge compared to the 100 sheet tray on my old 4ML), and a second 250-sheet tray is available as an additional option.

Conclusion

I remember being the only house on the block with a computer; now many households have several computers, all linked together on an intranet. In spite of the difficulties I had configuring the HL-1470N, I think this would be a great printer for a small home network. Print quality is fine for any but the most professional purposes, and it's easy to get the latest drivers from Brother's site. There are certainly better printers out there, but you want a cheap, networkable laser, Brother's HL-1470N is a good choice.

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Review: Inspiration 7.0a

by Gregory Tetrault, gtetrault@atpm.com

Developer: [Inspiration Software, Inc.](#)

Price: \$55; \$35 (upgrade)

Requirements: System 7.1 or Mac OS X

Recommended: Color printer, Internet connection, microphone

Trial: Fully-featured (30 days)



Overview

Inspiration organizes information as flow charts, concept maps, storyboards, and other diagrams. Inspiration can switch between diagram and outline views. Diagram creation is simplified by the use of templates. Inspiration diagrams can be exported as Web pages.

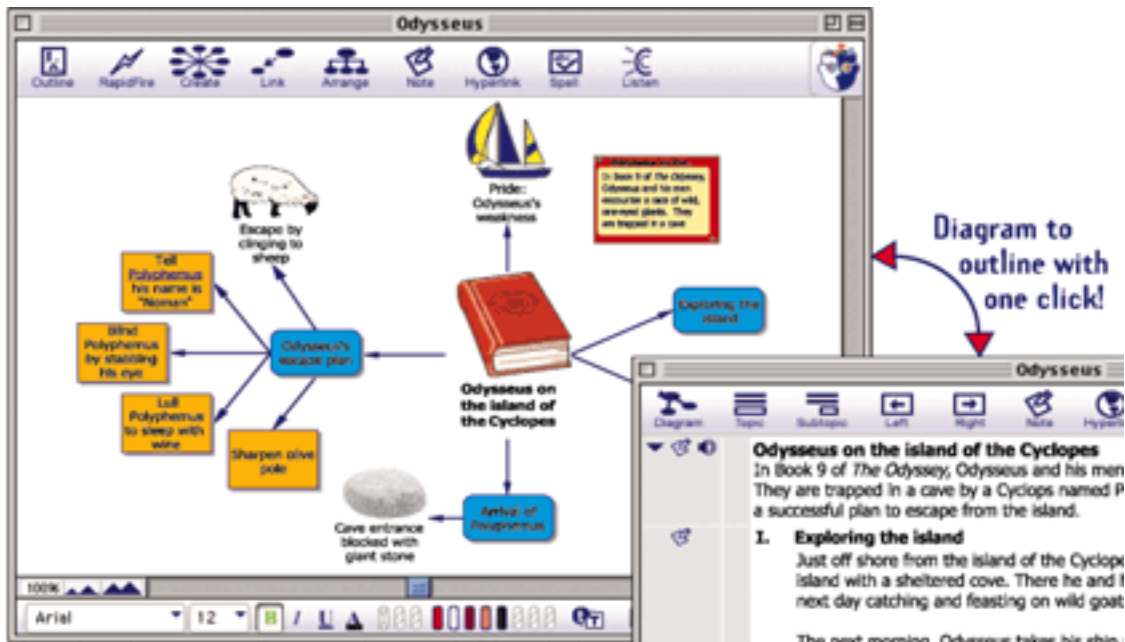


Diagram and outline views juxtaposed.

Installation

The installer lets you choose the location for the Inspiration folder. The default location is the Applications folder of the startup drive. The full installation includes all symbol libraries, spell-checking dictionaries, help files, PDF documentation, templates (52), and examples (22). The installer also places a series of nested folders into the Preferences folder. Inspiration is ready to use immediately after installation. Previous versions of Inspiration are unaffected by installation of version 7.



Full installation of Inspiration

An update is available for download. It converts Inspiration 7.0 to 7.0a. When you launch the updater, it locates Inspiration 7.0 and asks you to update it. The updated application can be used immediately.

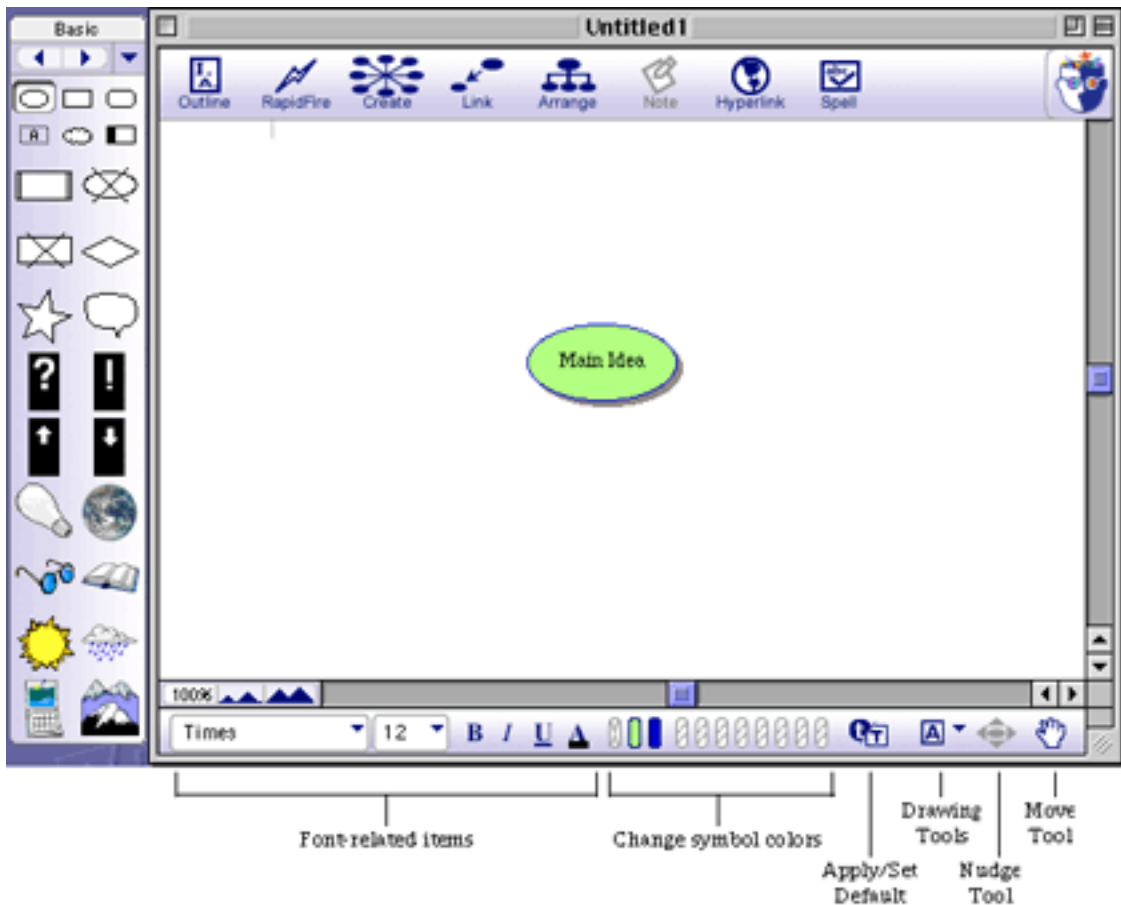
Significant New Features in Version 7

- Notes can be viewed in diagram mode.
- Hyperlinking to any file.
- Gather Hyperlinked Files command for putting copies of linked files into one folder.
- Audio notes supported.
- Spoken text and interface elements.
- Quick controls to hide or show topics or notes and to play audio notes.
- Formatting toolbar at bottom of main window.
- Multiple levels of undo and redo.
- Power outlining.
- Template creation and editing wizard.

- Improved HTML export including Web site skeleton creation.

Using Inspiration

You can create new documents by modifying a blank diagram or outline or by using a template. You can also import outlines which Inspiration will convert to diagrams. The general use of Inspiration is more fully described in my [review of Inspiration 6](#). Inspiration's Getting Started manual has tutorials on creating and modifying diagrams and outlines.



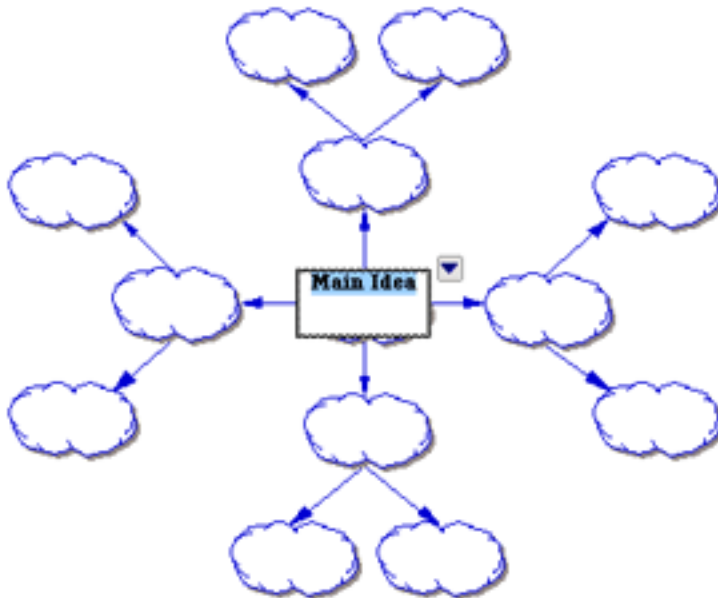
A new diagram window with labels added for the Formatting palette.

Inspiration's diagram and outline toolbars were modified and improved in Version 7, but their basic functionality has not changed. Inspiration opens in its diagram view with a single "Main Idea" topic box in the middle of the window. The symbol library palette lies to the left of the content window. The pop-up menu at the top of that palette lets you

switch between libraries. A tool palette appears at the top of the main window with the following buttons: Outline (switch to outline view), RapidFire (quickly make sequential topic entries), Create (add a symbol box), Link (add a link), Arrange (display the arrange options window), Note (add a text note), Hyperlink (add a link to an external file), and Spell (check spelling throughout document).

The formatting palette appears below the content window. It has menus for changing the font and font size, buttons for toggling font styles, buttons for changing symbol colors, a button for applying or changing default settings, a pop-up menu of drawing tools, a nudge tool, and a move tool (hand). The formatting tool palette does make it easier to change characteristics of a diagram element. In previous versions, you needed to go through menus and either submenus or dialog boxes to make relatively simple changes.

For many situations, starting with an Inspiration template works best. Version 7 added 25 pre-built templates. These are organized by topic and are accessed via the Open Template... item in the File menu. Educational topics predominate, since Inspiration is mostly found in school settings. The templates come with textual explanations and suggestions. Templates can be modified and saved as custom templates. You also can find downloadable templates on Internet Web sites.



How to use this template

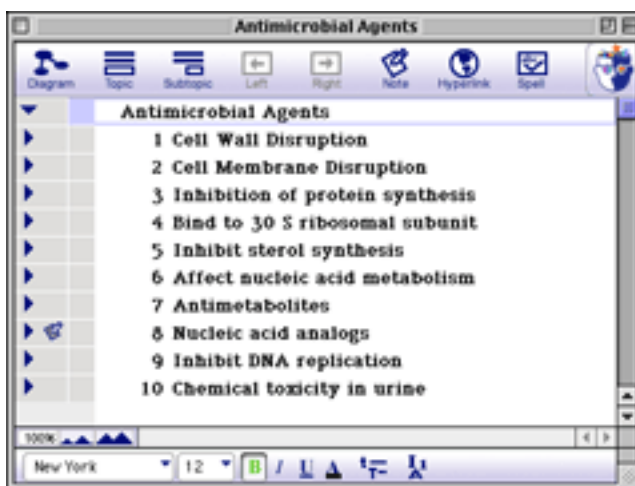
1. Start with a central idea and enter it into the symbol labeled "Main Idea."
2. Using key words to represent thoughts, brainstorm ideas and enter them into the symbols that branch from the central idea.
3. Add symbols as necessary using the RapidFire™ tool or the Create tool.
4. Show relationships between branches with textured lines and colors.

Benefits of using the Idea Map template

Idea mapping helps students explore an idea freely without the constraints of a superimposed structure. Moreover, a visual environment promotes making new connections and insights in a way that linear text does not. Switching to Outline View, however, allows students to arrange ideas in a more conventional, hierarchical manner.

A blank template.

Inspiration's outlining tools are adequate. Built-in outline prefix styles include Roman Numerals (and letters), Alphanumerals, Legal, Numeric, Bullets, and Power (where every item is labeled with its level number). You also can create a custom outline style (for example, one that mixes alphanumeric with bullets). You can create or modify templates to specify the text characteristics for each level of your outline. However, you cannot specify line spacing for each outline level.



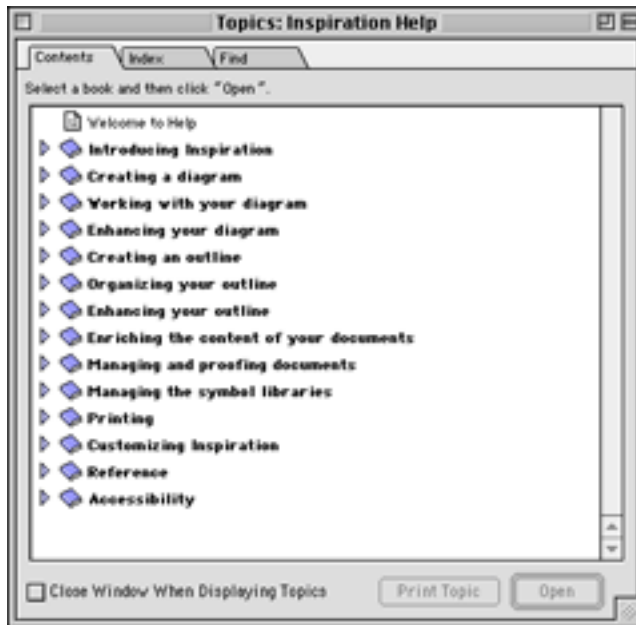
Compatibility

Inspiration 7 can open the following file types: Inspiration 5 and 6 with all features retained (older versions can be opened with some changes and substitutions), Kidspiration, RTF (rich text format), and plain text. When text files are imported, the first sentence of each paragraph becomes an outline topic and the remaining text becomes notes. Inspiration can export outlines as RTF (for Microsoft Word, Microsoft PowerPoint, or AppleWorks), plain text, and HTML. Inspiration can export diagrams as PICT, GIF, JPEG, BMP, or WMF graphics. It also can export diagrams as a single HTML Web page or as a "site skeleton" with diagram links converted to hyperlinks.

Online Help

Inspiration uses the QuickHelp application. Initially, a Welcome to Help window appears. You can enter keywords for topics. You can get more detailed help by clicking the Help Topics button. A new window appears with tabs for Contents, Index, and Find. Clicking on a topic reveals nested subtopics. Clicking a subtopic entry (or an index entry) displays

the relevant help information in the original QuickHelp window. The Find tab reveals a window that lets you create complex boolean searches of the Help file. Help topics that match your search criteria are displayed in section 2 of the window. Double-clicking on an entry brings up the Help window with your keywords highlighted. Inspiration's online help system is one of the best I have used.



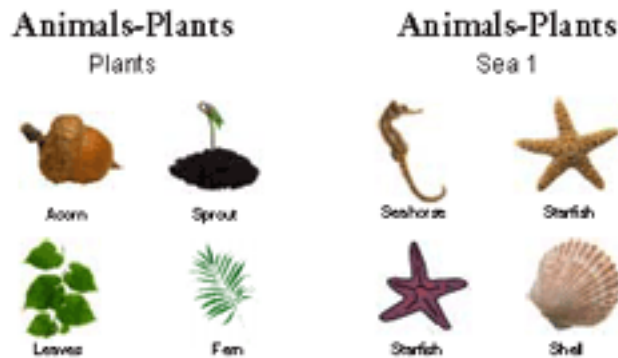
List of online help topics.



Boolean searches of the Inspiration Help file.

Documentation

Inspiration comes with printed Getting Started (68 pages) and Template Guide (60 pages) manuals. These manuals are also available as Adobe Acrobat (PDF) files. Two other Adobe Acrobat files are included: Symbol Guide (26 pages) and User's Manual (198 pages). The Getting Started manual has installation instructions, a program overview, and three tutorials. The Template Guide shows all the pre-built templates and gives suggestions on how to use them. The Symbol Guide displays all the elements of each symbol library. The User's Manual thoroughly describes how to use Inspiration. It includes a table of contents, bookmarks, and an extensive index. Hyperlinks are used throughout the table of contents and index.



Portion of a page in the Symbol Guide booklet.

Technical Support

Inspiration Software maintains a [technical support Web page](#) that can be accessed within Inspiration (choose Help on the Web from the Help menu). This site features installation and upgrade information, frequently asked questions organized by category, and "Inspired Tips." Technical support is also available by telephone (serial number required) Monday through Friday from 8 AM to 5 PM PST. Technical support can be requested by fax, e-mail, or [Web form](#).

Bugs

No reproducible bugs were found during my review.

My Wish List

Version 7 addressed many diagram-creation shortcomings. Outlining remains the weakest component of Inspiration. Page breaks for outlines cannot be created in the Print Preview window. There is no way to change the size of the indents used to distinguish subtopic levels in outlines. An existing outline cannot automatically be converted into a template: you still must specify the font characteristics for each topic and subtopic level. Outline spacing is not customizable by level. The Page Setup dialog box only gives four line-spacing options: single, 1.5, double, and triple.

Summary

Inspiration is a bargain at its reduced price of \$55. It is a great tool for creating flow charts, diagrams, concept maps, and outlines. Version 7 added significant improvements to diagramming and Web site creation. A question for owners of previous editions is whether they should upgrade. Owners of Version 5 or older definitely would benefit from upgrading. Owners of Version 6 would benefit from upgrading, but perhaps not enough to justify the cost. The best way to assess the benefits is to download a trial version which gives you 30 days to decide.

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Review: Mac OS X Disaster Relief (book)

by Kirk McElhearn, kmcelhearn@atpm.com

Author: Ted Landau with Dan Frakes, [Peachpit Press](#), 2002, 598 pages

Price: \$34.99

Trial: None.



There has been a slew of books on troubleshooting Macs lately, ranging from O'Reilly's pocket guides to Chris Breen's *Mac 911*, a florilege of material from his *Macworld* column. This is a good thing, because Macs are not without their share of problems. There's no blue screen of death, of course, but plenty of things can go wrong, both on the hardware side and the software side. Ted Landau, who is well known in the Mac community for being the creator of the excellent MacFixIt Web site, as well as author of a previous troubleshooting book (*Sad Macs, Bombs and Other Disasters*), and Dan Frakes give us a new book on troubleshooting Mac OS X.

Those of us who have been working with Macs for a while, and who have delved inside the System Folders of previous Mac OSes, certainly need to get up to speed with Mac OS X. Gone are the old-fashioned extension conflicts, but hello kernel extensions. There are no more crashes that bring down your entire Mac, at least theoretically—but let's all get used to the kernel panic.

This book begins with an introduction to Mac OS X, dealing with installation, basic use, and getting to know the system. For users new to Mac OS X, this is very useful, but this is not really what I would expect from a troubleshooting book. It then covers a large number of basic problems that occur with Mac OS X, from permissions problems, to printing and networking, by way of issues with the Classic environment. It ends with a very brief introduction to using the command line under Mac OS X.

The book is complemented by a thorough index, which makes it easy to find the type of problem you're trying to solve. The book is full of solutions, tips, and ways to make things work better and faster. But I haven't found solutions to many of my problems there. When discussing this book with a friend, he gave me the real low-down on what this book is good for: he said, "It's worth its weight in gold for setting up Mac OS X." In fact, that's the strength of this book—it gives you enough information to tweak Mac OS X and be comfortable with your customizations. If you look at one chapter—Troubleshooting

Networking, File Sharing and the Internet—you will see that some 60 pages are devoted to setting up networking and only about 25 to troubleshooting; this is pretty much the way the entire book is set up.

A couple of things bother me about this book, but they are certainly minor. First is the use of third-party tools for many things. Landau and Frakes advocate the use of X-Ray, which is a shareware tool for accessing advanced file information. I would rather see solutions that come out of the box, instead of expecting users to have the same program as the authors, especially since there is no CD with the book. Second is the occasional use of non-standard screen shots. As a writer, I always tailor my screen shots to look like a default installation—no extra folders in the Home folder, no long list of volumes in disk tool windows, etc.

It should be noted that this book only deals with Mac OS X software issues—it neither discusses other software nor does it deal with hardware. (A fine book that covers hardware is the *Macworld Mac Upgrade and Repair Bible*, by Todd Stauffer and myself, a third edition of which is due out in April 2003.)

While the original edition of this book was pre-Jaguar, a new, revised edition was published as this review was going to press. This second edition contains a long chapter about Jaguar, and describes the changes and new additions to Mac OS X 10.2. I am delighted to see that owners of the first edition can download [a PDF file of this chapter](#). It is available in a password-protected Stuffit archive; the password is found in the first edition of the book.

Some comments are in order, however, on this additional chapter. While it is a good thing that purchasers of the first edition can get this update without having to buy a new copy of the book, I feel that Peachpit took the easy way out. The addition is a long chapter at the end of the book, which means that when looking for information you must read both the original section and the update, and make sure to understand the changes. It would have been much better if the update were integrated into the book, with the new material replacing the old. But you can't have it both ways...

So, in the end, this is a fine book for understanding Mac OS X and setting it up, and especially tweaking it so it works the way you want. It is less effective for actual troubleshooting, but reading through the entire book will give you enough information that you may end up with fewer problems just by dint of better understanding the

operating system. I'd recommend it to any new user of Mac OS X who wants to go beyond basic setups. It's not as complete as David Pogue's *Missing Manual*, and it doesn't cover the Unix end like Ray and Ray's *Mac OS X Unleashed*, but it gives a good overview of what you can do with Mac OS X and how to do it.

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Review: SharingMenu 1.0

by Lee Bennett, lbennett@atpm.com

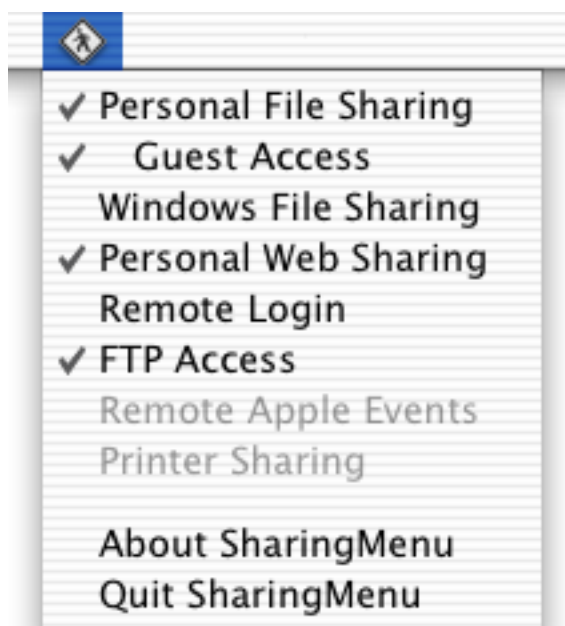
Developer: [Manfred Lippert](#)

Price: free

Requirements: Mac OS X 10.2



SharingMenu, simply put, does exactly what it's supposed to do—nothing more, nothing less. It does it perfectly, and does it for free.



So what does it do? It adds a menu bar icon to provide a no-frills method to enable and disable Mac OS file sharing, Windows file sharing, Web sharing, remote access, and FTP access without having to load the System Preferences window. A future release will include the ability to toggle remote Apple events and printer sharing.

SharingMenu even goes a step beyond the Sharing preference pane's capabilities by letting you disable guest access when using personal file sharing, meaning only people with existing user accounts on your computer can connect to it.

SharingMenu is a perfect time saver for anyone who frequently needs to turn various sharing modes on and off.

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Review: SMART Toolkit 1.2

by Eric Blair, eblair@atpm.com

Developer: [FWB Software](#)

Price: \$34.95

Requirements: Mac OS X 10.2

Trial: Fully-featured (no time limit)



There are few feelings worse than turning on your Mac to find out that your hard drive has taken all your data to Never-Never Land. In my experience, programs such as DiskWarrior tend to work in most cases. When your problems are caused by faulty hardware, though, there's not much these programs can do. If your hard drive reaches this point, your options are limited to either turning it over to an expensive service like [DriveSavers](#) or giving up on your data altogether.

Thanks to FWB SMART Toolkit and hard drives that support SMART (Self-Monitoring, Analysis, and Reporting Technology), you can limit your exposure to hard drive failures. Although SMART Toolkit cannot repair faulty hardware, advance warning that your drive is about to fail can give you a much needed opportunity to salvage your data and replace the drive before it is too late.

Installation and Setup

Getting SMART Toolkit up and running is extremely simple on a single-user computer. As well as creating a folder called "FWB SMART Toolkit folder" containing the application and the help files, the installer adds two programs as login items, FWB SMART Toolkit and FWBSMARTToolkitMonitor. The former is the application you use for configuring your monitoring; the latter runs in the background and actually monitors your drives.

Unfortunately, these programs are only configured as login items for your user. If your computer has more than one user, you will need to set up these programs as login items for all other users to ensure that your drives are always monitored. At first, I had some trouble locating FWBSMARTToolkitMonitor; it is actually stored in the Help Files folder. This sort of information should really be included in either the instructions or the application help files.

When you run SMART Toolkit, you are presented with a list of your installed drives, how much space is available on each drive, and most importantly the SMART drive status.



SMART Toolkit's main user interface.

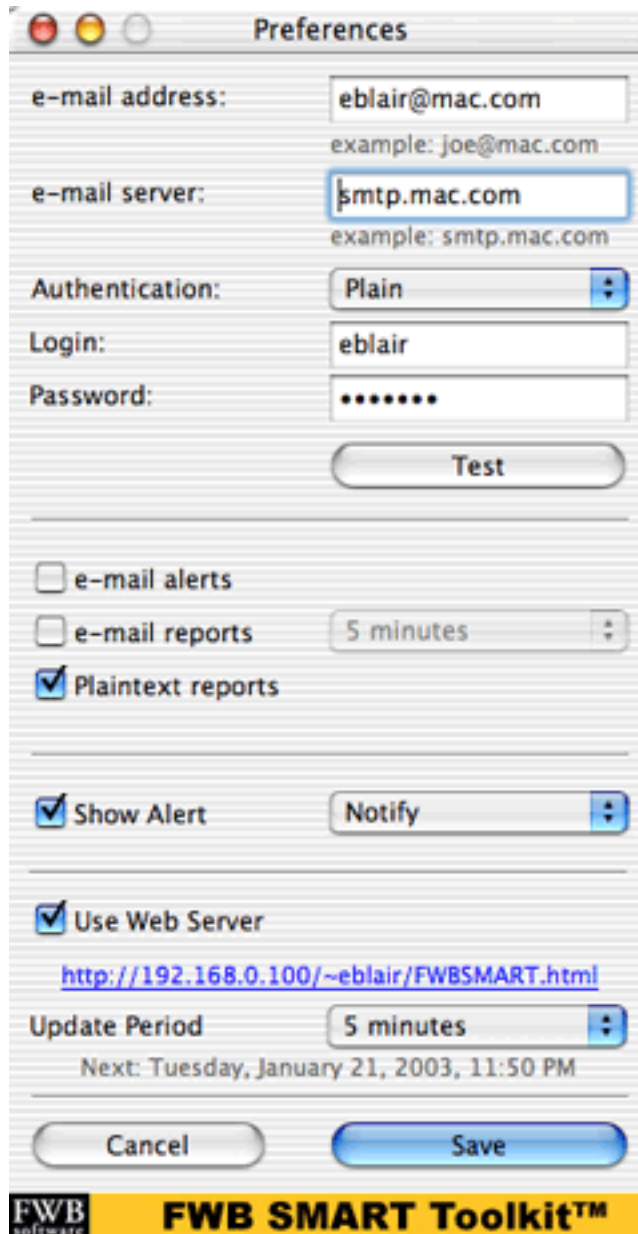
Monitoring and Notification

When FWB's developers designed SMART Toolkit, they realized the program could be used in any number of environments—from a laptop that is always with you to a server stashed in the back corner of a dark closet. Therefore, the program offers a number of different notification types.

For starters, SMART Toolkit displays a dock indicator whenever the application is running. A green check mark denotes that everything is OK while a red cross indicates a problem. If you keep your Dock hidden, these status markers can be easy to miss.

Fortunately, more conspicuous notifications are available. For people using a monitored Macintosh, SMART Toolkit can play an alert sound and display a warning message that something is wrong with one of your drives. For remote notification, SMART Toolkit gives

you the option of e-mail and Web page reports. Both types contain the same information: hard drive status, system information, logged-in users, recent restart and log in history, running processes, and network status.



SMART Toolkit's notification options.

There are several options for e-mail notifications. You can choose to receive updates either at regularly scheduled intervals or only when there is problem. Also, you can choose between HTML and plain text e-mails. Unfortunately, the interface for this is a bit confusing. Underneath the checkbox options for e-mail alerts and e-mail reports there is a checkbox for Plaintext reports. At first I thought this was an addition to the two e-mail options; in reality the checkbox toggles between HTML-formatted and plain text e-mail. Ideally, this checkbox would be replaced with a pair of radio buttons that read "HTML Formatted" and "Plain text."

SMART Toolkit contains its own mechanism for sending e-mails via an SMTP server, so e-mail reports will work no matter what e-mail client you prefer. Because of this, SMART Toolkit unfortunately requires an SMTP server for sending e-mail reports. If you use AOL or one of the many Web-based e-mail services, you might be out of luck.

The SMTP implementation supports servers that require no authentication, plain authentication (like Apple's .Mac servers), login authentication, and CRAM-MD5 authentication, so it will most likely work with your SMTP server.

If you're not certain what type of authentication your server uses, SMART Toolkit can test your connection. If the test succeeds, you will receive an e-mail report of your system status. Unfortunately, the test never fails: if SMART can't connect, it just keeps trying while the Sending E-Mail window remains on-screen. SMART Toolkit does not, but should, time out after a reasonable time period, realize the test has failed, and pass this information along to the user.

The only difference between a Web page report and an e-mail report is that an e-mail report is sent to you, while you have to check the Web page yourself. Both offer the same information and scheduling options. The similarity between the two options actually creates issues of its own, the first of which is a bug.

If you select both the Web page and e-mail notification options (it doesn't matter which e-mail option you choose) and opt for plain text reports, your Web page will be posted as plain text, rendering it pretty much unreadable.

The second issue is more of a missed opportunity for FWB. If the SMART Toolkit Web reports could automatically refresh themselves in a browser window, you could open a browser window once and almost always be looking at the most current system report. It only takes one HTML tag to enable auto-refresh, and the logical refresh interval would be the preset value in the Preferences.

This isn't the only chance FWB missed to take advantage of HTML features. Based on an upcoming version of the manual I was allowed to preview, the HTML-formatted error messages do very little formatting. If there is a problem with a drive, the alert message says "SMART Drive Fault" next to the drive information. It would be nice if faults were really obvious—either displaying the text in red or making the page background red would easily accomplish this.

Because the name and location of Web reports are pre-determined, your flexibility is severely limited. It would be nice if you could give the reports custom names and upload them to an FTP server. Combine this with my auto-refresh suggestion, and you now have a central repository of up-to-date system reports, which could prove very useful to system administrators.

Not Quite There Yet

For \$35, you probably shouldn't expect industrial-grade hardware protection. While it's true that SMART cannot detect every possible hardware error pertaining to your hard drives, SMART Toolkit has some shortcomings beyond its underlying technology.

Unfortunately, SMART Toolkit only monitors SMART-enabled drives connected via the Mac's built-in IDE ports, leaving out FireWire drives and drives connected via PCI IDE interfaces. This limits you to monitoring four drives in a Power Mac (assuming you remove the optical drive) and a single drive in an iMac, eMac, or laptop.

SMART Toolkit also has two more user interface problems. First, the main window has an active close box even though the Close Window command is grayed out in the File menu. If you close the main window, there's no way to re-open it without quitting and re-launching the application. Second, the Preferences... item is in the File menu instead of the application menu, which goes against Apple's Human Interface Guidelines. Since SMART Toolkit is an OS X-only application, it doesn't really make sense why the developers made this decision.

If you're running a system that uses external hard drives and hard drives connected to PCI IDE adapters for storing most of your important data, you should hold on purchasing SMART Toolkit. It will give you some information about what's happening on your computer, but it won't check the drives' SMART status. If, however, your important data is stored on drives connected to your onboard IDE connectors (including the hard drive that shipped with your Mac), you should probably pick up a copy of SMART Toolkit. As somebody who has been through hard drive crashes, I can attest that \$35 is a small price to pay compared to the time and frustration of losing data.

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Review: The Wireless Networking Starter Kit (book)

by Kirk McElhearn, kmcelhearn@atpm.com

Author: [Adam Engst and Glenn Fleishman](#), Peachpit Press, 2003

Price: \$29.99

Trial: 60-page [excerpt](#).



Wireless networking is cool. It has changed the way I work. I live in a village in the French Alps, and there is nothing I like more than working outside on a fine summer day, with the mountains in the background. I could do this without Internet access, but since much of my work requires using the Internet, it is certainly easier to be able to surf from my terrace.

I discovered the pleasures of wireless networking when I moved to where I now live three years ago. Before that, our home/office network had been a sneaker-net: put files on a Zip cartridge and walk to another computer. We didn't have a shared Internet connection, and only one computer was linked to the outside world via an ISDN line. Our Macs didn't all have Ethernet cards, and we didn't want to drill holes in the walls of our apartment.

Two issues arose in our new home: the first was the desire to set up a network to transfer files more easily, and the second was the desire to share the Internet connection. Since our offices are separated by three walls (including a bathroom), running Ethernet cables was out of the question. The natural solution was to get AirPort cards for all our Macs.

Installing and setting up the network was a breeze, and, at first, we used one of the Macs (an iMac) as a software base station to share the Internet connection. This turned out to be a headache: the iMac had to be on whenever the other Macs wanted to use the Internet, and the base station software itself was flaky. So, we bought an AirPort Base Station to provide always-on networking. It bridges to an Ethernet switch, which in turn runs to our ADSL modem. My PC has wired access to the network through the switch, with the AirPort Base Station working as a router for the network.

Today, I couldn't imagine working otherwise. Wireless networking, as I said at the beginning of this article, is cool. I can move my iBook anywhere in the house—except to the basement, as the floor is thick concrete—and use the Internet and access files on my home server. I can also work outdoors and take full advantage of my beautiful surroundings. I am no longer tied to my desk.

While wireless networking is similar to magic, once it works, it can be complex to set up (though it seems much easier on a Mac than on Windows). My situation is probably similar to that of most home users, but anyone working in an enterprise or educational context has many other issues to deal with. This book, *The Wireless Networking Starter Kit*, is a “practical guide to Wi-Fi networks for Windows and Macintosh” and covers all the issues and questions that may arise when setting up and maintaining a wireless network. Adam Engst and Glenn Fleishman have a great deal of experience in the matter, as they point out from the beginning, and cover all aspects of wireless networking.

Beginning with an overview of basic network concepts and protocols, the book goes on to explain how wireless networking functions. The heart of the book is about connecting computers (both Macs and Windows-based PCs), building a wireless network, and adding antennas to wireless networks. This is the most useful section for network administrators who want to set up larger, more complex networks, which include wired and wireless devices. Chapters on wireless security and troubleshooting help to understand how to make sure things work, and an interesting chapter talks about using Wi-Fi on the road. (Gee, if only the cafés here had wireless access points...)

The authors' comfortable, reassuring tone helps the reader feel at ease with this technology. Their detailed coverage of all the issues affecting this form of networking ensures that network administrators, who may be discovering wireless networking, fully understand how to design and optimize their networks.

Home users might not find a need for this book unless they have several computers and want to link them all. Anyone with a home office or small business, on the other hand, will save lots of time with this book, since they will be able to grasp the technology easily and quickly see how practical and useful it is. If you just want to find out more about wireless networking—which is certainly one of the technologies of the future—you'll like this book, since it covers all the current issues. Unfortunately for the authors, the book was written before Apple announced the release of AirPort Extreme, and no mention of it is made. An [update](#) is available on the book's Web site, however.

So, to discover the advantages of wireless networking, plan and implement your own network, or just keep up on this new technology, this is the book you need.

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FAQ: Frequently Asked Questions

What Is ATPM?

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

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What Are Some Tips for Viewing PDFs?

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- You can zoom the PDF to full window width and scroll through articles simply by single-clicking anywhere in the article text (except underlined links).
- You can quickly navigate between articles using the bookmarks pane at the left of the main viewing window.
- For best results on small screens, be sure to hide the bookmarks pane; that way you'll be able to see the entire page width at 100%.
- Try turning Font Smoothing on and off in Acrobat Reader's preferences to see which setting you prefer.
- All blue-underlined links are clickable.
- You can hold down option while hovering over a link to see where it will lead.
- For best results, turn off Acrobat's "Fit to Page" option before printing.

Why Are Some Links Double-Underlined?

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

What If I Get Errors Decoding ATPM?

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

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

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

Segments: Slices from the Macintosh Life

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Hardware and Software Reviews

ATPM publishes hardware and software reviews. However, we do things in a rather unique way. Techno-jargon can be useful to engineers but is not always a help to most Mac users. We like reviews that inform our readers about how a particular piece of hardware or software will help their Macintosh lives. We want them to know what works,

how it may help them in their work, and how enthusiastic they are about recommending it to others. If you have a new piece of hardware or software that you'd like to review, contact our reviews editor at reviews@atpm.com for more information.

Shareware Reviews

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

