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Coping with Change

IN THE WORLD OF COMPUTER TECHNOLOGY, CHANGE CAN occur at stunning speeds. For example, this January Steve Jobs announced that 2003 was the "Year of the Notebook," a declaration that was partially an admission that Apple wouldn't have any new Power Macs until late in the year at the earliest. Viewed less cynically, Jobs's assertion reflected a dramatic transition happening in the computer industry.

As laptops gain power, and as the cost of building laptops drops, regular computer users are increasingly opting for portable computers instead of desktops. If you don't need the speed of a Power Mac, the thinking goes, why not have the portability of a PowerBook? At work, I've got a 20-inch LCD screen, an Apple keyboard, and a Kensington Turbo Mouse attached to my 12-inch PowerBook. And when I'm ready to head home or to leave for a business trip, it's easy to unplug and go.

Since I started using a PowerBook as my primary Mac, I've never wanted to go back. I know that increasing numbers of *Macworld* editors are choosing laptops instead of desktops, and the same is true elsewhere in the Mac market. After all, Apple's PowerBooks are the talk of the computer industry in terms of design and features, and the iBook is a sturdy low-end laptop that's a great value.

PowerBooks and iBooks are great, but they're very different from their desktop cousins. That's why we've rounded up numerous tips and tricks, from PowerBook experts, in "Laptop Nation" (page 58). I hope that after reading our story, all laptop-wielding *Macworld* readers will find new ways to use their portable Macs efficiently—at home, in the office, and on the go.

Change on the Desktop

Of course, The Year of the Notebook has also turned out to be the Year of the G5. Apple's next-generation Power Macs have finally arrived, and we've got our first review, courtesy of former *MacWeek* editor Henry Norr (page 26).

The G5s change the game for Mac users, and we'll be adapting to those changes in the months ahead. It'll be interesting to discover just how USB 2.0, Serial ATA, and other new technologies incorporated in the G5 will affect the way we work on our Macs. And then there's the G5 chip itself, whose 64-bit architecture is perhaps the most dramatic change Apple has made to the Power Mac in quite a while.

Change in the Magazine

With this issue, there are also several changes to *Macworld*. Most dramatic is the change to our *Secrets* section, which now features a series of columns directed at different areas of interest among Mac users: *Working Mac* (general and business productivity), *Digital Hub* (digital video, music, and photography), *Create* (graphics, publishing, and pro audio), *Mobile Mac* (PowerBooks, iBooks, iPods, and handhelds), and *Geek Factor* (scripting, Unix, and nifty gadgets). We've also created a new section for help and tips: *Help Desk* features both Christopher Breen's *Mac 911* column and a new column of tips, *Mac OS X Hints*, from Rob Griffiths, of the www.macosxhints.com Web site.

In addition to those changes, we've moved our *Mac Gems* column into our *Reviews* section, next to *The Game Room*. And we've added a new feature to the back page—*Hot Stuff* will give you the skinny on the best Mac products in key categories, as well as tips on other goings-on in the Mac world that deserve your attention. □

ABOUT THIS MACWORLD

What happens when we need a group of laptop users to pose for a *Macworld* photo shoot? We put out an all-company casting call. The result is the opening photograph for "Laptop Nation." Filling the roles of various types of PowerBook and iBook users were these *Macworld* staff members (from left to right): Franck Zamora, account executive; Niki Stranz, Showcase account manager; Charles Purdy, managing editor; Megan Matteoni, production coordinator; and Robert Ordoña, freelance copy editor. Peter Belanger was our photographer.

Got a comment on changes to the Mac, changes to *Macworld*, or anything else? Send me an e-mail at jason_snell@macworld.com, or visit our online forums at www.macworld.com.

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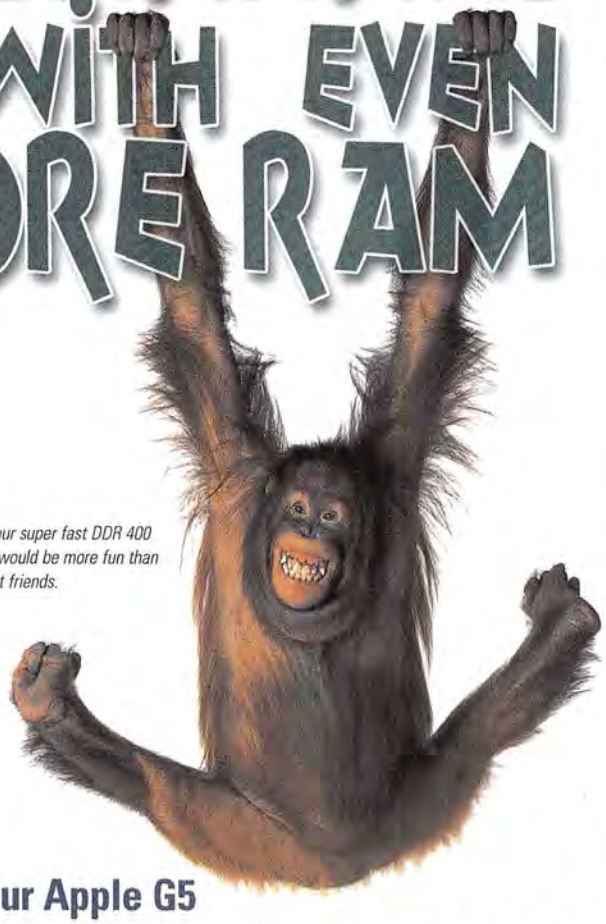

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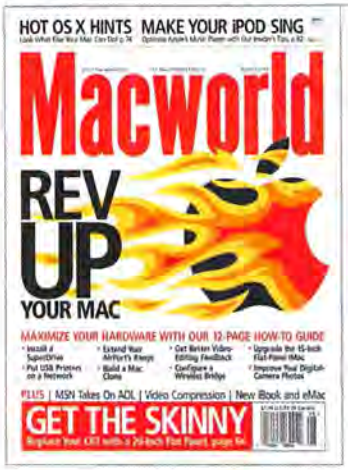

FEEDBACK

The Sound of One Hand Clapping

Macworld's readers are a hands-on bunch when it comes to their favorite hardware—and response to August's "The Do-It-Yourself Mac" was generally a solid two thumbs up. But other readers point fingers at Apple's Safari Web browser and our FreeHand MX review, while a Canadian Mac user sees the iTunes Music Store's United States–only policies as a slap in the face. Thanks to everyone who shared opinions—positive or negative. We take time to read all the letters you send us—and we would never tell one of our readers to "talk to the hand."

High Praise

BOB SIMON

It's all your fault, really. My computer savvy is only middle-of-the-road, but when I read Christopher Breen's "Soup Up Your PowerBook" (*Secrets*, January 2003) and learned how easy it would be to replace the 6GB hard drive in my PowerBook G3 with, say, a 40GB version, I worked up my courage—and did it! Then, my confidence hyped, I installed a second, 80GB drive in my two-year-old G4 tower. After that, I decided to get some use from the old PowerBook drive by putting it in an external FireWire housing. Finally, invincible, I saw in Jonathan Seff's "Install a SuperDrive" ("The Do-It-Yourself Mac," August 2003) that I could create a SuperDrive setup in the G4 and get iDVD 3 to recognize it.

It all works—I'm king of the Mac world. Thanks. What's the going rate for a lifetime subscription?

Faint Praise

BOB MARKETOS

Every year, I think about not renewing my *Macworld* subscription because most issues are uninteresting to me, and because I can find most content on the Web. But as with my relationship to the game of golf, it's that one shot that keeps me coming back. Your August issue was full of excellent advice and information, in almost every article. Even Andy Ihnatko was enjoyable. So you have me for one more year.

Working on Networking

MARK LOOPER

I have one comment and one question about "The Do-It-Yourself Mac" (August 2003). First, under "Better Burning," it reads: "Mac OS X doesn't support DVD-RW." But following a tip I read on the Web, I've found that I can use OS X's built-in disc-burning capabilities to write data DVD-RWs, and I can use OS X's Disk Utility to erase them for rewriting. I also use DVD-RWs with Dantz's Retrospect Express for backup chores. Second, concerning configuring the Linksys WET11 wireless bridge, the article says that you can connect "any device you want to the WET11's Ethernet port," and it will be on the network with any wireless devices that can recognize your AirPort Base Station. But can older Macs, printers, and so forth communicate via AppleTalk across the bridge for file sharing or printing purposes, or can they connect only via TCP/IP to the Internet? I thought the WET11 didn't support AppleTalk packets on its wireless link.

The WET11 is designed for TCP/IP, so it won't support AppleTalk. You can indeed connect "any device you want" to it, but the networking that's being relayed is TCP/IP. If you wanted to talk to an AppleTalk-only device across the WET11—for example, to use Printer Sharing on one Mac to share your AppleTalk printer with other Macs via TCP/IP—you'd need to attach the device to some other system that supports TCP/IP.—Ed.

DR. FRANK MURPHY

I read with great interest your article on making a wireless bridge with a WET11. I have a graphite AirPort network in my home. I just bought a ReplayTV 5040 unit with Ethernet. (It has a USB jack that hasn't been activated yet, so it's useless at this point.)

I bought the WAP11 because it was cheaper than the WET11, and I thought it might be possible to make a wireless bridge with the WAP11 in the same way as with the WET11. Can I? If so, how?

Definitely, via instructions very similar to those I gave for the WET11. Look in your device's documentation and find its default IP address. The WAP11's is 192.168.1.251. Next, set the WAP11 to Wireless Bridge mode. Then connect your ReplayTV to the WAP11 via an Ethernet cable, and you'll have wireless broadband on your TV set.—Jason Snell

Free to Be Dissatisfied

SHELLY RAMOUTAR

Your Macromedia FreeHand MX review (July 2003) left a lot to be desired. FreeHand is for the most part a print-production tool, and that area of the program was ignored completely. The Bezigon tool, which is touted as new, has been part of FreeHand since version 9 or earlier. Why is "No completely seamless import or export from Illustrator 9 and 10" a con? Adobe Illustrator has no similar importing and exporting capability for FreeHand—is that a con, too?

Macworld reviews are skewed way too much toward Web publishing, to the detriment of print-publishing professionals. For such a popular product, I found this review to be detached and incomplete, considering the kind of attention unpopular programs such as Adobe InDesign receive from *Macworld*.

I've always preferred FreeHand to Illustrator; it lagged with version 10, but the MX update goes a long way toward repositioning FreeHand to its rightful place. I wish *Macworld* had run a more thorough and realistic review.

We agree that FreeHand's versatility and power cover both print and the Web, but the review's focus was on FreeHand's integration with the MX product family. Most of this version's newer aspects involve Web publishing and integration with Flash.

FreeHand designers don't work in a vacuum. While FreeHand has its advantages, output for ads and other projects often requires Illustrator. It's more efficient and cost-effective to give print shops the format they want. FreeHand outputs to Illustrator 7 and earlier, but Illustrator is at version 10, and many of FreeHand's transparency effects aren't supported in Illustrator 7.—Andrew Shalat

Left Behind on Safari

PETER KEENE

Am I the only one who's somewhat bemused by the hurrahs surrounding the release of Apple's Safari 1.0? Yes, it is pretty quick at downloading certain Web pages. Problem is, I then have to flash up Microsoft Internet Explorer to download pages I want to save to disk, because Safari saves only the text. That's not the only bummer—the download manager doesn't support resumable downloads. If you lose the connection, or even if you lose the signal, for a couple of seconds, Safari dumps the lot. I lost 20MB of a 21MB download a while back. Much as I try, I can't seem to completely cut the Microsoft cord.

Apples and Maple Leaves

ROB GUTHRIE

I was pretty excited when Apple started offering individual song purchases for 99 cents through the iTunes Music Store. Searching through the library, I found the songs I wanted to purchase, attempted to make a payment, and then received this message: "We're sorry, but song purchase is not available in your area at this time."

This sucks. When will Apple (and many other U.S. companies) learn that there is a world outside of the United States? While I'm on the subject, when will we see an Apple store here? If Best Buy can set up shop in Canada, surely Apple can.

I'm sure Apple would be more than happy to take your 99 cents, but licensing and royalty issues are the culprits here—as far as we know, the record labels have authorized Apple to sell content only within the United States.—Ed.

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CORRECTIONS

In our review of FontDoctor 5.5 (September 2003), we printed an incorrect telephone number. The correct number is 800/583-2917.

OmniGraffle 3.0.1 Professional (*Reviews*, September 2003) is compatible only with OS X.

In "Speaking of the Future" (*Mac Beat*, August 2003) we reported on the Record function found in third-generation iPods. iPod Software 2.0.1 Updater (released after our August issue went to press) removes the diagnostic test that provides access to the Record function.

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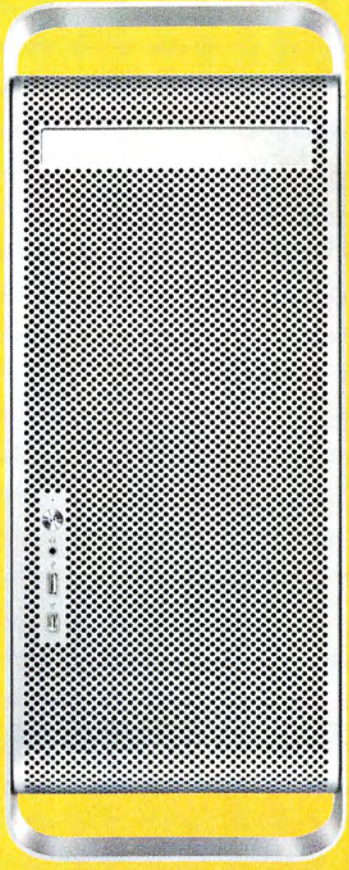

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NEW CREATIVE SUITE UNITES MULTIPLE APPS WITH IMPROVED INTEGRATION

Adobe Puts It Together

Artists and other creative professionals who rely on multiple applications from Adobe (800/833-6687, www.adobe.com) should be interested in the software giant's latest release. Adobe Creative Suite brings most of the company's principal applications—Photoshop, Illustrator, InDesign, GoLive, and Acrobat—under one roof. Just don't mistake this massive suite for a simple software bundle.

ILLUSTRATION BY JOHN FARNSWORTH

Traditionally, Adobe's bundles—which Adobe calls *Collections*—have been a handful of programs combined in one package with a discounted price. With Creative Studio, Adobe is "taking a couple of steps beyond that," says Jim Heeger, the company's senior vice president of creative professional products. The suite still includes multiple Adobe products; however, this time all but one application in the suite have undergone a major upgrade. (The exception, Acrobat 6.0 Professional, hit the market a few months ago.)

More important, the revised programs that make up Adobe Creative Suite introduce an unprecedented level of integration for Adobe. Parts of the suite "will work together in a way that you don't get from individual applications," Heeger says.

Adobe Creative Suite comes in two versions. The Premium Edition ($1,299; upgrade from Photoshop or the assorted Adobe Professional Collections, $749) features the updated programs, Acrobat 6.0 Professional, and the new Version Cue application. The Standard Edition ($999; upgrade, $549) ships without GoLive CS and Acrobat. (For a more in-depth look at the individual applications that make up Adobe Creative Suite, see "Adobe Changes Everything," page 67.)

A Big Mental Shift

Adobe executives decided to push for greater integration because they concluded that it was the best way to meet the needs of their customers, Heeger says. Because creative pros are responsible for content that appears in more than one medium, the company wanted to make its Web and print design products work together more smoothly. "If you're a creative professional, we want to provide you with a suite of tools that makes you as productive as you can be," Heeger says.

Adobe has other reasons for bringing its applications together. The company's research indicates that 60 percent of its installed base already uses two or more Adobe apps. What's more, rival software makers tout highly integrated suites of their own. Most notably, Macromedia just released Macromedia Studio MX 2004, which brings together Dreamweaver, Flash, Fireworks, FreeHand, and ColdFusion.

Having its programs work together more closely required more than changing the applications; Adobe also had to make changes to the way it develops and releases products. Historically, updates to Photoshop, Illustrator, and other apps came out at different times during

the year, allowing Adobe to shift its focus and resources from one project to the next. By integrating features of different programs, however, Adobe had to schedule simultaneous product upgrades. "It was a big mental shift internally," Heeger concedes.

Can Adobe customers expect simultaneous releases for future updates? Heeger won't rule out updates for lone products, but says that Adobe's new suite-based approach to releases is "clearly where we're headed."

Common Cause

So what will greater integration mean for Adobe Creative Suite users? Start with the user interface—each part of the separate apps that make up the suite now shares common commands, tools, palettes, and keyboard shortcuts. "That makes it easier for people who know one of the applications to pick up the rest of them," Heeger says.

The suite also boasts native file-format support between Photoshop, Illustrator, InDesign, and GoLive. Users can export vector files from Illustrator CS into Photoshop CS and open them with layers, text, slices, transparency, and image maps intact. Conversely, raster files from Photoshop can be opened or placed in Illustrator files. Users are also able to place native Photoshop files in InDesign CS layouts without having to flatten them first, eliminating the need for DCS- and separation-based workflows. An Edit Original Selection command in InDesign launches Photoshop or Illustrator when users want to make changes to an image or file. Similarly, GoLive CS allows native, layered Photoshop and Illustrator files to be placed right in HTML layouts.

Creative Suite supports a number of shared technologies to create a more predictable—and smoother—design process. These technologies include the Adobe Color Engine; the Flattener palette; the Separation Preview palette; OpenType font support; and Extensible Metadata Platform, a standards-based enabling technology that adds intelligence to files to make them easier to find, share, and reuse.

Right on Cue

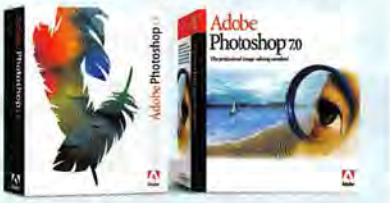
The most significant integration between the programs comes courtesy of Version Cue, the file-management application introduced with Creative Suite. Adobe bills Version Cue, which tracks changes and iterations of files for individual users and workgroups, as the glue that holds the suite together.

Version Cue saves files in a workspace that can be accessed from within any Creative Suite app. Clicking on the My Projects button in the Open dialog box gives thumbnail previews of all project files, along with version comments, previous authors, and other file information. A Search tab also lets users find files using comment, date, author, or keyword data. The Save A Version command saves a file back to the workspace without users having to jump between applications.

For workgroups, Version Cue lets users share projects from their desktops without any need for databases or file servers. Opening a file puts a working copy on your hard drive until you save a version back to the workspace; if other people try to open the same file, Version Cue warns them, minimizing the risk of conflicting versions. By allowing users to collaborate more efficiently, Heeger says, Version Cue moves Adobe beyond individual desktops and into workgroup settings. "Version Cue is a big step forward," he adds. "But it's the first of many steps."

Whether Adobe customers will be eager to take that step will become more apparent after Creative Suite ships later this year. But there's no denying that from this point forward, Adobe's design applications will have plenty in common.—PHILIP MICHAELS

New Suite, New Look



Adobe's updated apps have changed quite a bit under the hood, but they're also radically different on the *outside*. Old, familiar images such as the Photoshop eye logo and Illustrator's take on Botticelli's *The Birth of Venus*—as familiar to some Adobe users as the features of the programs themselves—have been dropped from the packaging for Adobe products. Instead, the company plans to mark the launch of its Adobe Creative Suite with the first major overhaul of its packaging in five years, turning to vibrant, multicolored natural elements to replace the familiar imagery.

Venus's exit comes as Adobe looks to rethink the way it serves its customers, says Jane Willis, senior director of product marketing for creative professional products. The new packaging for the revamped suite of creative products is part of that effort. "We wanted the packaging to reflect that this was a different way of designing the products and a different way of thinking about the products," she says.

MetaDesign, the San Francisco–based design firm that worked with Adobe to create the new look, wanted to get across three points with the redesigned packaging: precision, beauty, and inspiration. "A nature theme satisfied all those attributes," says MetaDesign executive creative director Brett Wickens. "Nature became the lens through which we looked to define the images of each product."

That approach led to a finished product that, in some cases, will be a major departure from past designs. Photoshop's eye makes way for brightly colored feathers, while an array of flowers takes Venus's place on the Illustrator box. Other changes are less dramatic—GoLive, which used to sport a planetary design, now features only stars, while InDesign adopts a more abstract version of its butterfly icon.

Adding to the normal pressure of replacing established designs with brand new looks was the fact that Adobe and Meta Design were overhauling the box art for products aimed at illustrators, graphic artists, and other folks who know a thing or two about effective designs. "You're talking about probably one of the most cynical and critical markets on earth," Wickens says. "So it's tough."—PHILIP MICHAELS

APPLE GIVES 15-INCH POWERBOOK AN ALUMINUM LOOK, UPDATES OTHER MODELS

PowerBooks Show Their Metal

The Power Mac G5 may have just arrived (see *Reviews*, page 26), but Apple isn't ready to declare the Year of the Notebook over just yet. And it's no wonder—consumers have snapped up Apple laptops. For the three-month period that ended on June 30, PowerBooks and iBooks made up 42 percent of Apple's sales, up from 34 percent at the start of 2003.

To keep the portable party going, Apple has refreshed the oldest part of its professional laptop line—the 15-inch Titanium PowerBook G4, which first hit the market more than two years ago. The other PowerBook models have undergone updates of their own, bolstering a product line that Apple considers an essential part of its future.

"We're going to continue to push innovation," says Apple vice president of hardware product marketing Greg Joswiak. "And there will be a time in the not-too-distant future when we're selling more laptops than desktops."

What's New for 15

Apple figures the redesigned 15-inch PowerBook will help lead that charge. While the most noticeable change is the shift to the aluminum alloy that houses the other PowerBooks, Apple stresses that the update involved more than just transplanting the old 15-inch components to a new enclosure.

The 15-inch model uses either a 1GHz or a 1.25GHz G4 chip; the Titanium topped out at 1GHz. Storage capacity has also increased to a maximum of 80GB, up from 60GB in the Titanium model. Gone is the ATI Mobility Radeon 9000 graphics card, replaced by an ATI Mobility Radeon 9600 graphics processor with 64MB of video memory. System memory remains at either 256MB or 512MB, but you can max out RAM to 2GB, double the old maximum. And the memory you install in the new PowerBook is 333MHz PC2700 DDR Ram, rather than the Titanium G4's PC133 SDRAM.

In terms of optical drives, you can choose a DVD-ROM/CD-RW Combo drive or a DVD-burning SuperDrive that burns DVDs at 2× instead of 1×.

The new 15-inch laptop supports USB 2.0 (as do all PowerBooks); it has one port on each side. And like its 12- and 17-inch siblings, the 15-inch PowerBook has improved AirPort reception, thanks to antennas installed in its display. The 15-inch model follows the 17-inch PowerBook's lead in another respect—it sports an illuminated keyboard that glows whenever the ambient light dims. (That feature is standard on the $2,599, 1.25GHz model and a $69 add-on to the $1,999, 1GHz configuration.)

Aluminum Five-Pack

MODEL	PROCESSOR	MEMORY/SPEED	HARD DRIVE	OPTICAL DRIVE	GRAPHICS CARD/MEMORY	PRICE
12-Inch PowerBook	1GHz G4	256MB/266MHz	40GB	Combo drive	Nvidia GeForce FX Go5200/32MB	$1,599
12-Inch PowerBook	1GHz G4	256MB/266MHz	40GB	SuperDrive	Nvidia GeForce FX Go5200/32MB	$1,799
15-Inch PowerBook	1GHz G4	256MB/333MHz	60GB	Combo drive	ATI Mobility Radeon 9600/64MB	$1,999
15-Inch PowerBook	1.25GHz G4	512MB/333MHz	80GB	SuperDrive	ATI Mobility Radeon 9600/64MB	$2,599
17-Inch PowerBook	1.33GHz G4	512MB/333MHz	80GB	SuperDrive	ATI Mobility Radeon 9600/64MB	$2,999

Ports, Power, and Prices

The changes to the 12- and 17-inch models are less dramatic than the revisions to the 15-inch PowerBook, but laptop enthusiasts will certainly welcome them. One of the more requested changes is in the 12-inch PowerBook, which now has a mini-DVI port instead of a mini-VGA port. The change lets users connect a 12-inch PowerBook to any digital or analog display, via included mini-DVI–to–DVI and mini-DVI–to–VGA adapters.

Other changes to the 12-inch PowerBook include a faster processor (1GHz instead of 867MHz) and more L2 cache (512K, up from 256K), as well as a new graphics card (the Nvidia GeForce FX Go5200 with 32MB of video memory). Maximum RAM doubles, to 1.25GB.

The 17-inch PowerBook still comes in only one configuration. But it should run faster than the old version, thanks to a bump in processor speed, to 1.33GHz from 1GHz. Like the 15-inch model, the 17-inch PowerBook uses an ATI Mobility Radeon 9600 with 64MB of video memory as its graphics processor. The 17-inch laptop can hold a maximum of 2GB of RAM.

The biggest change to the 17-inch PowerBook is its price tag—the cost has dropped $300, to $2,999. The price cut means Apple is selling its top-of-the-line PowerBook for less than $3,000—with the entire range of available PowerBooks starting at $1,599.

With that mixture of price and power, Apple could very well extend its Year of the Notebook into the foreseeable future.—PHILIP MICHAELS

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HARDWARE BEAT

Displays

Three flat-panel monitors from Planar Systems (866/475-2627, www.planar.com): The **PQ150** ($339) is a 15-inch display with a 1,024-by-768-pixel native resolution. The **PQ170** ($509) is a 17-inch model with 1,280-by-1,024-pixel resolution. The 19-inch **PQ191** ($739) also features a 1,280-by-1,024-pixel resolution.

Printers

Four ink-jet multifunction printers from Brother (408/704-1700, www.brother.com): The **MFC-3220c** ($130), **MFC-3420c** ($180), **MFC-3320cn** ($180), and **MFC-3820cn** ($230) print, fax, and scan. All four feature a 4,800-by-1,200-dpi resolution and print speeds of 14 black-and-white and 12 color pages per minute. The 3220c and 3320cn feature 8MB of memory; the 3420c and 3820cn have 16MB. The 3320cn and 3820cn are flatbed models.

Two printers from Xerox (877/362-6567, www.xerox.com): The **Xerox Phaser 6250** ($1,999 to $3,899, depending on model) is a network color laser printer with a 2,400-dpi resolution and print speeds of 26 pages per minute in color or black-and-white. The **Xerox Phaser 3450** ($549 to $899, depending on model) is a black-and-white printer with a 1,200-dpi resolution and print speeds of 25 pages per minute.

An ink-jet printer from Epson (800/463-7766, www.epson.com): The **Epson Stylus C84** ($99) can print at 5,760-by-1,400 dpi. It prints 22 black-and-white pages per minute and 12 color pages per minute.—COMPILED BY PHILIP MICHAELS

ICONS: WWW.ANDYMARTIN.UK.COM

WEB SITES HELP iCHAT AV USERS ADD TO THEIR BUDDY LISTS

Strangers with iChat

When Apple introduced iChat AV, you were among the first to download the beta software and shell out $149 for the iSight camera. Now, you've got everything you need to enjoy the new video-chatting capabilities in Apple's messaging app—everything, that is, except for friends with their own FireWire Webcams and the necessary system requirements. The only thing you've experienced so far is the sound—and sights—of silence.

ILLUSTRATION BY MICHAEL MEISTER

Jeffrey Glover knows your pain. "When I first heard about iChat AV and downloaded it on the day [Steve] Jobs unveiled it, I thought, 'Cool! I want to try this out,' but I didn't have anyone to connect to," says Glover, a San Francisco Web developer. But instead of suffering in silence, Glover created a Web site, iChatters.com, to solve his dilemma.

iChatters.com is one of several Web sites that sprung up in the wake of iChat AV's debut; iChatFinder (www.ichatfinder.com), Seeser (www.seeser.org), and iChattin.com have also gone online to help would-be iChatters meet face-to-face. All four sites operate under the same basic idea—they act as free services that list iChat AV users waiting on a friend. Some, such as iChattin.com, offer basic lists of registered users; others feature more complex, searchable databases that display information such as a user's interests, occupation, and online status. Both iChatters.com and iChatFinder even let members upload photos of themselves.

Of course, listing yourself on one of the sites might lead to a problem very different from the one you had before—too many "friends." "Many new members, particularly females, were overwhelmed by the volume of other members trying to make contact," says iChatFinder developer Bob Payne. But necessity—and one too many video-chat invitations—is the mother of invention. Payne developed filters that can block other iChatFinder users that meet various criteria.

Even with filters, iChatFinder and similar sites mean that your next conversation may be just a video-chat button away. After all, just because you're lonesome doesn't mean you have to be alone.—MATHEW HONAN

BLUETOOTH-BASED MOUSE AND KEYBOARD CONNECT TO MACS WIRELESSLY, REDUCING CABLE CLUTTER

Apple Cuts the Cord

The way Apple sees it, AirPort and Bluetooth wireless technologies are complements, not competitors. The former is for wirelessly connecting your Mac to a network; the latter wirelessly connects your peripherals to your Mac. And just as Apple turned to AirPort wireless connectivity as an alternative to Ethernet cables, the company is now letting users drop USB-based input devices in favor of a mouse and keyboard that connect to a Mac via Bluetooth.

The Apple Wireless Mouse and Apple Wireless Keyboard each cost $69 and work as far as 30 feet from your Mac. The snow-colored input devices feature 128-bit over-the-air encryption, for secure data-transfer, and adaptive frequency hopping, which eliminates interference from other wireless and electronic devices such as cordless phones. Apple plans to offer both the mouse and the keyboard as stand-alone options, continuing to bundle wired mice and keyboards with its hardware products.

Both wireless devices use AA batteries—two for the mouse, four for the keyboard. That should provide three months of battery life for the mouse and nine months for the keyboard, Apple says. However, the company also equipped its mouse and keyboard with on-off switches for conserving battery power.

Apple's Wireless Mouse and Wireless Keyboard will work with any Mac that comes with built-in Bluetooth support. In addition, the input devices connect with most Macs via a Bluetooth USB adapter.—PHILIP MICHAELS

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IMAGING BEAT

Hardware

Cameras

A 4-megapixel camera from Canon (800/652-2666, www.usa.canon.com): The **PowerShot A80** ($499) features a 3× optical zoom and supports PictBridge, a multivendor standard for direct printing.

Three digital cameras from Eastman Kodak (800/235-6325, www.kodak.com): The **EasyShare DX4530** ($399) is a 5-megapixel camera with a 3× optical, all-glass aspherical lens and a 3.3× advanced digital zoom. The **EasyShare CX6230** ($199) is a 2-megapixel camera with a 3× optical, all-glass aspherical zoom lens and a 3.3× continuous digital zoom. The **EasyShare DX6490** ($499) is a 4-megapixel camera that Kodak claims is the first to unite a professional-quality Schneider-Kreuznach Variogon 10× optical zoom lens (38mm–380mm equivalent) with an f2.8–f3.7 maximum aperture.

Two digital cameras from Sony (877/865-7669, www.sony.com): The **Cyber-shot DSC-F828** ($1,200) is an 8-megapixel camera with a maximum image size of 3,360 by 2,460 pixels. The **Cyber-shot DSC-U50** ($250) is a 2-megapixel camera with a 180 degree rotating lens.

Software

Asset Management

iView MediaPro 2.0, from iView Multimedia (www.iview-multimedia.com): This asset manager can now store as many as 128,000 media items in one catalog while reducing catalog size ($160; upgrade from version 1.5, $70).

PhotoReviewer 1.0, from Stick Software (www.sticksoftware.com): This photo-management shareware lets OS X users review photos imported to their Macs and keep the ones they like. The software was designed to be a go-between for digital cameras and iPhoto. It weeds out photos before they're imported into Apple's free digital-image manager ($10).

Image Editing

PhotoImpression 5, from ArcSoft (510/440-9901, www.arcsoft.com): This updated image-manipulation program for OS 8.6 and later (including OS X) sports a new interface in which various functions and options are segregated into projects, while enhancement tools are grouped together, separate from printing commands ($50; upgrade, $30).

Plug-In

Texture Anarchy, from Digital Anarchy (415/621-0991, www.digitalanarchy.com): This suite of Photoshop plug-ins—Texture Anarchy Explorer, Tiler Texture Anarchy, and Edge Anarchy—creates procedural textures and borders ($129). It's compatible with OS 9 and X, and Photoshop 3.0 and later.—COMPILED BY PHILIP MICHAELS AND TERRI STONE

ENCRYPTION SOFTWARE GETS MORE POWERFUL, LESS OBTRUSIVE

PGP Makes Privacy Universal

For years, computer users concerned about keeping communication private have used Pretty Good Privacy, or PGP (●●●●½; April 2003), to encrypt their e-mail messages. But despite PGP's integration with e-mail programs, most users don't have PGP, and many of those who do have PGP rarely use it.

For encryption to take off—and for e-mail to stop being about as private as the writing on the back of a postcard—it needs to be everywhere while remaining invisible to users. That's the goal of PGP Corporation and its new generation of PGP software (877/228-9747, www.pgp.com), which lifts the burden of encrypting messages off of the backs of individual users.

The new PGP Universal Server (which is based on Linux) runs on Intel-based PCs and encrypts e-mail while it's in transit. The messages you send and receive are completely unencrypted; PGP Universal handles all public and private keys and all message encrypting on-the-fly. A PGP Universal server can sit between you and your e-mail server, encrypting messages before they reach the e-mail server, or it can sit between your e-mail server and the outside world, acting as a gatekeeper and encrypting or decrypting everything leaving or entering your network. If your e-mail recipients don't have a PGP key to decrypt your message, an e-mail directs them to a secure Web site that displays the message's content.

For Mac users, the most interesting aspect of PGP Universal is the PGP Universal Satellite software, which runs on Mac OS X. If you use Universal Satellite, all the e-mail entering or leaving your Mac is decrypted or encrypted on-the-fly. Currently, Universal Satellite works only as a part of PGP Universal, but it seems reasonable to guess that, in the future, PGP might offer a single-user version—a product that would unobtrusively ensure that everyone's e-mail became a little more private.—JASON SNELL

POPULAR EOS REBEL GOES DIGITAL—AND ARRIVES FOR LESS THAN $1,000

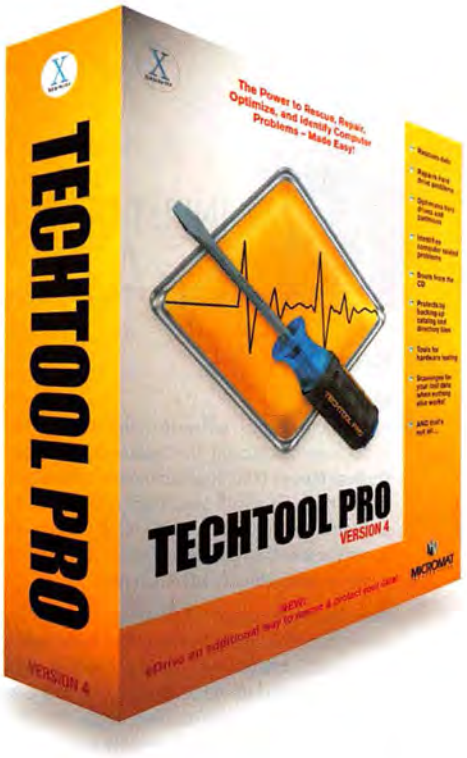
Canon's Rebel Yell

That old saying about weather in the Midwest—if you don't like it, just wait a few minutes, and it'll change—might as well apply to the digital-camera market. Don't care for the current selection? Just wait a few months, and things are bound to change. The latest shift comes courtesy of Canon (800/652-2666, www.usa.canon.com)—the September release of the EOS Digital Rebel, a digital version of the company's popular film SLR camera. It's a change that should drastically alter the digital-camera landscape.

Offering the same 6.3-megapixel CMOS sensor and DIGIC image processor as Canon's $1,499 EOS 10D (●●●●½; September 2003), the Digital Rebel supports Canon's full line of EF-series lenses (but not the high-end L-series). The camera's most impressive feature, though, may be its price tag—$899, making the Rebel the first digital SLR with interchangeable lenses that costs less than $1,500.

Most sub-$1,000 digital cameras use one lens for exposing and another as a viewfinder. With an SLR camera, you look through the same lens that the camera uses for exposing the image sensor, for a much more accurate view of what the final image will look like. Though other digital SLRs are available for less than $1,000, none offers interchangeable lenses or the larger image sensor size of the Digital Rebel. Serious hobbyists will appreciate the Digital Rebel's multiple lenses. Plus, the lenses have longer focal lengths than the typical sub-$1,000 digital cameras, for greater control and variety of depth of field.

Three years ago, Canon took its competition by surprise with its $3,000 D30, the lowest-priced digital SLR available at that time. Competitors have scrambled to match that price. With the Rebel, expect to see them again trying to catch up.—BEN LONG



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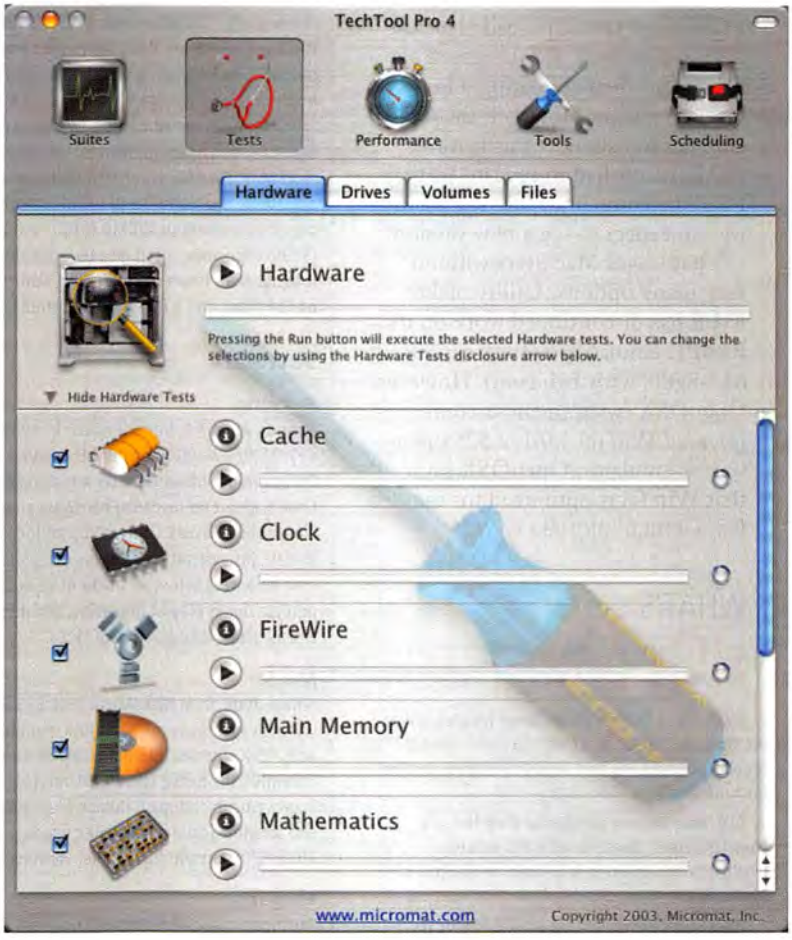

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EMULATION OPTIONS DWINDLE

VPC DOA?

The Power Mac G5 may feature a more powerful processor and faster overall performance than previous Apple desktops did, but that won't help Virtual PC run any faster on the new machines. The emulation software from Microsoft (800/642-7676, www.microsoft.com/mac) is incompatible with the newly released desktops.

The problem lies in the hardware, according to Microsoft Macintosh Business Unit product manager Jessica Sommer. Virtual PC for Mac 6.1 relies on a feature of the PowerPC G3 and G4 chips, called *pseudo little-endian mode*, for increased performance when emulating a Pentium processor. However, the G5 chip doesn't support this feature, so Microsoft had to rewrite Virtual PC. The company won't say when we can expect to see a new version.

That leaves Mac users without very many options. Utility maker FWB has discontinued work on its RealPC emulation software (650/637-8500, www.fwb.com). However, OpenOSX (www.openosx.com) released WinTel 1.0.1, a $25 open-source emulator. OpenOSX says that WinTel is optimized for the G5.—PHILIP MICHAELS

WHAT'S HOT

A Quick Look at the World of Macs

1. **Blaster and Sobig viruses cause hassles, havoc for Windows users.** *Mac users respond to the outbreak by yawning and then buying themselves another track off the iTunes Music Store.*

2. **AOL Time Warner decides to drop the *AOL* from its name.** *The company is also debating whether to stop referring to its board of directors as My Buddy List.*

3. **Adobe unveils revamped packaging for its updated Creative Suite products.** *The ultimate decision to use colorful images of nature on the packages barely beat out plans to produce completely blank boxes with "Doodle Here" space.*

4. **Due to incompatibility issues, Virtual PC won't run on Power Mac G5s.** *Frustrating compatibility issues? Wow—it's like you really are running a Windows machine.*

MULTIMEDIA BEAT

Hardware

Audio

A mobile audio interface from M-Audio (800/969-6434, www.m-audio.com): The **Transit** ($130) is a pocket-size device that provides analog and digital audio input and output, including support for AC3 and DTS passthrough. Compatible with OS 9 and OS X and aimed at laptop users, Transit's digital I/O transfers audio between a USB-equipped computer and other devices, such as MiniDisc and DAT players.

MP3 Players

Three Mac-compatible MP3 players from Rio Audio (800/468-5846, www.rioaudio.com): The **Rio Chiba** ($199 for the 256MB model; $169 for 128MB) and **Rio Fuse** ($149) are flash-based MP3 players with backlit LCDs, onboard memory, and more than 18 hours of continuous playback with a AAA battery. The Chiba features an FM tuner, a five-band adjustable equalizer, and onboard memory that can expand to 768MB. The Fuse is a 128MB MP3 player with an adjustable equalizer. The **Rio Cali** is a sport MP3 player that comes in 128MB ($170) and 256MB ($199) capacities; it can also be expanded to 768MB. It features 18 hours of battery life, USB connectivity, an FM tuner, and a five-band adjustable equalizer.

Software

Burning

Dragon Burn 3.0, from NewTech Infosystems (949/421-0720, www.ntius.com): This updated CD- and DVD-burning software for OS X features Dynamic Drive Support for resolving hardware and software compatibility issues. Other additions include Live Update (for optimizing software compatibility), volume balancing across all tracks of an audio CD, support for iTunes playlist importing, and integrated Discus label-making software ($50).

Music

Finale 2004, from MakeMusic (800/843-2066, www.makemusic.com): This music-notation software adds OS X support, including support for Aqua and CoreMIDI, the native OS X MIDI interface. Other improvements include a Human Playback feature and simplified note entry ($600; upgrade from Finale 2003, $90; upgrade from earlier versions, $140).

Plug-In

Automatic Duck Pro Import 2.0, from Automatic Duck (www.automaticduck.com): This software, which supports OS X and Windows, enables editors to import edited sequences from Avid systems or Final Cut Pro into Adobe After Effects or Boris Red 3GL. The update features translation of more Avid effects, as well as audio levels and keyframes from Avid and Final Cut ($495; upgrade, $195).—COMPILED BY PHILIP MICHAELS

INPUT-DEVICE BEAT

Hardware

Mice

A Bluetooth-enabled mouse from Belkin (800/223-5546, www.belkin.com): The **Bluetooth Wireless Optical Mouse** ($80) is a four-button scroll-wheel mouse that works with Macs running OS X 10.2.6 and later. It comes with a Bluetooth USB adapter for wireless connectivity; the adapter lets you connect as many as seven other Bluetooth devices.

Three mice from Logitech (800/231-7717, www.logitech.com): Both the blue-and-silver **Click Optical Mouse** ($25) and the silver-and-gray **Cordless Click Optical Mouse** ($40) are designed for use with either hand; the cordless mouse combines optical sensing with RF technology. The **Cordless Click Plus Optical Mouse** ($50) is designed for the right hand; it features RF technology, optical sensing, and forward and back buttons for browsing Internet pages.

Tablets

A new pen tablet from Wacom Technology (800/922-6613, www.wacom.com): The **Graphire3** tablet comes in two sizes: 6 by 8 inches ($200) and the traditional 3 by 4 inches ($100). The Graphire3 pen supports OS X's Inkwell handwriting-recognition technology. The tablet comes bundled with Adobe Photoshop Elements 1.0, Corel Painter Classic, and nik multimedia's pen-Palette LE.—COMPILED BY PHILIP MICHAELS

PRODUCTIVITY BEAT

Software

Presentation

IntelliPrompter 1.0, from Intelli Innovations (919/468-0340, www.intellisw.com): This teleprompting software displays text automatically on a screen or projector. IntelliPrompter Personal ($80) features text-styling support, text-color controls, embedded graphics, and a control toolbar. IntelliPrompter Presenter ($400) adds USB-controller support, text-spacing controls, and full-screen prompting. IntelliPrompter Pro ($700) supports multiple monitors and AppleScript.

Word Processing

Mariner Write 3.5, from Mariner Software (612/529-3770, www.marinersoftware.com): This updated word-processing application, which runs on OS 9 and OS X, adds Japanese, Dutch, and Swedish language support ($70; upgrade, free for version 3.0 users, $25 for users of earlier versions).—COMPILED BY PHILIP MICHAELS

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Which decision is no longer necessary?

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STORAGE BEAT

Hardware

Hard Drives

USB-FireWire external drives from Akumen (512/467-2808, www.akumen.com): The **Ascent XHD 800** features FireWire 800, FireWire 400, and USB 2.0 connectivity. It's available with an 80GB ($229), 120GB ($249), 200GB ($369), 250GB ($439), or 320GB ($549) capacity. It's also available as an enclosure kit ($139).

A line of external hard drives from Maxtor (800/262-9867, www.maxtor.com): The **Maxtor One-Touch** features a one-button backup-and-restore system bundled with Dantz Retrospect Express. The drives come in the following configurations: a 120GB, 7,200-rpm drive with USB 2.0 ($200); a 200GB, 7,200-rpm drive with USB 2.0 and FireWire ($300); a 250GB, 7,200-rpm drive with USB 2.0 and FireWire ($350); and a 300GB, 5,400-rpm drive with USB 2.0 and FireWire ($400). Maxtor also offers a 250GB, 7,200-rpm drive ($350) formatted for the Mac.—COMPILED BY PHILIP MICHAELS

APPLE BOOSTS iMAC'S PROCESSOR SPEED TO 1.25GHZ, iPOD'S CAPACITY TO 40GB

Faster iMacs, Bigger iPods

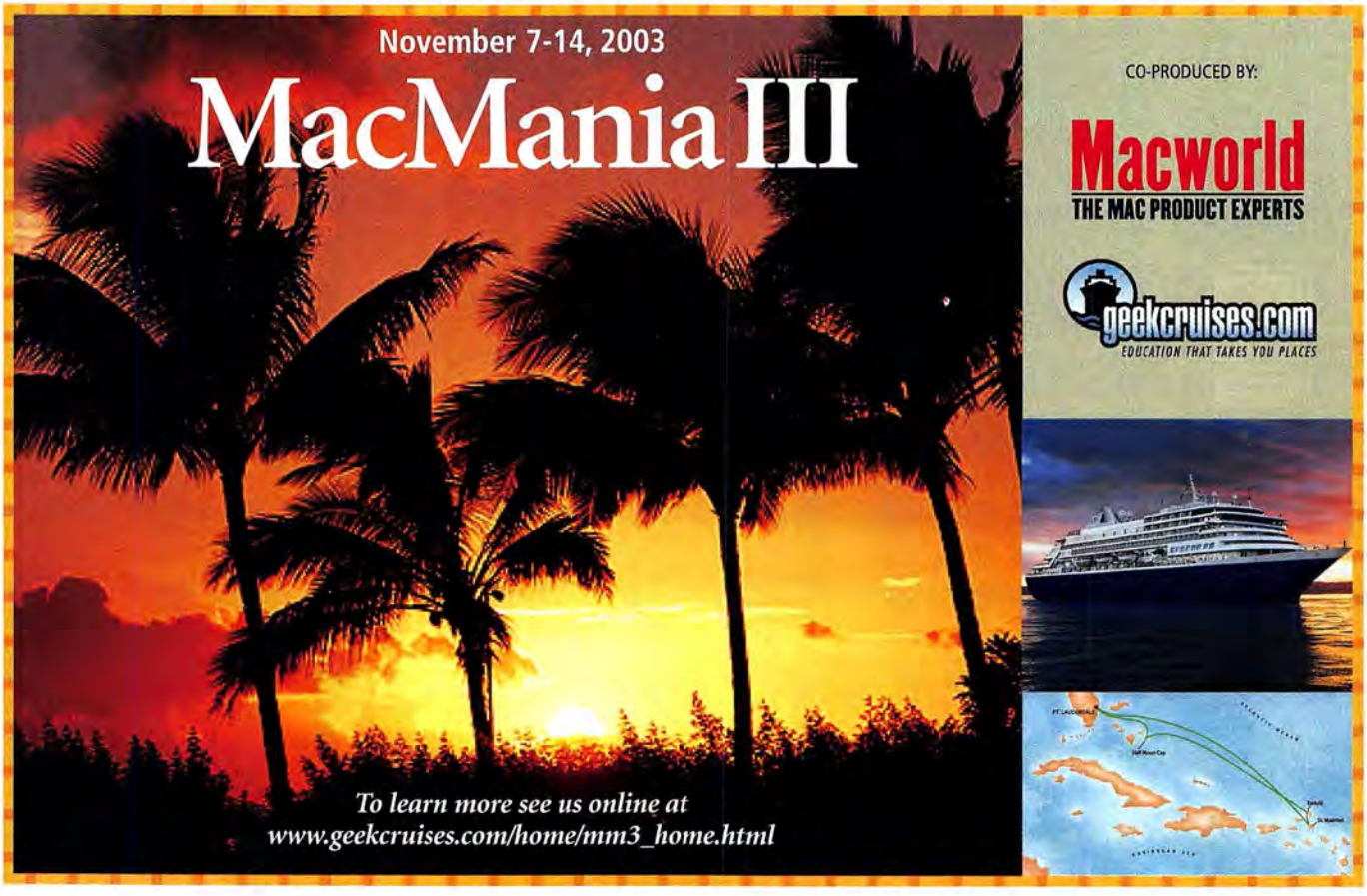
While most of the buzz around Macs these days involves the Power Mac G5, Apple (800/692-7753, www.apple.com) is making sure the other end of its desktop line stays up-to-speed. It has updated its flat-panel iMacs to include faster processors, memory, graphics cards, and USB connections.

The 17-inch flat-panel iMac now runs on a 1.25GHz G4 processor, up from 1GHz. The updated computer—which keeps its $1,799 price tag—also swaps its Nvidia GeForce4 MX graphics processor for the faster GeForce FX 5200 Ultra graphics card with 64MB of DDR video memory.

Apple bumped the $1,299, 15-inch flat-panel iMac's processor speed to 1GHz, from 800MHz, and replaced the GeForce2 MX card with a GeForce4 MX graphics processor that has 32MB of video memory. Like the 17-inch iMac, the $1,299, 15-inch model now offers an 80GB hard drive and support for both Bluetooth and AirPort Extreme wireless networking.

Both flat-panel iMacs come with 256MB of DDR system memory that runs faster, at 333MHz (up from 266MHz in the 17-inch iMac and 100MHz in the 15-inch version). The two models have three USB 2.0 ports (much faster than USB 1.1) and a pair of FireWire 400 ports, but no FireWire 800 support; Apple considers the faster connectivity standard to be a pro feature.

In addition to bolstering the speed of its iMacs, Apple has increased the capacity of its iPods. Joining the $299, 10GB portable music player are a $399, 20GB model and a $499, 40GB model, which replace 15GB and 30GB iPods at the same prices.—JIM DALRYMPLE



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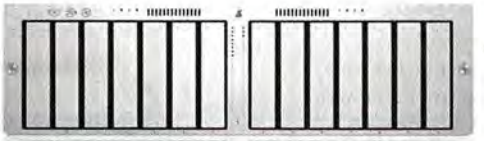

Apple Xserve RAID

Apple Xserve

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Power Mac G5s

As Promised, G5s Leave Their Predecessors in the Dust

BY HENRY NORR

The long wait for the Power Mac G5s is finally over, and the verdict is in: just as Steve Jobs promised, the next-generation desktops deliver the big performance boost that professional Mac users have hungered for, with growing impatience, for several years.

The new machines take their name from the powerful new processor they're built around—the IBM PowerPC 970, which Apple classifies as the fifth generation of PowerPC technology (for more details on the new G5s, see "The Next Generation," September 2003). But the three models that make up the new Power Mac line offer more than just a new CPU: with a brand-new case design, a revamped internal architecture, and a slew of cutting-edge technologies, they represent the biggest makeover for Apple's pro line since the introduction of the first G4s four years ago.

Great Big Boxes

Visually, the G5s borrow from the design of the popular G4 PowerBooks: instead of shiny plastic, the machines' elegant exterior is made of brushed aluminum, and the rounded contours of the older models have given way to a more conservative—not to say square—shape.

Unlike with Apple's laptops, however, no one would call the new desktops compact. Measuring 20.1 inches high, 8.1 inches wide, and 18.7 inches deep, the new models tower over their predecessors (see "Big Brother").

Despite their size, the G5s have less room for internal expansion than their predecessors: there's only one empty bay for an extra hard drive, none for a second optical drive to complement the standard SuperDrive, and three PCI (in the 1.6GHz model) or PCI-X (in the two faster models) card slots. In contrast, recent G4s have had bays for three extra hard drives and a second optical drive, plus four PCI slots.

The Sounds of Silence—Almost

So what goes on inside the G5 case? Much of it is occupied by fans (eight of them in the single-CPU models, nine in the dual-CPU version), plastic air deflectors, and giant processor heat sinks—all required to manage the heat generated by the high-powered G5 chip.

A network of temperature sensors and software work together to control the fans, ensuring that they operate only when and where necessary. The beauty of all this elaborate engineering is that it keeps the heat under control without making a racket. In fact, in *Macworld*'s offices—a fairly typical work environment—we could hardly tell when the 1.6GHz and 1.8GHz models were running. The dual-2GHz model's noise was more noticeable but hardly oppressive—nothing like that of the infamous "wind-tunnel" G4s.

Of course, the G5s—like any computer this side of the Cube—will be more noticeable in quieter environments, such as many home offices. But considering the power of the G5, Apple's engineers deserve a tip of the hat for keeping the noise to a minimum this time.

Technology Playland

The G5 processor, with its increased clock speeds and 64-bit capabilities, is definitely the star of the show. But to take full advantage of it, Apple had to develop a whole new set of supporting actors, including a high-speed system controller and a frontside bus that connects the controller to the processor. This

Macworld LAB TEST

	Speedmark 3.2	iMovie 3.0.3	iTunes 4.0.1	Quake III v1.32	Adobe Photoshop 7.0.1	Cinema 4D XL 7.303	MPEG-2
	OVERALL SCORE	RENDER	MP3 ENCODE	FRAME RATE	SUITE	RENDER	ENCODE
Apple Power Mac G5/dual-2GHz	**258**	**0:27**	**0:15**	**292.6**	**0:18**	**1:28**	**5:58**
Apple Power Mac G5/1.8GHz	225	0:29	0:23	139.3	0:28	3:04	8:32
Apple Power Mac G5/1.6GHz	207	0:33	0:26	125.4	0:31	3:29	9:31
Apple Power Mac G4/dual-1.42GHz (DDR/FW 800)	*196*	*0:28*	*0:23*	*135.9*	*0:30*	*2:41*	*7:34*
Apple Power Mac G4/1GHz (DDR/FW 800)	*158*	*0:50*	*0:42*	*75.9*	*0:52*	*6:55*	*14:54*
	>Better	<Better	<Better	>Better	<Better	<Better	<Better

BEST RESULTS IN **BOLD**. REFERENCE SYSTEMS IN *ITALICS*.

Speedmark 3.2 scores are relative to those of a 700MHz eMac, which is assigned a score of 100. iMovie, iTunes, Photoshop, Cinema 4D XL, and MPEG-2 scores are in minutes:seconds. Quake scores are in frames per second. We tested the Power Mac G5 systems with Mac OS X 10.2.7 (G5) installed and Energy Saver's Processor Performance set to Highest. The dual-2GHz model we tested had ATI's 128MB Radeon 9800 Pro graphics card, which is available as a build-to-order option. We tested the baseline systems with Mac OS X 10.2.6. All systems had 512MB of RAM. We set displays to 1,024-by-768-pixel resolution and 24-bit color. We tested MP3 encoding with an audio-CD track that was 9 minutes and 25 seconds long, converting it from the hard drive using iTunes' Better Quality setting. We tested Quake III at a resolution of 1,024 by 768 pixels with graphics set to High Quality. The Photoshop Suite test is a set of ten scripted tasks using a 50MB file. Photoshop's memory was set to 100 percent and History was set to Minimum. We encoded a 6 minute and 46 second DV file using the MPEG-2 60min Fast Encode preset in Apple's Compressor application. For more information on Speedmark 3.2, visit www.macworld.com/speedmark.—MACWORLD LAB TESTING BY JAMES GALBRAITH

26 Desktop computers
Apple Power Mac G5/1.66GHz
Apple Power Mac G5/1.8GHz
Apple Power Mac G5/2GHz DP

29 Web-site–maintenance app
Contribute 2.0

30 Grade-book software
Easy Grade Pro 3.6
Gradekeeper X 5.4
Master Grade X 1.5
MicroGrade 6.02
Perfect Score 1.1.6

32 E-mail application
Mailsmith 2.0

32 Web browser
Safari 1.0

35 Custom soundtrack app
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49 Mac Gems
Crossword master, disclabel, DV Backup, More Internet, SightClips

34 This Month in Printers
Brother MFC-8420, Hewlett-Packard LaserJet 3330mfp, Hewlett-Packard PSC 2175, Lexmark X5150 All-in-One Print Center

Power Mac G5s Compared

COMPANY	PRODUCT	MOUSE RATING	PRICE	OS COMPATIBILITY	CONTACT	PROS	CONS
Apple Computer	Power Mac G5/1.6GHz	♦♦♦½	$1,999	X	800/692-7763, www.apple.com	Outperforms fastest previous Power Mac; quiet; many cutting-edge technologies.	Large case size; limited space for internal storage; hobbled compared with other G5s.
Apple Computer	Power Mac G5/1.8GHz	♦♦♦♦	$2,399	X	800/692-7763, www.apple.com	Superb performance; quiet; huge memory capacity; packed with cutting-edge technologies.	Large case size; limited space for internal storage.
Apple Computer	Power Mac G5/dual-2GHz	♦♦♦♦½	$2,999	X	800/692-7763, www.apple.com	Excellent performance; quiet; huge memory capacity; packed with cutting-edge technologies.	Large case size; limited space for internal storage.

bus runs as fast as 1GHz—six times the speed of the equivalent channel in the latest G4s.

Complementing these new data-crunching capabilities are big, fast hard drives: a standard 80GB in the low-end G5, and a 160GB in the other two models, all spinning at 7,200 rpm and supported by 8MB of cache memory. (When it was accessed, the 80GB drive in the 1.6GHz G5 we tested was distinctly noisier than the drive in its higher-capacity siblings, even though both drives were Seagate units with identical acoustical specifications.) The drives are connected to the system via a new industry-standard interface called serial ATA, which offers two big benefits: it can transfer data at 150 MBps, making it 50 percent faster than the Ultra ATA/100 interface in the latest G4s, and it uses tiny, easy-to-connect cables, instead of the big gray ribbon cables and balky power plugs of previous ATA generations. However, no drives on the market can take advantage of the increased speed—this is a technology that hard drives will have to grow into.

With an AGP 8× Pro slot for graphics cards, the G5s also move Apple up a notch in display technology. A speedy Nvidia GeForce FX 5200 Ultra video card is standard in the single-processor models, while the still faster ATI Radeon 9600 Pro comes in the dual-processor model (the model we tested had the $300 ATI Radeon 9800 Pro graphics card). Both cards have two connectors (ADC and DVI, with an adapter that converts DVI to VGA) and can drive two displays simultaneously, in either extended-desktop or mirror mode. Since each connector supports digital resolutions as high as 1,920 by 1,200 pixels (1,600 by 1,200 for analog displays), you can enjoy astounding amounts of screen real estate if you hook up two displays.

It's hard to think of an up-to-date standard Apple doesn't support for moving data in and out of the G5s. The 1.8GHz and dual-2GHz models introduce PCI-X technology to the Mac: while the expansion slots in the G4s (and in the 1.6GHz G5) were based on the 33MHz PCI standard, one of the PCI-X slots in the high-end G5s runs at 133MHz and the other two at 100MHz. Although there aren't yet many PCI-X cards for the Mac, look for video, audio, and storage developers to take advantage of all that extra bandwidth in the coming months.

In addition to the usual 56 Kbps modem and an Ethernet port that handles speeds as high as Gigabit Ethernet (1,000 Mbps), the G5s have internal slots for optional AirPort Extreme and Bluetooth wireless cards. There's a FireWire 800 port, as well as two of the old FireWire 400 variety (for speed tests on FireWire 800, see "250GB FireWire 800 Drives," *Reviews*, September 2003). And the three USB ports have been upgraded to USB 2.0, which can handle data as much as 40 times faster than the previous version. (Warning: don't hook up a USB 2.0 drive, scanner, or printer to the free port on the keyboard

continues

Hands On with Photoshop

For Adobe Photoshop pros, the new dual-2GHz G5 is a dream machine. After you work on one for a couple of hours, it becomes very clear that the machine changes all Photoshop's traditional pain points. This makes many old workarounds unnecessary, but it will probably require new ones as we learn where the new bottlenecks are.

Right from the start, this machine feels fast while running Photoshop. Menus don't so much drop down as fly in your face, and you may need to slow down mouse tracking, at least until you get used to the speed. However, while the new machine does wonders for Photoshop, don't expect miracles.

The biggest bottleneck in Photoshop has long been getting data from RAM (or worse, from the scratch disk) to the CPUs. The memory bandwidth in the G5 is about an order of magnitude wider than in any previous hardware generation, which makes a huge difference in features such as the Healing Brush, or in redraws of layered files with complex blending. But until Panther has been out long enough for Adobe to perform rigorous tests, Photoshop will still be limited to using 2GB of RAM.

Once you exceed that limit, you're back to having Photoshop read the scratch disk, and while Photoshop's caching of the scratch volume is very sophisticated, you'll still see significant slowdowns. (Even though the dual-2GHz machine I tested had 4GB of RAM, it wouldn't let me dedicate a full 2GB to Photoshop—if you're considering maxing out your RAM for Photoshop use, 4.5GB seems like a good amount for now.)

Reading from and writing to disks is quite speedy using the stock 250GB serial ATA drive, but serious Photoshop users will almost certainly want something faster. Finding out just what that something should be will require more research, as drive vendors won't quite say whether it will be possible to attach an Ultra SCSI RAID 0 array, or even a FireWire 800 RAID 0 array. We look forward to numerous online debates about the relative merits of each, but even a second serial ATA drive with a dedicated Photoshop scratch partition would undoubtedly lessen some of the pain.

Any way you look at it, the dual-2GHz G5 is an extremely fast machine that will delight Photoshop geeks. But it's more than a little scary to contemplate just what the Photoshop engineers will do with all that power in the future. Meanwhile, having ordered *my* dual-2GHz G5 approximately 16 hours after Apple started taking orders, I want it *now!*—BRUCE FRASER

that comes with the G5s—though the sleek, white keyboard design is new, the USB hub inside is still limited to USB 1.1 speeds.)

Happily, Apple has finally bowed to popular demand and put some of these ports (FireWire 400 and USB 2.0, plus a headphone jack) on the front panel of the machines—hugely convenient for plugging in a camera or an iPod, especially if the system resides under a desk. Apple has also continued to beef up the Power Macs' audio capabilities. Besides the headphone jack, the new models have no fewer than four connectors dedicated to audio: analog line-in and -out ports, and optical digital audio-in and -out connectors. Pro audio and video editors will appreciate being able to monitor multichannel audio production and connect directly to digital hardware, such as DAT players, without the need for third-party devices.

By the Numbers

Beyond all the geeky goodies, the real question about the Power Mac G5s was whether they would actually get real work done appreciably faster. Our tests leave no doubt about it: on almost every task we threw at them, the new machines left their predecessors in the dust.

In fact, even the humblest G5—the 1.6GHz model—outperformed the fastest Mac we'd ever tested before, the discontinued dual-1.42GHz Power Mac G4, on our Speedmark 3.2 benchmark, which measures overall performance in a variety of everyday applications.

Because most of the Speedmark test results don't benefit from dual processors, the results show only a modest incremental improvement in performance for the dual-CPU G5, compared with the single-processor models. But if you look at the results for computation-intensive tasks in media-oriented programs optimized for multiprocessor systems—for example, Adobe Photoshop (with the new G5 plug-in), Maxon's Cinema 4D, and Apple's own Compressor utility—you'll see that the top-of-the-line model delivers another huge speed boost over and above what you get with the single-G5 models (see "Hands On with Photoshop" for more on Photoshop and the G5). For the customers Apple is targeting with the G5 line, results like these are money in the bank.

Macworld's Buying Advice

Of the two single-processor G5s, we'd recommend the 1.8GHz model ($2,399) over its 1.6GHz sibling ($1,999). The performance difference is barely noticeable, but the extra $400 will buy you twice the hard-drive space, twice as much capacity for memory expansion, and PCI-X instead of PCI expansion slots. You might not need those capabilities now, but there's a good chance you'll care about them in a year or two.

But for graphics pros, media producers, and anyone else whose productivity is truly limited by processor performance, we recommend saving up for the dual-2GHz Power Mac G5. If your time is money, the performance boost this amazing piece of engineering delivers will pay for itself. □

PHOTO BY RICK RIZNER

Big Brother The Power Mac G5's 9 percent larger volume makes it seem much larger than its G4 sibling.

Watch Those Add-Ins

Got a G4 loaded with cards, drives, and memory? Don't assume you can move all those goodies to your new G5.

In fact, forget about moving RAM or internal drives. Because the Power Mac G5s are based on the latest memory standards—128-bit Double Data Rate Synchronous DRAM (DDR SDRAM), running at 333MHz (PC2700) in the 1.6GHz G5 and 400MHz (PC3200) in the other two models—no memory from any older Mac will work in the new machines.

(If you're buying third-party RAM for a G5, don't just rely on the specifications—check with the supplier to make sure the memory has been tested for compatibility with the new architecture. And remember that you can't install DIMMs one by one in the G5, even if they meet all Apple's requirements—the new machines require matched pairs, just like in the old SIMM era.)

As for internal hard drives, leave them where they are, too. The G5s use a new interface called serial ATA for the built-in hard drive and the one free drive bay. Previous Macs relied on various generations of the older, parallel ATA standard, or in some cases on the completely different SCSI standard, and those drives aren't compatible with serial ATA.

External storage devices—hard drives, CD burners, Zip drives, and so on—should work fine, though, via the G5s' FireWire or USB 2.0 ports. (USB 1.1 storage devices, however, will be as slow as ever—you get USB 2.0's extra speed only when it's built into the peripheral and the host.)

As to existing PCI cards, most but not all will run in the G5s' three free expansion slots. They just have to support "universal," or 3.3V, signaling, rather than 5V signaling. In the 1.6GHz G5 model, the card also has to be capable of running at 33MHz; if you install a card that functions only at 66MHz, "damage to your equipment could result," the G5 manual warns. (Not certain about your cards? Check with the manufacturer.)

The 1.8GHz and dual-2GHz G5s are a bit more forgiving: although the 3.3V requirement still applies, the PCI-X slots in the higher-speed models are backward-compatible with PCI cards running at either 33MHz or 66MHz. That's a good thing, because at press time only one PCI-X card (a Fibre Channel adapter from Astera) was listed in Apple's online Macintosh Product Guide.

Tuning Your System

One little-noted feature of the G5s is something called "processor and bus slewing." When it's enabled—as it is when you take a new Power Mac out of the box—the system doesn't run at its rated speed all the time. To keep power consumption and the resulting heat and fan noise to a minimum, the machines operate at reduced voltage and speed when they're idle or performing light work. Only when they face heavy lifting do the processor and bus kick into high gear.

According to the technical documentation about the new series that Apple supplied to developers, shifting processor and bus speeds "does not impact system or application performance." But we, like other benchmark testers, discovered that this isn't quite accurate. When we went to System Preferences, opened the Energy Saver preference pane, clicked on the Options tab, and switched the Processor Performance setting from Automatic to Highest, the scores on many of our benchmark tests improved by 3 to 7 percent, and we noticed no significant increase in fan noise. (We used the Highest setting for all the tests reported in our benchmark chart.)

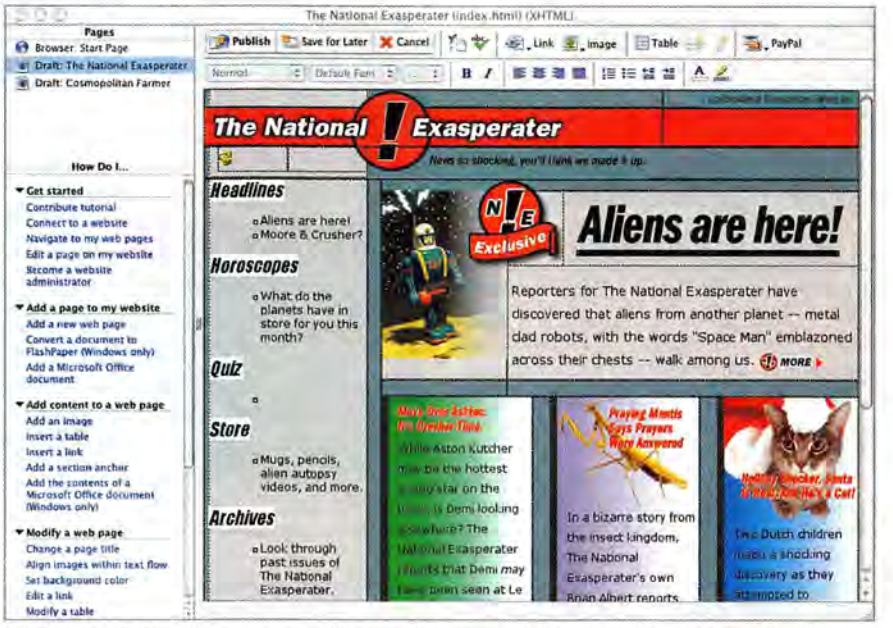
In this mode, the G5 consumes more electricity, which isn't exactly friendly to the environment or to your wallet. But when you need maximum performance, you might decide the costs are worth the candle.

Contribute 2.0

Web-Page Editor Balances Simplicity and Sophisticated Controls

BY DAVID SAWYER McFARLAND

Keeping a Web site fresh and its content up-to-date can be a Sisyphean task. While creating and editing Web pages isn't rocket science, it's just difficult enough that many people have to turn to experts—a company Webmaster, for example—to make even simple changes to a Web page. Consequently, users who want to update their sites often can't, and those who can may find their schedules overbooked with routine content updates. Enter Contribute 2.0 for the Mac. This OS X–only product successfully combines ease of use with sophisticated administrative controls, to simplify the process of updating a Web site.



What Do I Do? Contribute's Task panel (the How Do I area on the left side of the screen) provides all the answers you need to update your Web site.

Keep It Simple, Stupid

Contribute's greatest virtue is its simplicity. If you have a passing familiarity with a word processor and a Web browser, Contribute will have you editing your site in a matter of minutes. Its streamlined interface is divided into four panes: a Web-browser and page-editing area, a basic application toolbar, a list of current drafts (pages being edited), and a helpful Task panel full of specific and straightforward how-to information (see "What Do I Do?").

With its built-in FTP client (and support for the more secure encrypted SFTP), Contribute lets you update a live site on the Internet. Initial setup requires just a few technical details about the Web server—details you can skip over if an administrator provides an easy-to-use key via e-mail.

Contribute can edit any page on a site, regardless of what program was originally used to create the site. The process is simple: browse to a page on your site (using the built-in Web browser), click on the Edit button to switch to edit mode, make your changes, and click on the Publish button to update the page on your Web site.

Step-by-step instructions are available from the Task panel, while helpful and friendly messages—"Congratulations! Your changes have been published to the Web site"—escort you through each step of the editing process. Thanks to its built-in support for .Mac, Contribute automatically connects to your .Mac account, so you can edit your .Mac site without any complicated setup.

Not a Design Tool

Contribute is *not* a tool for designing or building Web sites from scratch. It provides basic text-formatting options, alignment options, and bulleted and numbered lists. The built-in spelling checker is a great bonus. And while Contribute doesn't have tools for creating styles, as most word processors do, you can apply Cascading Style Sheets (CSS) that the site designer created and applied to a page.

When you import information from Microsoft Word or Excel into your Web pages, Contribute retains some of the original document's formatting. Excel spreadsheets become HTML tables when pasted into Contribute, for example. There are some hitches: Contribute uses only the basic fonts available in the program when formatting pasted text. This might cause some confusion when you paste a paragraph of text formatted in ITC Kabel, say, and it turns into Times New Roman. In addition, Word graphics and complex Excel spreadsheets don't paste into Contribute correctly, and bulleted and numbered lists aren't formatted with their HTML equivalents—problems you can overcome by inserting the images and formatting the lists within Contribute.

Contribute isn't just a text editor, however. It lets you add graphics, HTML, and Flash movies (but not QuickTime movies) to your pages. Contribute even includes e-commerce tools for adding basic shopping-cart features, such as Buy Now buttons.

The program also lets you add new pages to your site, as long as they're based on a predesigned template that ships with the program, a page that's already on the site, or any Dreamweaver template used on the site.

An Administrator's Dream

Overworked Web designers and harried Webmasters may become Contribute's most fervid evangelists. The program's ease of use will allow them to pass on many routine site updates to less-technical users. A Webmaster at a school, for example, can have teachers use Contribute to update class Web sites.

Because even a simple tool can be misused, Contribute also supports a variety of administrative tools for controlling how other Contribute users edit a Web site. Each site has one administrator who can prevent users from inadvertently deleting a graphic or changing the design, for example.

The administrator can also create user groups with different sets of permissions. This is the kind of feature that helps busy Webmasters spread out responsibility without sacrificing peace of mind. And to simplify setup, an administrator can create a connection key—a password-protected, encrypted file containing the information users need in order to connect Contribute to a Web site and start editing—and then send it to users via e-mail. To prevent mistakes, Contribute lets you create e-mail review pages so others can look over and approve a page after you commit to changes. And if a mistake does get made, Contribute can roll back to 99 previous versions of a Web page; this is a great feature when you realize that you've accidentally deleted most of the home page before publishing it back to the Web server.

Macworld's Buying Advice

Contribute couldn't be easier to use. If you already have a Web site and are intimidated or overwhelmed by the process of updating it, this program just might be the answer. □

RATING: ★★★★½

PROS: Quick setup; very easy to use; supports .Mac; allows SFTP transfer; integrates seamlessly with Dreamweaver templates.

CONS: No OS 9 version.

PRICE: Single user, $99; five-pack, $399; ten-pack, $749; volume licenses available

OS COMPATIBILITY: Mac OS X

COMPANY: Macromedia, 800/470-7211, www.macromedia.com

Grade-Book Software

Five OS X–Ready Programs for Teachers Get Assorted Marks

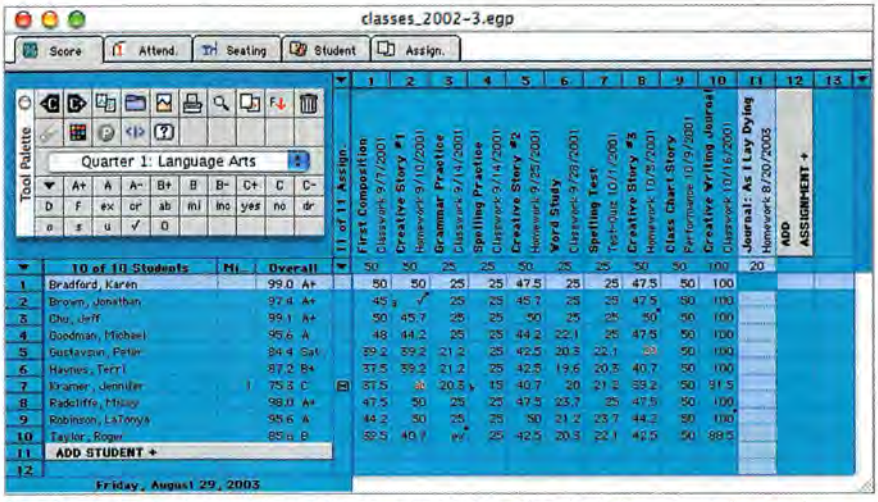
BY SCHOLLE SAWYER McFARLAND

If you're a teacher who's wanted to throw away a paper grade book, now is a good time. Once you switch to a grade-book application, you won't have to do the math to determine your students' grades, and you can generate reports and class statistics in an instant. In other words, you save time.

I test-drove five grade-book programs designed for OS X: Chariot Software Group's MicroGrade 6.02, Daniel Ethier's Gradekeeper X 5.4, Matt Fahrenbacher's Perfect Score 1.1.6, Maxium Developments' Master Grade X 1.5, and Orbis Software's Easy Grade Pro 3.6. (All except Perfect Score also run on OS 9 and Windows.)

The ideal grading program should be easy to use, since teachers rarely have spare time for learning software programs. It should also offer a variety of ways for recording scores. It should be able to determine a final grade by using total points or by weighting customized assignment categories. It should help you take class attendance. And finally, it should be able to generate reports quickly.

Given these criteria, Easy Grade Pro is the clear overall winner, due to its highly polished interface, time-saving features, and reasonable price.



Time-Saver Easy Grade Pro overflows with time-saving touches, such as the ability to access all your color-coded grade sheets from the Tool palette's pop-up menu.

First Day of Class

Most of these programs take their cue from the paper grade book and employ a spreadsheetlike interface. The simple Gradekeeper has only two views, Gradebook and Attendance. Perfect Score and Easy Grade Pro have tabs for viewing additional information, such as student profiles and seating charts. The oddball is MicroGrade, which confronts you with three or four jarring windows at once.

All the programs let you import student information from tab- or comma-delimited text files, and both Master Grade and MicroGrade can also import data in specific administrative software formats, such as CIMS III Canada School Administration System files.

Adding assignments is a good way to test a program's ease of use, and doing so is a snap in all the programs but MicroGrade and—to a lesser extent—Master Grade. Those programs require more clicking of the mouse and hunting through menus. MicroGrade expects you to create categories and add all your assignments to them at the same time. Master Grade requires that you do a lot of tedious mouse-clicking and dragging to create assignment categories, and then *apply* those categories to the classes.

Being able to keep information for multiple classes in one file will save you lots of time—you won't have to repeatedly open and close separate files as you track assignments and student data. Easy Grade Pro and Master Grade are the only programs that give you access to multiple classes in one file. This gives them a distinct edge over the other programs. Perfect Score at least lets you have multiple files open at once so you can drag and drop information between them.

All the programs except Perfect Score let you include multiple terms for a class that runs throughout the year. That knocks Perfect Score out of the running for elementary or secondary school teachers who don't want to re-create their class information each term.

Finally, if you like to do your homework by reading manuals, take note: only Easy Grade Pro provides printed documentation. The others come with electronic manuals, or none at all.

Grading through the Year

You have to set up your classes only once a term, but entering grades requires regular drudgery. All the programs let you score assignments with numbers, but only Gradekeeper, Easy Grade Pro, and MicroGrade also let you use letter equivalents such as B or D-. MicroGrade makes you type an equal sign (=)

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Grade-Book Software Compared

COMPANY	PRODUCT	MOUSE RATING	PRICE	OS COMPATIBILITY	CONTACT	PROS	CONS
Chariot Software Group	MicroGrade 6.02	●●●	$90 (single)[A,B]	9X	619/298-0202, www.chariot.com	Built-in e-mailing; seating chart; extensive reporting; many import and export options; add-on WebGrade service[C].	Expensive; confusing interface; one grade book per file; only one file can be open at a time.
Daniel Ethier	Gradekeeper X 5.4	●●●½	$20 (single)[D], $100 (site)	9X	www.gradekeeper.com	Inexpensive; straightforward interface; can create reports from multiple classes; good documentation.	One grade book per file; only one can be open at a time; can't curve grades; limited reports.
Matt Fahrenbacher	Perfect Score 1.1.6	●●●	$15[D]	X	http://homepage.mac.com/fahrenba/perfectScore/perfectScore.html	Inexpensive; can include photos in seating chart; elegant implementation of OS X interface elements.	One class per file; limited reports; inadequate documentation; no cross-platform or OS 9 support.
Maxium Developments	Master Grade X 1.5	●●½	$44 (single)[A]	9X	250/868-1007, www.maxium.com	Multiple classes in one file; broad support for narrative comments; extensive import and export options.	No attendance tracking; awkward interface; can't drop low assignment score; inadequate documentation.
Orbis Software	Easy Grade Pro 3.6	●●●●●	$49 (single); $249 (site)[E]	9X	253/848-6899, www.orbissoft.com	Multiple classes in one file; easy to trade information between classes; extensive reporting; excellent manual; seating chart.	None significant.

[A] Site-license price depends on total student enrollment. [B] Site-license cost depends on school level and number of supported platforms. [C] The WebGrade service is an additional $25 per year for individual users or an additional $995 per year per site. [D] Shareware. [E] Site-license price is for Mac OS X license; a site license for all platforms (OS 9, OS X, Windows) costs $374.

MSRP $ 3,795. Authentic US market AG-DVX100 product is offered with a complete set of supplied accessories and 12-month Panasonic US warranty. Third party or extended warranties are not endorsed by Panasonic. Find your local authorized Panasonic dealer at www.panasonic.com/broadcast.

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Safari 1.0

Faster, Sleeker Web Browser Best for the Mac

BY JEFF CARLSON

Well-Organized Web With tabbed browsing and on-the-fly bookmark organization, Safari 1.0 helps you keep your Web-browsing experience—and your desktop—tidy.

At the start of 2003, you could download at least seven different Web browsers for Mac OS X, and most of them performed admirably in everyday use (see "Battle of the Browsers," December 2002). In mid-2003, Apple released the first version of Safari, its homegrown Web browser for OS X 10.2 or later. Safari boasts dramatically better performance than the dominant browser on the Mac, Microsoft's Internet Explorer, and it has improved the overall browsing experience.

Taking Safari for a Spin

Apple based Safari on the open-source KHTML rendering engine, which appears to be quite sprightly. For a real-world comparison, we clocked the loading times of five Web sites that we felt represented a wide range of Web technologies: CNN.com (www.cnn.com), ESPN (www.espn.com), Quicken (www.quicken.com), The Web Standards Project (www.webstandards.org), and the Explore section of the Adobe Studio site (http://studio.adobe.com/explore/)—the same sites we used in our last Web-browser shootout. Safari loaded pages faster than Internet Explorer in four out of five tests—in some cases, almost twice as fast. Another key factor in browser performance was how well pages displayed: Safari handled traditional HTML techniques and the more modern Cascading Style Sheets definitions equally well.

But Safari still has a few rough edges. Occasionally we ran into situations where Safari held on to cached data too long, putting up old versions of pages even after we'd clicked on the Reload button (for instance, when we were making edits to a Weblog). Our biggest complaint is that Safari sometimes yielded unexpected results with some sites that use login forms, such as banks or online ordering systems. Some users also report difficulties logging in to some sites that provide cookies for accessing personalized news content.

Occasionally, the blame rests as much on the institution as on the browser. For example, when we tried to log in to a Washington Mutual business account, we got an error message saying the server did not recognize Safari as a legitimate Web browser; however, this didn't happen when we were accessing a personal account.

Improving the Browsing Experience

Safari has improved the experience of using a browser. One striking example is its bug-reporting feature (select Bug from the View menu to display the Bug button), which lets you easily send a bug report to the Safari development team. Also, Safari handles bookmarks elegantly and helpfully: clicking on a button near the Address field not only adds the current page to your bookmark list, but also prompts you to type a unique name and specify a location for it. These few seconds of housekeeping will prevent your bookmarks from becoming random lists of URLs.

Similarly, Safari's SnapBack feature—which takes you to the first page you viewed in a window, or to the results page of a search performed with Safari's Google search field—is a simple idea that eliminates the bother of clicking on the Back button dozens of times.

You can load multiple Web pages into one window via tabbed browsing, which is great for reducing screen clutter. With tabbed browsing enabled, you can also automatically load several of your bookmarked Web pages at once, thanks to an unobtrusive Open In Tabs command in the Bookmarks menu.

For our money, the best addition to Safari is an option that blocks unwanted pop-up windows. It's extremely easy to switch on and off, via the Safari menu.

Macworld's Buying Advice

Safari entered a fairly crowded field of OS X Web browsers, but it has sprinted past the others in terms of performance and popularity. Although we can't dismiss the possibility that its competitors may catch up in the future, Safari is currently the best browser for the Mac. □

RATING: ♦♦♦♦

PROS: Fast and accurate page loading; easy pop-up blocking; well-organized bookmarking; streamlined tabbed browsing; innovative SnapBack feature.

CONS: Inconsistent page reload and cache refresh; inconsistent compatibility with some sites that use forms; some sites don't recognize Safari.

PRICE: free

OS COMPATIBILITY: Mac OS X

COMPANY: Apple Computer, 800/692-7753, www.apple.com

Mailsmith 2.0

Confusing Interface Is a Flaw in an Improved E-mail Manager

BY ANDY IHNATKO

Contrary to what the folks cavorting in cargo-pants commercials might say, no single style is going to appeal to everyone. The fact that there are so many e-mail clients competing with Apple's free Mail app doesn't necessarily mean that Mail has limitations. No, that fact is evidence of a universal truth: All e-mail users are looking for the one shining feature that grabs their attention and sets their favorite e-mail application apart from the rest. The bling-bling of Bare Bones Software's e-mail program, Mailsmith, has always been the ability to automate all the drudgy, soul-sucking aspects of having a high-volume e-mail address. This legacy continues with the Mac OS X–only Mailsmith 2.0.

Most of its standout features aren't new. Mailsmith has the same text engine as Bare Bones' power editor, BBEdit, so you have an unequaled ability to analyze and modify text with tools such as grep. Mailsmith is also aggressively AppleScriptable. Nearly anything you can do manually—such as checking to see whether a message's recipient is reachable via iChat, and if so, alerting him or her that you've just sent an urgent e-mail—Mailsmith can do with a script. And what Mailsmith can accomplish with one simple filter that's then attached to several individual mailboxes can be done with Mail only via a long series of conditionals and a lot of repeated effort.

An Upgrade That Power Users Will Love

Mailsmith 2.0 has jettisoned one legacy: the profound wonkiness of its database engine. The improved database-engine performance is enough to justify upgrading—a small mammal could have experienced a whole life cycle in the time it took Mailsmith 1.5 to re-sort a list of messages, and stored mail required regular database maintenance. These problems appear to be solved, but the app still isn't speedy.

continues on page 38

RATING: ♦♦♦♦

PROS: Powerful scripting, mail filtering, and text-manipulation features; good integration with PGP, SpamSieve, and OS X's Address Book.

CONS: No support for IMAP, LDAP, or nonroman text; user interface needs a makeover; no as-you-type spelling checker; no integrated search filter.

PRICE: $99; upgrade from version 1.5, free; upgrade from competing application, $79

OS COMPATIBILITY: Mac OS X

COMPANY: Bare Bones Software, 781/687-0700, www.barebones.com

Suitcase X1 | www.extensis.com/X1

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THIS MONTH IN PRINTERS

Model	HP PSC 2175	Lexmark X5150 All-in-One	Brother MFC-8420	HP LaserJet 3330mfp
Rating	♦♦♦♦	♦♦♦	♦♦♦½	♦♦♦½
Type	color ink-jet	color ink-jet	black-and-white laser	black-and-white laser
Price	$200	$150	$549	$700
Print Resolution (in dpi)	1,200 × 1,200	2,400 × 1,200	2,400 × 600	1,200 × 1,200
Optical Scan Resolution	1,200 × 2,400	600 × 2,400	600 × 2,400	600 × 600
Manufacturer-Rated PPM[A]	18	19	17	15
Black Cartridge Life	450 pages	600 pages	3,300 pages	2,500 pages
Color Cartridge Life	391 pages	450 pages	N/A[B]	N/A[B]
Number of Colors	4[C]	3	N/A[B]	N/A[B]
Number of Cartridges	2	2	1	1
Cost to Replace All Cartridges	$53	$65	$66	$65
Monthly Duty Cycle	2,000 pages	3,000 pages	20,000 pages	10,000 pages
Dimensions[D]	18 × 15 × 8	18 × 17 × 14	21 × 18 × 19	21 × 17 × 20
Weight (in pounds)	20	15	37	35
Input-Tray Capacity	100 pages	100 pages	250 pages	250 pages
Memory	standard, 32MB; maximum, 32MB	N/A[B] (host-based)	standard, 32MB; maximum, 160MB	standard, 32MB; maximum, 96MB
Warranty	one year	one year	one year	one year
Special Features	Supports multiple flash media; Readiris OCR software.	ABBYY FineReader OCR software.	Document feeder; PostScript 3 emulation; ABBYY FineReader OCR software.	Document feeder; PostScript 2 emulation; Readiris Pro OCR software.
Fax	no	no	yes	yes
Image Quality				
Text	Very good.	Good.	Excellent.	Excellent.
Photo	Very good.	Good.	N/A[B]	N/A[B]
Graphics and Images	Very good.	Very good.	Fair.	Good.
Black-and-White Copy	Good.	Very good.	Good.	Fair.
Color Copy	Good.	Fair.	N/A[B]	N/A[B]
Scan	Fair.	Poor.	Good.	Good.
Speed				
1-Page Word Document	0:32	0:31	**0:20**	0:21
20-Page Word Document	5:43	8:30	**1:27**	2:09
4-Page PDF Document	16:00	14:52	**1:29**	8:36
Scan 1-Page Document	0:46	**0:25**	1:30	1:27
Pros	Best color copy.	Prints smooth curves; best black-and-white copy quality.	Fast printing.	Excellent print quality.
Cons	No fax.	Slanted scanner bed; scans dark; no fax.	Dark and blotchy printed images.	Copy was dark; printed images grainy with banding.
Contact	800/474-6836, www.hp.com	800/539-6275, www.lexmark.com	800/284-4329, www.brother.com	800/474-6836, www.hp.com

[A] PPM = pages per minute, normal black. [B] N/A = not applicable. [C] Six if you purchase $25 photo-ink cartridge. [D] Width × depth × height, in inches.

Macworld LAB TEST

BEST RESULTS ARE IN **BOLD**. All speed scores are in minutes:seconds. We tested the printers on a dual-1GHz Power Mac G4 with Mac OS X 10.2.6 and 512MB of RAM. A panel of experts examined each printer's output from a variety of applications and rated it excellent, very good, good, fair, or poor. We recorded the time each printer took to print 1-page and 20-page Microsoft Word X documents at the printers' default settings. We printed a 4-page PDF document at best quality. We scanned a full-page image at 300 dpi in our scanning-speed test.—MACWORLD LAB TESTING BY KRISTINA DE NIKE

BY KRISTINA DE NIKE

Even if you have a printer and a scanner, you probably still look for a copy machine when you need to duplicate a few pages. If you often need to make copies, you should consider a multifunction printer (MFP). It costs more than a scanner and a printer, but a combination device gives you copying abilities and saves desk space. We reviewed four MFPs—two color ink-jet printers and two black-and-white laser printers—that have a copy function, which lets you scan and print a page without a computer. And all four models are real options for small offices.

Clear as Black and White

Dedicated copiers can bleach out gray backgrounds and darken light text. The MFPs we reviewed kept more detail than an average copy machine but produced fainter text. Only the HP LaserJet 3330mfp came close to producing the dark text of a true photocopy, but its copy had a muddy background. The Lexmark X5150 All-in-One Print Center had the best balance of dark text and image detail.

In printer mode, laser printers produce sharper text than ink-jets. The LaserJet and the Brother MFC-8420

put out clean text even at small point sizes, but the LaserJet's best-quality output was slightly better than the Brother's. The LaserJet's default setting is highest quality, which explains that device's slower times on the 20-page test. But if you select the printer menu's 600-dpi option, the LaserJet's print time is in line with the Brother's.

In our PDF test, the Brother had by far the fastest times. But it also produced the lowest-quality output, even at the 1,200-dpi setting. The images were blotchy and had noticeable banding.

Multicolored World

Color ink-jet MFPs cost much less than their laser counterparts, and they can print photos and make color copies. The Lexmark produced the best black-and-white copy, but its color copy showed strange color shifts, with whites that looked lavender, reds that looked orange, and browns that looked red.

Today's color ink-jets are far better than those of a few years ago at printing photo-quality images. We printed photos on each color ink-jet, at best quality and on glossy paper. The HP PSC 2175's prints were lighter and had more detail, but they were slightly dull. The Lexmark's were darker, but the colors were punchier. In the darkest areas of the Lexmark image, however, the ink pooled and created a shiny pattern.

The PSC 2175 is clearly aimed at digital-camera owners. It includes slots for reading memory media, and it will print a proof sheet of all the images on a memory card. (You can then pick images to print by filling in spaces on the proof sheet.) It also lets you replace the black cartridge with another color cartridge, for six-color printing.

Scanning for Content

None of the MFPs' built-in scanners offered perfect color or fine detail, but any of the scans we got would be acceptable with some tinkering in Adobe Photoshop. The LaserJet produced the best scan, although it was slightly dark. The Brother was a close second, though its scan was even darker. The scan from the PSC 2175 was too blue. Without any correction, the Lexmark's scan was flat, dark, and dull. What's more, the Lexmark's scanning bed is angled, so pages kept slipping off.

Each MFP could scan a full page at its 1,200-dpi setting except the LaserJet, which created an angled, black-and-white scan. (The company says that the device probably ran out of RAM.) When we picked a page area of a few square inches, which is a more realistic test, the LaserJet completed the scan.

The automatic-scan buttons on the keypads of the Lexmark and the PSC 2175 work with a Mac. Both MFPs launch their software when you press the Scan button, and they then move the image into an e-mail application. The Brother, on the other hand, reports via the LED that it is looking for a PC and then resets itself. The LaserJet's Scan button is for when the device is connected to a network using HP's Jetdirect 310x print server; it didn't work with our Mac. □

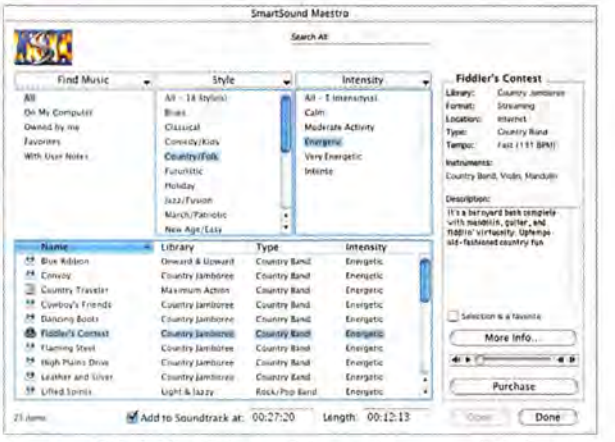
Sonicfire Pro 3

Music-Scoring Application Brings Ease of Use to the Table

BY ANTON LINECKER

All moviemakers want soundtracks that match films perfectly. SmartSound's Sonicfire Pro 3 is centered on prebuilt, though somewhat customizable, score libraries that you can scale to meet your timeline needs exactly. And like soundtracks made with Apple's Soundtrack (bundled with Final Cut Pro 4 [★★★★; September 2003]), those made with Sonicfire Pro 3 dress up video projects with a royalty-free musical score. But their approaches are different: Sonicfire yields results much faster, especially with longer projects. However, it does so at the expense of overall diversity of audio material.

Sonicfire Pro 3 comes in two versions: one with two 44K SmartSound CDs ($299), and the Bundled Edition, reviewed here, which includes five music CDs ($499). Either version lets you take advantage of Sonicfire's new Infinite Search Maestro search engine, and owners of version 2 (★★★★; July 2001) can upgrade to version 3 for $79.



Maestro at Work The Infinite Search Maestro lets you search for SmartSound music on your Mac and online.

Score One for Sonicfire Pro

Sonicfire Pro 3's reason for being is to simplify the very tedious and often expensive process of adding a musical score to a project. Not everyone is musically inclined, but people still know a good thing when they hear it—and Sonicfire is based on this principle. You can listen to premade soundtracks, and audition them with your imported QuickTime video. Sonicfire Pro 3's new Infinite Search Maestro lets you search intelligently—by style, intensity, instrument, and keyword—in not only the SmartSound audio already on your Mac but also the SmartSound libraries available on the company's Web site. This is particularly useful because you can find exactly the track you need, even if you don't yet own it. Downloading it will run you $20—more than an iTunes Music Store purchase, for sure, but not that expensive when you consider that you can use the track without paying royalties. This can also be a bargain, since buying a SmartSound CD would cost you $99 even if you used only one track.

Minimal Assembly Required

SmartSound audio is useful because it has been preprocessed into sound blocks that Sonicfire can easily manipulate. Sonicfire Pro's intuitive interface lets you quickly load the music into the timeline and make any necessary adjustments. You can also preview your movie (as a QuickTime file) with different soundtracks to see which works best.

The program will string together the music blocks to fit the length you need, and it does so in such a way that the music never ends abruptly. In fact, the SmartExtend feature always ends the clip in a manner that makes musical sense. You can also load your own audio into Sonicfire Pro and segment it into blocks; however, the program doesn't adjust non-SmartSound audio with the same finesse.

One downside of the Sonicfire workflow is that you can't change the actual music, as you can with Soundtrack. If you don't like the harmonica or violin melody on a clip, tough luck. A more grievous problem is that the program is a victim of its own success: We actually recognized some of the tracks because they had been used in local commercials.

The weakest part of the program is its PDF manual, especially the confusing tutorials.

Macworld's Buying Advice

Sonicfire Pro 3 is a useful application for video professionals who need a quick way to add high-quality, made-to-fit, royalty-free music scores to their productions. People who are insistent on stamping their own personality on their music are better off tinkering with Soundtrack or hiring a composer. □

RATING: ★★★★

PROS: Quick music-score creation; SmartSound audio fits any movie length; ability to sample and purchase individual royalty-free tracks online.

CONS: Included music selection is limited; weak PDF manual.

PRICE: $299; Bundled Edition, $499; upgrade from version 2, $79

OS COMPATIBILITY: Mac OS 9, Mac OS X

COMPANY: SmartSound, 800/454-1900, www.smartsound.com

EazyDraw

Make Drawing Fun on OS X

Introducing EazyDraw – the fun, easy-to-use Mac OS X design tool that lets you draw like a pro! Now you don't need to be a graphic artist to create great illustrations. EazyDraw's vector-based graphics and editing capabilities make it easy to create technical diagrams, flow charts, and business communications as well as commercial line art illustrations and graphic elements for application software and web design.

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Mac

Built for Mac OS X

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Visual Thesaurus 2.0

Reference Program No Match for Paper Counterpart

BY CHARLES PURDY

I adore a thorough thesaurus. As a professional wordsmith, I turn to mine dozens of times a week. So when Plumb Design asserted that it had found a better way for me to find the elusive perfect word, I was intrigued. And the mesmerizing Visual Thesaurus 2.0 is, in fact, fun to use, and it can be educational—students studying English as a foreign language, for example, could use it as an entertaining vocabulary builder. But it'll never replace my *Roget's International Thesaurus*. For most writers and editors, Visual Thesaurus will be largely superfluous.

In the Pink Visual Thesaurus 2.0 has an engaging interface, but it doesn't always provide appropriate synonyms.

Lovely to Look At

Plumb Design has attempted to make the thesaurus more interesting. But for people who love words, the pages of a typical thesaurus are already engaging; a colorful 3-D interface isn't necessary. Other folks—harried tech writers who need only another way to say *robust*, for example—don't typically need dynamic word diagrams or obscure definitions.

To its credit, this program *is* dynamic and colorful, and it has some smart features. You look up a word by typing it into a text box at the lower right-hand corner of the program's single, two-paned window (if you misspell a word, you're out of luck—it doesn't offer suggestions). Visual Thesaurus displays your word in a cluster map of related words. Parts of speech are indicated by color, and 16 types of related words are shown: from synonyms to "is a part of" words (for example, *page* is a part of *book*). You can choose to see only particular relationships (in any combination), via a drop-down menu. Click and drag to rotate your word map in 3-D space, and click on any word to create a brand-new word map based on that word (this is where the program can become hypnotic). Visual Thesaurus remembers each word you look up in a session (but you can't "bookmark" words). You can view pop-up definitions and connection types by mousing over word clusters and lines. The looked-up word's definitions are displayed in the window's right-hand pane.

The Good Word

Visual Thesaurus just didn't give me what any thesaurus must: good synonyms. When I searched for an alternative to *pink*, even Microsoft Word's thesaurus gave me more synonyms for the color (*salmon*, *rose*, and *light red*). Visual Thesaurus devoted half its word map to synonyms of the obscure verb *pink* that means "to make a pinging noise" (although it acknowledged some other definitions, it didn't give synonyms for more-obvious alternative meanings of *pink*—"to pierce," for instance). And although the elastic word clusters look very cool, they don't truly supply the program's promised "exploration of word relationships." A good dictionary will explain that the three aforementioned *pink*s have different etymological origins.

I did another test with *pretty*—Visual Thesaurus connected it to *beautiful*, *jolly*, and *bad* (as in "a pretty kettle of fish"). Clicking on *beautiful* got me more of what I wanted. But as in most cases, *Roget's* served me a lot better. Looking up *pretty* in *Roget's* led me to a long section devoted to the idea of beauty, separated by parts of speech and including everything from slang and idioms to the names of historical beauties. And Visual Thesaurus ignores many words. For example, I asked for a synonym for *pulchritude* and got only the word's definition.

Using Visual Thesaurus is, at least, a lot faster than flipping around in a book, and you can drag words from the program into text documents (Word documents, for example).

Macworld's Buying Advice

Visual Thesaurus is an appealing novelty item, and it may be useful in some educational environments. It also gives you a few things a paper thesaurus doesn't—such as the ability to search for unconventional word relationships. But the needs of most thesaurus users will be better met by a comprehensive reference book, which will probably cost (in paperback) around half as much as this program. □

RATING: 3½

PROS: Hypnotically entertaining; educational features; customizable searching; faster than a paper thesaurus.

CONS: No match for a real-world thesaurus; relatively expensive; odd word choices; doesn't truly deliver on promise to "explore word relationships."

PRICE: $30

OS COMPATIBILITY: Mac OS X

COMPANY: Plumb Design, 212/285-8600, www.plumbdesign.com

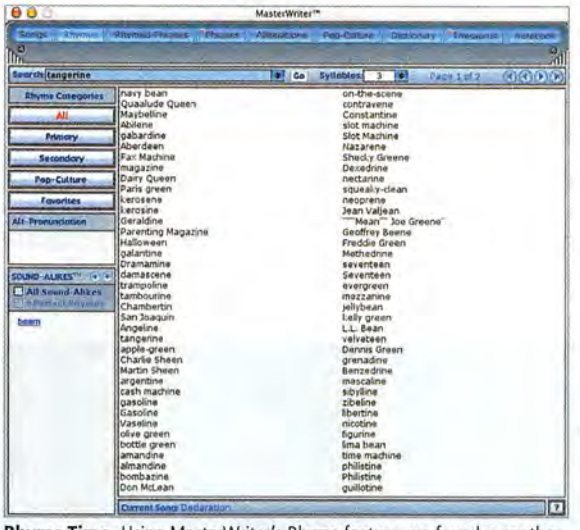
MasterWriter

Songwriting Utility Makes It Easy to Create Perfect Lyrics

BY CHRISTOPHER BREEN

Anyone who's written more than a couple of songs knows that there are times when inspiration flows effortlessly and times when you have to hammer a lyric into shape one grudging word at a time. MasterWriter, a utility designed in 4D's 4th Dimension database application, can help you jump-start your songwriting in either scenario. And it's the only program around that lets you organize your melodies and lyrics, record demos, and time-stamp your creations.

It's most useful, however, when the well of inspiration runs dry. At such times, MasterWriter is poised and fully prepared to provide the perfect rhyme, alliteration, well-turned phrase, or cultural reference.



Rhyme Time Using MasterWriter's Rhyme feature, we found more than 100 words, phrases, and names that rhymed with *tangerine*.

Rhyme and Reason

To get started, you click on the Songs button in the MasterWriter window, click on the New Song button, and write your lyrics in the word-processing portion of the window. If you can't think of a rhyme, select the word you want to rhyme and click on the Rhymes button. In short order, MasterWriter displays a list of possible solutions in the results portion of the window.

MasterWriter can show you only rhymes that contain a certain number of syllables—you might want to see three-syllable words that rhyme with *tangerine*, for example (the results include *kerosene*, *bombazine*, and *time machine*). If you don't find the perfect word, enable the All Sound-Alikes option, which displays words that nearly rhyme—here you'll get *Anchor Steam*, for instance. Unlike traditional rhyming dictionaries, MasterWriter sorts rhymes phonetically (by the first sound, rather than the first letter).

If the number of suggestions overwhelms you—the rhyming dictionary contains more than 100,000 words—you can narrow the list down to primary rhymes (words that most likely fit the bill), secondary rhymes (where even *Shecky Greene* makes an appearance), and pop-culture rhymes (in case *L.L.Bean* or *Seventeen* might work).

MasterWriter can go far beyond simple rhymes. By clicking on the appropriate button, you can view rhymed phrases, common idioms and clichés, alliterations, pop-culture references, synonyms, or a definition for the currently selected word. If you stumble across a word you'd like to explore later, double-click on it to add it to the Favorites list.

MasterWriter performs these chores very quickly—producing results in a couple of seconds on a modern Mac. If there's a shortcoming, it's that the program is slow to start: it took more than 30 seconds to launch on a 933MHz Power Mac G4.

More Than Words

There's more to songwriting than lyrics, and MasterWriter includes two other helpful features. The first is a hard-disk function that lets you record your songs through the audio-input port. This function isn't terribly full-featured—you can't edit the resulting audio files within the program—but it's perfectly serviceable for laying down a quick-and-dirty rendition of your tune.

Potentially more useful is Songuard, a date-of-creation feature that will upload your lyrics and audio to the company's server. Your time-stamped tune is your proof that you wrote a song on a particular date. Subscriptions to the Songuard service cost $30 per year (the first year of service is free when you buy the software).

Macworld's Buying Advice

Although MasterWriter won't write a song for you, it can generate ideas that may rouse your inner muse. If you write lyrics or poetry, MasterWriter is a comprehensive and worthwhile aid. □

RATING: ♦♦♦♦

PROS: Thorough rhyme generation and filtering; useful date-of-creation registration service; fast and intuitive interface.

CONS: Slow to launch; bare-bones audio recording.

PRICE: $289

OS COMPATIBILITY: Mac OS 9, Mac OS X

COMPANY: MasterWriter, 805/892-2656, www.masterwriter.com

Choose 91 at www.macworld.com/getinfo

Mailsmith 2.0

continued from page 32

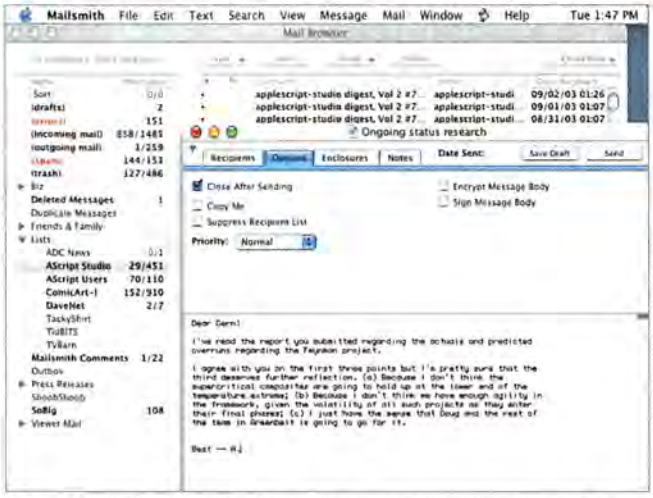
Mailsmith 2.0 also adds tighter integration with third-party applications. If you're using Jaguar or later, it can autocomplete addresses from OS X's built-in Address Book, as well as its own, so you no longer need to maintain separate address books in two different applications. If you've downloaded and installed the privacy program PGP Personal 8.0 (★★★½; April 2003) or the leading spam catcher, Michael Tsai's SpamSieve 1.3.1 (see "Guard Your In-Box," April 2003, for our review of version 1.2.2; ★★★★), they'll function within Mailsmith as though they were baked right in, not as two external apps.

But Mailsmith has some serious shortcomings. There's no support for IMAP, a mail protocol that is more modern than POP and makes it easier to maintain one e-mail collection across several devices. And Mailsmith can display only plain-vanilla roman text, so pictures have to be opened as separate attachments, HTML messages are stripped of all enhancements, and many non-English messages can't be displayed at all.

And let's just say that the user interface should be the next thing the company overhauls. Apple's Mail is clean, streamlined, and friendly. There's absolutely no elegance in Mailsmith, and worse, the user interface often works against you.

For example, say that Mailsmith was unable to connect to the mail server and, as a result, a mission-critical document (due back at headquarters in 30 minutes) didn't get sent. Does Mailsmith immediately give you a huge, can't-miss-it alert box? Nope. It's up to you to notice that your mailbox labeled "(errors)" has turned red. This mailbox looks just like all your other mailboxes, many of which may also be colored red (this color indicates that a mailbox contains an urgent message). Click on the mailbox to select it, and then click on the list of its contents to reveal the error message. Subtlety should have absolutely no place in error reporting, considering the potentially excruciating repercussions of a business e-mail message that is not sent.

And man, do we miss the convenience of Mail's as-you-type spelling checker and its integrated Search filter.



Seizing Control With Mailsmith, you can impose a tremendous amount of customized control over your mail, but first you have to negotiate its interface.

Macworld's Buying Advice

For some users, Mailsmith 2.0 is unquestionably a necessary upgrade. Its lack of support for IMAP mail servers and certain non-English languages will put off some people, and the program won't benefit those whose e-mail needs begin and end at reading, writing, and simple filtering. But if you're an active e-mail user who spends far too much time managing messages, Mailsmith 2.0 could become the single most important item in your Dock. □

THE CONQUEST

DiskWarrior is Now OS X Native

It's the indispensable utility that repairs problems such as disks that won't mount, files you can't trash, and folders that have disappeared. MacUser magazine said, "It's the fastest and safest data recovery utility you can buy."

Macworld magazine said, "DiskWarrior is by far the best disk utility available for the Mac; it can repair virtually any disk problem you may encounter...and it is likely to become the only tool you'll want to keep with you at all times."

David Coursey, ZDNet AnchorDesk, agrees in an article comparing disk utilities. He used it to fix a disk that no other utility could. "DiskWarrior is a great product, not just because it fixed a pretty serious screw-up, but because it showed me what it planned to do in minute detail before doing it."

But disk damage isn't the only threat to your data. As hard drives get older, the drive mechanisms

THE UTILITY COMPANY
ALSOFT

Phone: 1-800-257-6381 Fax: 281-353-9868 Email: sales.info@alsoft.com Web Site: www.alsoft.com

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before you enter a letter grade, which is awkward. Easy Grade Pro lets you use other marks, too—you can use a check mark (✓) to show that an assignment was completed, say.

If you want to make entering scores more efficient, you'll have to sort your papers by class and alphabetize them by student first. However, Easy Grade Pro's fantastic Continuous Search Mode and Search All Current-Term Classes options let you grade without a lot of prior paper shuffling. MicroGrade offers a similar, but more limited, ability to search for students by name.

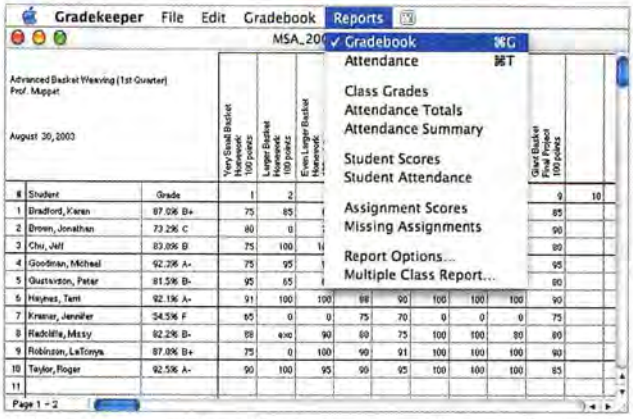
All the programs let you determine a final class grade by using total points or by weighting custom assignment categories—no calculating required. With most of them, this is a quick, straightforward process. All except Master Grade let you drop the lowest score in an assignment category. All the programs except Gradekeeper can curve grades.

Present and Accounted For

If you're accustomed to daily cries of "Here!" then you'll appreciate the ability to track attendance. Most of the programs give you a running tally of absences, excused absences, and other attendance-related data.

MicroGrade, Easy Grade Pro, and Perfect Score also let you create graphical seating charts. Use Easy Grade Pro to create a detailed map of your classroom; Perfect Score lets you include student photos to help you learn names and thwart switcheroo pranks when there's a substitute.

Master Grade is an oddball. It provides no attendance tracking or seating-chart features. This devalues the program for many teachers. (According to Maxium, attendance tracking should be available in the next version.)



Nothing Fancy Straightforward Gradekeeper looks and acts more like a paper grade book than any of the other programs.

Progress Reports

All the programs can easily create standard grade and progress reports. But Easy Grade Pro and MicroGrade outshine the others with 19 and 14 customizable reports, respectively. Gradekeeper's general options are limited, but it can combine grades from multiple files to make overarching grade and progress reports.

All the programs can export results to HTML so you can e-mail reports to students and their parents or post them on a Web site. You can also send e-mail messages from within MicroGrade. Gradekeeper, Master Grade, and Easy Grade Pro can all export reports to Edline, a password-protected Web-publishing service that many K-12 schools subscribe to. MicroGrade takes a different tack by integrating the company's own service, WebGrade, which costs extra.

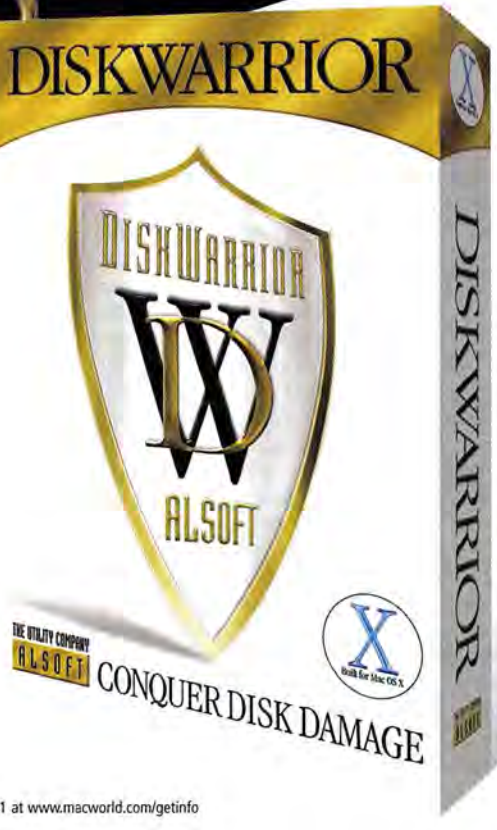
Macworld's Buying Advice

Easy Grade Pro is a pleasure to use and offers numerous time-saving features that will help you get excited about school. MicroGrade stands out because of its Web export and e-mail features. However, it costs nearly twice as much and is saddled with a confusing interface that supports only one class per file. Unless your school wants the integration MicroGrade offers with its Web service, Easy Grade Pro is the better choice. □

CONTINUES

begin to malfunction. Eventually, the malfunctions become so severe that the drive simply stops working. DiskWarrior can automatically test for hardware malfunctions, giving you the chance to back up your data before it's too late.

Be prepared. Don't wait until after you have a disk disaster to buy your copy of DiskWarrior. Bob LeVitus, aka Dr. Mac, said, "I feel naked without DiskWarrior." You can believe MacHome magazine when they said, "DiskWarrior is a quick, one-click solution to faster, more stable hard drives."



MacUser Awards 2000 Winner · Macworld 1/2 · Apple Design Award · winner macworld expo · MACnificent · mactoday ★★★★★ · Mac Addict Rated

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After Dark X + Fish

X

; Infinisys, e_info@infinisys.co.jp, http://en.infinisys.co.jp; $10

I'll never forget how absolutely cool After Dark was back in my Mac II days. We Mac users played with those modules for hours, tweaking silly options such as the speed, number, and bounciness of elements.

With After Dark X + Fish, Infinisys, the Japanese distributor of After Dark, brings the screen saver back, but not necessarily in a good way. Sure, the Mowing Man, the Fish, and the Space Toasters have returned, along with the adorable theme song. And the program works with OS X, after some rather unseemly manual installation. But many of the modules are disappointing: they look exactly as they did on my Mac II—which was fine a dozen years ago. But in 2003, on a 1GHz PowerBook G4, they're just bad. Only some modules have been revised, and they're still pixelated and just plain weird.

After Dark X + Fish is a cute novelty for longtime Mac users. If you want your flying toasters back, $10 isn't much to get them. But if you're looking for cool screen savers, stick with the beauties included in OS X, or pick up Marine Aquarium 2.0 (; September 2003).—JENNIFER BERGER

CinemaLift

; Innovative Office Products, 800/524-2744, www.lcdarms.com; $369

Positioning your LCD monitor at a comfortable height can be a delicate process. I've jury-rigged a stack of risers to get my 17-inch Apple Studio Display to sit at eye level. But Innovative Office Products takes the guesswork out of the job with CinemaLift, a metal arm designed to suspend a 20- or 23-inch Apple Cinema Display above your desk. (For monitors like mine, it offers the StudioLift, which has the same price and functionality but a lower weight-bearing capacity.)

The CinemaLift conjures Apple's flat-panel iMac: the arm holds an attached monitor over your work surface, so you can adjust the display's height, pivot it from side to side, tilt it up and down as much as 200 degrees, and move it closer or farther away. Designers, in particular, will appreciate being able to rotate a monitor 90 degrees to get a vertical view of a page. And all users will enjoy the extra desk space they get.

But you have to assemble the CinemaLift to reap those benefits, and that's a bear of a job. The product ships with enough parts to frustrate even intrepid do-it-yourselfers; the instructions are vague and filled with jargon; and some parts of the CinemaLift are particularly difficult to screw, tighten, or adjust, unless you have very small hands. You also run the risk of scratching the screen when you attach the bracket to the back of the monitor.

In action, the CinemaLift is a thing of beauty. But if you have no tolerance for labor-intensive, do-it-yourself projects, you might want a set of risers.—PHILIP MICHAELS

CintiqPartner

9X

; Wacom, 800/922-6613, www.wacom.com; $200

For digital painters and graphic artists, Cintiq interactive displays, from Wacom, are among the best input tools there are. These LCDs have built-in pressure-sensitive tablet technology, which lets you use a stylus pen to paint directly on screen. But if you use a Cintiq as a second display, it can be annoying to have to switch from your Cintiq pen to your mouse when you want to access a menu on your primary screen. To address this, Wacom has released the CintiqPartner, an add-on tablet.

The CintiqPartner plugs into your computer's USB port and has a 6-by-8-inch active area. Using Wacom's normal control panel, you can map the tablet to work across both the Cintiq display and your primary display. If you place the CintiqPartner just below your screen, you can easily access any control, window, or menu on either the Cintiq or your primary monitor without having to switch to another pointing device. (Because the CintiqPartner uses a pen frequency different from that of Wacom's other tablets, you can't achieve the same functionality with any other tablet.)

With the Cintiq 15-inch display priced at $1,899 and the 18-inch at $3,499, $200 more for the CintiqPartner to get added functionality is money well spent.—BEN LONG

EasyShare 3.0

9X

; Kodak, 800/235-6325, www.kodak.com; free

EasyShare 3.0, from Kodak, is an alternative to Apple's iPhoto. The program is quite good and provides many of the same features as Apple's photo-library application, but EasyShare won't convince you to give up iPhoto.

Like iPhoto, EasyShare includes a number of simple editing tools for cropping, converting to black-and-white, removing red-eye, and automatically enhancing photos. EasyShare also makes it easy to burn your images to disk and print and e-mail your photos. But it's no match for iPhoto when it comes to slide shows or to integration with Mac OS X's built-in screen-saver and desktop-picture features.

EasyShare's best feature may be its solid integration with Kodak's Ofoto Web site (www.ofoto.com). (Ofoto is also the service Apple's iPhoto uses for processing prints.) EasyShare lets you create Ofoto picture albums, upload your pictures, and then sign on to the Ofoto Web site. There, you can share your photos in Web albums and gain access to a larger variety of photo-editing tools and borders.—JEFFERY BATTERSBY

Inspiration 7.5

9X

; Inspiration Software, 800/877-4292, www.inspiration.com; $69; upgrade from version 7, free

Launch Inspiration, and you'll think of dozens of ways to put the diagramming application to good use. The last version impressed us mightily here at *Macworld* (; March 2003), and version 7.5 offers some great improvements that we hadn't thought to ask for.

The best addition builds on the program's outlining feature. As before, you can view your charts in Diagram mode or Outline mode (which shows your chart as a textual outline in a simple word processor). Any changes you make in either mode are universal. When you're finished diagramming and outlining, you can click on the new Transfer button to send your chart to either a Microsoft Word or an AppleWorks document.

The Transfer feature makes a lot of sense in a program targeted at classroom environments, as do several new language-arts templates, including Fiction Writing and Biographical Essay. Customizable templates are a strength of Inspiration, and the new ones are superb. (The program actually made me wish I'd had a book report to write; luckily, it works equally well for software reviews.)—CHARLES PURDY

KeyStrokes 3

9X

; Niemeijer Consult, info@assistiveware.com, www.assistiveware.com; $250

KeyStrokes 3 is an on-screen keyboard for people with disabilities. Using KeyStrokes and a mouse, trackball, head mouse, or other mouse emulator, you can enter text and control a computer. The software supports multiple languages and offers numerous configurations to accommodate users with differing degrees of muscle control. It also includes a Dwell mode for people who cannot click a mouse or trackball. But the Dwell mode is poorly documented and unintuitive, despite its clearly labeled icons.

Using an on-screen keyboard is a slow process. To speed things up, KeyStrokes features text shortcuts (useful for addresses and other frequently used text) and word prediction. We found that the choices offered by the prediction engine were very useful. It suggested single- and multiple-word choices as we went along, offering *could*, *could be*, and *couldn't* when we entered *cou*. The more you write, the better the prediction gets. You can

even analyze documents you've already written, to further fine-tune KeyStrokes' performance.—T. PATRICK HENEBRY

Live 2.1

9X

★★★★½; Ableton (distributed by M-Audio), 800/969-6434, www.ableton.com; $399

Ableton's Live (★★★★½; July 2003), the Mac's foremost audio sequencer, just got better. Live 2.1 has added multichannel audio-input and -output support for Digidesign hardware, as well as support for sample files saved in Digidesign's Sound Designer II format. The program is also snappier than previous versions—there's no longer a slight delay when selecting functions and switching between Arranger and Session views.

For people who work in multiapplication music environments, the biggest improvement is Live's full support for ReWire, Propellerhead's cross-application synchronization standard. We configured Live as a master, and it flawlessly played and controlled the tempo of a sequence from Propellerhead's Reason 2.5. With Reason configured as a slave, we could easily trigger a Live arrangement from within Steinberg's Cubase SX (★★★½; March 2003).

If the lack of full support for ReWire was the only thing holding you back, it's time to go Live.—CHRISTOPHER BREEN

MacMaid 2.1

X

★★★; Realmac Software, info@realmacsoftware.com, www.realmacsoftware.com; $10

Upon first learning about MacMaid 2.1, I jumped for joy: the little utility purports to use rules you set to automatically clean your Desktop or any other folder. "Finally," I mused, "I can delete those aliases I mistakenly created, the hundreds of disk images, and inadvertent PDF downloads without picking through them one by one."

MacMaid is, indeed, easy to use and has a very clean interface. You just pick a folder to clean (in my case, the Desktop) and set some if-then rules based on a file's name, extension, date created, date modified, or size. (This process is similar to setting rules in Microsoft Entourage.) Then you tell MacMaid how often to clean; the catch here is that once each hour is the *least frequent* cleaning schedule.

The program's limitations, therefore, make it only marginally useful. I found myself rewriting basically the same rule because you can't create two if statements per then: for example, to put files with *.jpg* and *.tif* extensions in a folder titled Images, you must create two rules. But the biggest problem is that your rules are limited to certain file criteria, so you can't create a rule based on a file's Kind, such as a Microsoft Word document or a StuffIt archive. MacMaid will do some cleaning for you, but not quite enough.—JENNIFER BERGER

PDFshrink 3.0

X

★★★★; Apago, 770/619-1884, www.apago.com; $35

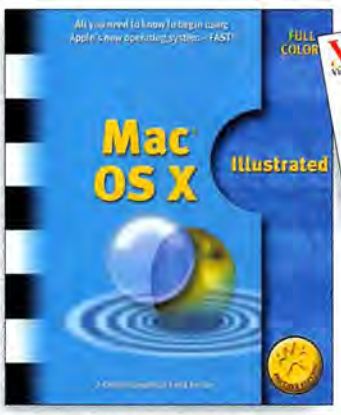
When it comes to PDF files, one size doesn't fit all, especially if you want to use those files on the Web. But Apago's PDFshrink 3.0.1 can help make those files smaller by letting you alter image resolution and compression and remove unwanted content.

If you already use Adobe Acrobat 6, you may not need PDFshrink. Acrobat 6 Professional does all that PDFshrink does (except eliminate tiny metadata) and offers finer control; Acrobat 6 Standard does a decent job of reducing file sizes, but you can't control how it shrinks them.

But if you have batches of files to trim down, you'll want PDFshrink. You can create a large queue of files, and PDFshrink will slim them automatically and quickly.

The program works extremely well on files filled with high-resolution images or repetitive elements (such as a PowerPoint presentation with a logo on every slide). And if you rely on OS X's tools to create PDF files, PDFshrink can make a huge difference in the sizes of those notoriously bloated files.—JIM FELICI

How a Panther becomes a pussycat.



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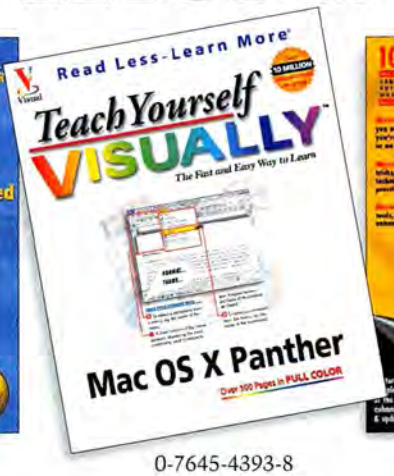

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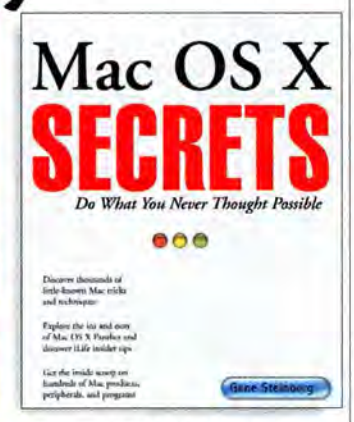

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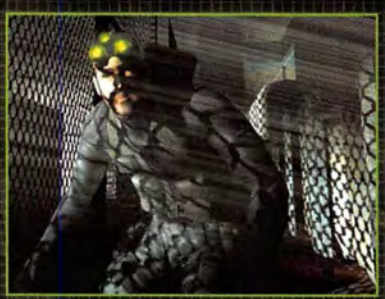

TEEN T Blood and Gore Violence
CONTENT RATED BY ESRB

Mac

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- EverQuest
- SimCity 4
- America's Army: Operations
- Warcraft III: The Frozen Throne
- Pyramat PM300

Reality Is for Losers

GET OUT THE CAFFEINE AND SAY GOOD-BYE TO THE REAL world—assuming, of course, that you've ever been well acquainted with it. EverQuest, one of the most popular and most widely discussed entries in the MMORPG genre (for the uninitiated, that's massively multiplayer online role-playing game) has at last come to the Mac. And it didn't earn the nickname "EverCrack" without being highly addictive.

Virtual Reality You'll have to negotiate or battle with all manner of creatures in EverQuest.

EverQuest puts players in the online world of Norrath—a giant fantasy realm populated by all manner of creatures both mundane and magical, and chock-full of treasure and tribulations. It's up to you to uncover it all—first by yourself and then with other EverQuest players.

As in any good role-playing game, your first step is to create a character for yourself. In EverQuest, you'll choose from one of many races, specifying your gender, religious persuasion, facial characteristics, and even style of hair—or fur, as the case may be. You'll also assign your character a role in society. (You can maintain several characters simultaneously—if you have time to keep up with them all.)

For newbies, EverQuest can be painfully dull. Low-level characters need to gain experience somewhere. This means you'll spend most of your time killing rats, snakes, bugs, bats, and other vermin outside the walls of whatever city you start your adventure in. Penniless and without substantial equipment, you'll have to depend on your wits and your talents, in whatever profession you choose, to get you through. But eventually, you'll amass fortune, formidable skills, and all the tools you need in order to truly get into the action.

Talking with computer-controlled NPCs (Non Player Characters) can lead to new quests and adventures. Once you've gained some experience, it's often wise to ally yourself with other EverQuest players and form a party. Many of the areas that midlevel and high-level characters explore are teeming with vicious, powerful monsters. Navigating those levels alone is virtually impossible; it takes teamwork.

Above all, EverQuest requires dedication. You won't become a seasoned player in an hour, a day, or even a week. Some EverQuest players have logged hundreds of real-time days in the world of Norrath and still haven't fully explored it. So make sure you're up to the task before you dive in.

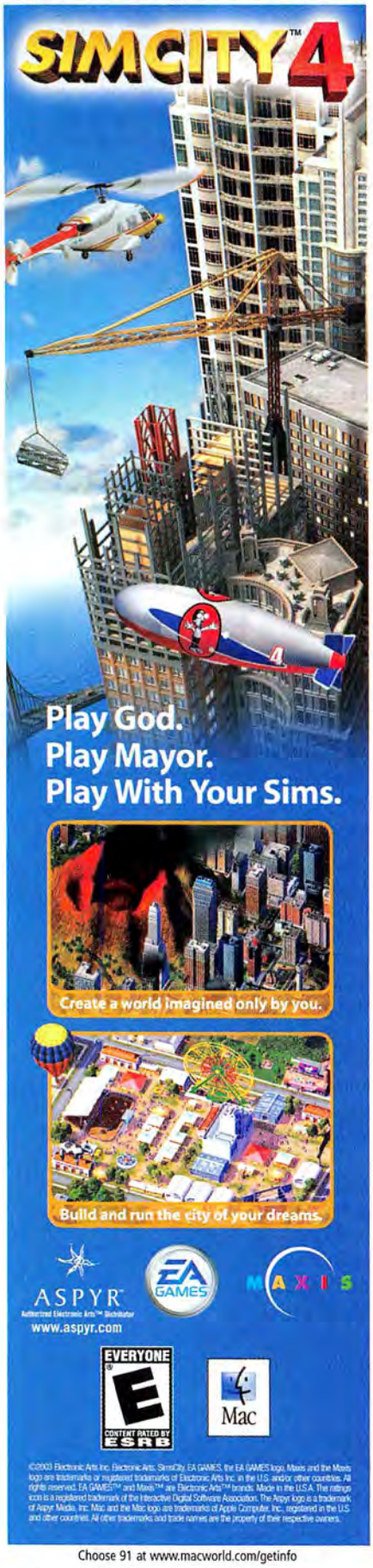
All told, you're going to lose more than 2GB of disk space when you install EverQuest's four CDs. On the bright side, you don't need to insert a CD to play. However, the EverQuest CDs aren't your only cost. You'll also have to pay a monthly subscription fee to play (your first month is free). As an incentive to get more Mac players to sign up, the game includes a second registration code that a friend can use to activate a short-term subscription, using your discs to install the game.

> You just don't earn the nickname "EverCrack" without being *very* addictive.

EverQuest's interface, with its multitude of separate windows, may be daunting to new users, but it's easy to customize. You'll need to have a decent video card and hefty amounts of RAM if you want to crank up the graphics options and detail levels. (Sony recommends a 64MB video card and 517MB of RAM.) Even then, don't expect too much. EverQuest is years old now, and the graphics reflect that. You won't find the high level of detail that you will in, say, Unreal Tournament 2003. But that's not the point: EverQuest is a shared, collaborative, online social experience, which is a lot more than can be said for the average shooter.

continues

EVERQUEST
RATING: ♦♦♦♦
PROS: Huge world to explore; customizable interface.
CONS: Mac users segregated from PC users; bland graphics.
PRICE: $50 (plus a $13 monthly subscription fee)
OS COMPATIBILITY: Mac OS X
COMPANY: Sony Online Entertainment, 858/537-0898, www.everquest.com/mac



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More Fun Than a Barrel of Orcs

One of 2002's best games—WarCraft III: Reign of Chaos—got major improvements over the summer, with the release of WarCraft III: The Frozen Throne. This expansion pack requires the original game and ships on a hybrid Mac and Windows CD-ROM. At $35, it's a bit pricier than the average expansion pack, but you get a lot for the money.

The Frozen Throne continues where the first game's story left off, adding more than two dozen new single-player missions. You don't need to have played through the original game to play the expansion pack's missions—though it'll help if you have. The expansion pack also includes new heroes, new buildings, new units, and upgrades to each of WarCraft's four races: Humans, Orcs, Night Elves, and Undead.

New multiplayer capabilities include support for clans and tournament ladders, through Battle.net, as well as new filters and improved matchmaking when you're finding a game. In addition, the Frozen Throne features an expanded and improved World Editor that lets you make entire campaigns, complete with your own cut scenes.

You don't have to buy the expansion pack to get all these enhancements. Warcraft III players can download updates from Battle.net for bug fixes and some of the new multiplayer improvements.

The Bottom Line The Frozen Throne gives WarCraft III fans a game that's more thoroughly balanced and playable than its predecessor. It's more fun, too. If you've already gotten your money's worth out of the original WarCraft III, you'll love this add-on.

WARCRAFT III: THE FROZEN THRONE
RATING: 4½
PROS: Expanded game play; improved World Editor.
CONS: Pricey for an expansion pack.
PRICE: $35
OS COMPATIBILITY: Mac OS 9, Mac OS X (World Editor requires OS X)
COMPANY: Blizzard Entertainment, 800/953-7669, www.blizzard.com

The Mac version of EverQuest is independent of the PC version. This is a downer for PC EverQuest users who want to switch, as they'll have to start from scratch with new Mac characters—you can't import them. On the upside, it also means that everyone you meet in Norrath is a Mac user, so we're all on a level playing field for once. EverQuest has a rating of T for Teen.

The Bottom Line Sony has brought a solid and fully realized online world to Mac gamers. Let's hope that the company continues to support Mac users with new premium online titles.

Living in Sim

SimCity is an old and storied game franchise; I remember playing it back in the days of black-and-white Macs. Now in its fourth iteration, SimCity is back and better than ever, with enough options, drama, and detail to satisfy even the most power-hungry players.

SimCity 4 grants you unprecedented, godlike authority: for the first time, you can shape the terrain, form a wilderness, and even populate it with herds of wild animals. Once you raise your city from the earth, you're responsible for every aspect of how it's run. And while you have a bevy of advisers to help you make decisions, you're the mayor, so it's on your head if things don't work out.

Your city will need basic elements, such as electricity and clean running water. Then you'll need to zone different areas for residential, commercial, industrial, and agricultural purposes. You're on a limited budget, so don't expect to raise a city like San

continues

We Built This City SimCity 4 brings new meaning to the term *micromanagement*.

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TEEN T CONTENT RATED BY ESRB

Violence
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TEEN T Violence — Content Rated by ESRB

Mac

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SIMCITY 4
RATING: ♦♦♦½
PROS: Sims offer valuable input on improving your cities; combines huge scope with intricate detail.
CONS: Sluggish performance as cities grow; weak tutorials.
PRICE: $50
OS COMPATIBILITY: Mac OS X
COMPANY: Aspyr Media, 888/212-7797, www.aspyr.com

Francisco or Paris immediately. It takes time, proper planning, and attention to detail—all while keeping an eye on what costs money and what generates revenue.

SimCity 4 also breaks new ground by letting you get inside the heads of your residents (Sims). You can transplant individual Sims into your city's new houses. They'll buy cars, get jobs, meet people, and have accidents that require medical attention. Along the way, they'll express their frustrations and offer suggestions for improvements. For example, I learned from one of my Sims that the hospital I'd put on the other side of the city was too far away. So I ended up building a clinic nearby to help her and other residents.

All of this micromanagement has an interesting effect on game play. Past SimCity games let you stay focused on the long view and paint your city's layout in broad strokes (a tract of residential housing there, a spot for industrial waste over here). In SimCity 4, the long view is still important—in fact, a new feature lets you take a regional approach and build several different cities that are linked together by transportation hubs, shared utilities, and more. But SimCity 4 truly thrives when you focus on the small picture, building neighborhoods and city centers that your Sims *want* to live in.

This attention to detail has an inevitable downside; the larger your Sim world gets, the slower the game runs. SimCity can make heavy demands on your hardware. Thankfully, you won't find the same performance problems and bugs that plagued the Mac conversion of Sim City 3000. (A different developer handled SimCity 4.)

One place where the game slips up, though, is in its online support. Two buttons that promise to link you to extras such as downloadable cities and a collaborative environment don't currently work on the Mac. Instead, when you enter your serial number, you'll get a cryptic error message. However, Aspyr says it plans to eventually make this content accessible to Mac users as well.

As voyeuristic as it sounds, there's nothing untoward in SimCity 4. The game is rated E for Everyone. However, it may be too complicated for young gamers. In fact, it's fairly complicated for older players. While the game's basic tutorials will get you started, I would have appreciated more training. The first time I tried to make a city of my own, I failed miserably. It took a lot of trial and error to understand many of the game's nuances—some of which might have been clearer with a bit more handholding at the beginning.

The Bottom Line Intricately detailed but massive in scale, SimCity 4 is the most challenging, immersive SimCity yet.

All That You Can Be

America's Army: Operations is the most unlikely military recruitment tool I've ever seen. It's also a compelling game with single-player and multiplayer elements. And it's at last available on the Mac.

Released for the PC by the U.S. Army last year, America's Army: Operations offers a simulation of what it's like to be in the Army. You train, work your way up the ranks, and ultimately become part of an elite Special Forces unit.

Your Tax Dollars at Work America's Army: Operations is a recruitment tool and an intense multiplayer game.

Let's get one thing straight at the outset, soldier: You're in the army now. You're here to take orders. Step out of line, and you'll find yourself pacing a jail cell at Fort Leavenworth. I took a pot shot at a growling sergeant one time on the

continues

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Bodies at Rest

Take a Load Off The Pyramat PM300 lets you recline and play games—and get a bass-driven back massage, to boot.

Steve Jobs says it's the Year of the Notebook, and who am I to argue? With the impressive CPU speeds and graphics systems of the latest PowerBook G4s, it's little wonder that Mac gamers are replacing their desktop systems with portable models.

The best part about having a mobile system is being able to play anywhere. And if you're the kind of laptop gamer who likes to play games from your actual *lap*, the Pyramat PM300 ($150; 877/591-1012, www.pyramat.com) may be just what you're looking for.

The Pyramat PM300 is a three-cushion mat that rests on the floor. A trapezoidal headrest at one end contains a 50-watt amplifier hooked up to a subwoofer and a pair of stereo speakers. A wired remote control lets you turn the system on and off and control volume levels.

The PM300 is ostensibly designed for console gamers, but I've found it works great for PowerBooks, too. In fact, if you have a clear view of your Cinema Display from the floor, you might want to give the PM300 a try.

The PM300 is compact and portable, and it offers good sound quality. It attaches to your Mac using a simple stereo Y-cable adapter. With all these wires, it's easy to get tangled up, but once you're ready to go, wham! The subwoofer vibrates against your back, creating a thoroughly pleasant sensory experience when you're playing action games or watching DVDs on your PowerBook or iBook.

The Bottom Line The PM300 isn't for everyone, but it's an interesting take on the idea of furniture that makes noise. It's a great device for PowerBook or iBook gamers looking to stretch out, and it's doubly useful if you have a console system.

PYRAMAT PM300
RATING: ●●●½
PROS: Compact and portable; good sound quality.
CONS: Begging for a wireless transmitter.
PRICE: $150
COMPANY: Pyramat, 877/591-1012, www.pyramat.com

rifle course and quickly found myself behind bars. The game also takes online rankings very seriously: mess up badly, and you'll be demoted.

As both a game and an informational tool, America's Army is full of interesting details about what life as a soldier is like, from basic training at Fort Benning to advanced training and deployment as a medic, combat engineer, scout, or Special Forces member.

As in EverQuest, online play is a crucial part of the America's Army experience. The multiplayer missions let you select the server you'll connect through, your team, and your role within the team. Missions are based on actual situations and locales in which the U.S. Army has been deployed in the past, and for the most part they require unequivocal cooperation with your teammates. This reliance on multiplayer capabilities is all right, but it penalizes players who don't want to—or can't—get online.

America's Army is a rock-solid, reliable game; I didn't encounter any crashes or unusual behavior. I also found acceptable performance in online play—a pleasant change of pace from some other online games I've played recently.

The game offers detailed graphics and sound, and it supports wide-screen resolutions. (The graphic depictions of violence merit a rating of T for Teen.) However, at more than 300MB, the game requires a fast connection—or saintly patience—to download. You download a free copy from Macgamefiles.com or get it for $6 from the developer's Web site.

The Bottom Line If you're an enthusiast of team-based tactical games like Aspyr's Ghost Recon, you'll probably love America's Army: Operations. □

AMERICA'S ARMY: OPERATIONS
RATING: ●●●½
PROS: Detailed graphics; intense multiplayer combat.
CONS: Relies on a network connection for most features.
PRICE: $6
OS COMPATIBILITY: Mac OS X
COMPANY: America's Army, www.americasarmy.com

MacCentral.com Senior Editor PETER COHEN can often be found in the world of Norrath, where he's svelte, athletic, and charming; has a full head of hair; and, oh yes, is a female.

> More Internet
> SightClips
> CrosswordMaster
> disclabel
> DV Backup

Helping Hands

I'M A BIG FAN OF MAC OS X, BUT I ADMIT THAT THERE ARE a few things I miss about OS 9. The Internet control panel, for one, let you customize helper applications—the utilities and apps that process URLs and files you're likely to encounter on the Web and in e-mail messages. OS X includes the same settings, but apart from letting you choose your e-mail client and Web browser, it doesn't give you a way to edit those settings. (Microsoft Internet Explorer does let you change some of them.)

Monkeyfood Software's free utility **More Internet** (4½) works much like the Internet control panel, but as an OS X preference pane. More Internet displays a list of protocols on the left, and the application that's set to handle each protocol on the right. To change a helper application, you select a protocol and then drag the preferred application's icon into the More Internet window.

If you want to add a protocol that isn't listed, such as SFTP, click on the Add button and type the protocol (sftp) and a short description (say, Secure FTP). Click on OK, and then drag the icon of your preferred application for that protocol into the window to set it. I chose Panic's Transmit (4½; September 2003) to handle SFTP URLs. As another example, if your chosen browser has trouble with HTTPS (secure HTTP), you can opt for a different browser that handles it properly.

No-Stick Stands

Speaking of helping hands, if you have an iSight camera, you've probably noticed that apart from the clip-on PowerBook mount, the included stands require that you blemish your beautiful Mac—or $2,000 Cinema Display—with a big, round slab of adhesive. Your choices for mounting location and angle are limited, too. MacMice's $15 **SightClips** (4½) are a welcome alternative.

Line of Sight SightClips let you place an iSight where you want it—without the mess.

Made of attractive clear acrylic and available in a number of styles, SightClips let you mount an iSight wherever you want, without adhesives. Form-fitting clip-on models are available for Apple flat-panel displays, iMacs, eMacs, and CRT monitors. You can also choose a model with suction cups that attach to any smooth surface, a shelf-mount version (if your Mac has a shelf above it) that doubles as a tripod mount, and a stand that sits on your desk, elevating the iSight about 6 inches. No matter where you want your iSight to sit, there's a SightClip for you.

Good Help More Internet 1.0 lets you choose your Internet helper applications, as you did in OS 9.

Crossword Creations

In previous issues, we looked at the Internet crossword-puzzle clients MacXword (4; April 2003) and Across Lite (3; June 2003). But what if instead of solving online puzzles, you want to make your own? Yin Yan Software's $25 **CrosswordMaster** (4) may be for you.

CrosswordMaster walks you through the process of creating crossword puzzles. First you create a grid from scratch or from a library of templates. If you want to build your own, CrosswordMaster's grid mode lets you designate where filled blocks go (you can also add such blocks to grid templates).

After you've customized your grid, you need to fill it in, one word at a time. If you're having trouble finding a word to fit, CrosswordMaster helps out by providing you with a list of possible words. You can also search for words that fit a particular pattern (for example, all five-letter words that fit the pattern *-t--r*).

After you've filled in your puzzle, you'll need to add clues for each word. CrosswordMaster assists you here, too, with built-in dictionaries and (as long as you're connected to the Internet) the ability

continues

to look up definitions in several online dictionaries and thesauruses.

Composing good crossword puzzles isn't easy, but CrosswordMaster makes it a lot more manageable.

Designer Discs

People have been burning CDs for a long time, but Apple's iLife apps have transformed modern Macs into veritable media-production machines. I regularly make mix CDs for the car and DVDs of home movies for the relatives. The problem is that these homemade discs are just plain, well, *plain.* Writing titles on discs with a permanent marker may be retro-cool, but it doesn't impress the recipient, and it makes finding the right CD while driving down the freeway difficult.

Cover Me The simple interface of disclabel 1.1 helps you create CD and DVD labels and inserts.

The obvious solution is CD labels. There are a number of applications on the market that let you create disc labels and case inserts—but SmileOnMyMac's $30 **disclabel** (♦♦♦½) is my favorite. It lets you create the actual disc labels, as well as design CD and DVD case covers and tray inserts, down to the text on the spine.

The program's design elements and online templates make it easy to create exactly the look you want. You can start with a blank slate, or base your design on one of the included templates. Even better, other users can share their designs via the Internet. Either way, you can then customize the label with text, graphics, and shapes. You can rotate, crop, and move objects at will, as well as create circular text—great for printing track info around the edge of a CD.

But what really sets disclabel apart is its iLife integration. Just burned a CD from an iTunes playlist? disclabel imports the track list and track information. Got a great picture you want to use for the case insert? You can browse your iPhoto library, and disclabel will insert a selected picture into your label layout.

Another nice feature is disclabel's AppleScript support. If you're handy with AppleScript, you can automate the label-making procedure—so you can create multiple labels with a few clicks of the mouse.

Though disclabel has a few quirks, its impressive feature set, stellar interface, and excellent customer support add up to a bright future.

Home (Data) Movies

If you've heard it once, you've heard it a thousand times: *Back up your data regularly.* The question is how to do so without spending a lot of money. I'm going to let you in on a little secret—if you have a FireWire-equipped digital-video camera and a Mac with a FireWire port, you may already have the solution.

The $25 **DV Backup** (♦♦♦♦), from coolatoola, lets you use your video camera or deck as a tape-backup system. It works with many DV and Digital8 camcorders, as well as some DVCAM decks, and it provides a simple interface for backing up and restoring data. Insert a new tape, click on the Format button, and then drag files and folders from the Finder to DV Backup's table of contents. Add a description, and DV Backup will do the rest. You can store 10GB of data on a one-hour videotape at standard speed, and in my tests, 160MB of data took about two minutes to back up.

DV Backup also lets you choose a level of error protection, enable backup verification to ensure that the files have been copied correctly, and enable buffer-underflow protection in case your hard drive can't keep up with the video camera. In addition, the latest version includes a number of traditional backup-utility features, such as incremental and scheduled backups; compression; and the ability to back up data across multiple tapes.

DV Backup doesn't work with all camcorders—some models have issues writing or retrieving data—but you can run the Perform Camera Test function in evaluation mode to verify compatibility. And even if your camera fails the test, it may still work, so try a few backup-and-restore cycles to be sure. I tried DV Backup with a number of DV camcorders—thank you, Good Guys—and several that didn't pass the camera test worked fine when I tried to back up and restore data.

Even if you don't use DV Backup as your normal backup system, at times it can really come in handy. For example, take your video camera along when traveling, and you can back up important data from your PowerBook at a moment's notice.

DV Backup may not have all the features that a standard backup utility such as Dantz's Retrospect Backup 5.0 (♦♦♦♦; July 2002) has, and some people may have concerns about the wear and tear that regular backups may put on their video camera. In addition, because DV Backup's interface is a bit different from that of traditional backup software, you should actually read the (very thorough) manual. But if DV Backup encourages you to back up your data when you otherwise wouldn't, that's the most important feature of all. □

The Treasure Chest

COMPANY	PRODUCT	MOUSE RATING	PRICE	OS COMPATIBILITY	CONTACT
coolatoola	DV Backup 1.1	♦♦♦♦	$25	X	support@coolatoola.com, http://coolatoola.com
MacMice	SightClips	♦♦♦♦½	$15 each	X	sales@macmice.com, www.macmice.com
Monkeyfood Software	More Internet 1.0	♦♦♦♦½	free	X	VinceFeedback@Diggory.net, www.monkeyfood.com/software/
SmileOnMyMac	disclabel 1.1	♦♦♦½	$30	X	support@disclabel.com, www.disclabel.com
Yin Yan Software	CrosswordMaster 1.1.2	♦♦♦♦	$25	X	feedback@yinyansw.com, www.yinyansw.com/products/

DAN FRAKES is the editor of MacFixIt.com and the author of *Mac OS X Power Tools* (Sybex, 2003). He can be tracked down at www.danfrakes.com. Send your thoughts on this column, or on things you'd like to see in future columns, to macgems@macworld.com.

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FOCUS ON HOME TECHNOLOGY

SO YOU'RE A CARD-CARRYING MEMBER OF THE twenty-first century, but what have you got to show for it? No personal robot, no flying car, no jet pack—even your superpowered Mac is still stuck in its old routines, sequestered in the home office crunching numbers or in a kid's room playing games. But it doesn't have to be. With the right gadgets and software, your Mac can become a full-fledged member of the household—helping with chores, keeping track of schedules, recording your favorite shows, even planning your next meal. Forget the future: here's what you need to do all of this—and more—*today*.

PHOTOGRAPH BY TIMOTHY ARCHIBALD

THE DO-EVERYTHING MAC *Turn Your Mac into the Ultimate Home Appliance*

WITH THE DAILY CHAOS of schedules, chores, clutter, and meals, you may feel as though you need a full staff of servants just to keep track of it all. But if you own a Mac, you already have all the help you need. While it can't wash and fold your clothes for you, your Mac can do plenty around the house. All you need is the right software and a little creativity. Here are just some of the roles your Mac can fill.

Chef and Bartender

Putting together the perfect meal is unnerving enough. Why deal with having to locate the perfect recipe when it's folded, stained, mutilated, and stuffed in a recipe box? Digital Fried Chicken's $20 CookWare Deluxe (★★★★½; October 2002; www.digitalfriedchicken.com) puts all your recipes in a single database. You can search recipes by ingredient, print them, and even create a shopping list for all the items on your menu. The program ships with more than 700 recipes (you can purchase over 1,200 more for $16). It also lets you add as many new recipes as you please.

When your guests arrive, it's nice to kick off the evening with a cocktail. But what do you do when they request a Pink Pussycat? Instead of substituting a light beer, fire up Digital Fried Chicken's $13 BarWare Deluxe (★★★★; "More Mac Software Bargains," May 2003), where you'll discover everything you need for a Pink Pussycat or 774 other cocktails.

Double Agent

If your living space is short on actual *space*, why not make your Mac do double duty as a TV or telephone?

You can watch your favorite shows on your Mac with Eskape Labs' MyTV ($135; www.eskapelabs.com). This easy-to-use USB device plugs into your cable connection or TV tuner, and displays the shows in a resizable window. So you can check e-mail, finish work, or surf the Web without missing a moment of the action. It's perfect for watching Food Network shows while you cook, or for following your favorite team from your home office.

If you have a high-speed Internet connection, your Mac can also help you keep track of distant loved ones while saving you money on long-distance calls. With Apple's free iChatAV (in beta), you can hook up any FireWire digital-video or Web camera to your Mac and videoconference with other iChatAV users. But if you don't want them to see you in your sweats, you can also hook up a microphone and have voice-only chats. It doesn't matter whether they're on the other side of the building or the other side of the Pacific.

Filing Cabinet

Remember the last time you rotated your tires or got a tetanus shot? If not, Digital Fried Chicken also offers a host of inexpensive programs that can help you track the health of your family, pets, and cars.

Rather than looking through old drawers and folders, you can quickly monitor everyone's allergies, prescribed medications, and immunizations with Medical Records. This $9 program maintains a detailed history of your family's health and insurance information. For the furrier members of your family, there's SafeCat and SafeDog ($15 each), two programs that record your pet's medical history, breeding information, and training progress. Finally, for a detailed overview of your vehicle's upkeep—including a record of every dime you've ever spent on it—look to the $20 CarCare software.

Home Librarian

You lent out your favorite DVD a couple of months ago, and now you'd like it back. The only problem is, you don't remember which of your slacker friends has it. Whether you're a movie buff or a bookworm, you can use your Mac to keep better track of your cherished collections so this won't happen again.

For DVD collectors, Chris Campbell's free DVD Cache (in beta) is a great option (http://homepage.mac.com/mysoftware). This program stands out by linking to the Internet Movie Database (www.imdb.com) to download relevant information about your discs. This means that you won't have to fritter away your time entering inane DVD details. Its Lending Library feature hooks into OS X's Address Book to help you monitor the whereabouts of your discs.

Book collectors who want to catalog their libraries without typing in all the publishing information can take a look at Chronopath's Chronoscan USB bar-code scanner ($200; www.chronopath.com). This device works in conjunction with the company's free Library software to scan book bar codes and pull relevant publishing information from Amazon.com's Web site.

Just the Beginning

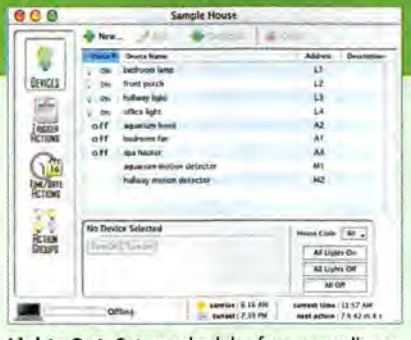
When it comes to putting your Mac to work around the house, we've only scratched the surface of what's possible. From keeping track of schedules to timing the brownies in the oven, there's software for almost any task—often for a very small fee. For more ideas, check out Version Tracker.com.—JEFFERY BATTERSBY

AUTOMATE YOUR HOME

Ever lie in bed wondering whether you remembered to turn off the garage light? Or wish that the heat could be turned up before you get home? Well, put your Mac on the job.

With home-automation software such as Perceptive Automation's Indigo ($90; www.perceptiveautomation.com) or Always Thinking's Thinking Home ($39; www.alwaysthinking.com), you can use your house's electrical wires to control practically every device you own.

Along with the software, you'll need a special X10 interface, such as the PowerLine USB ($35; www.smarthome.com), which plugs into your Mac. You'll also need Control Modules for every device you want to control. (These range from $10 to $190, depending on the device.)



Lights Out Set up schedules for any appliance with Perceptive Automation's Indigo software.

With this combination of software and hardware, you can create schedules to turn on lights, appliances, and sprinklers, or to fire up your hot tub before you get home from work. Now *that* feels like the twenty-first century.

THE GREAT ENTERTAINER *Make Your Mac the Centerpiece of Your Home Entertainment System*

WITH POWERFUL SOFTWARE for downloading music, managing photos, and editing video, the Mac has become an all-in-one resource for digital media. Yet when it's time to relax, most of us still retreat to the TV and home stereo system in the living room. Why not get the best of both worlds? Here are three simple ways to extend your home entertainment system with your Mac.

Never Change CDs

These days, it's not unheard of to have hundreds—if not thousands—of MP3 and AAC music files in your iTunes library. But your Mac isn't always the ideal tool when it comes to *listening* to your music. The solution? Hook up your music library to your home stereo system. You'll get all the benefits of iTunes—your entire collection at your fingertips and customized playlists—and the superior sound quality of your stereo.

If you have an iPod, you can connect it to your home stereo with an inexpensive Y-cable (the kind with a stereo ⅛-inch minijack on one end, and red and white RCA plugs on the other). Avoid using your stereo's phono input; that amplifies the signal excessively and can result in distorted music that may damage your speakers (or your ears).

Of course, you'll want to control your iPod from the couch. For that, look to Ten Technology's $50 naviPod (distributed by Dr. Bott; www.drbott.com). The naviPod has two parts: an attachment that connects the iPod to your stereo and includes an infrared sensor, and a small, round remote control. The remote lets you adjust volume, as well as pause, change, fast-forward, and rewind tracks from across the room.

If you don't have an iPod, check out Slim Devices' $239 SliMP3 (●●●●½; *Mac Gems*, April 2003). The SliMP3 connects your stereo to your Mac's Ethernet network and gives you instant access to your entire iTunes library—including playlists. You can view songs and lists on the SliMP3's LED screen, and control playback with its remote.

Stop Switching Remotes

Between the TV, stereo receiver, DVD and CD player, and DVR, remote-control clutter can become overwhelming. When you're ready to consolidate, check out Intrigue Technologies' $299 Harmony Remote SST-768 (pictured; www.harmonyremote.com), the only universal remote that you can configure via your Mac's USB port.

The device's OS X software takes care of complicated scripting, so selecting the Watch A DVD option can, for example, turn on your TV and set it to the proper input, turn on your DVD player, and turn on your stereo and set it to the proper input—all at the push of a single button. (There's also a simpler version available for $199, the Harmony Remote SST-748.)

Say Good-bye to VHS Tape

Digital-video recorders (DVRs), such as those from TiVo, are changing the way we watch television. These handy devices can record shows while you're gone, pause and rewind live broadcasts, and do plenty more. And thanks to TiVo's new Home Media Option, some DVRs can now even connect to your Mac, displaying photos and playing MP3 files through your TV and stereo system (see "TiVo Home Media Option").

But you don't need to have a TiVo—or even a TV set—to record your favorite shows. Whether you want to watch them later on a long flight, or archive an entire series as you would with VHS tapes, you can do it all right on your Mac.

Elgato Systems' $199 EyeTV (●●●½; November 2002) and Formac's $399 Studio TVR (●●●●; April 2003) not only let you watch TV on your Mac, but also use the TitanTV Web site (www.titantv.com) to integrate TiVo-like scheduling and recording.

The EyeTV connects to your Mac via USB and converts the TV signal to MPEG-1 video, suitable for burning to VCDs. The Studio TVR, on the other hand, connects via FireWire and uses a DV encoder. With DV footage, for example, you can use iDVD to burn several episodes onto DVDs. Or if you don't have a SuperDrive and your external DVD burner doesn't come with software, you can use Roxio's $90 Toast 6 Titanium to do the same thing (www.roxio.com).—JONATHAN SEFF

SURROUND SOUND FOR YOUR MAC

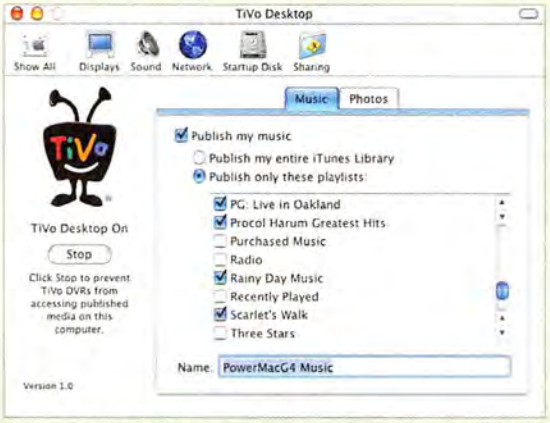
Hearing a movie's creaks and crashes through a surround-sound speaker system can make you feel like you're part of the action. But there's no reason for these speakers to be tethered to a traditional stereo. Thanks to Apple's new G5 Mac, which offers built-in support for digital output, multichannel sound is now also available to users who want to watch DVDs on their Macs. In fact, you can already buy Klipsch's $299 ProMedia GMX D-5.1 speakers (shown here) from the Apple Store. And Harman Multimedia will begin selling the $400 JBL Encounter 5.1 speaker set in November (www.harman-multimedia.com).

If you want to connect these surround-sound systems to an older Mac, you'll need M-Audio's $120 Revolution 7.1 PCI card or $120 Sonica Theater, which connects via USB (www.m-audio.com). However, keep in mind that Apple's current DVD player doesn't support multichannel output. Although that should change with the release of Panther, there is a solution now. VideoLAN's free VLC media player (●●●●; "More Mac Software Bargains," May 2003) can play DVDs and output surround sound to speaker systems such as these.

TiVo Home Media Option

Convenient Add-on Service Provides MP3 Streaming and Photo Viewing

If you own a TiVo Series2 digital-video recorder, you know how these addictive devices can transform your TV-watching habits. Forget schedules or phone interruptions—you just watch the shows you want, *when* you want. But why limit yourself to TV? Thanks to TiVo's new Home Media Option (HMO) package—an add-on to your existing TiVo service—and the Rendezvous networking protocol, your Series2 DVR can also act as an extension of your computer, streaming MP3s and iPhoto pictures from your Mac to the DVR. HMO lends credence to the term *digital hub* and performs in a nearly seamless fashion.



Your Preferred HMO Select just those iTunes playlists you'd like your TiVo to stream.

The Gear

To take advantage of the HMO package, you'll need a TiVo- or Sony-branded Series2 DVR—earlier TiVo models are incompatible with the option, as are DVR units from DirecTV. You'll also need a wired Ethernet or wireless 802.11b or 802.11g connection to your home network, a Mac running Jaguar, and the free TiVo Desktop software.

HMO costs $99 for the first DVR and $49 for each additional unit—a bargain compared with stand-alone MP3-streaming hardware, which costs as much as $250. Connecting the DVR to your home network is painless. Just navigate to TiVo's Wireless Setting screen; if you have an open network, its name should appear. You'll also find an option for connecting to password-protected and closed networks.

Streaming iLife

When you select Music & Photos from TiVo's main menu, you have the option of listening to MP3 files (TiVo won't recognize AAC-encoded files) or viewing pictures stored on an available computer. The process works beautifully. As in iTunes, songs are alphabetically arranged by artist, album, song, and genre. You can also play a particular playlist or shuffle and repeat songs. Similarly, you can view all the photos in your iPhoto Library or just those in specific albums. You can rotate photos, view pictures individually, or turn them into a slide show. But unlike iPhoto, TiVo doesn't let you add musical accompaniment to slide shows.

TiVo Anywhere

In addition to streaming photos and MP3 files from your Mac, HMO offers two other features—the ability to schedule your TiVo programming via the Web, and Multi-Room Viewing, which lets you copy programs from one DVR to another. For example, you can use your bedroom DVR to view programs that you recorded on the DVR in the living room.

Remote scheduling and Multi-Room Viewing are great features, but they require patience. The remote-scheduling portion of TiVo's Web site was sluggish on my broadband connection. And if you intend to use Multi-Room Viewing extensively, you'll benefit from a wired Ethernet connection. (A USB-to-Ethernet adapter is required for each DVR.) I could play a program during the transfer process, but unless I gave the receiving DVR a 15-to-20-minute head start on my 802.11b wireless network, the program was routinely interrupted while the DVR caught up. My wired connection, on the other hand, required a head start of no more than two minutes.

RATING: ★★★★½

PROS: Easy to set up and use; convenient; full featured; relatively inexpensive.

CONS: Slow remote scheduling and wireless data transfer from one DVR to another; no soundtracks for photo slide shows.

PRICE: First DVR, $99; each additional DVR, $49

OS COMPATIBILITY: Mac OS X

COMPANY: TiVo, 408/519-9100, www.tivo.com

Macworld's Buying Advice

Despite some minor quibbles, Home Media Option is nearly as much of a miracle as TiVo itself. If you have a compatible Series2 DVR and a home network, this HMO is the perfect prescription.—CHRISTOPHER BREEN

Tinkering with TiVo

On its face, the TiVo digital-video recorder is a technical marvel. But if you never crack open the TiVo case (admittedly, you'll void your warranty by doing so), you won't know the half of what it can do. From adding new drives to becoming a Web-ready device, the TiVo is eminently hackable.

Want to add more recording space to your TiVo? In many cases, you can buy a new IDE hard drive, attach it to your Mac, and run Eric Wagner's free MacTiVo Blesser software (www.weaknees.com/mactivo.php). Once the software has properly formatted the drive, attach it to your TiVo's spare drive and power cables, and you'll have all the space you need.

For more-complicated drive tricks, such as backing up your TiVo hard drives, find a cheap PC and follow the Hinsdale-How-To upgrade guide (www.newreleasesvideo.com/hinsdale-how-to/). If you're feeling squeamish, pay a pro such as WeaKnees (www.weaknees.com) or PTVupgrade (www.ptvupgrade.com) to do it for you.

Got an older TiVo you'd like to control over the Web? Although TiVo's HMO requires a Series2 DVR, you can match its Web features and more on an older TiVo by adding an Ethernet card from 9th Tee Enterprises (www.9thtee.com/tivoupgrades.htm). Again, you'll need access to a cheap PC to get everything set up. (I used a worthless Pentium-100 tower that lives in my garage.) Once you've installed the Ethernet card, you can add the free TiVo Web Project software (http://tivo.lightn.org) and control your own TiVo via the Web, taking advantage of features even HMO can't match.

Intrigued but wary? Join the network of clever TiVo hackers at the Underground Playground section of the TiVo Community Forum (www.tivocommunity.com/tivo-vb/) for all the TiVo advice you can shake a pair of rabbit ears at.—JASON SNELL

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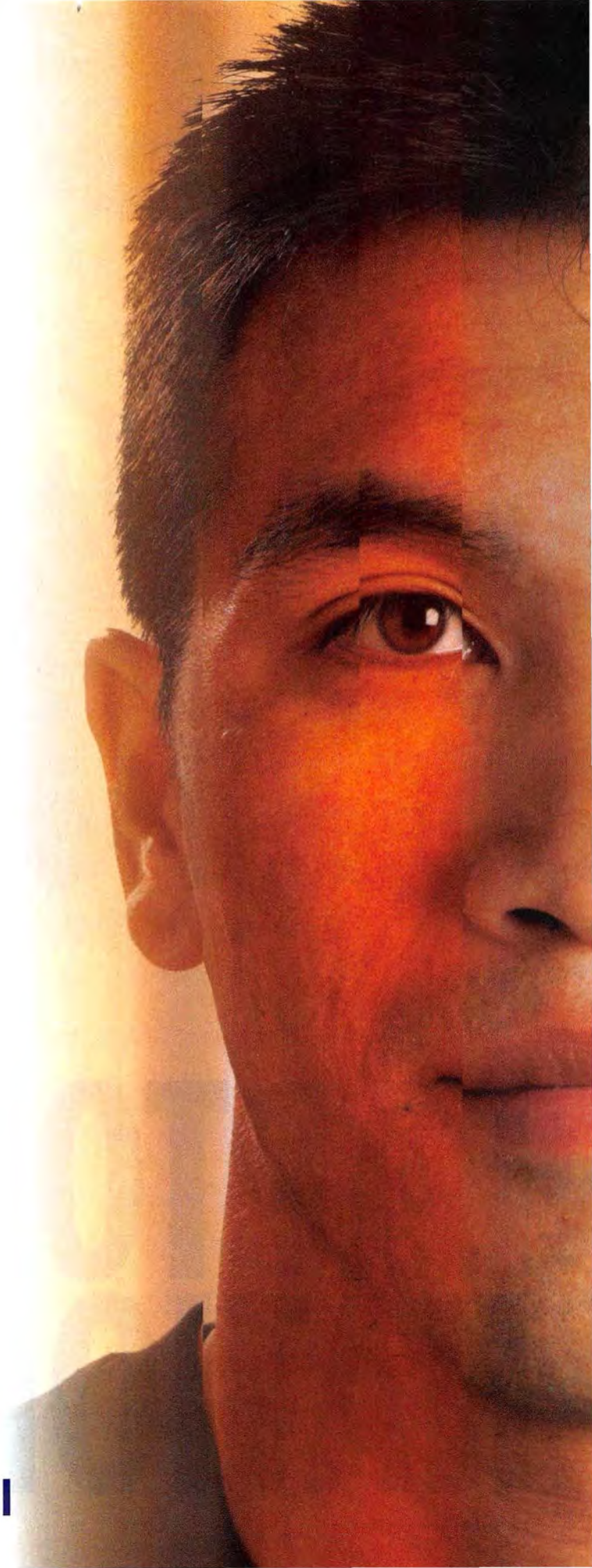

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LAPTOP NATION

Apple's Portables Are Everywhere. Here's How to Get the Most Out of Yours.

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BY CHRISTOPHER BREEN

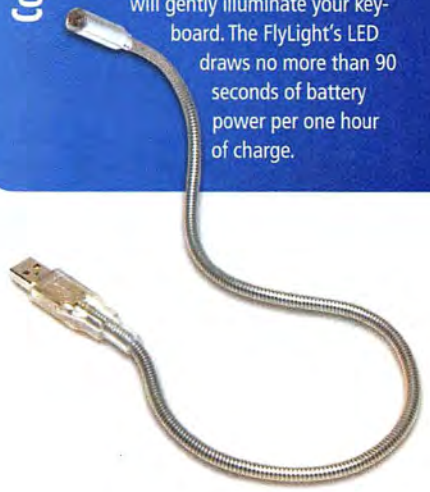
The days when a portable computer served as a poor substitute for a desktop computer are long gone. PowerBooks and iBooks abound—and for good reason. These laptops not only make for stylish traveling companions, but also have features that closely match those of their deskbound counterparts. And they're fast. However, the needs of mobile Mac users differ from those of people whose computers live on or under a desk.

Swift Storage

Tired of seeing the FireWire 800 port on your PowerBook go to waste? Pick up WiebeTech's Micro-GB800 FireWire 800/USB Micro Drive (866/744-8722, www.wiebetech.com). Small enough to fit in a shirt pocket, this ruggedly built enclosure costs $160 without an included drive. You can also buy a 20GB, 40GB, 60GB, or 80GB model. The 20GB drive, the 40GB drive, and one version of the 60GB drive run at 5,400 rpm. The $530 MG8-60/7200 model runs at 7,200 rpm. The $489 80GB drive spins at 4,200 rpm.

Come Toward the Light

People whose touch-typing skills are sorely tested when they give a presentation in a darkened room needn't pay a premium for a 17-inch PowerBook G4's lighted-keyboard feature. Kensington's $23 FlyLight Platinum (800/235-6708, www.kensington.com)—a small light with a flexible neck that plugs into your laptop's USB port—will gently illuminate your keyboard. The FlyLight's LED draws no more than 90 seconds of battery power per one hour of charge.



AirPort-able

D-Link's Air Wireless 2.4GHz USB Adapter (949/788-0805, www.d-link.com) lets any Mac with a USB port connect to a wireless network. Just install the included drivers and plug the adapter into a free USB port, and your Mac is ready for wireless.

Portable (and Playable) Storage

For storage *and* playback of multimedia files on a device even more portable than your iBook or PowerBook, take a look at SmartDisk's $500 FlashTrax digital multimedia player (239/425-4080, www.smartdisk.com). This 5.6-by-3.6-by-1.2-inch device features a fold-up 3.5-inch, 480-by-234-pixel LCD screen for viewing pictures (JPEG format) and movies (Motion JPEG format) stored on the 30GB drive. You can also store MP3 files on the FlashTrax and play them through the headphone port or the device's internal speaker.

The FlashTrax includes a rechargeable battery, a USB interface (supporting USB 2.0 and USB 1.1), and a slot for CompactFlash cards. (The card's files can be viewed on the unit or copied to the FlashTrax's hard drive.) FlashTrax also includes a composite video-out port for playing media on a television and an infrared remote control for running slide shows.

We'll explore these important laptop-computing issues, and we'll examine how Mac OS X and today's wireless and networking technologies may change the way you work on the road. Also, look for our favorite laptop-related goodies sprinkled throughout this story.

Safety First

Thieves have made off with your iBook or PowerBook. That's bad enough, but at least you can prevent them from plundering your private information. There are several ways to protect the data on your laptop.

Password Protect It One simple way to keep your data safe is to disable the Log In Automatically option in the Users section of the Accounts preference pane. At each startup or login, you must enter a password.

To prevent others from using more-nefarious means to access your Mac, run Apple's Open Firmware Password utility (http://docs.info.apple.com/article.html?artnum=120095). When Open Firmware protection is enabled, other people can't boot your Mac from a volume other than the one designated in the Startup Disk system preference.

Make sure your password *does not* include a capital U. If you create a password that includes this character, your Mac won't recognize the password, effectively locking you out. Should this happen, you can try to disable the offending password by installing or removing some of your laptop's RAM, and then restarting your Mac by holding down ⌘-option-P-R, waiting for the Mac to chime three times, and then letting go of the keys.

You can also keep people from accessing your Mac while it's running. Launch Keychain Access (in the Utilities folder) and select Show Status In Menubar from the View menu. A lock icon will appear in the menu bar. Select the Lock Screen command from this menu item. Your Mac's screen saver will engage and won't depart until you enter your Administrator password.

Encrypt It Apple's upcoming OS X 10.3 (Panther) includes FileVault, which will let you automatically encrypt the contents of your user folder. Until Panther arrives, OS X users must rely on Disk Copy or third-party utilities for encryption. To encrypt a folder with Disk Copy, simply drag the folder to the Disk Copy icon; in the resulting Image Folder dialog box, select AES-128 from the Encryption pop-up menu, and click on Save. In the New Passphrase dialog box that appears, enter and verify a password for the file, and click on OK. Don't choose the Remember Password (Add To Keychain) option.

Prime Location Location X brings the capabilities of OS 9's Location Manager back to the Mac.

Some reliable third-party encryption utilities are MacMagna's Codex ($19; www.macmagna.net) and SubRosaSoft's Encryptor ($13 [the accompanying Decryptor application is free]; www.subrosasoft.com).

Another option is PGP's PGP 8.0.2 Personal (650/319-9000, www.pgp.com). This $50 application not only encrypts e-mail, files, and instant messages, but also creates volumes that are encrypted when you're not using them.

Back It Up

Bad news is when your laptop's hard drive gives up the ghost. Worse news is when, in the process, you lose the presentation you're slated to give to your company's board of directors early tomorrow morning. A portable, bootable FireWire hard drive (and this includes Apple's iPod) can be a lifesaver, as can a CD or USB memory dongle that contains copies of the data you can't afford to lose.

To create a bootable FireWire drive, plug the drive into a FireWire port, launch your Mac OS installer disc, and install a copy of the system software on the drive. If, as is the case with the iPod,

the FireWire drive doesn't boot when system software is installed this way, use a tool such as Mike Bombich's free Carbon Copy Cloner (www.bombich.com) to clone a working startup drive to your FireWire drive.

Location, Location, Location

OS 9's Location Manager let you create groups of customized network, date and time, printer, and QuickTime settings. But OS X's Network preference pane lets you create only locations that contain network settings. If you and your laptop move from town to town, these tips may make you feel more at home.

Location X If you long for Location Manager, check out Alex Keresztes and Greg Novick's $10 Location X (http://homepage.mac.com/locationmanager). This program lets you save groups of locations that include not only network settings but also QuickTime, time-zone, printer, Mail, Entourage, and shell-script configurations (see "Prime Location").

Time Zone and iCal A bug in iCal causes appointments to move forward or backward when you change time zones in the Time Zone portion of the Date & Time preference pane. To avoid this problem, reset the Mac's clock in the Date & Time area of this pane when you move to a new location.

Roam If You Want To

Just because you've detached your laptop from your home or office network doesn't mean you're any less dependent on your connection to the Internet or to the computer on your desk.

Seek Broadband Thanks to the proliferation of broadband Internet connections and wireless networks, the days of dial-up-while-on-the-road are coming to an end—at least in major U.S. metropolitan areas. Many hotels offer broadband via Ethernet in guest rooms and wireless broadband access in lobbies and meeting rooms, for between $10 and $20 for a 24-hour period.

T-Mobile (800/937-8997, www.t-mobile.com) offers wireless Internet access in more than 2,500 locations across the United States, including Starbucks cafés, Borders stores, and airports. T-Mobile's rate plans include one-day access for $10, a month's worth of wireless access for $40, and an annual plan that costs $30 per month.

To locate other wireless networks, visit the WiFinder Web site (www.wifinder

Minihubs

If your notebook's single FireWire port won't support the plethora of FireWire devices in your travel bag, look to Belkin's $100 FireWire 6-Port Hub (310/898-1100, www.belkin.com). This FireWire 400 hub (about the size of a dental-floss container) includes 6 ports, a detachable power supply, and a FireWire cable.

For greater USB expansion, turn to Keyspan's $49 USB 4-Port Mini Hub (pictured). As its name implies, the hub sports four USB 1.1 ports and takes up as much desk space as a credit card. It includes a retractable cable, and it supports bus-powered and self-powered modes.

POWERBOOK PHONE HOME

If you have a Bluetooth-enabled cell phone and a laptop with a Bluetooth adapter, you can connect to the Internet without a regular wireless network. Here's how:

1. Enable Bluetooth on the phone. (Bluetooth draws power from the phone's battery, so it's turned off by default.)

2. Open the Bluetooth preference pane, click on the Settings tab, click on the Turn Bluetooth On button, and select the Discoverable option.

3. Click on the Devices tab and then on the Set Up New Device button. This launches the Bluetooth Setup Assistant (in the Applications: Utilities folder).

4. Follow the instructions for pairing your phone with the Mac (you do this by entering a passkey on the Mac and confirming it on the phone).

5. In the Mobile Phone Setup – Step 4 Of 5 screen, enable the Use With Address Book option if you want to sync your phone with Apple's Address Book. Select the Access The Internet With Your Phone's Data Connection option and choose either Use Dial-Up Connection or Use Data Connection, depending on the kind of connection you want to establish. Click on Continue.

6. If you've created a dial-up connection, the resulting dialog box will ask you for your user name, your password, and your ISP's dial-up phone number. (If you've configured your laptop to use the laptop's internal modem to establish a dial-up connection, you'll find this information by opening the Network preference pane and selecting Internal Modem from the Show menu.) If you've selected the data-connection option, you'll be asked for a user name, a password, and a GPRS CID string. This information is available from your wireless carrier.

Both dialog boxes ask you to choose a modem script. If the scripts included with your Mac don't seem to work, visit Ross Barkman's Home Page (www.taniwha.org.uk) to find modem scripts for many of today's mobile phones.

7. Open the Network preference pane, select USB Bluetooth Modem Adapter from the Show pop-up menu, and confirm your settings in the PPP and the Bluetooth Modem portions of the window. In the TCP/IP tab, you may need to enter DNS Server information if you're using a dial-up connection. For either a dial-up or a data connection, deselect the Wait For Dial Tone Before Dialing option in the Bluetooth Modem tab.

Establishing Mac-to-mobile connections may take a few tries—choosing the wrong modem script or entering an incorrect GPRS CID string can throw a wrench into the works. If you can't establish a connection, call your wireless carrier's tech-support team.

Typing Redefined

When the keyboard on your 15-inch Titanium PowerBook just won't do and you're looking for a more ergonomic way to type, visit the Web site of FingerWorks (610/246-2199, www.fingerworks.com). The company's $259 TouchStream MacNTouch Keyboard replaces the 15-inch Titanium PowerBook's keyboard and lets you avoid using the touchpad. The touch-sensitive keyboard interprets finger gestures as mouse movements and as triggers for such common tasks as opening documents, cutting and pasting, and rotating graphic objects.

A Different Dock

If your 12-inch PowerBook G4 spends a lot of time on your desk, connected to an external monitor, keyboard, and mouse, you're a candidate for the $179 BookEndz Docking Station, from Photo Control (800/787-8078, www.bookendzdocks.com). The dock slides onto the left side of your PowerBook and routes power, Ethernet, modem, FireWire, USB, audio-in, and audio-out connections to the back of the dock, where you can attach the appropriate cables.

Though BookEndz doesn't currently offer a dock for the 17-inch PowerBook G4, it does sell docks for Titanium PowerBooks, recent iBooks, and some older PowerBook G3s.

.com), where you can search for free and paid wireless access points anywhere in the world.

Going Mobile When you're out of range of a conventional wireless network or a phone jack, you may be able to use your Bluetooth-enabled mobile phone to log on. Your laptop must have a Bluetooth adapter—either the one built into today's aluminum PowerBooks or a USB adapter such as D-Link's $45 USB Bluetooth Adapter (949/788-0805, www.d-link.com).

Making the connection can be a bit of a hassle (see "PowerBook Phone Home"). Although your mobile phone may include a dial-up feature that allows it to connect to your ISP, some providers don't allow such connections unless you upgrade your service plan to include GPRS (General Packet Radio Service) data services.

If you can establish a dial-up connection, do so. You'll be charged only for the price of the call. When you sign up for a data plan with your wireless provider, you can access only so much data before you're charged per kilobyte for data you've consumed above and beyond your rate plan. For example, Cingular Wireless (800/331-0500, www.cingular.com) charges a monthly rate of $6.99 for 1MB of data and an overage rate of $.03 per KB, or $49.99 for 13MB of data and an overage rate of $.01 per KB.

Retrieve It You may have experienced the modern-day equivalent of accidentally leaving your briefcase at the office: forgetting to transfer an important document from your desktop Mac to your laptop. But now you have fewer excuses for not getting a bit of work done over the weekend. If you configure your desktop Mac to allow file sharing, you can log on to that machine from your laptop and retrieve files.

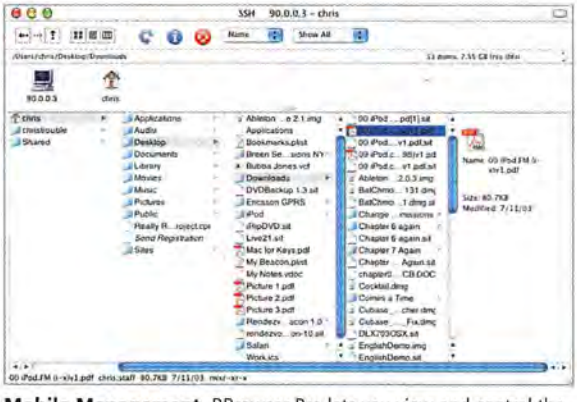
Open the Sharing preference pane on the desktop Mac and enable the Personal File Sharing service in the Service column. Select Connect To Server from the Finder's Go menu and, in the resulting Connect To Server window, enter the desktop Mac's IP address or domain name. Click on Connect. Select the computer you want to connect to, click on Connect again, and enter the user name and password for that computer. Click on Connect a third time, choose the volume you want to mount, and click on OK. The volume will appear on your portable's desktop, ready to provide you with the files you need.

Manipulate It To do more than copy files from your desktop Mac when you're on the road—for example, to move or delete them—you can take advantage of OS X's SSH (Secure Shell protocol) server to remotely control your Mac over a secure connection.

Enable the Remote Login service in the Sharing pane's Service column. Make a note of the desktop Mac's address (in the form of *yourusername@serveraddress*—chris@123.45.67.89, for example). You'll be asked for this address (and this user's password) when you log in remotely.

You can now log in to this Mac via a network or across the Internet. And you can control the desktop Mac via Terminal—by establishing an Internet connection, typing ssh *yourusername@server address*, and then issuing Unix commands. But people uncomfortable with the command line will feel more at home with Robert Vasvari's RBrowser Pro (www.rbrowser.com), a $49 utility with a friendly interface that lets you remotely manage files via FTP, SFTP, and SSH (see "Mobile Management").

Remote Printing Even when you're on the move, you can print invoices on the office printer. If your office network is behind a firewall, you'll need the help of a system administrator to tunnel through. (For more about firewalls, see "Protect Your Mac," October 2002.) If you don't have to deal with a



Mobile Management RBrowser Pro lets you view and control the contents of a remote Mac over a secure connection.

SMART TRAVELING OVERSEAS

You can prepare for a world tour with this overview of hardware, software, and tips for easy international travel.

Foreign Powers (and Phones)

For people venturing abroad, refueling a PowerBook can require a tad more effort than simply tossing a power cord into a suitcase.

Adapters Apple's standard AC adapter is dual-voltage ready—it handles European and Asian 220-volt current, as well as American 110-volt electricity. So you won't need pricey converters or transformers, but you will need a small adapter to plug into foreign electrical sockets. (Adapters cost about $5 and are available at most luggage or travel shops.)

If you want to look like a local wherever you travel (or if you're simply averse to carrying dongles), the $39 **World Travel Adapter Kit**, from Apple (800/692-7753, http://store.apple.com), offers six AC-adapter plugs, with blades and pins for every continent. Apple's plug adapters click seamlessly into the white power brick that ships with iBooks and PowerBooks.

Surges and Pulses A travel-size surge protector can be a very good investment—electrical grids in many nations (including the United States) can be unstable. You'll also want to protect your notebook's modem: the higher-voltage PBX lines in some foreign hotel and office phone systems can damage it. Consider carrying a digital phone-line tester, such as Voltage Valet's $20 **Digital Phone Line Tester**, available from Magellan's (800/962-4943, www.magellans.com). You can also get this information by ringing the office's IT guy (and it costs nothing).

Modems can also be disrupted by the high-frequency "tax pulse" that some European telephone companies employ to measure usage. (You'll know that a company relies on tax pulses if you hear a slight beep every 30 or 60 seconds when you're on the phone.) For continental excursions, try the pocket-size, all-in-one **EuroSurge**, from LaptopTravel ($46; 888/527-8728, www.laptoptravel.com). It includes a European plug adapter, a surge protector, and a modem filter.

Converters by Country Depending on your destination, you might also need a plug adapter for the phone cord. Although RJ-11 jacks are increasingly the norm in urban offices and hotels overseas, older residences and budget rooms may feature other, bizarre-looking contraptions. If you're venturing outside of business-class accommodations, check out **BuyTravelConverter** (888/346-4688, www.buytravelconverter.com). This travel outfitter stocks a comprehensive selection of phone and electrical adapters, typically for $5 to $10 a pop. Don't know what adapters you need for that trip to Slovenia? No sweat—the site lists everything by country.

Extra Juice In planes, trains, and (rental) automobiles, a laptop can serve as a deluxe mobile entertainment system for cranky passengers who are tired of exotic scenery. Sadly, the fun lasts only as long as the battery. Look for a Mac-compatible mobile charger, such as iGo's **Juice 70** ($120; 888/205-0064, www.igo.com). It grabs juice from the EmPower outlets in modern planes, from car cigarette lighters, and from standard electrical outlets. The Juice 70 charges both a Powerbook and either a PDA or a cell phone at the same time.

Get Connected in Far Parts

These days, it's nearly impossible *not* to stumble across Internet access points in popular tourist destinations such as London or Rome. If you can't find one, ask a local teenager or visit the searchable cybercafé directory at www.cybercaptive.com.

Web Mail Unfortunately, not every Net café accommodates walk-in notebook users. To access your e-mail from another computer, you'll need to know the address for your mail provider's Web-based e-mail. (For .Mac customers, it's http://Webmail.mac.com.)

Big U.S. Internet providers (including AOL, CompuServe, and Earthlink) also provide local dial-up numbers in foreign locales. Check with your ISP to see whether it covers your destination and what surcharges may apply. But watch out—local calls in some countries can be pricey, and calling from a hotel room can cost even more.

The dial tone's pitch varies from country to country (Italy's dial tone, for example, fluctuates like the American busy signal). So you may need to disable your modem's Wait For Dial Tone option (by going to System Preferences: Network: Modem). For some foreign phone exchanges, you may also need to toggle the Dialing: Pulse setting in the same pane.

Cell-Phone Savvy Getting online overseas can be surprisingly easy if you use a tri-band cellular phone equipped with GPRS, a standard for wireless communications. For example, you might use the Apple-friendly Sony Ericsson T68 (for directions, see "PowerBook Phone Home," page 61).

Your biggest hurdle will be obtaining a local number from a regional cell operator that offers data-communication services (usually via the 2.5G

End Cable Clutter

Does your laptop bag contain a snarl of cables? Take a gander at Keyspan's Zip-Linq retractable cables—Ethernet, modem, USB, or FireWire (510/222-0131, www.keyspan.com). They're as long as 40 inches and wrap up in a small round case. Zip-Linq cables cost between $14 and $16. The company also sells a line of retractable power cables that let you charge your cell phone via your Mac's USB port ($22 to $30, depending on the type of phone). (For more on retractable cables, see "Retraction in Action," *Mac Beat*, October 2003.)

Keychain Backup

To protect important documents, you must carry a backup. And the most convenient and transportable backup you can find is a USB flash memory drive. These small USB dongles fit on your keychain; hold as much as 512MB of data; and cost between $40 and $200, depending on capacity. USB flash memory drives are available from several companies, such as DiskOnKey (510/494-2090, www.diskonkey.com), SmartDisk (239/425-4080, www.smartdisk.com), and Verbatim (704/547-6500, www.verbatim.com).

GPRS system—in a few privileged cities, faster, 3G networks are being rolled out). You might also be able to use GPRS roaming with your current cellular carrier, though you'll need to make sure it's available (and affordable) at your destination.

Data-connection fees are usually based on kilobytes instead of time—that means sending and receiving text e-mail is inexpensive compared with surfing the Web.

Stash Some Extras in Your Bag

Whether you'll be riding a *tuk-tuk* in Bangkok or the *U-Bahn* in Berlin, remember to bring along a few more supplies.

Backups and Warranties When you leave the country, it's even more important to back up your system before you hit the road. If you're checking out for an extended period, bring along CD-R copies of your system software and of any applications you can't live (or work) without. A few CDs don't weigh much, but they can save days in the field when things go wrong.

Purchasing software overseas isn't a great idea since you can run into warranty, upgrade-licensing, and language issues. Don't forget that Apple's iDisk knows no borders, either—along with your iPod, it's a handy place to stash key files and applications.

For hardware still under warranty, tuck a photocopy of the receipt or your AppleCare information in your suitcase. Apple's notebook warranties are valid worldwide, and international Apple resellers offer some walk-in services (such as replacing a bum battery) if you can prove you qualify.

Download and Go Lastly, here are two useful utilities to download before your trip.

Time Palette, by Trygve H. Inda ($30; www.timepalette.com), is a full-featured application that includes world times, sunset and sunrise information, local weather, photo-realistic maps, and a night-shading projection map.

EuroConverter Pro, from Macron Software ($25; http://macronsoft.com/pages/en/euroconvpro.html), converts the fixed-rate exchanges of euro countries, as well as the variable rates of 28 other currencies. You can update currency-exchange rates manually or via the Internet. The utility also includes a calculator.—JASON COOK

Finding WiFi

Do you really have to flip open your iBook to check for nearby wireless networks? Not with Kensington's $30 WiFi Finder (800/235-6708, www.kensington.com) in your pocket. With a press of the WiFi Finder's button, you can detect the existence and the signal strength (as indicated by three green LEDs) of 802.11b and 802.11g wireless networks from as far as 200 feet away.

Recharge on the Road

If you've exhausted your PowerBook's battery during your flight, you can give it a power boost while driving to your hotel, with Kensington's $98 Universal Car/Air Adapter (800/235-6708, www.kensington.com). This small adapter plugs into a car's cigarette lighter or an EmPower-equipped airline seat, and it includes two adapter tips—one compatible with PowerBooks and one for iBooks.

firewall, you can print over the Internet by following these steps:

1. On a Mac locally networked to the office printer, turn on Printer Sharing in the Sharing preference pane.
2. Download and install a copy of the free Gimp-Print (http://gimp-print.sourceforge.net/MacOSX.php3) on this Mac.
3. Launch a browser on this Mac, and type http://127.0.0.1:631. This produces a Web page that lets you configure your printers via CUPS (Common Unix Printing System).
4. Click on the Manage Printers link; in the resulting window, click on the name of the printer you want to access from afar. Note the URL in the address field (in the form of http://127.0.0.1:631/printers/*printername*, where *printername* is the name of the printer).
5. On your laptop, launch Print Center and, while holding down the option key, click on the Add button.
6. Select Advanced from the pop-up menu at the top of the sheet that appears.
7. From the Device pop-up menu, select Internet Printing Protocol (http).
8. Enter a name for the printer in the Device Name field, and then enter the IP address of the computer that shares the printer.
9. Select the printer model from the Printer Model pop-up menu.
10. Click on Add, and quit Print Center.

The office printer should now appear in any Print dialog box on your laptop and be accessible as long as your laptop and the computer attached to the printer are linked to the Internet.

DVD on TV When you're stuck on a long flight, watching a DVD on your laptop is all well and good. But even the screen of a 17-inch PowerBook is much smaller than most of today's TVs. There's no need to be confined to your laptop's small display when you've reached your destination. To watch DVDs on your hotel room's TV (or any set), purchase Radio Shack's $30 Video RF Modulator (part number 15-1214), six feet of coaxial television cable, a composite video cable, and a stereo audio cable with a single stereo miniplug on one end and two RCA plugs on the other.

String the coaxial cable between the Modulator's To TV coaxial connector and the TV's coaxial antenna connector (you'll have to detach the cable currently plugged into this connector). Attach the composite video cable to your laptop's video adapter and plug the other end into the Modulator's Composite Video port. Plug the miniplug side of the audio cable into your laptop's audio-output port and the two RCA connectors into the Modulator's left and right audio-input ports.

Open the Displays preference pane and then enable the Mirror Displays option. Insert a DVD and, when DVD Player launches, press Play. Then just enjoy your DVD—it may not be on the "big screen," but at least it's on a bigger screen.

The Last Word

From dorm rooms to hotel rooms to conference rooms, Apple's laptops have become vital to the way we work—and play. With these tips and your trusty PowerBook or iBook, you can make yourself at home no matter where you are. □

Contributing Editor CHRISTOPHER BREEN pens *Macworld's Mac 911* column and is the author of *Secrets of the iPod*, third edition (Peachpit Press, 2003).

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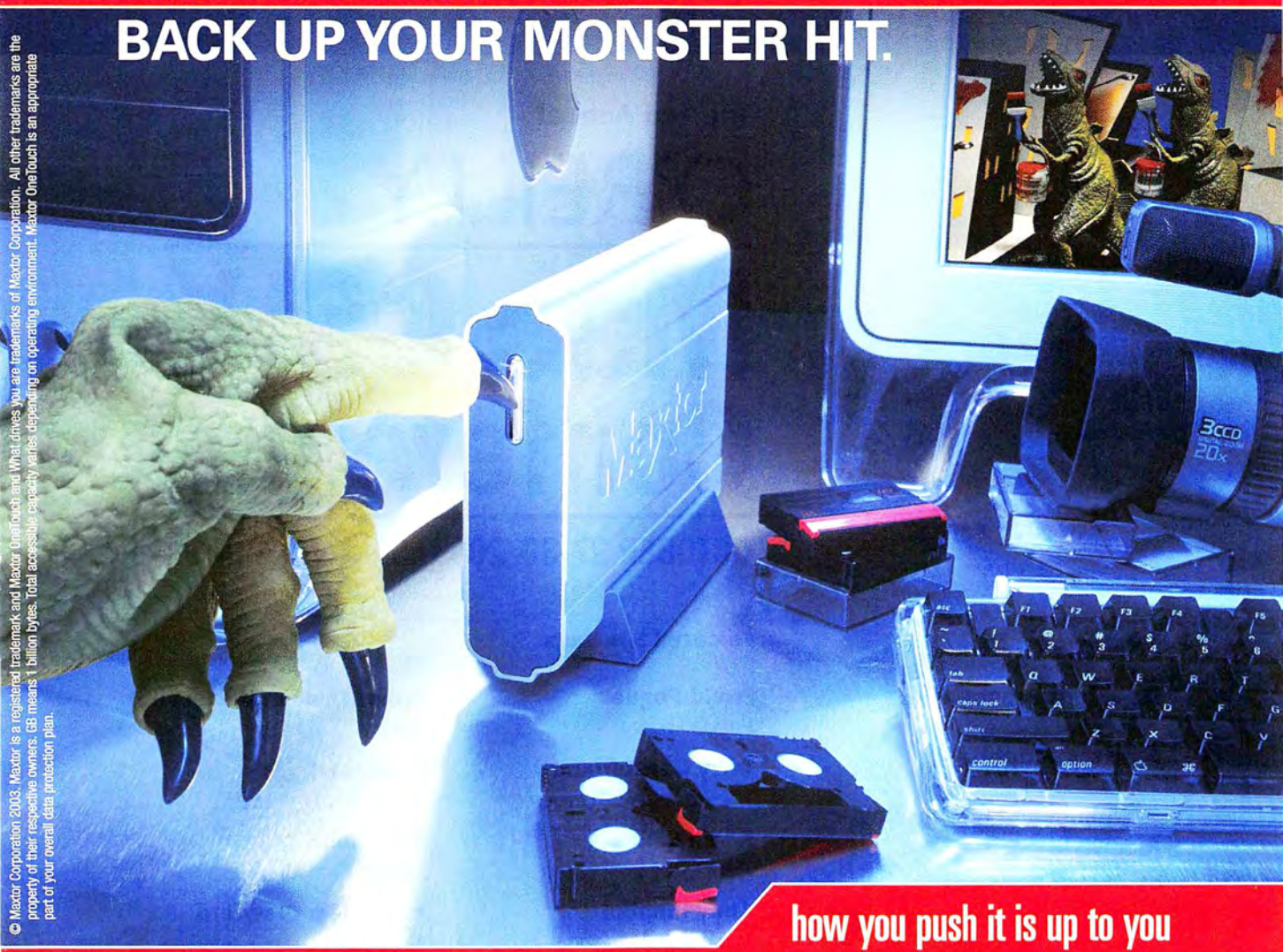

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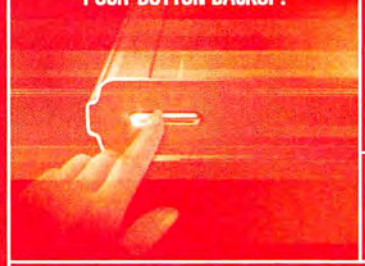

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Adobe Changes Everything

An Exclusive Look at the New Versions of Photoshop, InDesign, Illustrator, and GoLive

Adobe is making a bold move. The company has radically reworked its four major applications: GoLive, Illustrator, InDesign, and Photoshop. The fruit of its labor is the OS X–only Adobe Creative Suite (800/272-3623, www.adobe.com), which includes all four revitalized applications. There are some great new features in these tightly integrated programs (for pricing and package information, see "Suite Spot")—here's what you can look forward to:

IMAGES COURTESY OF ADOBE SYSTEMS

Photoshop

IMPROVEMENTS IN AND ADDITIONS to Photoshop should please print and Web designers, photographers, and digital-video artists.

View Photos in the Raw When it first appeared last spring, Photoshop Camera Raw was a $99 plug-in. Now it's built into Photoshop. Not to be confused with Photoshop's .raw file format, Camera Raw gives you access to the digital equivalent of a film negative. You can edit the proprietary image formats that a digital camera produces before the camera's internal algorithms process the information. Camera Raw's color-calibration controls and separate histogram display give you fine control over the image data.

Share Comp Layers Designers have long used Photoshop layers to experiment with variations on a theme, but presenting those layers as comps to other people is difficult. Now it's easy to output each comp layer as an individual image, or create a multipage PDF or Web site with one comp layer per page.

PDF Presentations You may prefer to design your comps in separate files, not on separate layers. You can still deliver your ideas in one coherent package—the PDF Presentations feature groups multiple files into one PDF. You can even add notes, page transitions, and security restrictions.

Place Text on a Path In version 7, Photoshop's type engine took on some of the sophisticated power of Illustrator and InDesign. That trend continues in Photoshop CS—you can now place text on a path and edit it at any time.

Make Videos Pixel Perfect Like graphic designers and photographers, video artists and filmmakers rely on Photoshop. But digital video and film use nonsquare pixels, which the previous version of Photoshop didn't support. Now you can create nonsquare pixel documents that are ready for import into applications such as Apple's iDVD, DVD Studio Pro, and Final Cut Pro, as well as Adobe After Effects.

Also new is Pixel Aspect Ratio Correction, which lets you view images in the aspect ratio of a video monitor. Without this new feature enabled, computer screens distort nonsquare pixel images.

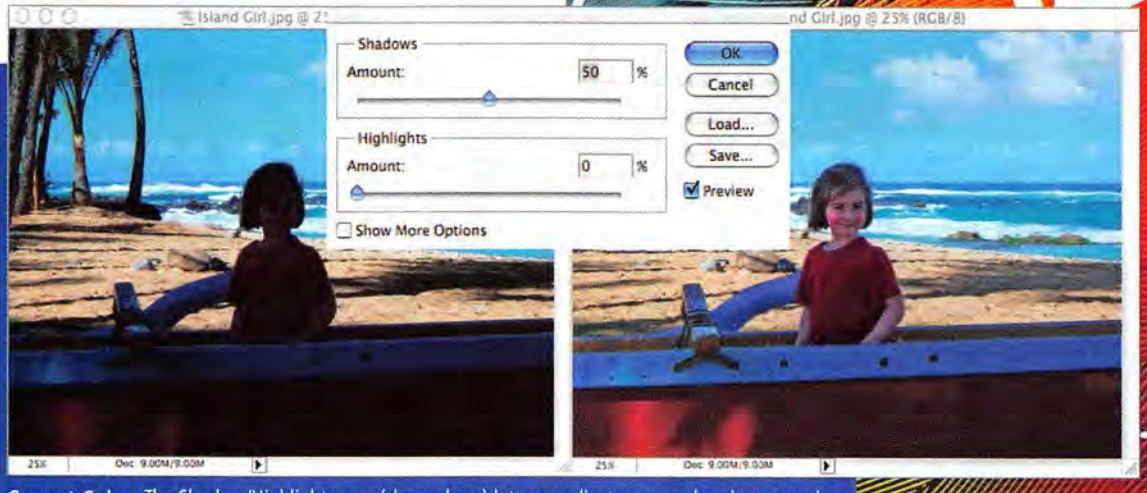
Filter Gallery No need to schlep up to the Filter menu any more—you can see and control all filters from the new Filter Gallery palette. A larger, resizable preview pane helps you judge the results of stacked effects. The Filter Gallery palette includes new Photo filters, which mimic the look of traditional photographic lens filters.

It's Alive! Histograms can give you important information about your images. In Photoshop CS, live histograms reflect edits as you make them. You can also look at before-and-after histograms for quick comparisons of your work.

Match Colors You've taken a series of shots and edited one of them until it looks just right. With the new Match Colors feature, you can apply those edits to the entire series. You can also use Match Colors to make photos shot in different lighting conditions look more consistent.

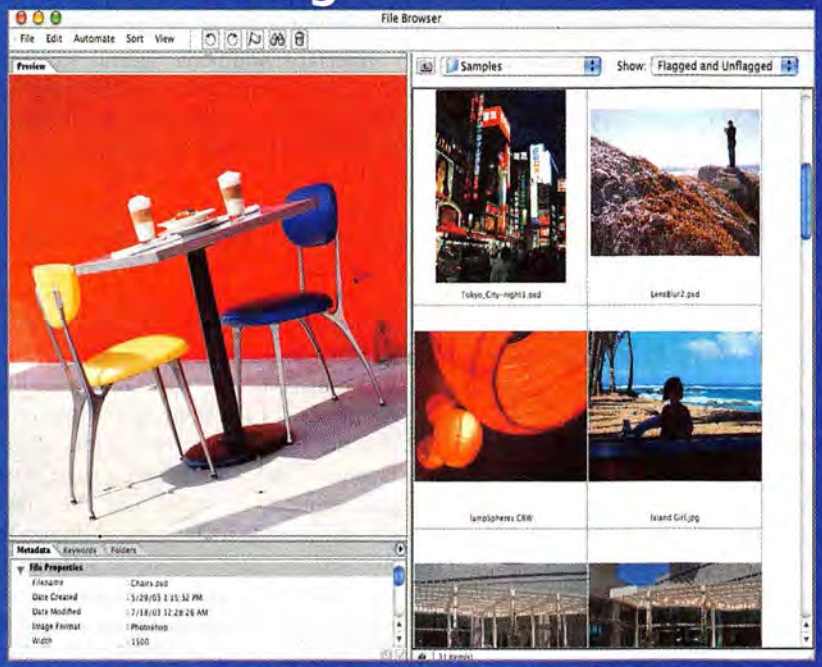
Replace Colors On the flip side, the new Color Replacement tool paints the foreground color so you can quickly change the color of a portion of your image without altering any shading or texture.

Double Exposure Control



Correct Color The Shadow/Highlight pane (shown here) lets you adjust over- and underexposed areas simultaneously. Match Color lets you take the color statistics of one photo and apply them to another. This could be a time-saver if you have a series of shots taken in similar conditions and you want to apply improvements made to one image to the entire series. You can view Match Color and Shadow/Highlight changes as they happen in a new, real-time Histogram palette.

Just Browsing



Browse Smarter The File Browser is no longer just a bare-bones way to view a folder full of photos. You can now see not only a grid of thumbnail previews, but also a larger preview of any one of those images. A new toolbar contains buttons for deleting, searching, and flagging files. The Flag command marks images temporarily—so you have, for example, an easy way to collect only the zebra images from 100 stock photos you're considering for a zoo brochure. If the stock company has assigned keywords or other metadata to those wildlife photos, you can also search for the word *zebra*, via the File Browser's new Metadata pane.

More Support for 16 Bits In previous versions of Photoshop, some features worked only on images with 8 bits or less. Now you can use layers, painting, text, and shapes on 16-bit images as well.

SWF Support There are also changes to ImageReady, Photoshop's Webcentric companion. You can now export the layers in a Photoshop file as separate SWF files, the format native to Macromedia Flash. Once you're in Flash, you can assemble the separate files into one file. (Adobe has quietly stopped promoting SVG, a file format it once saw as a competitor to SWF.)

Dynamic Data Sets You could define dynamic (changeable) images and text in ImageReady files before, but now you can include dynamic text in a SWF file—without having to learn how to program complex variables.

Web Productivity It's easier to tweak multiple objects on the ImageReady CS canvas, whether you're copying them or executing layer commands over several layers. This has the potential to speed up common Web-design tasks such as creating rollover buttons.

Take the Long View There are several plug-ins and stand-alone applications designed to allow you to stitch photos together into a panorama, but now that capability is built into Photoshop. The Photomerge tool combines images and blends the seams.

Look at the Big Picture If you design billboards, bus wraps, and other projects of mammoth dimensions, you'll need to take note of Photoshop CS's new upper limits—your files cannot be larger than 300,000 pixels by 300,000 pixels.—TERRI STONE

Acrobat 6

Adobe Creative Suite Premium Edition includes the recently released Acrobat 6.0 Professional (★★★★½; September 2003).

Acrobat 6 has improved tools for creating PDF files. It also enables an Adobe PDF printer in your Mac's printer list, and it adds toolbar items to Microsoft Office applications, for converting documents to PDF and e-mailing them.

You can also output to the PDF/X-1a and PDF/X-3 formats, ISO-standard subsets of the PDF format that are more limited but also more predictable than standard PDF files. This is useful for prepress purposes.

Among its other additions are a PDF Optimizer, built-in preflighting features, and tools for creating forms.—JONATHAN SEFF

Integration

One thing that makes this collection of applications a suite is improved integration. All these programs benefit greatly from Adobe's Version Cue file-version manager, which provides an internal server for checking out and working with files in a small workgroup.

In addition to Version Cue, the Creative Suite provides a common interface and tool set, and it supports interchangeable native file formats. It also includes automated Web production and shares core technologies such as a graphics manager and a color engine, and it improves support for Extensible Metadata Platform (XMP). (For more on Adobe Creative Suite integration, see "Adobe Puts It Together," *Mac Beat,* page 14).—JONATHAN SEFF

Suite Spot

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Adobe Photoshop CS	$649
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* Includes Acrobat Professional, GoLive, Illustrator, InDesign, and Photoshop. ** Includes Illustrator, InDesign, and Photoshop.

InDesign

WE WOULDN'T USE THE WORD *flashy* to describe most of the changes to InDesign, but the new version may help you work faster and more efficiently.

Nested Styles In previous versions of InDesign, when you wanted to apply a character style to text formatted with an existing paragraph style, you had to apply the character formatting by hand. Now you can quickly apply character and paragraph styles simultaneously to the same text—including drop caps, inline headings, and table text. You can also specify the number of sentences, characters, and words to which they are applied.

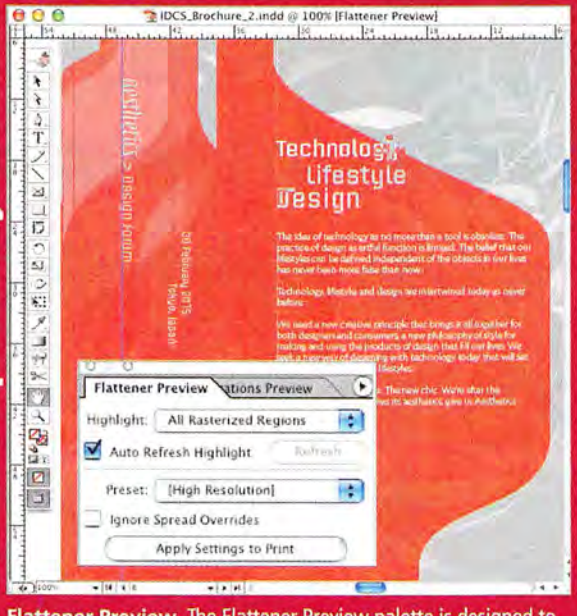
Separations Preview The Separations Preview palette lets you preview color separations. You can check potential problems such as knockouts and overprinting, and experiment with ink limits to see how your output might vary on different media and in various press conditions.

XML Support If your workflow requires XML, then InDesign CS's built-in support for Document Type Definitions (DTDs) may make integrating it easier. For example, once you've imported a DTD into the Structure view, tags in the DTD automatically show up in the Tags palette, and you can apply them to templates or content. You can also map XML styles to character styles, so InDesign knows to style anything with the XML tag Byline in 11-point HTF Champion, say.

Speedier Performance Since version 1.0, people have complained about InDesign's slow performance. Adobe says InDesign CS scrolls and redraws its screen 50 to 80 percent faster, imports Word and Excel documents 40 to 70 percent faster, imports PSD and EPS files as much as 70 percent faster, and prints complex PDF files 40 percent faster.

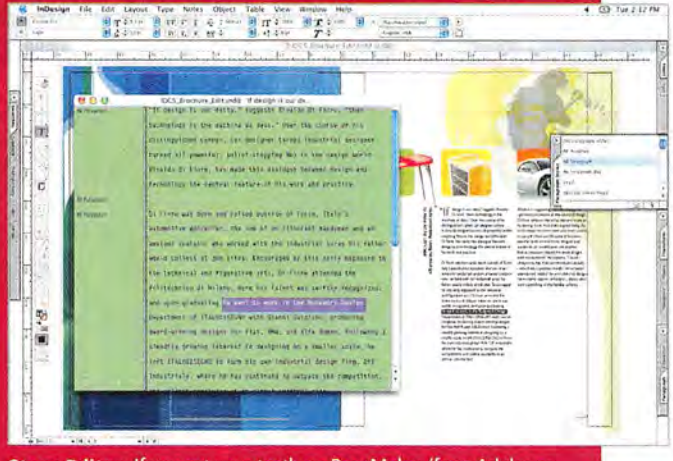
Interface Additions Several small but significant items debut in InDesign CS. Drag a palette to the left or right edge of a window, and it will shrink into a sidetab and dock itself along the edge of the window. The new Info palette should look familiar to Photoshop and Illustrator users; it shows you everything from how many characters, words, lines, and paragraphs are in a frame, to the resolution of an image after you resize it in InDesign. The Measure tool has been brought over from Illustrator. This tool helps you calculate the distance between any two points on your layout. The context-sensitive Control palette functions much like the one in QuarkXPress. The Document Presets feature lets you save a group of settings you use often—say, page and margin size, column number and placement, and bleed and slug settings—so you don't have to specify the settings manually.—TERRI STONE

No Transparency Trouble



Flattener Preview The Flattener Preview palette is designed to address problems InDesign 2.X users have had printing files that include transparent elements. (PostScript RIPs can't output transparent objects natively, so you have to first flatten transparency.) The new palette helps you identify areas that might be affected by flattening, such as complex vector graphics and outlined text, and control the flattening process with greater precision.

Tell Me a Story



Story Editor If you cut your teeth on PageMaker (from Adobe or Aldus), you'll be glad to hear that a text editor reminiscent of PageMaker's is now in InDesign. Story Editor is a lightweight word processor that displays your text in a separate window, where you can edit text, and view and apply text formatting, character and paragraph styles, and XML tags. As you alter text in the Story Editor, your layout reflects the changes. (Story Editor doesn't replace InCopy, Adobe's writing, editing, and workgroup-management product.)

Illustrator

ILLUSTRATOR CS ADDS quite a few high-level features to its already extensive list of abilities.

Scribble Effect One new feature is Scribble Effect, which is useful for making vector artwork that looks hand-drawn. The feature adds texture to your designs. You can control how far the scribble appears outside the lines of the original shape, and you can use these irregular shapes as image masks. Blending two scribbled shapes into a SWF file can also cause jumpy animation.

Type Enhancements Illustrator CS borrows from InDesign and adds many improvements to its type capabilities, including a redesigned text engine. Illustrator now has character and paragraph styles, which help you retain consistent formatting and save time by applying a series of attributes to characters and words with a click of the mouse.

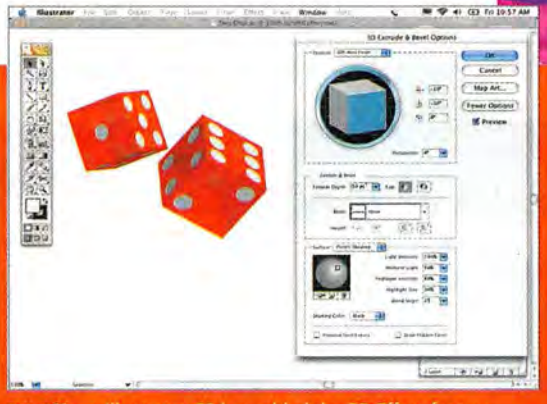
Illustrator CS now has advanced support for OpenType fonts and includes more than 100 such fonts. Styles can use OpenType font options such as ordinals, fractions, and discretionary ligatures, and the new Glyphs palette provides easy access to all of a font's glyphs.

Two new features help you reduce the time it takes to manually kern type. Optical Kerning analyzes words, lines, or paragraphs to determine the ideal spacing between characters of different fonts and sizes. Optical Margin Alignment shifts punctuation such as quotation marks and hyphens at the beginnings and endings of lines to make them look more even.

Better PDF Support Illustrator CS supports Acrobat 6 and the Adobe PDF 1.5 format. It also supports layers, printer's marks, and bleeds, and it provides extensive security (such as password, printing, and copying protections) for PDF files. To save time and ensure consistency, you can now save your PDF export settings as presets, and Illustrator CS includes three: Illustrator PDF, Press PDF, and Acrobat 6 Layered PDF.

Tight Office Integration Adobe has added a new Save For Microsoft Office command to Illustrator—useful when you want to use an Illustrator file in PowerPoint, Word, or Excel.—JONATHAN SEFF

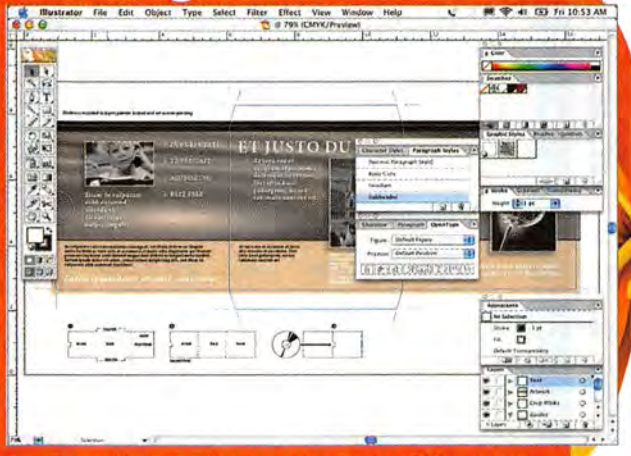
Roll Them Bones



3D Effect Illustrator CS has added the 3D Effect feature, for transforming shapes and type into 3-D objects. You can extrude shapes to create 3-D type, cubes, or other regular geometric shapes; revolve paths around a central axis to create bottles, glasses, or other circular shapes; and rotate a shape in 3-D space, so you can take advantage of another new feature, the ability to map artwork onto the surface of a 3-D shape. This feature can help you create product labels for 3-D objects, for example.

Like dedicated 3-D software packages, Illustrator CS lets you adjust lighting and surface characteristics of your 3-D objects. You can add as many lights as you want, each with individual intensity controls, as well as a shadow color for lighting as a whole. To determine the surface of an object, you can adjust matte and gloss controls and use other Illustrator effects. If you want to reuse what you've created, you can save your formatting choices as a graphics style to apply to other objects.

Starting Point



Templates Illustrator CS ships with more than 200 templates (in a new template file format), with custom-size artboards, layers, styles, swatches, symbols, and more, so you don't have to start every project from scratch. You'll find many blank templates for projects such as business cards, and you can save your own designs as templates with custom guides, character and paragraph styles, and more.

GoLive

WEB DESIGNERS FAMILIAR with previous versions of GoLive won't find GoLive CS jarring, but they will discover many useful new features.

Style Previews Although GoLive has long supported Cascading Style Sheets (CSS), GoLive CS is the first version that offers a preview of styles as they're created instead of just when they're applied to text and objects on a page.

Photoshop Support You can now crop Photoshop files from within GoLive, avoiding common extra steps. You can also zoom in on Photoshop files to see details.

Flash Conversion Flash SWF files are more elaborately supported, too. You can convert Illustrator files to SWF within GoLive, and there's better JavaScript for handling redirection across an entire Web site, for browsers that don't have a Flash plug-in installed.

Packages GoLive can now display previews of InDesign CS files, using InDesign's Package For GoLive feature. The preview is a replica of the InDesign layout, but individual objects, text layers, and stories can be dragged directly onto Web pages. You can also place native Illustrator and Photoshop files within package files on GoLive pages, and manipulate them within the program, as you could in previous GoLive versions.

Added Software The biggest change to GoLive is the external software that the program now interacts with. The first is Adobe Web Workgroup Server (AWWS), which was bundled with GoLive 6 and is now called Version Cue. It's available only as part of Adobe Creative Suite.

AWWS managed only Web sites, but Version Cue stores revisions and allows file check-in and checkout for all CS applications. This lets groups collaborate on projects, with all of their resources and versions in a central depository. Only one user at a time can check out a file.

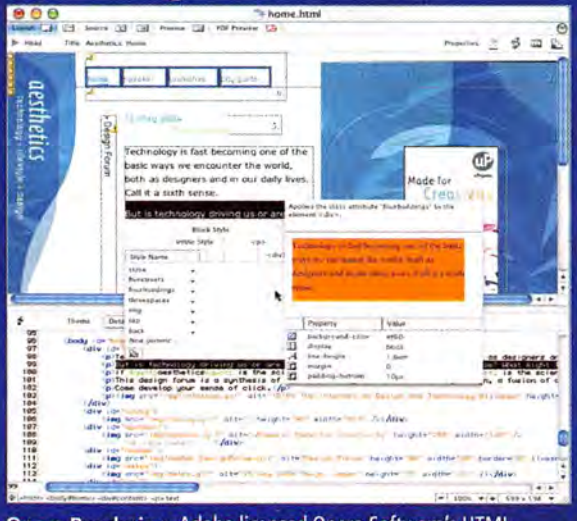
The second application is Co-Author, a program that lets a user edit Web pages that a designer has set up in GoLive CS. The designer defines regions, called *templates*, on each page. For instance, a menu document might have templates that allow a user to add new entrées or update prices.

The Web designer uploads the pages and then exports an encrypted XML document containing the FTP user name and password for accessing the Web site. A Co-Author user imports this document and can then open any file with Templates on the Web site. Co-Author users can change only specific areas within a file and do so with the help of a wizard.—GLENN FLEISHMAN

PDF Express

Edit PDFs GoLive CS lets you edit bookmarks and hyperlinks directly in PDF documents, and you can turn any Web page into a PDF file instantly from a page-layout window. (The latter feature was available in GoLive 6, but only through a plug-in that Adobe sold separately.)

Fast Layout



Opera Rendering Adobe licensed Opera Software's HTML-rendering engine to provide dynamic previews of a CSS style as it's defined. Opera's engine is also used to provide an optional live preview, via a rendering window, of pages as they're designed. The preview refreshes as you make changes to the raw HTML or the layout (if you work graphically in GoLive's Layout mode).

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8 Ways to Speed Up Office

NOT EVERYONE HAS A G5 MAC WITH 2GB OF RAM. IF YOU USE Microsoft Office v. X on a slower computer, such as an iMac or an iBook, you may find yourself twiddling your thumbs from time to time. But there are ways to make Office's applications move a little faster. Here's a handful of tips that will help speed up your work.

1. Turn Off Word's Live Word Count

If you're not a professional writer, you probably don't need to know how many words your document contains every second. Consider turning off Microsoft Word's Live Word Count feature—go to Word: Preferences, click on View, and deselect the Live Word Count option in the Window section.

When you do this, you speed up not only Word—a little memory-munching homunculus inside Word keeps the word-count display up-to-date—but also the rest of your Mac. The Live Word Count feature taxes your processor, even when the program is running in the background. If you have a long document open in the background, Word can hog 20 to 30 percent of your CPU's processing power. Even short documents can consume 10 percent.

If you need to know how many words your document contains, select Tools: Word Count, or just click on the blank part of the status bar (at the bottom of your document window) to the right of the Col section, where Live Word Count previously appeared.

2. Use Word's Normal Page View

When you want to see what your printed documents will look like, Word's Page Layout view (View: Page Layout) is handy. Don't use this view for run-of-the-mill editing and writing, though, unless you've got time to spare. In this view, Word must laboriously calculate page breaks, margins, and layout elements to display each page.

A better option is the Normal view (select View: Normal, or click on the Normal View button at the bottom left of your document window). Page breaks and section breaks appear as dashed lines, but you can still see all your graphics, tables, and other elements (except text boxes). Since Word doesn't have to calculate all the tiny details, the display is updated much faster. The difference is especially noticeable as you scroll through a document.

3. Turn Off Excel's Automatic Calculations

As you make changes to data or add new cells to formulas, Microsoft Excel dynamically updates the results of even your most complex calculations. While Excel works hard to keep all its behind-the-scenes calculations up-to-date, it can slow to a crawl. This is particularly noticeable if your worksheet has data tables, pivot tables, or charts.

You can speed things up by turning off automatic calculation. Select Excel: Preferences, click on Calculation, and make the change in the Calculation box. You have three choices: Automatic, Automatic Except Tables, and Manual.

If you don't need to see the results of every change, choose Manual. Select Automatic Except Tables if data tables are slowing down Excel. If you have very complex calculations, turn everything off. Leave the Recalculate Before Save option selected in Excel's preferences pane, so all your worksheet results get updated when you save your document.

GET MORE FROM ENTOURAGE

Ever wish you could read your e-mail on your cell phone, or print out all the praise-filled messages from a client in one fell swoop? If you use Microsoft Entourage, you're in luck. More than just an e-mail client, a personal information manager, and a newsgroup reader, Entourage is also the easiest Microsoft Office application to customize with AppleScripts.

Search for the word *Entourage* at MacScripter.net (http://scriptbuilders.net), and you'll find hundreds of AppleScripts—some freeware and some shareware—that can extend Entourage's power or automate tasks. Run scripts by selecting them from the AppleScript menu in the main menu bar. We've listed a few examples (other scripts let you quickly access different parts of Entourage, delete junk mail, merge contacts, print labels from your address book, and much more).

- **Export-Import Entourage X**, by Paul Berkowitz, lets you export and import almost everything (e-mail, contacts, calendar events, tasks, and notes) between Entourage and other PIM programs, such as Microsoft Outlook and Outlook Express (Mac and Windows), Yahoo, and MSN's Hotmail.
- **Forward Mail to SMS**, by Jonathan Nathan, makes sure that you never miss an important e-mail message—it automatically forwards those that meet certain criteria to your cell phone, in SMS format (text-message format).
- **Sync Entourage-Address Book**, by Paul Berkowitz, synchronizes your Entourage contacts with Apple's Address Book so you can use them in other places—for example, in fax programs, iSync, and iChat, as well as on your iPod.
- **Entourage Many to Word**, by Alan Watson, lets you select a single e-mail message or an entire folder and display all the messages in a Word document.

Just remember to recalculate your worksheet manually before printing or sending it to a colleague, or whenever you need to check the results of a formula: press ⌘–equal sign (=) or F9 to do this.

4. Turn Off Graphic Display in Word and Excel

When Word and Excel have to display a lot of graphics and charts, scrolling through documents can become slow and jerky. Why put up with that? You probably don't need to see your graphics once you've inserted, resized, and formatted them.

You can have both Word and Excel show only placeholders—empty black frames that mark the location and size of your graphics. In Word, select Word: Preferences; click on View; and in the Show section, select Image Placeholders. In Excel, select Excel: Preferences; click on View; and in the Objects section, select Show Placeholders. Documents in both of these programs will now scroll much faster, even if you use Word's Page Layout view.

5. Close Entourage's Progress Window

If you use Microsoft Entourage for e-mail, you've probably noticed the Progress window—it appears when you send or retrieve e-mail, and it shows the progress of messages as they arrive or leave. If you have several e-mail addresses and a slower Mac, you can see this window as it moves down the screen, account by account.

Close the Progress window (click on the red button in its left corner), and you won't lose anything—you'll still get all your mail. (If you need to check something's progress, you can always press ⌘-7.) You will, however, take some pressure off your Mac, which has one less thing to draw on screen.

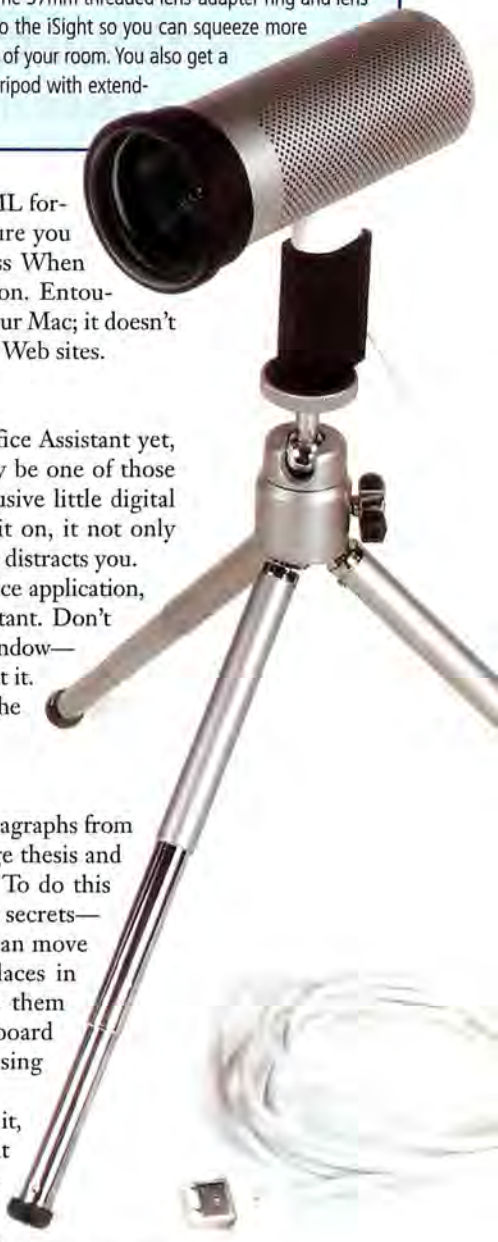
6. Turn Off HTML in Entourage

Entourage can display the fancy layouts of HTML e-mail messages, but do you always want to see them? You can turn off HTML display by selecting Entourage: Mail & News Preferences, and deselecting the Display Complex HTML In Messages option. And there are several good reasons to do so.

The first is speed: HTML messages display *much* more slowly than text. (If HTML is off, you'll still see the message text.) But there's another, more sinister reason: some HTML spam contains objects that let the spammer know whether your address is valid. If you open a message (or just preview it in the Preview pane), Entourage connects to the sender's server to request the graphics. This request contains a unique identifier that tells the spammer that you looked at the message, confirming your address. And confirmed addresses then get sold to more spammers!

IMPROVE YOUR iSIGHT ↓

If you freelance or telecommute, iChat AV has probably changed the way you dress for work. You can't show much more than your mug if you're using the iSight camera *au naturel*—without accessories, that is. Enter the $50 Kaidan Accessory Kit for the Apple iSight Video Camera (www.kaidan.com). The 37mm threaded lens-adapter ring and lens shade let you attach a wide-angle lens to the iSight so you can squeeze more people into the shot or show a wide view of your room. You also get a tripod-mounting adapter and a desktop tripod with extendable legs.—SCHOLLE SAWYER McFARLAND



If you really want to see the HTML formatting in your messages, make sure you deselect the Allow Network Access When Displaying Complex HTML option. Entourage then displays only what's on your Mac; it doesn't go checking—or snitching to—any Web sites.

7. Nuke the Office Assistant

If you haven't eighty-sixed the Office Assistant yet, now is a good time. Sure, you may be one of those people who actually find this intrusive little digital character useful, but if you leave it on, it not only slows down your programs but also distracts you.

Select the Help menu in any Office application, and deselect Use The Office Assistant. Don't just click on the close button in its window—it'll come back when you least expect it. If you need it later, just select Use The Office Assistant to bring it back.

8. Spike It

What if you need to move a few paragraphs from different locations in your 400-page thesis and put them together in chapter 17? To do this fast, use one of Word's best-kept secrets—the Spike. With this feature, you can move text or graphics from different places in open Word documents and place them together on a page. It's like a clipboard that lets you add items without erasing what you've already stored there.

To add an item to the Spike, select it, and then press ⌘-F3. (This cuts it from its original location.) Add as many items as you like. To paste everything into a new location, press ⌘-shift-F3. The Spike empties its contents at the cursor's location and is then ready to start again. Note that if you're using an iBook or a PowerBook, you'll need to add the function (fn) key (in the lower left corner of your keyboard) to these keyboard commands. □

KIRK McELHEARN, a freelance writer and journalist who lives in a village in the French Alps, coauthored *Microsoft Office v. X Inside Out* (Microsoft Press, 2002). His next book, *Unix for Mac OS X: Learning the Command Line,* will be released this fall by Addison-Wesley.

Working Mac is a monthly collection of tips that will help you be more efficient—and help you get home in time for dinner. We want to hear from you! If you've got secrets to share or suggestions for column topics—or if you just want to tell us what you think of *Working Mac*—e-mail us at workingmac@macworld.com.

More Bang for Your Burn

iTUNES, iPHOTO, AND iDVD ALL OFFER BURNING FEATURES. In most cases, using them is as easy as clicking on a button. But to get the most out of these burning tools, you'll need to look beneath the surface.

Whether you're burning an audio CD that transitions seamlessly from one song to another, or you want to include PDF files in your iDVD projects, here are some answers to iLife's burning questions.

Burning in iTunes

By tweaking the Burning preferences in iTunes, you can adjust the pauses between songs, the volume levels, and even the format of your final CD. To access these settings, choose Preferences from the iTunes menu and click on the Burning button.

Air Out Your Songs When iTunes burns an audio CD, it automatically puts a 2-second gap between tracks. But with some recordings, you may want to extend—or eliminate—that silence. For example, if you're burning a compilation of classical pieces, you may want to insert a longer pause. To do this, go to your Burning preferences pane and choose the number of seconds you want, from the Gap Between Songs pop-up menu.

For other recordings, you may want to lose the gap. But even if you choose None from the Gap Between Songs menu, you may not remove the silence completely—iTunes simply doesn't insert any additional silence. To learn how to get truly seamless transitions between songs, see "Mind the Gap."

Control Volume Not all albums are mastered at the same volume level. If you mix and match tracks from different CDs, some songs may sound much quieter than others. Instead of reaching for the volume knob, select the Use Sound Check option before burning (see "Fine-tune iTunes"). iTunes will adjust each track to make the levels consistent on the finished CD.

You can also even out volume levels between tracks while listening to your playlists in iTunes. Just click on the Effects button in the preferences pane and activate the Sound Check option there, too.

Know Your Formats Although an audio CD is great for playing music on almost any CD player, it's not your only option for burning your music to disc. iTunes can also burn MP3 CDs and data CDs. Which one you should choose depends on how you plan to use your music.

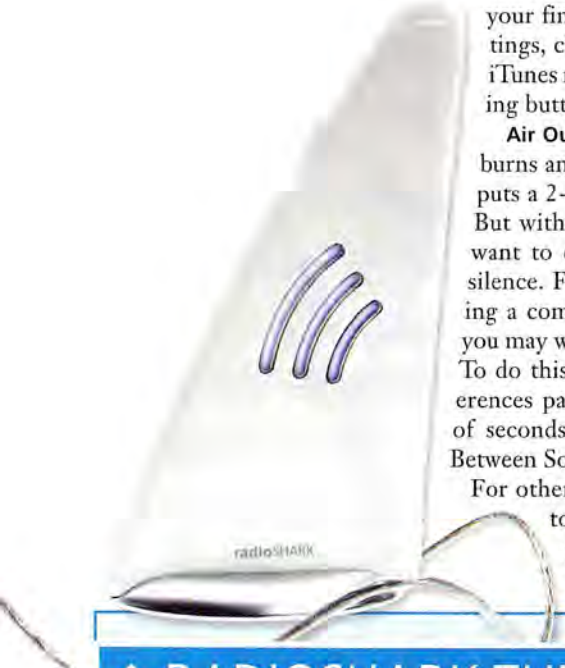
If you want to fit a large playlist on one CD, the MP3 format is your best option. Because MP3 files are more compressed, MP3 CDs can hold roughly ten times more music than audio CDs can. However, only some of the newest CD players can read MP3 CDs. If you can, before you go on a burning spree, test your home or car CD player to see whether it can handle MP3s.

Burning in MP3 format is also handy for copying songs from one Mac to another. Unlike an audio CD, an MP3 CD retains the song and artist information for each track when you insert it into a different computer.

To back up your music library or to move tracks stored in a variety of formats, your best choice is to burn a data CD—a new capability in iTunes 4. Data CDs can store tracks in any format that iTunes supports, including AAC, AIFF, WAV, and Audible.com audio books. If you have a DVD-R drive, you can even burn to a DVD and back up several gigabytes of songs at once.

Burning in iPhoto

In iPhoto 2, you can burn individual photos, entire rolls, a selection of albums, or your entire library onto a CD or a DVD. The only trick is that what-



↑ RADIOSHARK TUNES IN

Video recorders such as TiVo and ReplayTV have spoiled us. The ability to pause live TV, skip commercials, and watch scenes again is so addictively liberating that lately we've been wishing for a way to extend this control to other parts of our lives.

Griffin Technology hasn't yet found a way to replay conversations or fast-forward through boring meetings, but its new RadioShark does provide pause and record features for radio (615/399-7000, www.griffintechnology.com). The $50 RadioShark is a USB-powered AM-FM tuner—shaped like a shark's fin, of course. The device comes with software that lets you pause, play, and record radio shows. You can schedule the RadioShark to record shows while you're away from your desk. Then you can transfer recorded broadcasts to your iPod and listen on the go.

This shark swims in streams, too: the RadioShark can record streaming Internet audio broadcasts as well as local airwaves.

ever you burn must fit on a single disc—unlike a backup program, iPhoto can't back up across multiple discs.

Lose the Baggage iPhoto's burning feature creates a full-fledged iPhoto library, complete with thumbnail images, keywords and titles, and even the original versions of images you've edited. This is great for moving photos from one Mac to another. But if you're just burning a dozen photos to mail to a friend, you probably don't want all that extra baggage or the convoluted folder structure that accompanies it.

The solution: use OS X's disc-burning feature instead of iPhoto's Burn button. Insert a blank disc into your Mac and then drag the images you want from the iPhoto library to the disc's icon on your desktop. You can use the Finder to organize the photos into separate folders if you like. When you're done, control-click on the disc icon and choose Burn Disc from the contextual menu.

Work with Burned Discs When you insert a disc that was burned in iPhoto, you can, to some extent, work with the photos on the disc as if they were stored in your regular library. You can order prints, create slide shows, and export photos and QuickTime movies. But you can't retouch or otherwise edit the photos, since they're stored on a read-only medium. To get around this limitation, drag the image you want to edit into your photo library.

Burning in iDVD

With iDVD's burning options, you can include photos and other documents on your DVDs or reclaim valuable disk space after burning.

Include Original Photos An iDVD slide show is a great way to share digital photos. But what if you want others to be able to work with the original image files? There's no way to extract high-resolution images from an iDVD slide show, but you can have iDVD include the original image files on the disc. To do this, choose Preferences from the iDVD menu, click on the Slideshow button, and activate the Always Add Original Slideshow Photos To DVD-ROM option.

When you include original images, your final DVD will still play on a standard DVD player. However, if you insert the disc into the DVD drive on a Mac or a PC, you'll see an additional folder, named DVD-ROM Contents. Inside this folder are your original image files.

Burn Documents You can add more than just photos to a disc's DVD-ROM folder. If you're creating a promotional disc for your company, for example, you might want to include PDF documents—such as your brochures and price lists.

MIND THE GAP

On concept albums such as Pink Floyd's *Dark Side of the Moon*, the music flows seamlessly from one song to the next—that is, unless you downloaded the songs from Apple's iTunes Music store or ripped them as MP3 files. Because of the nature of these compressed formats, you'll hear a tiny silence between connected songs when listening to them on your burned CD or on an iPod. In fact, you'll hear this gap even if you've gone into iTunes' Burning preferences pane and set the Gap Between Songs menu to None.

To hear these tracks as the artists intended—gapless—you'll need to rip them from a CD. With the audio CD inserted, open the CD's playlist in iTunes and select the songs you'd like to run together. Next, choose Join CD Tracks from the Advanced menu. iTunes will then create one long file that contains all the songs you selected, without any distracting silence.

Of course, it's difficult to navigate from song to song in such a file. And if you're listening on an iPod, keep in mind that these long tracks will also take a toll on your battery's charge.—CHRISTOPHER BREEN

To add other types of files to your DVD, open the Customize drawer and click on the Status button. Choose DVD-ROM Contents from the pop-up menu. Then drag any files you want to include on the disc into the box below the pop-up menu.

Reclaim Disk Space Normally, iDVD saves an MPEG file whenever you close a project. This lets you burn another DVD without having to wait for iDVD to encode the files. But these MPEG files can devour a lot of disk space.

Fine-tune iTunes
In iTunes' Burning preferences pane, you can control the gaps between songs, even out volume levels, and create an MP3 CD or a data CD.

To have iDVD delete these files when you close a project, choose Preferences from the iDVD menu and click on the General button. Select the Delete Rendered Files After Closing A Project option. You'll wait longer the next time you burn a copy of that DVD, but you can reclaim as much as 4GB of disk space. □

Contributing Editor JIM HEID is the author of *The Macintosh iLife* (Peachpit Press/Avondale Media, 2003), and he publishes iLife tips at www.macilife.com.

Digital Hub is a monthly collection of tips and strategies for anyone who creates movies, music, or photographs for personal use. We want to hear from you! If you've got secrets to share or suggestions for column topics—or if you just want to tell us what you think of *Digital Hub*—e-mail us at digitalhub@macworld.com.

Powerhouse Plug-Ins

MAYBE THERE WAS ONCE A GOLDEN AGE WHEN GRAPHIC designers could spend hours, or even days, modifying an image in search of just the right effect. Today's creative professionals need to produce high-quality images in less time and on smaller budgets. While meeting that need with more software may seem counterintuitive, using the right tool for the job is important. Here, we examine four specialized tools: these Adobe Photoshop–compatible plug-ins also work in Adobe Photoshop Elements 2, Macromedia Fireworks MX, and other OS X applications that support Photoshop plug-ins.

The Sky's the Limit

Say you're designing a travel brochure and have a perfectly good photo of a resort, but the sky is a little dull. Or maybe you're working on a mock-up of a new building and your client asks you to add a pond. Aurora 2.0, from Digital Element (♦♦♦½; $179; 510/601-7351, www.digi-element.com), generates dramatic, true-to-life skies and water—not from a collection of canned images, but from scratch. And for extra realism, the plug-in can use your foreground layers to create reflections and shadows in the water.

Sky High In the original photo, the sky was a clear blue. We added colorful clouds with the Aurora filter.

Aurora's interface is relatively straightforward, with controls for every aspect of every effect. In fact, there are so many options, you may find it easier to turn to the presets and the handy Variator, which displays eight variations of your current choice.

Aurora places a virtual camera at a distance from your existing objects. It lets you add sky and water, and then it generates appropriate shadows and reflections of your objects. If you place each of your objects on a different layer in Photoshop and tell Aurora what each layer's intended distance from the virtual camera is, the program will resize and illuminate the items appropriately, and it will then add their reflections to the water it builds. You can control the horizon, cloud height, water color, and many other variables. The clear manual provides excellent basic examples of how to create effects, as well as explanations and tips for all the advanced adjustments.

Full installation requires an Internet connection—you enter the serial number, and the company sends a license number to you via e-mail. Until you enter the license number, some features are disabled.

The Grass Is Greener

Digital Element's $199 Verdant 1.03 (♦♦♦) uses advanced 3-D–modeling and –rendering technology to add photo-realistic greenery to existing 2-D images. Verdant generates convincing trees and shrubs singly or in groups of as many as 100. It includes 35 varieties of trees, from palms to pines, and each is infinitely customizable, in age, size, branch angle and density, amount of greenness, and more.

You can rotate the trees in 3-D space, adjust the viewing angle, and assign light sources in any color to match your original image. Groups of trees can follow a built-in pattern, such as rows or clusters, or you can add your own pattern.

You don't need to know anything about 3-D modeling to use Verdant, but you do need a powerful computer. Digital Element recommends a G4 processor and 512MB of RAM. I used Verdant on a 1GHz G4 with 768MB of RAM. While I could accomplish my goals, the software was unacceptably slow when manipulating or rendering groups of trees.

As with Aurora, you'll have to register the software to use all of its features.

Changing Perspective

The Perspective filter, from Andromeda Software (♦♦♦½; $44; 800/547-0055, www.andromeda.com), lets you rotate a flat image in 3-D space. This allows you to make an image seem as if it had been shot from another position. This plug-in can also correct *keystoning*, the illusion that the distant end of a tall or long object is smaller than the closer end. You can also use the plug-in to change a photo's perceived camera angle, which is an easy way to improve the realism of collages.

There are presets for common camera angles, such as High Right and Low Bottom. You can also click on arrow-shaped buttons to tilt, swing, and zoom the virtual camera and to rotate your image in 3-D space.

Monumental Changes You can grow palm trees (or other types of greenery) in Washington, D.C., with the Verdant plug-in (left). The Perspective filter can fix keystoning or skew an image for mock-ups of product packaging (middle). Rip Open is one of many effects that you can apply to a Photoshop layer in Xenofex 2 (right).

Once you've found a useful perspective, you can save it as a preset for future use.

One challenge of this process is that any time you change the perspective of an image, one end of it becomes narrower than the other, resulting in white space around the image. You must either crop the wider end or somehow add image data to the narrower end. The filter provides assistance in the form of a color picker that lets you choose a color to fill the empty space, but if your photo has a complex background, you're stuck with an oddly shaped image.

Open Up Your Image

Among the most difficult effects to create are those that occur in nature: cracks, rips, burns, lightning, clouds, stars, and so on. Yet these effects are worth pursuing for the drama they add to pictures. Alien Skin Software's $129 Xenofex 2 (♦♦♦♦; 888/921-7546, www.alienskin.com) automates the process of creating these realistic natural phenomena, with an interface that's inviting and easy to use.

If you want to peel back a portion of an image to reveal something else beneath, try the Rip Open effect. When you want to imply that an institution is crumbling or that an object is very old, add cracks with the Cracks effect. Or try one of the 12 other effects, which can add lightning or stars to a night sky, make a picture look as though it were displayed on a bad television, or place a logo on a waving flag. Put a water stain on a document or crumple it up; burn a hole in an image or just burn the edges—Xenofex 2 makes it easy. You can apply all these effects to an entire image or just to a selection. Hundreds of presets and a Random Seed button help you quickly find an effect you can use, but sliders also give you control over every detail of the transformation.

Xenofex 2 has one more feature worth applauding: its manual. This truly useful reference is clear and entertaining. □

JAY NELSON is the editor and publisher of Design Tools Monthly (www.design-tools.com), a respected source of news and advice for graphic-design professionals.

WARM IT UP

You're up-to-date, but sometimes the digital world is so . . . cold. For times like this, turn to the Sherwood Type Collection, from P22 Type Foundry ($350; 800/722-5080, www.p22.com). These 28 history-based fonts by Ted Staunton will add depth to your designs.—TERRI STONE

Sherwood
Plymouth
Mercian
Roanoke
Mayflower
1722
Albion
Aragon
Elven
Symphony

Create is a monthly column for professional print and Web designers and audio and video pros. We want to hear from you! If you've got secrets to share or suggestions for column topics—or if you just want to tell us what you think of *Create*—e-mail us at create@macworld.com.

SECRETS BY PHILIP MICHAELS AND LISA SCHMEISER

Have iPod, Will Travel

WE WERE LEAVING SAN FRANCISCO FOR OUR ANNUAL TRIP to Las Vegas, where we would tour the strip, go to an all-night buffet, and see shows that Broadway wouldn't know what to do with. Las Vegas is approximately 570 miles from San Francisco—or, the way we drive, roughly eight hours. But it wasn't the unending stretch of highway that concerned us; it was how two people with incompatible musical tastes were going to survive eight hours (each way) without coming to blows over whose music we'd play. Apple's iPod was the perfect choice: we could fit both of our music libraries on its 20GB hard drive, and it decides which songs to play via the fair and equitable shuffle function. We just needed a way to get the music from our iPod to our car stereo.

Fortunately, there are plenty of inexpensive adapter options. We focused on two types: simple cassette-shaped conduits that connect an iPod to a car's cassette deck, and FM transmitters, which send the iPod's audio to your FM radio. On the cassette-adapter side, we used Creative Labs' $20 Nomad Cassette Adapter, Sony's $20 CPA-9C MiniDisc and Discman Cassette Adapter, and XtremeMac's $20 iPod Cassette Adapter. On the FM-transmitter side, we took along Belkin's $40 TuneCast Mobile FM Transmitter and First International Digital's $30 iRock 300W Wireless FM Transmitter (each of which requires two AAA batteries), as well as Griffin Technology's $35 iTrip.

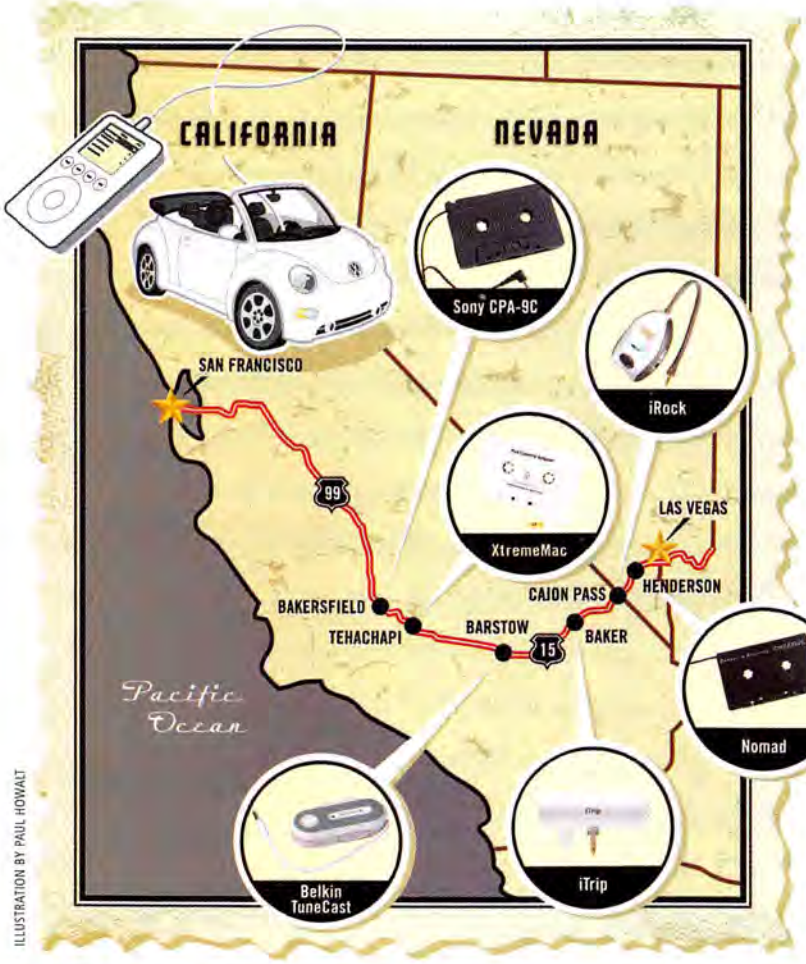


ILLUSTRATION BY PAUL HOWALT

Bakersfield, CA—286 Miles to Las Vegas

We started with the Sony (800/222-7669, www.sonystyle.com). Setup for this device and the other cassette adapters was a snap: you just put the imitation cassette into your deck and plug the cord into your iPod's headphone jack. But we soon discovered that turning up the car stereo's volume not only amplified the track we were playing, but also intensified any muddled tones or fuzziness. We got better sound quality by turning up our iPod's volume to the 80 percent range and then adjusting the stereo's volume on a track-by-track basis.

Tehachapi, CA—247 Miles to Las Vegas

After popping in the XtremeMac cassette adapter (866/392-9800, www.xtrememac.com), we were fairly pleased. And after 30 minutes of vigorous debate about sound clarity, we concluded that there was no discernible difference between the XtremeMac's audio and the Sony's.

Barstow, CA—156 Miles to Las Vegas

After nearly one hundred miles of cassette-adapter experimentation, we tried our luck with the FM transmitters. Our first attempt at using Griffin Technology's iTrip (615/399-7000, www.griffintechnology.com) ended in disaster when, spoiled by the plug-and-play simplicity of the cassette adapters, we tried plugging the iTrip in before reading its fairly complicated directions. So much for ease of use. (This was the only product whose setup was not self-evident.)

We quickly gave up, moving on to the Belkin TuneCast (800/223-5546, www.belkin.com). Unlike the iTrip, which lets you broadcast your iPod's tunes over any FM frequency, the TuneCast (as well as First International Digital's iRock) offers only four choices

(88.1, 88.3, 88.5, and 88.7). The limited options mean greater simplicity; not long after we'd hooked up the TuneCast, we could clearly hear Kate Bush over the car stereo. Unfortunately, when we turned up the volume so we could actually make out the words to "Running Up That Hill," a low, static-like hum settled in; changing frequencies didn't help. And that's a flaw of FM transmitters—as you move through broadcast areas, static will occasionally come through your songs. The TuneCast's biggest drawback—other than persistent static—is that it's sensitive to placement within your car. The closer you hold it to the radio, the louder and clearer it sounds.

We tried the iRock (847/202-1900, www.myirock.com), which uses the same four-frequency setup as the TuneCast but has a different, teardrop-shape look. And the iRock had the same static problem but not the TuneCast's strong signal. We heard radio stations bleeding through our music; this would make the iRock less than ideal for any area where local stations broadcast at a very strong frequency.

Cajon Pass, CA—80 Miles to Las Vegas

Once we'd climbed to 4,000 feet above sea level, we were eager to see whether the lack of readily available radio stations would make the iRock sound less noisy. It didn't.

Henderson, NV—16 Miles to Las Vegas

As the Las Vegas strip loomed before us, we did one last test, figuring that the standstill traffic would give us plenty of time to evaluate Creative Labs' Nomad cassette adapter (800/998-5227, www.americas.creative.com). It performed beautifully: the Nomad featured the best sound of the bunch, picking up low tones so well that we could actually make out the background singers' lyrics in a Solomon Burke anthem, and every line of dialogue in Monty Python's "Cheese Shop" sketch. It handled recordings that predated stereo technology, as well as The Who's *Quadrophrenia*.

Henderson, NV, again—554 Miles to San Francisco

After 48 hours of giving Las Vegas a run for its money, we began the long trek home.

Baker, CA—477 Miles to San Francisco

After poring over the iTrip's instructions—and fighting off nausea caused by reading while the car was in motion—Lisa gave the transmitter another try. Here's how it works: First you have to find an FM frequency that has minimal interference. Then you scan through a list of iTrip stations, stored on your iPod as a playlist (which you remembered to load before you left home), until you've found the matching signal. You hold down the iPod's play button until the blue LED begins to rapidly blink, and then you click on the play button once more. If the LED pulses three times, you've successfully programmed the iTrip. The persistent radio static was our only clue that we had again failed to make the iTrip work.

Fresno, CA—155 Miles to San Francisco

Victory! We managed to make the iTrip work. The iTrip plugs into the iPod's headphone jack; a piece of plastic inserted into the FireWire port anchors the iTrip to the iPod (another version, without this piece, is available for third-generation iPods). We noticed that our model's anchor caused the iTrip to come loose from the headphone jack. So we detached the iTrip from the FireWire port and let it swing free by its headphone jack. The blue light started blinking, and the signal came in loud and clear.

At least it did until a radio station came in at the same frequency. After spending ten minutes looking for an open FM frequency, we decided to give our nerves a rest and return to the comfort of a cassette adapter.

The End of the Road

We arrived home more experienced in the ways of the iPod than we'd been at our journey's start. After our trials, tribulations, and frustration with the FM transmitters, the cassette-based adapters had won us over. If your car has a working cassette deck, this lower-tech method is the way to go. Cassette adapters just work, making them perfect for solo travelers. Best of all, they helped maintain a state of marital—and musical—bliss on the long road to Sin City. □

Philip Michaels and Lisa Schmeiser are editors at *Macworld*. Michaels won money during this trip to Vegas; Schmeiser did not.

POWERBOOK EXTREME

When Apple announced AirPort Extreme–equipped PowerBooks, owners of older PowerBooks were a little let down. Sure, Mac users with original AirPort (802.11b) cards could join an AirPort Extreme (802.11g) network, but not at AirPort Extreme speeds. Apple said that it had no plans to sell an Extreme card that fit the original AirPort slot. And 802.11g cards for Windows users didn't come with Mac drivers.

But now there's a way for left-behind PowerBook users to get on the Extreme bandwagon—if they're running Mac OS X 10.2.6. Just pick up a compatible PC Card and download AirPort 3.1. Put it in your PowerBook's PC Card slot, and configure it via the AirPort tab of the Network pane in System Preferences—then you're good to go.

Of course, not just any card will do. You need one that's based on the Broadcomm chip, also the basis of Apple's AirPort Extreme cards. (Most Windows-centric vendors' products don't use the Broadcomm chip, so they won't work with a Mac.) These cards will work: The $60 FriendlyNet AeroLAN AL5402-XG 802.11g Wireless CardBus Adapter, from Asanté (408/435-8388, www.asante.com); the $50 AirStation 54 Mbps Wireless Notebook Adapter, from Buffalo Technologies (800/456-9799, www.buffalotech.com); or the $80 Aria Extreme, from Sonnet (949/587-3500, www.sonnettech.com).—SHELLY BRISBIN

Mobile Mac is the place for tips on making the most of your PowerBook, your iBook, or their sidekicks. We want to hear from you! If you've got secrets to share or suggestions for column topics—or if you just want to tell us what you think of *Mobile Mac*—e-mail us, at mobilemac@macworld.com.

SECRETS BY SCOTT LOVE AND CHARLES ROSS

Scripting FileMaker and iCal

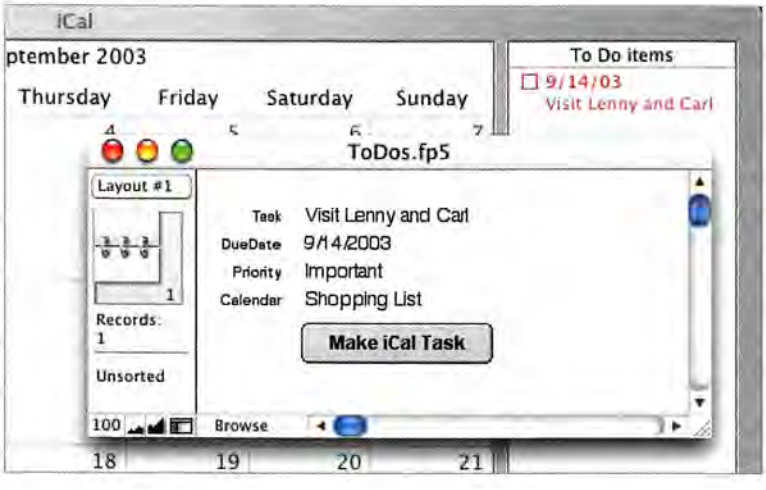
FILEMAKER PRO IS EASY TO USE AND SUPREMELY SCRIPTable via AppleScript; it lets you design databases that do almost anything, including interact with data in other programs. This sample project is a case in point. With it, you can track a project's to-do items via a system created in FileMaker Pro (800/325-2747, www.filemaker.com). And it lets you push those to-do items to a handheld device via Apple's free iCal application and iSync utility. (For an AppleScript primer, see "Amazing AppleScript," December 2002.)

Needed: Two Databases

You can use AppleScript to create massive database systems, but for this example, we needed to create two small databases. (If you don't want to create these files or to type out the scripts, you can download them from www.macworld.com/downloads/fm-ical.sit.) Set up one database, named ToDos.fp5, that contains three Text fields (Task, Calendar, and Priority) and one Date field (DueDate). The other database, Calendars.fp5, should contain one Text field (CalendarName). In the ToDos.fp5 database, format the Priority field as a pop-up list with an attached value list containing four options: None, Very Important, Important, and Not Important. You should also format the Calendar field as a pop-up list with a value list containing the contents of the field CalendarName in the Calendars.fp5 file.

First Script: Sync Calendars

The first thing you'll do is write a script that synchronizes your iCal calendars with the contents of the Calendars.fp5 database: if you create new calendars within FileMaker, they'll be added to iCal, and if you add new calendars to iCal, FileMaker will pick them up automatically.



Wired Up Clicking on the button runs a script that adds a to-do item to iCal.

You use ScriptMaker, FileMaker's built-in automation system, to embed an AppleScript within FileMaker. While ToDos.fp5 is active, select Scripts: ScriptMaker. Type a new script name, iCal Sync, and click on Create. FileMaker will open a script-definition dialog box with a pane to the left of your script choices. (Delete the items it has placed in the right pane by default.) Since your script requires that the Calendars.fp5 file also be open, scroll to near the bottom of the Files subsection and double-click on Open. Then click on the Specify File button and choose your Calendars.fp5 file.

To embed any AppleScript code in FileMaker, you need to scroll almost to the bottom of the left pane and double-click on Perform AppleScript; then click on the Specify button. In the resulting window, you can type or paste your AppleScript code (see "Script Snippet: iCal Sync").

The script stores the available calendar names from iCal and FileMaker in a few list variables (iCalList and FMCalList), and then loops through each list and compares the calendars in FileMaker and iCal. If calendar names that appear in one list are missing in the other, the script supplies the missing data.

While this script explicitly targets the iCal application, it doesn't target FileMaker by name. Because the script is stored within FileMaker itself, the program assumes that any commands not targeted elsewhere are meant for it.

To make this script run every time your database file opens, select FileMaker Pro: Preferences: Document. In the When Opening 'ToDos.fp5' section, select the Perform Script option and then select iCal Sync.

When creating the new record in FileMaker, the script uses the with data qualifier for create new record. In this case, your record has only one field, so the data is a simple string (stored in the theCalendar variable). However, if the database contained multiple fields, you could accomplish the same type of operation by using a list: the data's position in the list would determine which field received the data, with the creation order of the fields in FileMaker setting the order in which AppleScript populates them. You can also set individual fields (called *cells* in FileMaker terminology) in a record by using a command such as

set cell "CalendarName" of current record of database "Calendars.fp5" to theCalendar.

Second Script: Export Events

The previous script used iCal data to add items to FileMaker. Now you can create a new iCal To-Do item from a FileMaker record. (Use the method described earlier to create a new ScriptMaker script—this one called CreateToDo—in the ToDos.fp5 database, with an Execute AppleScript item within that script.)

This script (see "Script Snippet: Create To-Do") extracts the data from the current FileMaker field and stores each item in a variable (theDueDate, theSummary, and so on). Note that we saved a good deal of typing by using the tell block that begins with tell current record of database "ToDos.fp5", rather than repeating the same information in all four lines.

The line set theDueDate to date theDueDate may seem repetitive, but it's necessary. FileMaker returns the contents of a Date-formatted field as a text string. This line converts that text into a proper AppleScript date object.

Next, the script instructions create the variable prioritiesList, which maps a list of priority names to their iCal-equivalent values. For example, Very Important gets converted to an iCal priority level of 1.

Finally, the script tells iCal what to do. Since your database allows the user to choose a calendar for each to-do item, the subsequent repeat loop matches the selection to the calendar in iCal and sets that calendar in the variable theCal. If you entered a calendar that isn't already in iCal (and you haven't run the iCal Sync script in the meantime), the initial value of theCal will be empty—in AppleScript terms, "". If that's the case, the script creates a new calendar in both iCal and in Calendars.fp5, storing a reference to the iCal calendar within the theCal variable.

Finally, with the code beginning make todo at end of todos, we tell iCal to add the FileMaker to-do item to iCal.

The Final Touch: Add a Button in FileMaker

You can run your script from FileMaker's ScriptMaker menu, but to make it even easier to use, wire it to a FileMaker button. In Layout mode, draw a button with the button tool. When the Specify Button dialog box appears, click on the Perform Script step in the list on the left, and select Create ToDo from the Specify pop-up menu on the right.

Back in Browse mode, try entering some data in the record fields, and then click on the button (see "Wired Up"). Switch to iCal, and you should see your new to-do. Now you're free to take your project to-dos on the road, secure in the knowledge that they agree with your FileMaker data at the office. □

SCRIPT SNIPPET: iCAL SYNC

```
set iCalList to {}
tell application "iCal"
	repeat with theCal in every calendar
		set iCalList to iCalList & {title of theCal}
	end repeat
end tell
set FMCalList to every record of database "Calendars.fp5"
repeat with theCalendar in iCalList
	if theCalendar is not in FMCalList then ¬
		create new record at database ¬
			"Calendars.fp5" with data theCalendar
end repeat
repeat with theCalendar in FMCalList
	if theCalendar is not in iCalList then ¬
		tell application "iCal" to ¬
			make new calendar with properties ¬
				{writable:true} & ¬
				{title:theCalendar}
end repeat
```

Note: The ¬ character (option-L, or option-return in most script editors) tells AppleScript that the next line is actually a continuation of the current line. Breaking up lines of AppleScript this way makes the code easier to read.

SCRIPT SNIPPET: CREATE TO-DO

```
tell current record of database "ToDos.fp5"
	set theDueDate to cell "DueDate"
	set theSummary to cell "Task"
	set thePriority to cell "Priority"
	set theCalendar to cell "Calendar"
end tell
set theDueDate to date theDueDate
set thePriority to 0
set prioritiesList to ¬
	{{priorityName:"None", priorityNumber:0}} & ¬
	{{priorityName:"Very Important", priorityNumber:1}} & ¬
	{{priorityName:"Important", priorityNumber:5}} & ¬
	{{priorityName:"Not Important", priorityNumber:9}}
repeat with currentPriority in prioritiesList
	if thePriority is priorityName of currentPriority then
		set thePriority to priorityNumber of currentPriority
		exit repeat
	end if
end repeat
tell application "iCal"
	set theCal to ""
	repeat with i from 1 to count of every calendar
	if title of (item i of every calendar) is theCalendar then ¬
		set theCal to item i of every calendar
	end repeat
	if theCal is "" then
		set theCal to make new calendar with properties ¬
			{writable:true} & ¬
			{title:theCalendar}
		tell application "FileMaker Pro" to ¬
			create new record at database ¬
				"Calendars.fp5" with data theCalendar
	end if
	make todo at end of todos of theCal with properties ¬
		{due date:theDueDate} & ¬
		{summary:theSummary} & ¬
		{priority:thePriority}
end tell
```

SCOTT LOVE is a principal of the database-development company The Moyer Group (www.moyergroup.com). CHARLES ROSS is an application developer for The Moyer Group.

Geek Factor is a monthly guide to pushing your Mac to its limits—for fun, for increased productivity, or for both. We want to hear from you! If you've got secrets to share or suggestions for column topics—or if you just want to tell us what you think of *Geek Factor*—e-mail us at geekfactor@macworld.com.

Mac OS X Hints

THIS MONTH, LEARN SHORTCUTS, HINTS, AND UNIX TIPS for deleting iTunes playlists, building quick image galleries, turning off Mail's junk-mail sounds, changing Terminal's calendar language, installing system updates remotely, blocking access to certain Web sites, restoring a lost Purchased Music playlist in iTunes, and more.

Delete an iTunes Playlist without Warning

When you try to delete a playlist in iTunes, you're greeted by a confirmation dialog box asking, "Are you sure you want to delete the playlist '*name*'?" You could permanently remove this dialog box by selecting the Do Not Ask Me Again option, but this is a pain to undo later.

A better solution is to leave the warning dialog box enabled, but bypass it when you're positive you want to delete a playlist. Just press ⌘-delete with the chosen playlist highlighted. iTunes will then delete the playlist without any warning.

Toggle Audio and MP3 CD Burning in iTunes

iTunes lets you burn either standard audio CDs or MP3 CDs, which many newer car and home CD players can play. Normally, toggling between the two burning modes requires opening iTunes' preferences, clicking on the Burning button, choosing the desired disc format, and then clicking on OK.

A much simpler solution is to leave your preferences set for audio-CD burning, and let iTunes' intelligence do the work for you. Just select more than 80 minutes' worth of music (the maximum amount for a blank 700MB CD), and iTunes will display a dialog box warning that the chosen songs will not fit on a standard audio CD, and offering instead to burn a data CD. Click on the Data CD button, and you'll soon have all the MP3s on your CD. Note that not all players can handle data CDs, so test one before you create a dozen party-tunes collections for your next event.

Build a Quick HTML Image Gallery

iPhoto is a great tool for building image galleries. But you may want to create a gallery from images that aren't stored in iPhoto—for example, a collection of images received via e-mail. If you just need a quick and simple gallery, you can use an AppleScript included in OS X to get the job done.

From the root level of your hard drive, open Library: Image Capture: Scripts. These scripts are designed to be used with the Image Capture application, but they'll also work fine on their own. Drag a folder of images onto the Build Web Page script. When it's done, the script will open your preferred browser and load the image gallery. Your image folder will now contain your original, unaltered photos, as well as your HTML gallery in an Index folder.

Silence Mail's Junk-Mail Sounds

Tired of hearing Mail's new-mail alert, only to find that your new message is yet another request for help in transferring $20 million from a Nigerian bank? To eliminate these false alarms, start by opening Mail's preferences, clicking on the Accounts tab, and then setting the New Mail Sound menu to None. Click on the Rules tab and then click on the Add Rule button. Set the If section to Any, and the pop-up menu underneath to Every Message. In the Perform The Following Actions section, choose Play Sound, and then choose your favorite sound effect (to learn how to add your own sounds, see "Give Mail Its Own Voice"). Click on OK to save the new rule.

Now move your new rule so it's just below all your junk-mail rules (move these to the top of the list if necessary). Select the first junk-mail rule and click on Edit; then click on the last plus sign (+) in the Perform The Following Actions section to add a new action at the end of the list. Select Stop Evaluating

UNIX TIP OF THE MONTH

One of the more interesting features in Unix is the ability to create your own commands through things called aliases. They're not related to the aliases you might create in the Finder; instead, they're a way to make a shortcut for something you do regularly in Terminal. For example, if you work with the built-in Web server, you may find yourself opening Terminal and typing cd /Library/WebServer/Documents to change to the Web server's file directory. With an alias, you can shorten that to simply webfiles or even wf if you prefer.

Open Terminal and type pico .tcshrc. Pico is a text editor, and .tcshrc is a special configuration file that can store aliases (among other things). Now type alias wf 'cd /Library/WebServer/Documents' on an empty line if there are other lines in the file already. Press control-O and return to save the file. Press control-X to quit pico, and type source .tcshrc to read your newly updated file; then type wf.

Similarly, to make your changes from "Translate Terminal's Calendar Language" permanent, add the alias line from that hint to the .tcshrc file and save it as described above.

Rules in the pop-up menu, and then click on OK to save your changes. Repeat for each junk-mail rule you have. Now you'll no longer hear the new-mail sound for every piece of spam you receive.

Translate Terminal's Calendar Language

In Terminal, the Unix command cal will display a monthly calendar. But if your native language isn't English, you may not like its English-only date headings. To switch the headings to another language (in this example, French), enter the following in Terminal (note that there are two spaces between S and M, Tu and W, Th and F, and F and S):

```
alias cal "cal | sed 's/ S  M Tu  W Th  F  S/Di Lu Ma
Me Je Ve Sa/'"
```

Now the cal command will run your alias instead, and substitute your replacements for the stock day names. To make this change stick after you close your window, however, you'll have to add the alias to one of the invisible Unix files in OS X, the .tcshrc file at the root of your user folder (for more on this, see "Unix Tip of the Month").

Install System Updates from Afar

Ever been at work when Apple released a big software update and wished you could start the update at home right away? If you have a full-time Internet connection and you've set up your Mac for remote access, you can. Just connect to your home Mac via a command-line interface and type:

```
sudo softwareupdate
```

Software Update will run and let you know if it finds any new updates. If it does, you'll see the update name and description. To install the update, just type:

```
sudo softwareupdate update name
```

Software Update will then start downloading and installing the selected update while you finish your day at the office.

Block Certain Web Sites

Have a project that absolutely must be done today, and don't have time for your daily Slashdot fix? Or don't want the kids to be able to visit a certain page? Open Terminal and type:

```
sudo sh -c 'echo "127.0.0.1 slashdot.org" >>
/etc/hosts'
```

Reboot your machine, and all attempts to view your favorite OS X hints site will result in your browser's loading your local machine's Web pages instead. When you want to undo your restrictions, type:

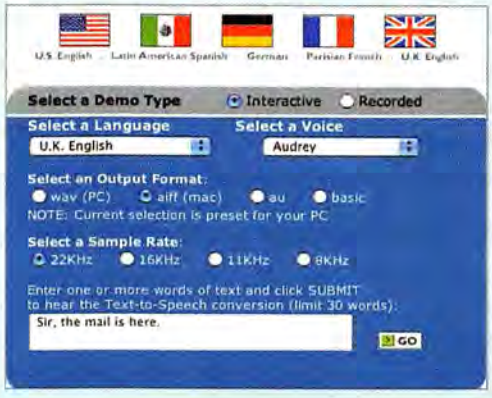
```
sudo pico /etc/hosts
```

Delete the line you added (127.0.0.1 slashdot.org in this example), and then press control-O to save the file and control-X to exit. Once you reboot, all will be back to normal.

GIVE MAIL ITS OWN VOICE

Tired of the boring new-mail alert sounds? With a bit of help from AT&T's Natural Voices demo site (www.naturalvoices.att.com/demos/), you can create your own customized e-mail announcements. Load the site, choose a language and voice from the pop-up menus, set the output format to Aiff (Mac), change the sample rate to 22kHz, enter your text, and click on the Go button (as shown in "Speak, Mail, Speak"). Once the sound has played, select File: Save As and save the file.

In Mail, edit the rule you created in "Silence Mail's Junk-Mail Sounds": Select Add/Remove from the pop-up menu of sounds. Click on the Add button, navigate to your new sound file, highlight it, and click on Open. Click on Done and then find your sound in the pop-up menu. Choose it and click on OK; future e-mails will be announced by your customized audio.

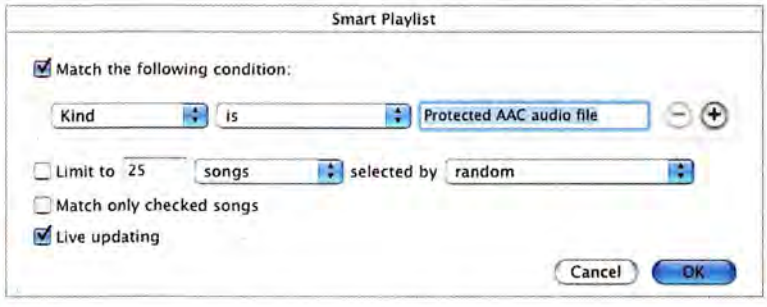


Speak, Mail, Speak
If you find a simple sound effect too boring for new-mail alerts, how about a posh British voice instead?

Restore iTunes' Purchased Music Playlist

Purchases made at the iTunes Music Store show up in a special playlist called Purchased Music. This playlist helps you keep track of your Music Store purchases, but it's just like any other playlist—so it can be deleted. Once it's deleted, there's no way to get it back.

Though iTunes will create a new Purchased Music playlist with your next purchase, it won't include any past music you've bought. You can, however, make a perfect substitute with iTunes 4's Smart Playlist feature. Select File: New Smart Playlist, and set the options as shown in "Smart Purchases." Click on OK when you're done, and name your playlist something memorable (say, My Purchased Songs). All past and future purchases will now be a part of this playlist. □



Smart Purchases
Use the Smart Playlist feature to re-create the default iTunes playlist that tracks your iTunes Music Store purchases.

ROB GRIFFITHS is the author of *Mac OS X Hints, Jaguar Edition* (O'Reilly, 2003) and runs the Mac OS X Hints Web site (www.macosxhints.com).

Mac OS X Hints offers tips and tricks for using hidden features in OS X. We want to hear from you! If you've got suggestions for column topics or want to tell us what you think of *Mac OS X Hints*, e-mail us at macosxhints@macworld.com. For more hints, go to www.macosxhints.com.

Mac 911

IF YOU'RE VEXED BY MENU-BAR ITEMS THAT WON'T GO away and the hard-drive space annexed by unnecessary language files, this month's *Mac 911* is for you. Join me as I detail handy methods for removing extraneous items. I also address syncing e-mail with Palms and converting audio files for Final Cut Pro.

Ejecting Eject

Rob Griffiths describes how to add an Eject icon to the Mac's menu bar in "Mac OS X Hints" (*Secrets*, August 2003). But he didn't provide instructions for removing it. Please advise.

Matt Palomares, *Asheville, North Carolina*

To remove almost any item from the Finder's menu bar (except commands such as File, Edit, and View, which you can't remove by this method), just ⌘-click on the item you'd like to eliminate and drag it to the Desktop. The resulting puff of smoke and "whoosh" sound effect indicate that the menu item has hit the road. Note that this procedure doesn't trash the original MenuExtra plug-in, it merely removes its icon from the menu bar.

You can also use this shortcut to drag items to a new position on the menu bar.

Lost Languages

The tip for freeing up disk space by deleting language files was helpful ("Mac OS X Hints," *Secrets*, August 2003). Can I do the same kind of thing by using Find to locate the offending language files (searching for da.lproj, for example) and deleting them all at once?

Mei Chau Hayes, *Bedford, New Hampshire*

Although you can find such .lproj files with the Finder's Find command, you can't throw them away because you don't have the proper permissions to do so. Many of these files are owned by the root user and are forbidden to you.

Thankfully, a host of free utilities can strip extraneous language files from OS X volumes (see "Deleting Dialects"). Among them are Mike Bombich's DeLocalizer (http://software.bombich.com), Joshua Schrier's Monolingual (http://homepage.mac.com/jschrier/index.html), and Philippe Hupe's Youpi Optimizer (http://perso.club-internet.fr/phupe/english/YOIndex.html).

Portable Post Office

I sync Microsoft Entourage with my Palm Tungsten T and my Mac. This is great for my contacts but not for e-mail. How can I sync my e-mail with the Palm so that I can work with it while I'm offline?

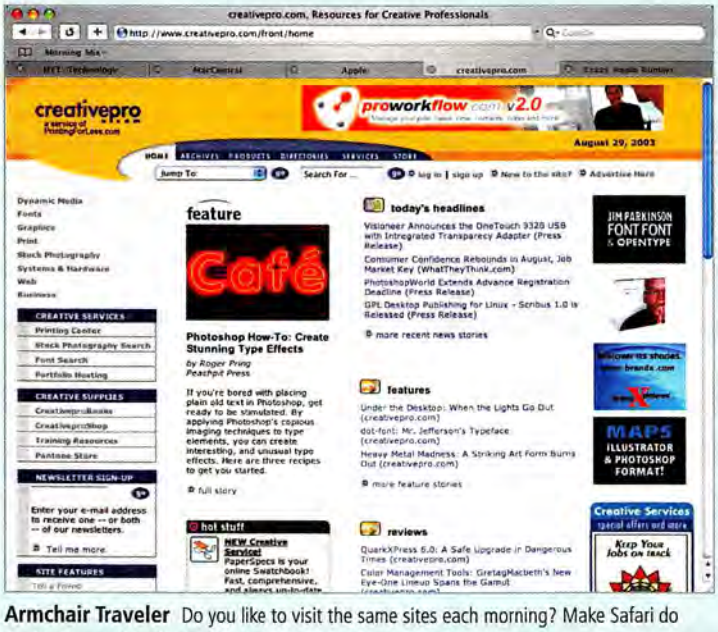
Eli Zakay, *Macworld.com forums*

For this kind of thing, I use Ligature Technologies' Mail Courier ($25; www.ligaturetech.com). Mail Courier is made up of a conduit, the Ligature Mail application that you install on your Palm, and an AppleScript that copies mail between the devices. Within Palm's HotSync Manager (in the Conduit

UNSOLICITED ADVICE

If, like me, you tend to visit the same collection of Web sites each morning, the following technique will save you multiple trips to Safari's Bookmarks menu.

Launch Safari and make sure the Enable Tabbed Browsing option is selected in the Tabs section of Safari's preferences. Click on the Bookmarks button and create a new folder (⌘-shift-N). Give the folder a descriptive name (mine is called Morning Mix), and copy the bookmarks of your favorite Web sites into it. Click on the Bookmarks Bar entry in the Collections column of the Bookmarks window, and drag your new folder into Safari's main window. Enable the Auto-Tab option next to the folder in this window. When you next sit down at your Mac, click on this folder (which now appears in the Bookmarks Bar) and howl exultantly as each site within the folder opens in a separate tab.



Armchair Traveler Do you like to visit the same sites each morning? Make Safari do the hunting and gathering for you.

Deleting Dialects Strip away hundreds of megabytes of unnecessary foreign-language files with a utility such as DeLocalizer.

Settings window) you configure the program to synchronize Entourage's e-mail database on the Mac and the Palm, overwrite the messages on the Palm with those on the Mac, or overwrite the messages on the Mac with those on the Palm. In Ligature Mail you browse your Entourage e-mail, reply to it, and create new messages. The next time you run HotSync, any messages you create on the Palm are copied to your Mac, ready for sending from Entourage. Ligature Mail displays only text and doesn't synchronize attachments, and each message has a size limit of 32K (anything larger will be truncated).

Mail Courier is a viable solution to your problem only if you regularly toss out your old e-mail. The program doesn't let you choose which e-mail messages it synchronizes—it's either *all* the mail in your Inbox, Outbox, Deleted Items, Filed Mail, Drafts, and Sent Items mailboxes, or nothing. That's perfectly ducky with me when I'm on the road with my PowerBook—which holds just the e-mail I need for my travels—but I'd never use it at home, where my Entourage Inbox contains thousands of messages.

iPod Is as iPod Does

Before I sold my iMac G4, I installed Jaguar on my 30GB iPod and moved most of the contents of my iMac's hard drive to it. When I need a Mac, I borrow my roommate's PowerBook and boot from the iPod. However, I would still like to use the iPod as an iPod—sync my contacts, calendars, and music. Is this possible when you're booting a computer from the iPod?

Greg Lindus, *Fort Collins, Colorado*

Sure, a booted iPod is more than happy to perform its primary functions. Bear in mind, though, that if the iPod's music library is linked to your old iMac, you'll lose your songs if you allow the PowerBook to automatically update the iPod. For this reason, you should configure the iPod for manual updating.

To choose this option, open iTunes, click on the iPod's icon in the Source list, click on the iPod Preferences icon that appears at the bottom right of the iTunes window, and, in the resulting iPod Preferences window, enable the Manually Manage Songs And Playlists option. To add songs to your iPod, drag them from the iTunes library to the iPod (or to a playlist on the iPod).

Camera Capers

When I connect my digital camera to my Mac via USB, Apple's iPhoto automatically opens. I use Adobe Photoshop to manipulate my photos and would like it to open when I connect the camera. I've explored both iPhoto's preferences and System Preferences to find a way to achieve this, but I've been unsuccessful. Can you help?

Robert Steven Connett, *Mount Washington, California*

You're right to look to a preference to direct Photoshop to open when you connect your camera, but you've missed the appropriate application. That application is Image Capture (found inside OS X's Applications folder). Launch Image Capture, choose Preferences from the Image Capture menu, and in the resulting window select Other from the Camera Preferences pop-up menu. In the sheet that appears, navigate to your copy of Photoshop, select it, and click on Open. When you connect your camera in the future, Photoshop should launch. □

TIP OF THE MONTH

You want to include that great tune you purchased from the iTunes Music Store in a video you're editing in Final Cut Pro 4. But Final Cut Pro won't import the file, and QuickTime Pro can't convert a protected file into the required AIFF format. You could burn the file to CD and then import it into iTunes as an AIFF file, but why bother when iMovie can convert the file for you?

Open a new iMovie project and click on the Audio button. Drag the song you want from the iTunes Library window into the timeline. Save the project and then choose Export from the File menu. Choose To QuickTime from the Export pop-up menu and Expert Settings from the Formats pop-up menu. Click on the Export button and, in the resulting Save Exported File As dialog box, choose Sound To AIFF from the Export pop-up menu. Click on Save to convert the movie to an AIFF sound file.

When the conversion is complete, quit iMovie and import the converted sound file into Final Cut Pro.

Eric Dietrich, *Kettering, Ohio*

Contributing Editor CHRISTOPHER BREEN is the author of several books. The most recent is *Secrets of the iPod*, third edition (Peachpit Press, 2003).

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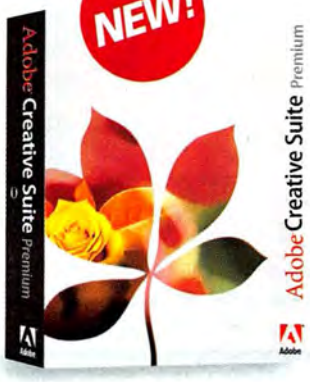

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Canon EOS 1DS Digital SLR
• 11.1 MegaPixels
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• 4064 x 2704 pixels • 2.0" LCD Monitor
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• CompactFlash Type I & II Memory Cards
• Burst Rate: 3 fps for 10 Frames

Canon EOS 1D Digital SLR
• 4.15 MegaPixels
• 2496 x 1665 pixels
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Sony DCR-TRV19/22/33
Mini DV Camcorders
• 10x Optical 120x Digital
• USB Streaming
TRV22 • Digital Still Memory • MPEG Movie Mode
TRV33 • 1 MegaPixel CCD
Free Pinnacle Video Editing Software

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• Intelligent Hot-Shoe
TRV39 • Network capable via USB for Images or MPEG1

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Mini DV Camcorders
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• Network capable via USB for Images or MPEG1
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• Direct Print
• 2592 x 1944 Resolution
• Accepts CompactFlash Type I & II
• Real-image zoom viewfinder
• QuickTime AVI Movie with Audio

Nikon CoolPix 5400
5.26 MegaPixel
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• Audio Annotation
• CompactFlash Type I & II and Microdrive Cards
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Mini DV Camcorders
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• 16:9 mode
ZR-65MC • 20x/400x • SD/Multimedia Card Slot
ZR-70MC • 22x/440x • Motion JPEG
Free Pinnacle Video Editing Software

Canon Optura 10/20
Mini DV Camcorders
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• Image Zoom 15x Optical/60x Digital
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Optura 20 • 3.5" LCD
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5.12 Megapixel Super HAD CCD
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• MPEG VX & MPEG Video Mail

Canon PowerShot S400
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• Real-image optical zoom viewfinder
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• AVI (Motion JPEG, WAVE)

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• Digital Line-In Recording

Sony DSC-P10
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• 2592x1944 Resolution
• True Zoom Optical Viewfinder
• Memory Stick/Memory Stick Pro
• MPEG VX / MPEG Video Mail w/Audio

Fujifilm FinePix F700
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Canon PowerShot A70
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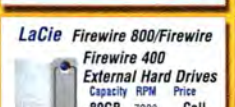

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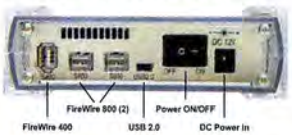

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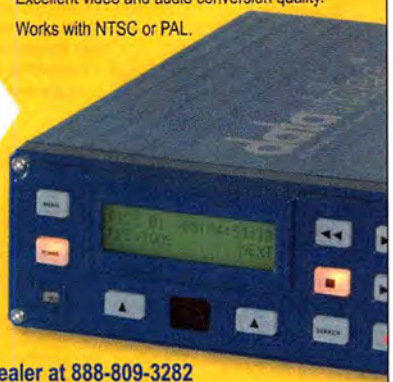

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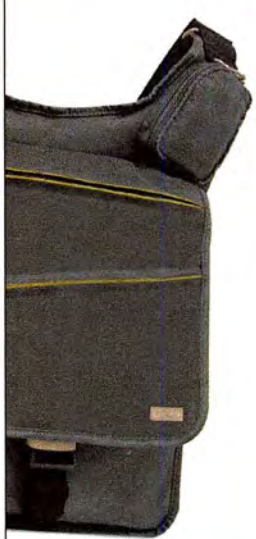

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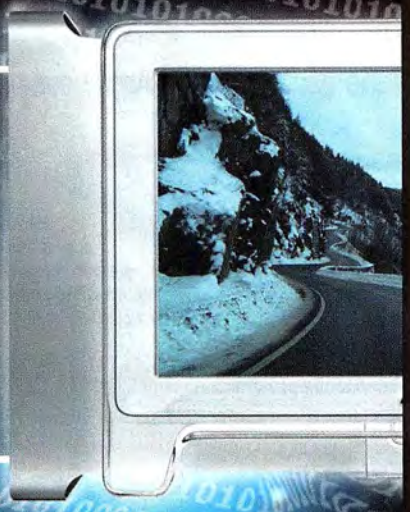

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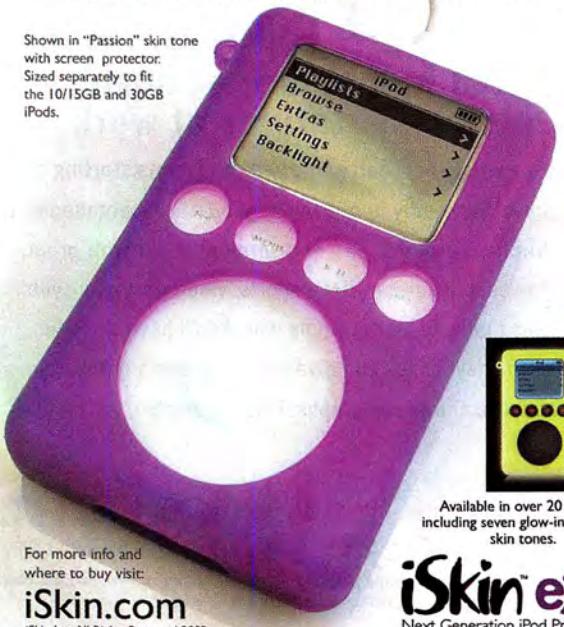

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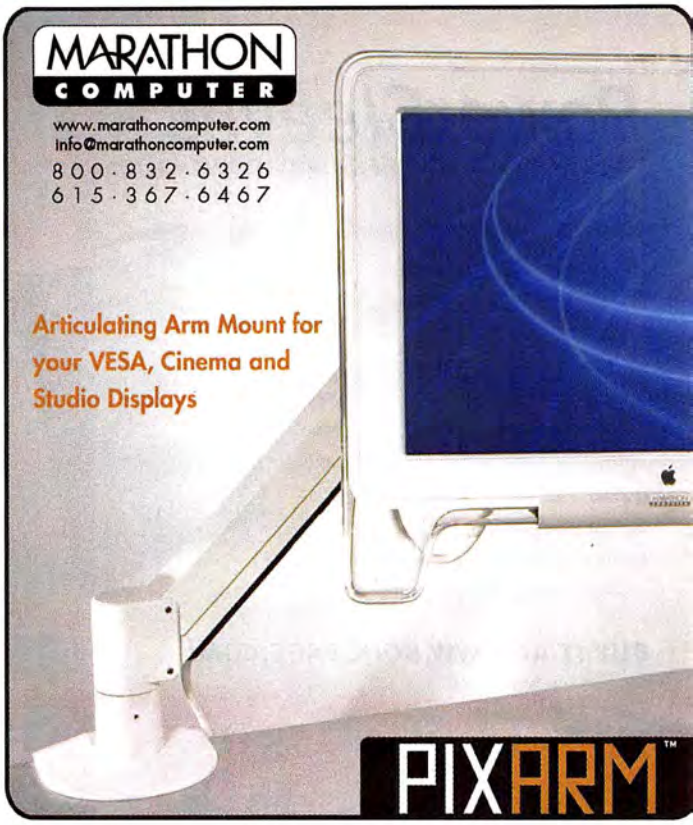

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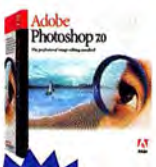

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Hot Stuff

The Month's Coolest Developments

1 Logitech MX700 Cordless

New mice don't usually get more than an "eh" out of us. But this mouse isn't just cordless—it's rechargeable, and it has lots of buttons in just the right places (www.logitech.com).

2 Buying EPs from the iTunes Music Store

The EP is a format you may have forgotten. In the past few weeks, we've bought several short collections of tracks (by artists such as Ben Folds and Guster) and recalled just why these mini-albums are so cool.

3 TiVo Home Media Option

For $99, this nifty feature lets a TiVo Series2 DVR use the Web to schedule recordings. That comes in handy when it suddenly dawns on us that *Alias*'s new season is starting *tonight*. Now we can also show digital photos and stream music from the other room (www.tivo.com).

4 LiveType Titles

Using Apple's LiveType (part of Final Cut Pro 4) is our new favorite (and time-sucking) way to get professional-looking animated words to fly across our movies.

5 Twin

This amazing typeface changes with the weather—hard edges mean cold; relaxed curves indicate warmth. To see Twin in action, go to http://design.umn.edu.

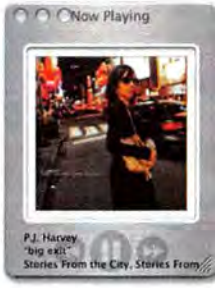
cold warm

6 Front-Panel Ports

Apple has put a headphone jack, a USB 2.0 port, and a FireWire 400 port on the front of the new Power Mac G5s. Once we stop drooling over the G5s, we'll enjoy attaching and removing peripherals without having to crawl around the back.

7 Clutter

This little program from Sprote Rsrch (www.sprote.com) shows the CD cover for the iTunes music you're listening to, even if you don't have the image on your hard drive. It also turns your albums into buttons you can keep on your desktop.



8 Digital Video Pocket Guide

This slim book by Derrick Story (O'Reilly, 2003) fits in a camcorder bag for whenever you need easy-to-understand advice on lighting, sound, and other aspects of great video.

Best Digital Cameras

	MEGA-PIXELS
Canon EOS 10D ●●●●½; September 2003; $1,999	6.3
Canon PowerShot A70 ●●●●½; July 2003; $399	3.2
Nikon D100 ●●●●; January 2003; $1,999	6.1
Canon PowerShot S400 Digital Elph ●●●●; July 2003; $599	4.0
Canon PowerShot G5 ●●●●; October 2003; $899	5.0

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●●●●½; March 2003; $200

HP Color LaserJet 2500L color laser
●●●●½; March 2003; $1,000

HP PSC 2175 color ink-jet multifunction
●●●●; November 2003; $200

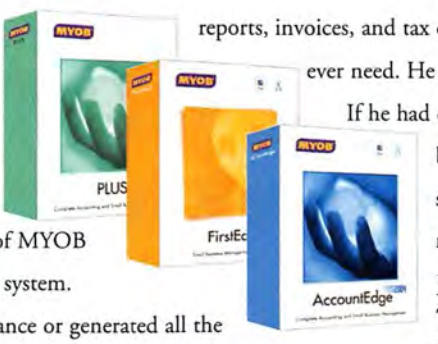
Epson Stylus Photo 960 photo ink-jet
●●●●; February 2003; $349

Epson Stylus Photo 900 consumer ink-jet
●●●●; August 2003; $199

See Dick. See Dick run his business with software that wasn't written and designed for his Macintosh. Poor Dick.

A moment of silence for Dick, please. A good guy with a good small business, but his accounting software was one of those PC transcription jobs, not pure MAC like MYOB AccountEdge and MYOB FirstEdge.

If only he'd known about the amazing capacity of MYOB software to bring out the best in his MAC operating system. He could have tracked and managed finances at a glance or generated all the reports, invoices, and tax documents that he and his accountant would ever need. He could have spent more time with his clients.



If he had only known that MYOB develops the world's best selling MAC small business management software for lots of good reasons, this story might have had a happy ending. Sorry Dick.

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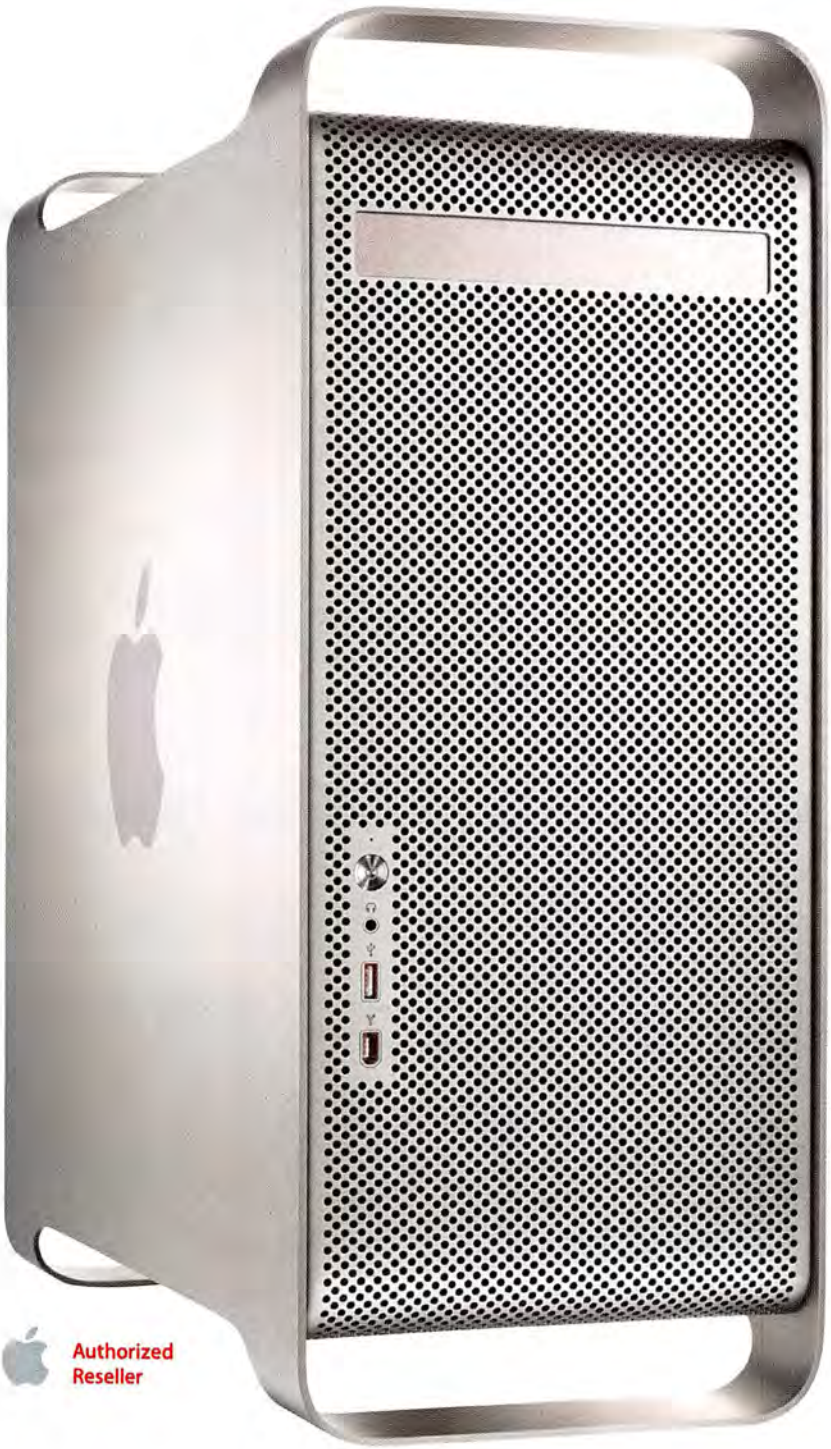

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