REVIEWS OF THE LATEST G5 MACS

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NEW DUAL-PROCESSOR POWER MACS, p. 23

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The Mac Product Experts

37 GADGETS EVERY MAC USER WILL LOVE

gear guide

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All readers now have free access to the contents of the CD-ROM that comes with some copies of *Macworld*. To view the contents of the CD, go to the following URL (broadband Internet recommended): http://cd.macworld.com/2004/12/duck-belt

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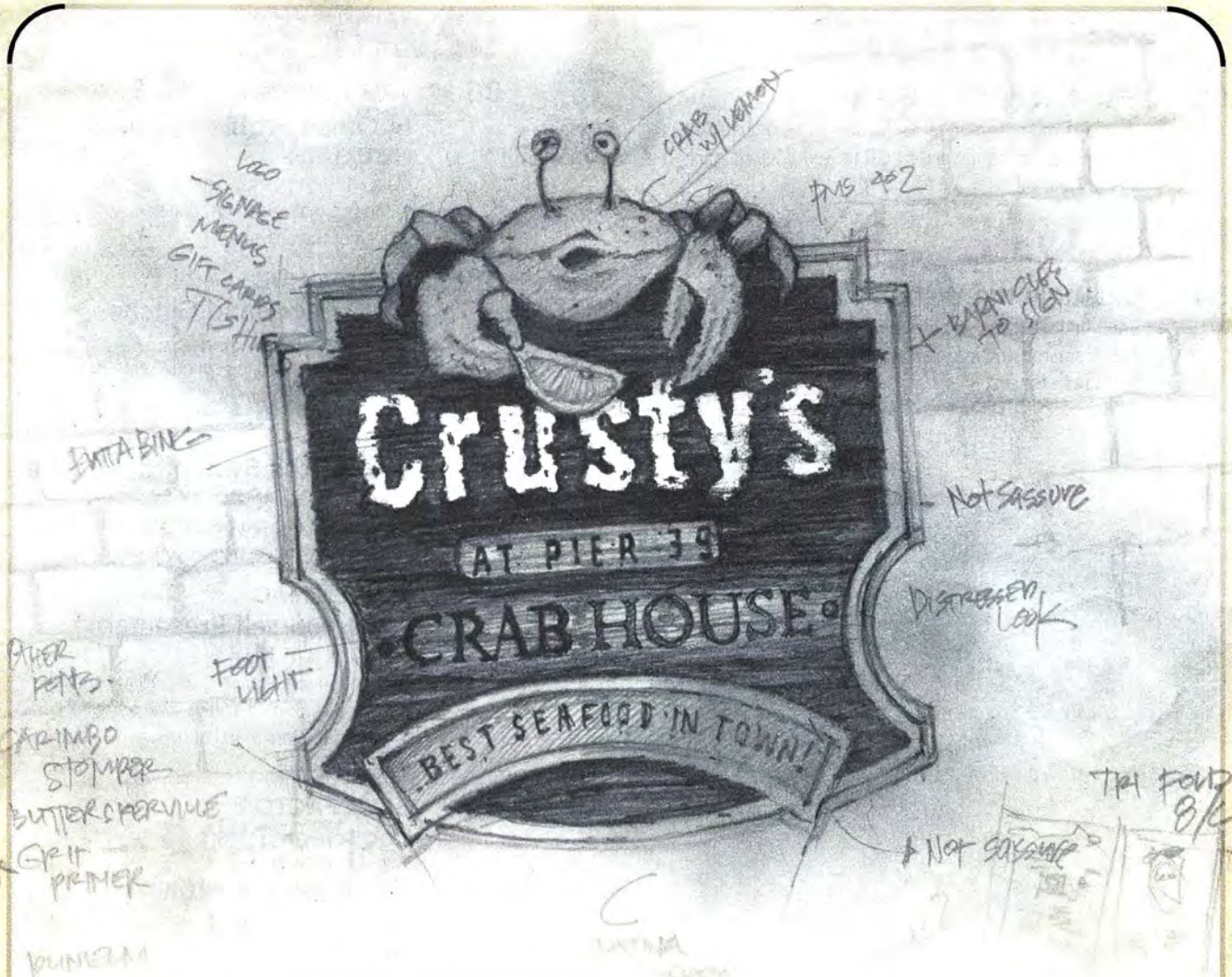

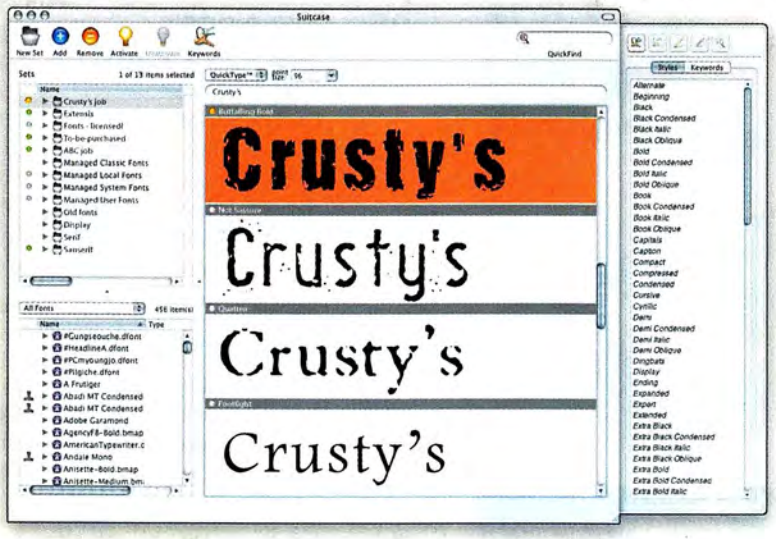

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The Search Is On

A few months back, we polled a group of *Macworld* readers to find out which Mac programs they used on a regular basis. I was shocked at the results: while old standby Microsoft Word came in third, the top two spots were taken by Apple's iTunes and Safari.

In hindsight, I suppose that this makes sense. Lots of us keep iTunes open in the background all the time, playing music while we do something else. Ditto for Safari, which I use constantly (although I admit I've enjoyed using Mozilla's Firefox and The Omni Group's OmniWeb, too). Seeing Safari place so high on the list of favored apps reminded us that we shouldn't underestimate the power of the Web just because it's so familiar.

It also started an interesting conversation among the editors here. We all surf the Web, but it's not always as easy to use as we'd like. Steve Jobs may claim that finding pages on the Web is easier than finding files on your hard drive, but it's still not easy to wade through all those search results to find what you *really* want.

That's what we were thinking as we developed our story "Untangle the Web" (page 54). Our goal is to help you quickly find what you need on the Web. We've also put together a bunch of Safari tips and a list of add-ons that will help you get more out of Apple's streamlined Web browser. And we've rounded up and compared the leading Safari alternatives. If you use the Web, I think you'll find that the results are worth more than a casual browse.

Gadgets and Gear

One of the first stories I worked on upon arriving at *Macworld* in 1997 was a showcase of cutting-edge gadgets, from brightly colored cordless phones to the original PalmPilot. I realized then, and still believe now, that Mac users have a taste for the finer things in life—in fact, that's a big reason we're Mac users in the first place. We aren't spendthrifts, but we know and appreciate clever bits of technology when we see them.

That's why we're once again showcasing more than 30 of the newest, niftiest gadgets we could find ("*Macworld*'s Gear Guide," page 68). Some of them are directly Mac related, accessories that'll make your Mac more useful or capable. Others are slightly further afield—but they should still appeal to the, *ahem*, refined tech sensibilities of Mac users.

As we approach the holiday season, we hope you gift givers out there will find that this story is a useful starting point for your gift-list brainstorming. If you're on the receiving end, you'll see some cool items to put on your wish list. And if you're not the gifting type, fear not: once you see the products we've singled out, you'll probably find at least one that you'll want to get for yourself.

Online Expansion

If you haven't visited Macworld.com or its sister site, MacCentral.com, lately, you should. We recently completed a redesign of the two sites that unifies them under a single look. We've also introduced several new features. I'm excited about our Apple Hardware Guide (www.macworld.com/products/apple/), which puts all the information about currently shipping Mac hardware—including *Macworld* mouse ratings, Speedmark test scores, and constantly updated pricing—on one page.

In the coming months, you'll find even more on Macworld.com, as we expand our online coverage and add special features for magazine subscribers. You'll start finding more links in our pages pointing to extra resources, deeper information, and up-to-the-minute online coverage that just couldn't make it into print. I hope you'll come to rely on our Web site as an excellent complement to *Macworld* in print. □

Got a favorite search engine, browser, or Mac gadget? Is there something you'd like to see on Macworld.com? Send your comments to jason_snell@macworld.com, or post them online in the Macworld.com forums.

About This Macworld

If you regularly use Microsoft Office 2004, you may have noticed some funny behavior. We certainly did. So we sent Contributing Editor (and our resident Office guru) Rob Griffiths on a search for answers. In this month's *Working Mac* (page 86), Rob reveals solutions and workarounds for 14 of the suite's most annoying quirks, bugs, and pitfalls—from unexpected quits to trouble copying and pasting text between Word 2004 and Apple's iChat.

Apparently, Microsoft has been listening. As this issue was going to press, Microsoft released the Mac Service Pack 1, a collection of bug fixes and performance improvements for Office 2004. You can download the free update from Microsoft's Web site (find.macworld.com/0131). This update fixes problems with stability, security, and more—including a few of the glitches that Rob mentions in his column. But it doesn't solve them all. For an updated version of this month's *Working Mac* column—and a look at which glitches *weren't* addressed by Microsoft's update—go to find.macworld.com/0132.

PORTRAIT BY PETER BELANGER

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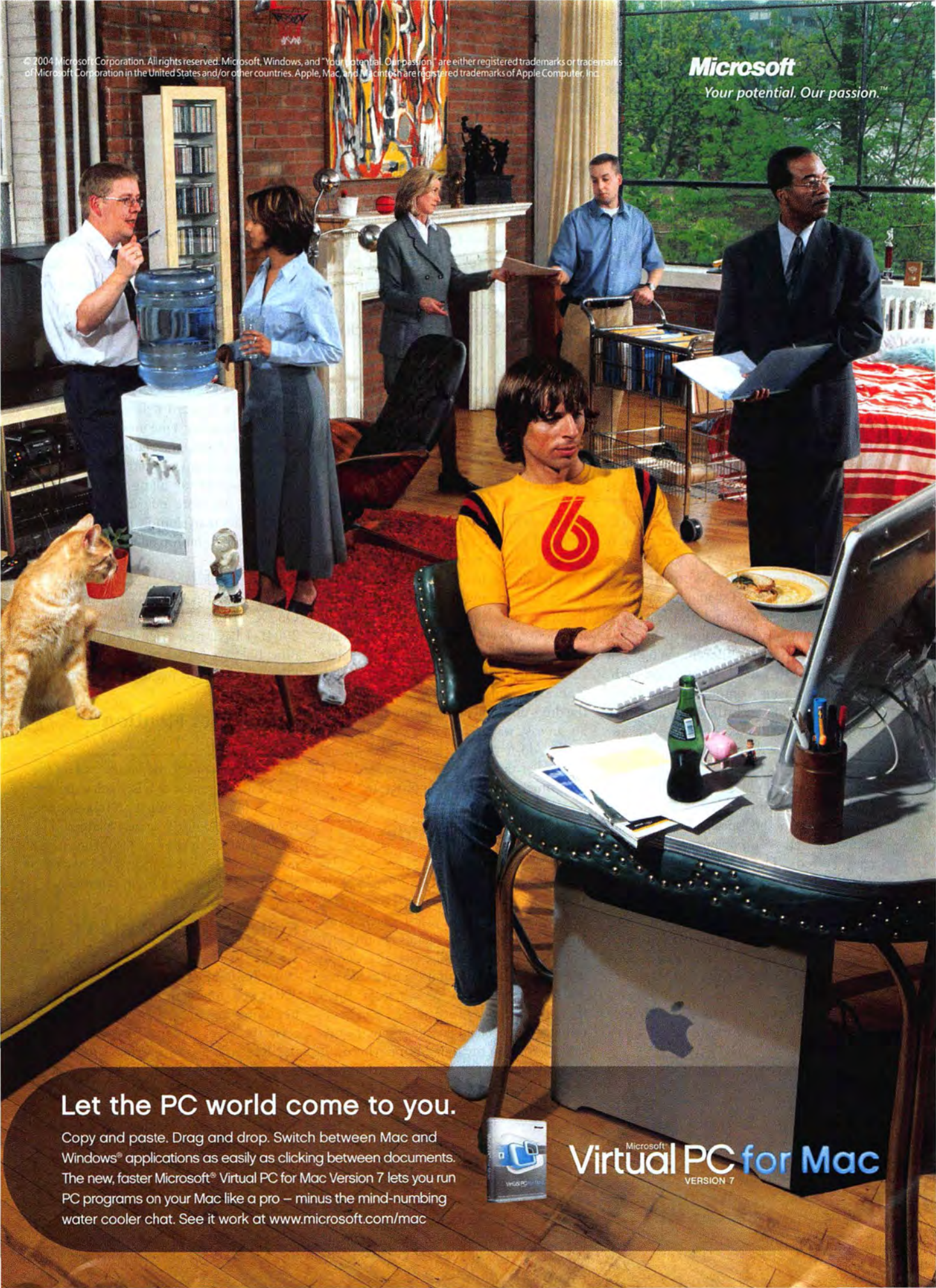

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FEEDBACK

Time for Tiger

It'll be a few more months (at least) before Mac OS X 10.4 is ready for prime time, but that's not stopping *Macworld* readers from grabbing Apple's Tiger by the tail. After reading the September 2004 preview of Tiger's announced features—and our wish list of things we'd like to see—readers flooded us with suggestions of their own. Where do Mac users find the time to analyze an OS update that's yet to appear? We'd like to think that the 66 time-saving tips we included in the same issue helped a bit. □

Tiger Tales

GERRY DAVENPORT

Reading "10 Tiger Features We'd Like to See" ("10 Things to Know about Tiger," September 2004), I was quickly reminded of a piece of software I use. You wanted spring-loaded folders in the Dock; Workstrip, by Softchaos (www.softchaos.com), is a great tool for this. As for quick access to files and smarter files, Workstrip does that, too. As much as I would love to have every conceivable cool and neat feature in my OS, that just isn't going to happen, because everyone is different. What you like may not be what I want to deal with. To load up your computer with many, many small widgets, little apps, and other scripts to do small tasks and alter the system is not a wise thing to do.

STEPHEN C. LANGFORD

Here is a suggestion for iChat AV: a transparent image of the "speaker" that appears superimposed over a document on screen (as pictured). The listener can point to things on screen and ask questions or make suggestions. You can edit the document in real time in the application of your choice. The technology, called FaceTop, implements several standard OS X extensions. David Stotts, at the University of North Carolina, Chapel Hill, estimates that a Mac version would take a couple of months to implement. Interested commercial or private developers should contact the Office of Technology Development at the University of North Carolina.

BENJAMIN OSTROM

Regarding "Typing Tiger" (*From the Editor's Desk*, September 2004): While keyboard strokes are useful to keyboard people, I'm a GUI guy, and I'm addicted to my Wacom tablet-and-pen interface. What I would dearly like to see in Tiger is the ability to take any program's drop-down interface and then drag and drop an instruction to an overlay of that program's main menu. For instance, I use the Select All command a lot in many programs, but it always requires a mouse or pen move to the drop-down menu. Why not simply create an easy way to customize any program with a do-it-yourself icon? Tiger would remember the new, user-customized GUI each time you opened that program.

Time Is on Our Side

PHIL ZAMPINO

I picked up a few interesting tricks from "Save Time with Shortcuts" (*Working Mac*, September 2004). I'm a fast touch typist and prefer to keep my hands on the keyboard whenever possible. I've given up in many cases, and instead use a trick that has saved me enormous amounts of time, though I've never heard anyone else mention this idea. What I do is program the two side buttons on my four-button Microsoft mouse to issue a forward delete (front button) and a return (back button). Since my hand is on the mouse so often, and these are two of the most-used keys, I find that I'm able to move much more speedily around my system with far less back-and-forth between the mouse and the keyboard. My other favorite keyboard macro uses CE Software's QuicKeys to program a left-hand return and delete key. I make option-Q a forward delete and option-~ (tilde) a return key. I use these less than I do the mouse delete and return buttons, but when I'm mousing around the screen and deleting—great for filling out forms in a browser—it's more efficient to use both hands rather than clumsily move my fingers from button to button on the mouse.

STEFFIE LUCCHESI

Thanks for the silent-startup tip ("Mac OS X Hints," *Help Desk*, September 2004). I have new friends in the library now. I always forget to plug in my headphones before turning my laptop on.

A Discreet Mention

TODD JAQUITH

While Ben Long mostly hit the nail on the head with his review of Discreet's Combustion 3 (★★★½; September 2004), he was wrong about some of the new features. The Grain Management tool has been in the product since Combustion 2, as have the selection and mask feathering controls.

Fonts of Information

THERESA MESA

With FontAgentPro 2.1 (★★★½; September 2004), you don't have to add fonts to a set to compare them in Font Compare. Just press the ⌘ key as you click on the font in the left column—this trick works even with All Fonts selected.

MICHAEL MYERS

There is one major thing none of the current font managers do that we designers desperately want and need and that we lost in OS X—WYSIWYG font menus in all programs. So far only AppleWorks has it. Yes, I can go to Font Book and look them

up, but that takes too long. I need to see them in the list, whether I'm in Quark, Illustrator, or Photoshop. I currently use Extensis Suitcase, but I found out that it doesn't have WYSIWYG menus. Please, get us our WYSIWYG menus back!

You Software's $30 You Control: Fonts (www.yousoftware.com) adds a WYSIWYG menu to many apps.—Ed.

Stifled Voices

SHAWN KING

In his review of iPod voice recorders (September 2004), Cyrus Farivar writes that "there are no options for recording in other formats" and lists this as a con for the Belkin Voice Recorder for iPod and the Griffin Technology iTalk iPod Voice Recorder. That's a bit unfair—both devices are limited by the *iPod's* capabilities. Apple has limited the recording ability of the iPod to 8kHz, 16-bit mono WAV files. Also, he doesn't make it abundantly clear that neither device is suited to high-quality recording. Again, the Apple-imposed limitations make them recommendable only to people who want to do simple voice recordings.

Enjoying Encoding

GRANT GRUBB

I want to thank Jim Heid for "iTunes Encoding Strategies" (*Digital Hub*, September 2004). I recently added an AirPort Express to my living room, and I love listening to my computer in the afternoon. The "Rebuild Your Library" box was especially helpful. I didn't care much for the quality of my music when I first set things up—it sounded a bit mushy. Increasing the bit rate to 192 Kbps on several CDs has made a world of difference, and I plan to reencode them all soon.

Much Ado about Bit Rates

TREVOR COOK

Reader John Burt warns against using variable bit rate (VBR), saying that his files ended up with a rate between 164 and 184 Kbps (*Feedback*, September 2004). First, he may have been using *average bit rate*, which focuses on a certain spectrum of bit rates and is not in fact true VBR. Second, that's all his music needed. The concept behind VBR is that not all music, not all parts of a song, require the same bit rate. VBR analyzes your music and gives out what it determines to be the highest bit rate required to ensure the best sound possible, assigning high and low rates as needed for file-size economy. In short, the reason his music may have hung around that same bit rate was merely that it needed nothing more to sound transparent (that is, as close to the original CD as possible).

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TEST YOUR MAC KNOWLEDGE WITH OUR ANNIVERSARY QUIZ

Hands on Buzzers

A lot can happen in two decades. To celebrate the end of 2004—the 20th-anniversary year of the Mac—we tapped Owen W. Linzmayer, the author of *Apple Confidential 2.0: The Definitive History of the World's Most Colorful Company* (No Starch Press, 2004), to stump you with 20 tricky trivia questions. Once you think you know the answers, turn to page 20 to see how your knowledge stacks up.

1 What was the first product Apple cofounders Steve Wozniak and Steve Job sold together?

a. Blue boxes for illegally making free telephone calls.
b. Blueprints for the Apple I computer.
c. Pints of blueberries at Casa de Fruta in Gilroy, California.

2 When did Macintosh revenue first surpass that of the venerable Apple II product line?

a. 1984.
b. 1985.
c. 1986.

3 When did Steve Jobs first become a billionaire?

a. In 1981, after Apple went public.
b. In 1995, after Pixar went public.
c. In 1996, after he sold Next to Apple.

4 To what was Roger Heinen, manager of Mac software architecture at Apple, referring when he said, "All the MBAs in the world can't convince us it's a good model"?

a. Licensing the Mac operating system in 1985.
b. Adopting Unix as the underpinning of Mac OS X in 1998.
c. Porting System 7 to run on Intel processors in 1992.

5 On what computer did the proprietary Apple Desktop Bus (ADB) make its debut?

a. The Mac SE in 1987.
b. The Apple IIGS in 1986.
c. The Lisa XL in 1983.

6 Who was not sued by Apple?

a. Steve Jobs in 1985, for dereliction of duties as chairman when he resigned from Apple to form what would become Next Computer.
b. Microsoft in 1988, for appropriating elements of the Macintosh graphic interface and using them in Windows 2.03.
c. The Beatles' recording company—Apple Corps—in 1989, for the similarity of its name to Apple's user group division.

7 Whom did Apple pay for rights to use the Macintosh name for its computer?

a. The Oregon State Apple Growers' Commission.
b. The heirs of Charles Macintosh, the chemist who invented the first waterproof raincoat.
c. Audio equipment manufacturer McIntosh Laboratory.

8 What was the nature of the $5,000 bet Steve Jobs and Lisa product manager John Couch made in 1981?

a. That the Mac would make it to market before the Lisa.
b. Who could abstain from showering the longest.
c. Who could charge the most for a slow, underpowered computer.

ILLUSTRATION BY CARLOS CASTELLANOS

9 How did former Apple CEO Gil Amelio respond when asked, "If you were going to prescribe a medicine for Apple, what would it be?"

a. "Frankly, I'd administer a heavy dose of morphine to Steve."
b. "Give everyone a free bag of pot every day."
c. "There's nothing wrong in Cupertino that a little caffeine couldn't fix."

10 About whom was Jef Raskin, "the father of the Macintosh project," speaking when he said, "He would have made an excellent king of France"?
a. Jean-Louis Gassée, Apple's vice president of product development.
b. Steve Jobs, Apple's chairman.
c. Gaston Bastiaens, the head of Apple's Personal Interactive Electronics Division.

11 What was Compaq's vice president of corporate development Robert W. Stearns talking about when he said, "They are smoking dope. There's no way it's going to work"?
a. The "Star Trek" project—Apple's attempt to port the Mac operating system to Intel processors.
b. The Newton MessagePad's handwriting recognition.
c. The alliance between Apple and IBM to develop the PowerPC processor.

About whom was software wizard Andy Hertzfeld speaking when he said, "He was a total poseur"?
a. Apple CEO Michael Spindler, for demanding $3.7 million in severance pay.
b. Apple CEO John Sculley, for appointing himself Apple's chief technology officer.
c. Apple CEO Gil Amelio, for insisting on being called "Dr. Amelio" because he had earned a Ph.D. in physics.

13 Which of the following was not designed by Jonathan Ive, now Apple's vice president of industrial design?
a. The Newton MessagePad 110.
b. The eMate.
c. The MacTV.

14 Who or which of the following did not sue Apple?
a. Folk singer Bob Dylan in 1994, to prevent Apple from releasing the Newton's programming language under the name Dylan.
b. Fig Newton producer Nabisco in 1992, to prevent Apple from releasing its PDA under the name Newton.
c. Xerox in 1989, challenging the validity of Apple's copyrights covering the Lisa and the Mac graphic interface.

15 To what was former Apple software evangelist Guy Kawasaki referring when he said, "Medicine will cure death and government will repeal taxes before Steve [Jobs] will fail. You can quote me"?
a. The Power Mac G4 Cube.
b. The Macintosh Portable.
c. The Nextstation.

16 Which of the following quotes was not uttered by feisty Frenchman Jean-Louis Gassée?
a. "We don't want to castrate our computers to make them inexpensive. We make Hondas, we don't make Yugos."
b. "One's experience with the personal computer should be better than the greatest orgasm you could have."
c. "Forcing Apple to buy its next-generation operating system from Be makes my nipples hard."

To what was Apple's director of Mac platform marketing Michael Mace referring when he said "[It] is the most overhyped product in the history of the PC industry"?
a. Microsoft Windows 95.
b. The Next computer, aka "the Cube."
c. The original Bondi blue iMac.

19 What did Apple CEO John Sculley predict in 1992 would become a $3 trillion market by the beginning of the 21st century?
a. Personal digital assistants.
b. Digital music downloads.
c. Macintosh clones.

20 Complete this quote by Apple CEO Michael Spindler: "If anybody makes a Mac cheaper than we do from a cost standpoint, with our volume of a couple million machines..."

a. "...we should be shot."
b. "...we'll buy the company."
c. "...I'll resign to go pick edelweiss in Germany."

17 Who said, "If I were running Apple, I would milk the Macintosh for all it's worth—and get busy on the next great thing. The PC wars are over. Done. Microsoft won a long time ago."

a. Dell Computer CEO Michael Dell in 1997.

b. Microsoft president Steve Balmer in 1998.

c. Next CEO Steve Jobs in 1996.

QUARK AND ADOBE BATTLE FOR YOUR BUCKS

Publishing Dustup

Quark and Adobe have been competing for the loyalty and dollars of graphic designers for years. But lately, the two companies have stepped up the pace, and that competition is good news for customers choosing between QuarkXPress 6 ($1,045; www.quark.com) and InDesign CS ($699; www.adobe.com).

Over the years, Quark has earned a reputation for having rather poor customer service—a problem it hoped to remedy by appointing a new CEO in February. "Quark has not always listened to its customers," admits Glen Turpin, director of corporate communications. Turpin says that, since the switch, Quark has tripled the number of people available to help customers, added phone lines, and brought back its online forums. It has also eased its restrictive licensing policies.

Furthermore, the upcoming QuarkXPress 6.5 (which may be shipping by the time you read this) adds many customer-requested features, such as QuarkVista—an XTension that lets you edit images without leaving XPress—and improved support for Adobe Photoshop's PSD file format, according to Dan Logan, a technical product analyst at Quark.

But Adobe believes that people are switching from XPress to InDesign, pointing to coups such as the adoption of Adobe Creative Suite by publishing giant Hearst Magazines. Will Eisley, InDesign's group product manager, says that the migration is due to the close integration with the company's other creative tools: Photoshop, Illustrator, and GoLive. "All the cool features in the world won't convince someone to shell out money for software," says Eisley. "But if you can prove that someone will save time and money, you really have their attention."

Eisley also insists that Adobe has always valued its base. "I welcome Quark to the idea of listening to customers," he says. "But customers will see who has the track record."

Michael Gartenberg, vice president and research director at JupiterResearch, agrees that integration makes InDesign very attractive. But, he adds, "both programs are very good. This battle will continue to rage on."—TERRI STONE

VIREX BUG FORCES PULL OF VIRUS APP

Cure Causes Disease?

A few days after McAfee released the new version of its antivirus application Virex, in late August, reports started pouring in that the software's e-mail–scanning function deleted users' entire e-mail in-boxes when it found certain types of viruses. The problem was particularly troubling because Apple includes Virex with every .Mac account. What went wrong? A bug that McAfee (www.mcafee.com) wishes it had caught before it shipped Virex 7.5.

"Similar problems were reported in McAfee's beta-testing process, and the company believed that the problem had been corrected," says Teney Takahashi, a market analyst at the Palo Alto, California–based Radicati Group. "However, a small percentage of viruses were still able to trigger a mailbox deletion in the final version."

McAfee and Apple pulled the product from their respective Web sites.

Candace Worley, McAfee's director of security products management, says the problem is currently being fixed—Virex 7.5.1 should be available by the time you read this. The update will eliminate the problematic e-mail–scanning function. "It's not optimal, but it's the only short-term solution that would ensure the delete risk was removed," Worley says. "But this doesn't mean there's no protection at all; if someone were to open an e-mail with an infection, the active scanner would catch it."

Worley says that future versions of Virex will include architectural changes expected to eliminate the flaw altogether. Unfortunately, there's no remedy for those users who lost entire in-boxes—that data can't be recovered.

Still, analyst Takahashi says McAfee reacted well to the problem, quickly accepting responsibility. "The company has been prudent in pulling its product and working towards a solution," she says. "The impact for most users will be minimal, as only a small percentage of mailboxes were affected."—ADELIA CELLINI

IMAGING BEAT

C-7000, from Olympus (www.olympusamerica.com): Seven-megapixel camera features 5× optical zoom and 30× maximum zoom capacity ($600).

DxO Optics Pro 2.0, from DxO Labs (www.dxo.com): Image-correction program uses a mathematical model of the camera and lens to perform precise corrections that remove image faults (pricing varies based on camera body and lens configurations).

Coolpix 4800, from Nikon (www.nikonusa.com): Four-megapixel camera features 8.3× optical zoom and a macro mode for shooting objects that are less than half an inch away ($400).

Coolpix 8400 and **Coolpix 8800**, from Nikon (www.nikonusa.com): Eight-megapixel cameras feature either a 24–85mm ultrazoom lens, in the 8400, or a 35–350mm zoom lens, in the 8800 (8400, $900; 8800, $1,000).

PowerShot SD300 Digital Elph, from Canon (www.usa.canon.com): Four-megapixel camera features 3× optical zoom ($400).—COMPILED BY PHILIP MICHAELS

PRODUCTIVITY BEAT

ChartConstructor 2.0, from Headshack (www.headshack.com): Project-charting application adds multiple resources per task and the ability to export to iCal. It also allows you to customize calendars and change the percentage of resource allocation ($45; upgrade, free).

Nisus Writer Express 2.0, from Nisus Software (www.nisus.com): The updated program for word processing now offers a built-in table-creation tool, user-defined style sheets, footnotes, endnotes, a highlighter feature, and smart quotes ($59; upgrade from Nisus Writer Express 1.X, free; from Nisus Writer 6.0, $45).—COMPILED BY PHILIP MICHAELS

BEAT ICONS BY PAUL HOWALT

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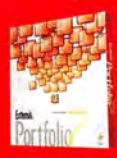

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MA/MW 12/04

MACS AT WORK

iMOVIEFEST BRINGS EYEBALLS TO YOUR iMOVIES

Show and Tell

iMovie and a personal Web site make it easy to create and share home movies with your friends and family. But what if you want the whole world to see your masterpiece? That's the question Michelle Mendenhall answered a few years ago, when she came up with the idea for iMovieFest.com, a new iMovie community Web site that she and her brother, George Schmick III, launched earlier this year.

"I was using iMovie and made my first movie," says the 30-year-old Mendenhall. "I really wanted to see what people thought, and I couldn't really find anything back then."

iMovieFest.com brings your movies to a global audience, and the site's nearly 1,000 members can offer feedback and ratings. The site tracks a movie's ranking and number of viewings. It also offers tips, tutorials, and a forums section where aspiring digital Coppolas can learn how to improve their craft. Mendenhall and the 20-year-old Schmick put the site together using Mendenhall's iBook and Power Mac G4, with Linux as the backbone.

"The whole Web site was designed on a Mac, but we pretty much wrote the code from scratch," says Mendenhall.

A. J. Rickert-Epstein and Chris Cowan, a pair of student filmmakers from Ohio, like the site because it offers them a higher level of feedback than they've found elsewhere. "I think it's very helpful in that it's an older, more professional-based audience," says Cowan.

iMovieFest.com membership is free, but $45 buys you a VIP membership, which provides 50MB of storage, among other perks. Seeing your own movie rise to the top of the ranks is, of course, priceless.—MATHEW HONAN

LOS ANGELES MUSICIAN USES MAC TOOLS TO CREATE MUSIC

Soundtrack Mac

Burton Paul wears many hats. On any given day, he may be a singer, a songwriter, a lyricist, a composer, a producer, or an engineer (and he's often a little of each). The Los Angeles–based Paul (www.burtonpaul.com) recently finished a soundtrack for Mnemosyne Pictures' upcoming independent movie *Armageddon Jones*—and he did most of the work on his 15-inch PowerBook G4 using Apple's Soundtrack application. He used a combination of Soundtrack's built-in sounds, third-party loops such as Sonic Foundry's R&B Drums: Groove Spectrum, and some loops he created. "I even took a break and went to Palm Springs for a couple of days," says Paul, "and I sat by the pool writing the songs and creating loops on my PowerBook."

Working out of both his home setup and the professional studios he uses to record vocals, Paul also coproduced the song "It's Already Written, Pt. 2 (Thunder)" on the debut gold album of hip-hop artist Houston, in 2004. And he's currently negotiating his first album with a large record label. The album includes the AIDS-awareness song "Need," which Paul cowrote and recorded for the World Health Organization.

In addition to his laptop, Paul uses a 733MHz Power Mac G4 (he's upgrading to a dual-2.5GHz Power Mac G5 soon) and a 17-inch Apple Studio Display (a 20-incher is on the way), and he runs Pro Tools LE on Digidesign's Digi 001 and Mbox.

So why does he work on the Mac? "Because I don't have a hole in my head," says Paul. "I cannot understand why anyone in their right mind would not work on a Mac—it's just beyond me."—JONATHAN SEFF

HARDWARE BEAT

Apple HD Cinema Display Extension Kits, from Gefen (www.gefen.com): Kits with distances ranging from 10 to 330 feet enable users to separate computers from their HD Cinema Displays while retaining high-definition resolutions of up to 1,920 by 1,200 pixels ($217 to $4,065, depending on distance).

Pixma iP4000R, Pixma iP5000, and **Pixma iP6000D**, from Canon (www.usa.canon.com): Photo printers print 25 black-and-white and 17 color pages per minute; the iP4000R features 802.11g wireless networking, while the iP6000D adds a 2.5-inch LCD screen for fine-tuning prints (iP4000R, $230; iP5000, $200; iP6000D, $180).

SoundDock, from Bose (www.bose.com): Speaker system designed for third- and fourth-generation iPods and iPod minis features an infrared control for operating both the music system and the iPod ($299).—COMPILED BY PHILIP MICHAELS

INPUT-DEVICE BEAT

Intuos3, from Wacom Technology (www.wacom.com): Pen tablet adds ExpressKeys for quick access to modifiers and keystrokes, and finger-sensitive Touch Strips for zooming and scrolling (4-by-5-inch model, $200; 6-by-8-inch, $330; 9-by-12-inch, $450).

IRIS Business Card Reader II, from IRIS Group (www.irisusa.com): Device scans business cards in landscape or portrait mode and exports the data to Entourage, Address Book, and other PIMs ($149).

MX1000 Laser Cordless Mouse, from Logitech (www.logitech.com): Mouse uses laser-tracking technology for precise control over surfaces that LED-based optical mice don't work on ($80).

Memory MiniMouse 800, from Iogear (www.iogear.com): Mouse with 64MB of flash storage also features 800-dpi resolution, a retractable cable, and USB connectivity ($50).—COMPILED BY PHILIP MICHAELS

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NEW FORMATS MAKE MAC HD EDITING A REALITY

Your High-Def Mac

High Definition (HD) video—once limited to people with very deep pockets—is catching on as financially viable for even the most modest budgets. By renaming its professional video-editing software Final Cut Pro HD, Apple has also acknowledged the growing popularity and viability of HD on the Mac. Last month we introduced you to the world of HD video ("Meeting HD," *Mac Beat*, November 2004); now let's take a look at how Mac users can get in on the game.

BlackMagic Design's DeckLink HD Pro

For the Pros

HD falls into two main camps: professional production level—with expensive equipment, superb quality, and high data rates—and consumer level, which is typically more affordable and highly compressed.

Professional HD facilities usually edit with uncompressed HD, which requires staggeringly high data rates. A 1080i HD signal, for example, needs 160 MBps of throughput (to compare data rates for several common formats, see "Data Deluge"). As a result, editing uncompressed HD requires a hefty Final Cut Pro system, preferably with a dual-processor G5, and large and very fast RAID storage—an hour of that uncompressed 1080i HD video gobbles up more than half a terabyte of hard-drive space (see "Getting Cheaper All the Time" for what you'll need in a typical editing setup).

Editing HD video in Final Cut Pro has been possible since the introduction, back in the OS 9 days, of Pinnacle Systems' CineWave HD capture card (www.pinnaclesys.com)—which now supports Power Mac G5s and Final Cut Pro HD in OS X. But Pinnacle has plenty of competition. AJA Video (www.aja.com) and BlackMagic Design (www.decklink.com) are releasing second-generation versions of their HD cards that support both Standard Definition (SD) and HD video: the $2,490 Kona 2 HD and $1,995 DeckLink HD Pro, respectively. And Aurora Video Systems has entered the HD space, with its $1,499 PipeHD card (www.auroravideosys.com).

Apple finally tacked the *HD* onto the Final Cut Pro name in April 2004 because editing professional HD content without any extra hardware or drives had finally become possible. How? With FireWire.

Panasonic has an HD format, DVCPRO HD, that is based on DV. In fact, people in the industry sometimes call this format DV100 because it uses DV-type compression to record to tape at 100 Mbps (four times the rate of normal DV). Two years ago, Apple vowed to support the Panasonic platform and Panasonic vowed to add FireWire to all its decks—the result was HD over FireWire this year. (Even standard FireWire 400 has plenty of bandwidth for DVCPRO HD.)

Although DVCPRO HD cameras are still in the $60,000-plus range, you can capture that professional-quality video into Final Cut Pro HD using a Panasonic AJ-HD1200A HD deck. Even at $21,000 (plus the $4,000 FireWire add-on), the deck costs less than half of what you would have paid for an HD deck before this one came out. The system requirements are so basic that you can use a PowerBook to capture and edit HD.

Final Cut Pro HD also has the ability to play HD footage out to a Cinema Display or a DVI projector. The 23- and 30-inch Apple Cinema Displays work particularly well with this feature, since their optimal resolution settings surpass the HD pixel count.

For the Rest of Us

Nonprofessionals—whether they're watching an HD signal from satellite, cable, or over-the-air sources, or recording with an HD video camcorder—never deal with uncompressed HD. Highly compressed video formats (usually HD MPEG-2) are far more manageable and easier to store, in the range of 2.4 MBps. Because this signal is so highly compressed, you can easily capture it to stock hard drives.

Consumer HD got a big boost when JVC (www.jvc.com) introduced the first HDV camcorder, the $3,500 GR-HD1, in 2003. (HDV is HD for the masses—it lets users record very compressed HD MPEG-2 video onto DV tapes, as both 720P and 1080i. The quality for the price is astounding, and the data rate is in the same ballpark as conventional digital video's.) The GR-HD1 was followed by the $3,995 HD10U. And Sony's $3,700 HDR-FXI should be out soon.

These HDV camcorders also come equipped with a FireWire port that lets users transfer footage to computers to edit and also send video to HD DVHS tape. Unfortunately, the editing program that JVC currently includes with its HDV camcorder supports only Windows XP. MPEG-2 is notoriously difficult to edit because of its inter-frame compression, but Apple has promised native support of HD MPEG-2 in a future update to Final Cut Pro HD. Currently, if you want to edit HDV in Final Cut Pro HD, you'll need a third-party application such as Heuris's XtractorHDV (part of the $500 Indie Tool Kit; www.heuris.com) or Lumiere HD's $179 eponymous product (www.lumierehd.com) to import and use the footage.

And there's more good news for Mac video creators—with Mac OS X 10.4, Apple plans to add support for H.264/AVC (Advanced Video Coding) video, one of the video types approved for the new HD DVD standard—which will make HD content even easier to distribute.—ANTON LINECKER

DATA DELUGE

As video quality increases and less compression is used, video data rates are skyrocketing. Here are rates for some common video formats.*

Video Format	Data Rate (MBps)
HDV, ATSC HD broadcast	3
DV (25)	3.6
DVCPRO HD 720P 24-fps (native)	5.8
DVCPRO HD 1080i 30-fps (native)	14
Uncompressed SD 10-bit 30-fps	27
Uncompressed HD 24-fps 1080P 10-bit	126
Uncompressed HD 30-fps 1080i 10-bit	160

*All capture rates include sound.

Getting Cheaper All the Time

Here's a sample of what it costs to set up a pro editing room.

PRODUCT	PRICE
Power Mac G5/dual-2.5GHz, 2GB of RAM, 250GB hard drive, SuperDrive, and two 23-inch Cinema Displays	$8,076*
Final Cut Pro HD	$999
Xserve RAID with 3.5 terabytes of storage, dual-512MB cache, and cache battery backup modules	$11,649*
HD capture card	$2,495
Keyspan USB-serial adapter (for deck control), and control cable	$110
TOTAL	**$23,329**

*Price is as custom-configured through Apple's online store.

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WHAT'S HAPPENING IN THE DIGITAL MUSIC WORLD

Listen to the Music

Apple continues to chug along as the leader in both digital music players *and* digital music downloads, but there are other goings-on in the realm of digital music to pay attention to.—JONATHAN SEFF

MICROSOFT LAUNCHES MUSIC STORE

Microsoft opened its digital doors in August with the beta version of its Windows-only store, offering 500,000 tracks (of the 1 million expected at launch) in the 160-Kbps WMA format. Pricing is similar to that of the iTunes Music Store—most tracks go for $0.99; most albums, for $9.90—but some tracks cost twice as much (http://beta.music.msn.com).

RealNetworks Takes on Apple

Not long after RealNetworks promised that its digital music files would play on the iPod, much to Apple's chagrin (see "Music Battle Gets Real," *Mac Beat*, November 2004), the company tried to take some sales away from the iTunes Music Store. In late August, Real slashed prices to $0.49 per track and $4.99 per album—but only for three weeks. Real says it sold more than 3 million tracks during the time period (www.real.com).

HP UNVEILS HP iPOD

Hewlett-Packard began selling its version of the iPod this fall. It's identical to Apple's Click Wheel iPod—except for a small HP logo on the back. Prices are the same, and both include a one-year warranty. But HP offers a year of 24-hour phone tech support, as opposed to Apple's 90 days (www.hp.com).

iTUNES AFFILIATE PROGRAM OFFERS COMMISSIONS ON SALES

Insert Link Here

When Amazon.com first started, it offered Webmasters a deal: mention a book on your site and put a link to the book on Amazon.com's site, and the company would pay a commission on any resulting sales. The program helped Amazon.com become synonymous with online book sales. Now Apple's hoping to do the same thing with online music.

Click to Earn iTunes affiliates earn money from sales.

The company's new iTunes Affiliate Program, launched in September, pays a five percent commission on all sales generated via links from participating sites. Apple provides the links and (if you want it) the artwork. A company called LinkShare tracks the leads and cuts the checks.

While Apple won't give out any details about how many sites have signed up or how many sales it has driven, the program appears to be an early hit: A Web search a week after the launch turned up dozens of participating sites, from online music magazines to homespun fan sites.

Nathan Wright, who runs the pop-culture zine Monkeycube (www.monkeycube.com) out of Des Moines, Iowa, was one of those first adopters. Wright managed to generate forty leads in his first four days. At press time, he was still waiting for his first commission check.

Still, signing up thousands of Monkeycubes isn't going to drive millions of downloads. This is about marketing, not sales. At a time when Microsoft and other competitors are ramping up their own online music efforts, the Affiliate program is a way to keep the Apple and iTunes brands in front of as many surfers as possible.

"It's driving awareness for consumers to whom online music is still a new thing," says IDC analyst Susan Kevorkian. "Just by expanding the reach of program, it's bound to help." The real question, though, is how long that boost will last.—DAN MILLER

STORAGE BEAT

CompactFlash Elite Pro cards, from Kingston Technology (www.kingston.com): 2GB and 4GB cards feature transfer rates of 8MB per second and read-write speeds of 10MB per second (2GB, $129; 4GB, $500).

d2 Hard Drive Extreme with Triple Interface, from LaCie (www.lacie.com): External hard-drive system features USB 2.0, FireWire 400, and FireWire 800 interfaces (160GB, $199; 200GB, $249; 250GB, $279).

OneTouch II, from Maxtor (www.maxtor.com): External drive with 7,200-rpm drive mechanism features one button that activates Dantz Retrospect Express (250GB, $330; 300GB, $380).

RackFire, from WeibeTech (www.wiebetech.com): 1U rackmount enclosure accepts two removable hot-swappable drive trays capable of holding two sets of IDE drives, which can be striped together using RAID level 0 ($700–$3,000, depending on configuration).—COMPILED BY PHILIP MICHAELS

UTILITY BEAT

Keyboard Maestro 2.0, from Stairways Software (www.keyboardmaestro.com): Updated utility features a rewritten internal engine, support for multiple macro triggers, and new actions ($20; upgrade, $10).

MacLinkPlus 15, from DataViz (www.dataviz.com): File-conversion utility adds decompression support for StuffIt X, the ability to extract text from PDF files, and the ability to convert word processing and PDF files to text for export to an iPod ($80; upgrade, $40).

StuffIt Deluxe 9.0, from Allume Systems (www.stuffit.com): Compressing-and-archiving utility lets users save archives directly to CDs and DVDs, as well as to FTP servers, including .Mac's iDisk ($80; upgrade, $30).—COMPILED BY PHILIP MICHAELS

Quiz Answers 1: a; 2: c; 3: b; 4: c; 5: b; 6: c; 7: c; 8: a; 9: b; 10: b; 11: c; 12: b; 13: c; 14: b; 15: c; 16: c; 17: c; 18: a; 19: a; 20: a.

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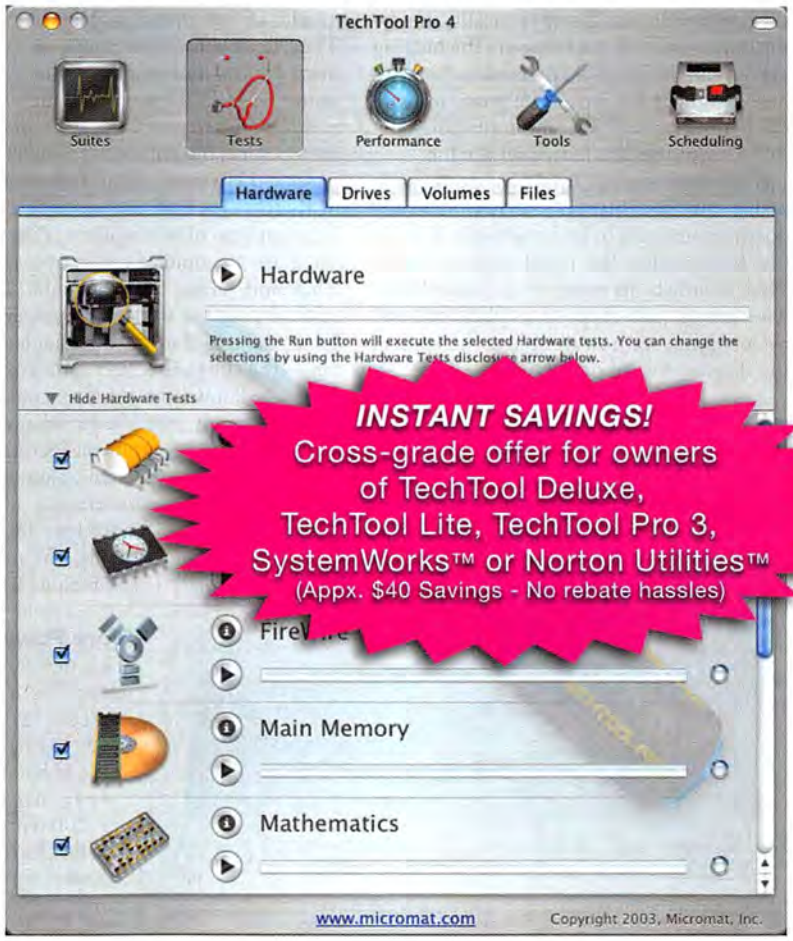

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iMac G5s

Apple's Consumer Desktop Strikes a New Pose

BY HENRY NORR

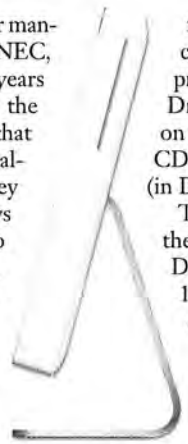
Cross an iPod and an eMac and what do you get? The new iMac G5, the third generation of Apple's trendsetting desktop design for the home and school.

The latest iMacs are the slimmest and slickest models yet. But stylistically, they're the most conservative. Gone are the bulging curves and florid colors that made the original design such a sensation; gone, too, are the igloo-shaped base and the amazing flexible neck of the first flat-panel version.

This time around, Apple has gone minimalist. At first glance, the new machine doesn't even seem to be a computer. It looks like just another flat-panel display, distinguished only by its snow-white plastic bezel. The drives and chips that filled the old iMac's dome are now built into the back of the display, spread out behind a 17- or 20-inch LCD panel.

Apple is hardly the first computer manufacturer to adopt this approach—NEC, Gateway, and others first tried it years ago. But their designs sacrificed the trim lines and easy adjustability that make flat-panel displays so appealing—to one degree or another, they all looked like flat-panel displays *with PCs strapped to their backs.* To cool their tightly packed innards, most of them had noisy fans—and they were all fairly expensive.

Apple's design team solved nearly all of these problems. The iMac G5 is only a couple of inches thick—not quite as svelte as the latest LCD monitors but close enough to pass for one. On the front of the machine, the only indication that it might be something more is that the bottom section of the bezel is four inches high, creating a large expanse of white plastic. (On the back, there are a couple of giveaways: a big iMac label and, along the left side, 10 neatly stacked ports, as well as the power button.) Even though the machine includes three fans—the PowerPC G5 processor inside is hardly known for running cool—they're rarely audible during normal use. And considering the cost of stand-alone flat-panel monitors that are equivalent in size and quality, the new iMacs are genuine bargains.



More Power

The new entry-level iMac has a 17-inch screen; a 1.6GHz G5 processor; 256MB of memory; an 80GB, 7,200-rpm Serial ATA hard drive; and, built into the system's upper right side, a slot-loading DVD-ROM/CD-RW Combo drive. It costs $1,299.

For another $200, you can move up to the midrange model, which is similarly configured except for its slightly faster processor (1.8GHz) and its SuperDrive. In addition to watching movies on DVD-ROM and playing or burning CDs, you can burn your own DVD discs (in DVD-R format).

The top-of-the-line iMac G5, featuring the same 1.8GHz processor and SuperDrive as the midrange model, has a 160MB hard drive and a huge, 20-inch display. This model goes for $1,899.

If you're wondering whether Silicon Valley continues to deliver more bang for the buck every year, just compare these systems to their predecessors, the last of the iMac G4s. At the low end, you'll need as many bucks as before, but you'll get a lot more bang today: $1,299 used to buy only a 15-inch screen and a mere 1GHz G4 processor. In the middle and at the top of the line, Apple hasn't just beefed up its offerings—it has aggressively cut prices: At $1,499 and $1,899, the top two configurations cost $300 less than the G4 models they replace.

Don't Forget the Memory

Of course, you'll want to budget for additional memory. All three new configurations, like their predecessors, come with just 256MB of RAM. To take full advantage of OS X and the iLife applications—iTunes, iPhoto, GarageBand, iMovie, and, with SuperDrive configurations, iDVD—we recommend adding at least another 256MB. If you order from Apple's online store, you can upgrade to 512MB for $75, to 1GB for $225, or to the new iMacs' maximum, 2GB, for $1,125. (If you're willing to open the iMac and install memory yourself—a task that's extremely easy with Apple's new design—you can save considerably by buying your RAM from third-party discounters.)

We're always frustrated when Apple fails to provide adequate memory in its entry-level systems, mainly because there are always users who don't know to add more, and they end up grousing—with some justification—that their systems are sluggish. The good news in this case is that the iMacs have two DIMM slots, and the factory-installed 256MB fill only one of them. So you can boost your system to as much as 1.25GB—plenty for most people—without having to unload memory you've already paid for.

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PHOTOGRAPHY BY PETER BELANGER AND APPLE COMPUTER

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Power Mac G5s

Apple's Hot New Systems Push the High End Even Higher

BY HENRY NORR

Back in June 2003, when Apple announced its first Power Mac G5 models, performance-hungry pro users heaved a sigh of relief. The new machines offered an elegant enclosure, a sophisticated cooling system that didn't make a racket, and lots of other state-of-the-art technology.

Above all, there was the PowerPC G5 processor. In addition to a huge one-time performance boost, it was supposed to provide plenty of headroom for future advances, thanks to a streamlined architecture and a manufacturer—IBM—renowned for its chip-building prowess. At the WWDC, we were told that the lagging performance and frustrating delays that marked the Motorola-built G4s were ancient history. Steve Jobs even promised an assemblage of Apple developers last year that the top of the Power Mac line would hit 3GHz—a 50 percent speed increase—by mid-2004. Unfortunately, things haven't quite worked out that way. Just like Intel and other chip makers, IBM ran into unexpected difficulties as it moved to a new generation of production technology. For a year, the G5 stalled at a maximum speed of 2GHz, and when Apple announced new Power Macs in June of this year, the best it could offer was 2.5GHz—embarrassingly short of Jobs's promise. And IBM even had trouble living up to *that* commitment: the new high-end Power Mac, with dual-2.5GHz G5 processors (that is, two completely separate chips, not one chip with dual processing cores) was supposed to ship in July, according to Apple's announcement, but didn't actually begin to reach impatient customers until late August.

Still, the new model is finally here, along with new versions of its dual-2GHz and dual-1.8GHz siblings, and it delivers a substantial, if not earthshaking, speedup. The improvement is noticeable even in mundane tasks like unstuffing files, scrolling through PDF documents, and browsing the Web—but as you'd expect, the benefits are most significant in demanding image- and multimedia-processing work (see the benchmark chart, page 25).

Three Times Two

As usual, Apple offers three standard Power Mac configurations, but now they all have dual processors. The top-of-the-line system is priced, as before, at $2,999, but it now comes with a pair of the new 2.5GHz G5 processors. The midrange, $2,499 configuration, formerly powered by dual-1.8GHz processors, now has two that run at 2GHz. And what used to be the least-expensive Power Mac, with a single 1.6GHz G5 chip and a price tag of $1,799, has been replaced by a dual-1.8GHz model priced at $1,999.

All three configurations now have 8× SuperDrives, up from 4× in the previous generation. That advance hasn't attracted a lot of attention, but if you burn many DVDs, you'll definitely appreciate it.

As before, 512MB of memory and a 160GB, 7,200-rpm Serial ATA hard drive are standard in the top-of-the-line and midrange models, while the entry-level configuration has only 256MB of RAM—barely adequate to run OS X—and an 80GB, 7,200-rpm hard drive.

Those aren't the only ways in which the new dual-1.8GHz configuration resembles

continues

The Year of the Desktop

If 2003 was Apple's "year of the notebook," as Steve Jobs proclaimed, then 2004 is turning out to be the year of the desktop. In recent months, Apple has delivered both an overhaul of its Power Mac line and a completely new version of the iMac, the flagship of its consumer and education line.

As usual, what's attracting the most attention about the iMac is its appearance—a striking new design in which the guts of the computer seem to disappear, hidden behind an expansive flat-panel display.

But the new model also marks an important technological milestone: it's Apple's first consumer desktop machine to incorporate the high-powered G5 processor. The new chip, improved graphics circuitry, and other enhancements give the iMac G5 a significant performance boost relative to its igloo-shaped predecessor—a boost you'll notice when you're encoding music in iTunes, rendering video in iMovie, or playing demanding games.

For graphics pros and others who require maximum performance, however, there's still no comparison: Even though the iMac has reached the G5 plateau, it's no match for the second-generation Power Mac G5 line—especially now that all Power Mac models, even the base configuration, feature dual processors. Besides, though the iMac has a full complement of ports for connecting external devices, its close-packed design leaves little room for internal add-ons (except more memory and wireless cards), while the big Power Mac towers can accommodate an extra hard drive and as many as three internal expansion cards.

These reviews assess the two new desktop Mac families. If you're considering a notebook or the inexpensive eMac instead, or if you're looking for the latest prices on any Apple hardware, check out Macworld.com's Apple Hardware Guide, at www.macworld.com/products/apple/.

the discontinued 1.6GHz model—it also shares some inherent technological limitations. The logic boards, for example, have only four DIMM slots and are limited to a maximum of 4GB of RAM, compared with eight DIMM slots and a maximum of 8GB on the higher-end configurations. And while the expansion slots in the high-end models are based on PCI-X technology, those in the new dual-1.8GHz configuration handle only cards built for the older, slower PCI standard. Apple has marketed three Power Mac G5s with 1.8GHz processors so far. Both the original single-processor model and the dual-processor version that replaced it had PCI-X slots and could handle 8GB of RAM; the latest version has PCI and a 4GB limit on memory. All this could add up to a nightmare for system administrators in organizations with many Macs. It's enough to make you pine for meaningful model numbers.

Of course, not everyone—not even every pro user—needs 8GB of RAM or PCI-X slots. In fact, 15 months after Apple announced its first PCI-X systems, the Made4Mac database of third-party products on the company's Web site still showed only four Mac-compatible PCI-X cards. Still, you should consider your future, as well as present, hardware needs before you shell out about $2,000 for a system Apple has deliberately hobbled.

ADC RIP

Like their predecessors, all three new machines have an AGP (Accelerated Graphics Port) 8× Pro slot. Nvidia's GeForce FX 5200 Ultra, with 64MB of dedicated memory, again fills it on the standard entry-level and midrange configurations, while the high-end system now comes with the 128MB ATI Radeon 9600 XT, successor to the 9600 Pro that was standard in the old high-end setup.

If you have your Power Mac configured to order, you're free to upgrade to higher-performance graphics: buyers of the low-end and midrange models can move up to the Radeon 9600 XT for $50 more, to the new ATI Radeon 9800 XT for $350, or to the Nvidia GeForce 6800 Ultra DDL (required if you're going to use Apple's new 30-inch Cinema HD Display) for $500; from the high-end Power Mac, the upgrades are $50 less. (We tested only the standard cards.)

All of these cards support dual displays and have two DVI ports; a DVI-to-VGA adapter is included. Apple apparently has given up on its proprietary, single-cable ADC connector—a setback for people who can't stand cable clutter, but a win if you prefer industry-standard ports and a wide range of displays to choose from.

A word of warning, though: some third-party displays may not work with the cards Apple offers. An AG Neovo flat-panel display we've used with Power Mac G4s wouldn't work at all when connected to the Nvidia card in the new dual-2GHz G5, though it worked fine with the Radeon 9600 XT in the high-end model. Users of Apple's online support site report problems with displays from Samsung and several other manufacturers.

Any Port in a Storm

In other respects, the new Power Macs are basically similar to their predecessors. They have the same enormous enclosure with brushed-aluminum surfaces and a hole-punched grille on the outside, and an elaborate thermal-management system, with plastic baffles and nine fans, on the inside. In the high-end model, a water-cooling system built into the processor modules—and therefore invisible to the user, even when you remove the Power Mac's side panel—helps keep the dual 2.5GHz processors from melting down. You'll still hear the fans kick in fairly often—particularly when you're doing processor-intensive work, but sometimes for no obvious reason. Like the original G5s, however, the new systems are noticeably quieter than Power Mac G4s.

In terms of connectivity, the new G5s sport the same rich variety of options as last year's models. A USB 2.0 port, a FireWire 400 connector, and a headphone jack are conveniently located on the front panel. On the back, there's an even dozen ports: two for USB 2.0; one each for FireWire 800 and 400, Gigabit Ethernet, and the built-in 56K modem; four audio jacks (analog and optical in and out); and antenna connectors for optional internal AirPort Extreme and Bluetooth cards ($79 and $50, respectively).

The Price:Performance Ratio

In the previous generation of Power Macs, the midrange model was the clear standout, in terms of bang for the buck, once Apple added a second 1.8GHz G5 processor. In the new lineup, the price:performance ratios look quite different. First of all, the high-end configuration, with its 2.5GHz processors, now holds a much larger speed lead—17 percent on our Photoshop test, for example—over the new midrange model.

At the other end of the spectrum, now that the base configuration also has dual processors, it's no longer the relative laggard the entry-level Power Mac used to be: on our Speedmark benchmark, the new dual-1.8GHz system trails the dual-2GHz model by only 8.5 percent; in the previous generation, the base model, with a single 1.6GHz G5 processor, came in almost 23 percent behind what was then the midrange configuration (with two 1.8GHz chips).

Macworld's Buying Advice

For the graphics and media pros the Power Mac G5 line is designed for, we think the clear speed advantage of the dual-2.5GHz model makes it well worth its $2,999 price. But if your budget is tight, if you can live with a little less than maximum performance, and if you don't foresee any need for PCI-X or more than 4GB of memory, then our recommendation is the $1,999 Power Mac model. It's only a little slower than Apple's midrange offering, and even after you add some RAM and maybe a larger hard drive, you'll still save several hundred dollars. □

POWER MAC G5S COMPARED

COMPANY	MODEL	RATING	PRICE	CONTACT	PROS	CONS
Apple Computer	Power Mac G5/ dual-1.8GHz	♦♦♦♦	$1,999	www.apple.com	Lots of bang for the buck; 8× SuperDrive; FireWire 800; Gigabit Ethernet.	Extremely large size; comes with only 256MB of RAM and 80GB hard drive; hobbled compared with other G5s.
Apple Computer	Power Mac G5/ dual-2GHz	♦♦♦½	$2,499	www.apple.com	Good performance; huge memory and hard-drive capacity; 8× SuperDrive; FireWire 800; Gigabit Ethernet; PCI-X.	Extremely large size; extra performance and features compared with entry model's may not justify $500 price premium.
Apple Computer	Power Mac G5/ dual-2.5GHz	♦♦♦♦½	$2,999	www.apple.com	Appreciably faster than any other Mac; huge memory and hard-drive capacity; 8× SuperDrive; FireWire 800; Gigabit Ethernet; PCI-X.	Extremely large size; relatively pricey.

continued from page 22

Equipped with sufficient RAM, the new iMacs' G5 processors deliver impressive performance. In our Speedmark 3.3 tests, the new entry-level iMac, with a 1.6GHz G5 processor, scored 24 percent higher than its top-of-the-line predecessor, a 1.25GHz G4; the 1.8GHz G5 processor bested the same G4 system by about 35 percent (see the benchmark chart).

On some common tasks, the improvement is even more dramatic: encoding a 45-minute audio CD track into MP3 format took 3 minutes and 20 seconds on the old 1.25MHz iMac G4; the same task took only 2 minutes and 6 seconds on the new 1.6GHz G5, and 1 minute and 53 seconds on the new 1.8GHz G5.

iMAC G5S COMPARED

COMPANY	MODEL	RATING	PRICE	CONTACT	PROS	CONS
Apple Computer	17-inch iMac G5/1.6GHz	★★★★	$1,299	www.apple.com	Elegant design; big, wide-format screen; powerful CPU.	Insufficient standard RAM.
Apple Computer	17-inch iMac G5/1.8GHz	★★★★	$1,499	www.apple.com	Elegant design; big, wide-format screen; powerful CPU; SuperDrive.	Insufficient standard RAM.
Apple Computer	20-inch iMac G5/1.8GHz	★★★★½	$1,899	www.apple.com	Elegant design; huge, wide-format screen; powerful CPU; big hard drive; SuperDrive.	Insufficient standard RAM.

Hooking Up

Twin speakers are built into the bottom of the iMacs, pointing down at your desk for extra resonance. The sound was surprisingly good—certainly better than what built-in computer speakers usually deliver—but it's not as good as audio from external Apple Pro speakers hooked up to the iMac G4.

The ports on the iMac's back provide an array of connectivity options: three USB 2.0 ports (plus two USB 1.1 ports on the keyboard); two FireWire 400 connectors; an audio line-in connector; an output jack that delivers analog sound when headphones are plugged in, or digital audio (in S/PDIF, the Sony/Philips Digital Interconnect Format, used to transfer stereo digital audio signals between various devices and stereo components) when an optical cable is connected; a 10/100BaseT Ethernet jack; a 56K modem; and a video-out port that, with the addition of an Apple VGA or a Composite and/or S-Video adapter ($19 each), can drive an external monitor in mirror mode.

Internally, the only expansion options are AirPort Extreme ($79; installable at any time) and Bluetooth wireless cards ($50; available only in build-to-order configurations). Among other advantages, there's an aesthetic argument for going wireless with the new iMacs: the more cables you plug into the ports on the back—even if you route them through the hole in the systems' aluminum stand, where the power cable goes—the more you mar the new design's sleekness.

In fact, port placement is our one real gripe: we wish Apple had followed the example it set with the Power Mac G5 and put headphone, USB 2.0, and FireWire jacks in front, where they're readily accessible.

Macworld's Buying Advice

The new iMacs don't deliver the same floating-in-thin-air, adjust-it-any-way-you-want experience that Apple rightly made so much of when it introduced the iMac G4 models. But in every other respect—elegance, performance, and price—the G5 generation is a big step forward. All three new models are appealing, but for people who can afford it, and particularly those who plan to work with video, we recommend the 20-inch model: its large screen, hard-drive capacity, and SuperDrive make it well worth $1,899. □

Macworld LAB TEST

	Speedmark 3.3	Adobe Photoshop 8.0	Cinema 4D XL 8.5	Compressor	iMovie 4.0.1	iTunes 4.6	Unreal Tournament
	OVERALL SCORE	SUITE	RENDER	MPEG-2 ENCODE	RENDER	MP3 ENCODE	AVERAGE FRAME RATE
Apple iMac G5s							
17-inch iMac G5/1.6GHz	150	2:02	3:24	11:17	0:42	2:06	33.5
17-inch iMac G5/1.8GHz	162	1:51	3:02	10:00	0:40	1:52	33.6
20-inch iMac G5/1.8GHz	163	1:51	3:02	10:05	0:39	1:53	33.6
20-inch iMac G4/1.25GHz	*121*	*2:20*	*6:16*	*13:10*	*1:10*	*3:20*	*21.6*
Apple Power Mac G5s							
Power Mac G5/dual-1.8GHz	194	1:29	1:32	5:03	0:41	1:17	32.6
Power Mac G5/dual-2GHz	212	1:21	1:23	5:06	0:42	1:11	38.9
Power Mac G5/dual-2.5GHz	**237**	**1:07**	**1:06**	**4:20**	**0:37**	**0:59**	**71.4**
Power Mac G5/dual-1.8GHz (previous)	*197*	*1:26*	*1:32*	*4:59*	*0:40*	*1:17*	*32.6*
	>Better	<Better	<Better	<Better	<Better	<Better	>Better

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

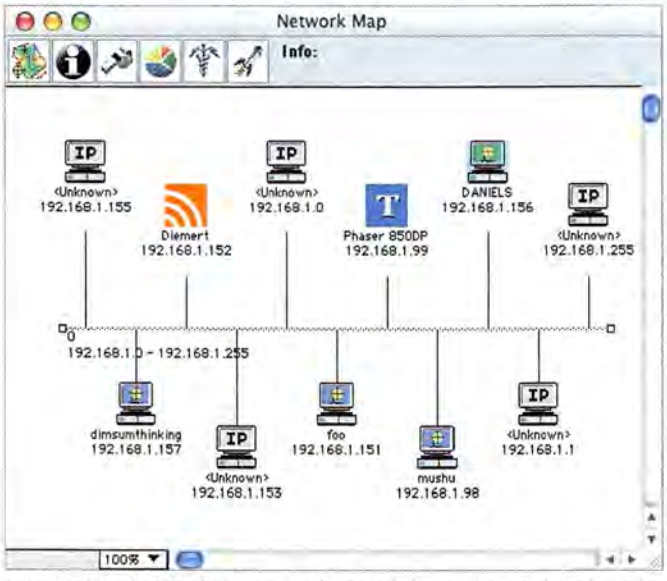
Speedmark 3.3 scores are relative to those of a 1GHz eMac G4, which is assigned a score of 100. Cinema 4D XL, Compressor, iMovie, iTunes, and Photoshop scores are in minutes:seconds. All systems were running Mac OS X 10.3.5 with 512MB of RAM installed. We used iMovie to export a movie that was 1 minute and 40 seconds long to QuickTime: Email. We tested MP3 encoding with an audio CD track that was 45 minutes long, converting it from the hard drive using iTunes' High Quality setting. The Photoshop Suite test is a set of 14 scripted tasks using a 50MB file. Photoshop's memory was set to 75 percent and History was set to Minimum. We used Unreal Tournament's Antalus Botmatch average-frames-per-second score; we tested at a resolution of 1,024 by 768 pixels. We used Compressor's Fast Encode preset. For more information on Speedmark 3.3, visit www.macworld.com/speedmark.—MACWORLD LAB TESTING BY JAMES GALBRAITH

LANsurveyor 8.1

Network Mapper Gets Additional Advanced Features

BY DANIEL H. STEINBERG AND ANDREW T. LAURENCE

If you administer a network, Neon Software's LANsurveyor 8.1 is a useful tool for mapping, monitoring, and tracking inventory. The program probes the network and gathers information to help you anticipate, diagnose, and fix network problems.



Mapping Your Network LANsurveyor's network diagram is a good starting point for finding out what's running on your network

Version 8.1 offers improved Neon Responder agents, local agents you use to determine—and remotely start and stop—the applications running on individual networked machines. You can also determine the type of machine located at each node, and get detailed information on installed hardware and software.

Scant Changes in New Version

Version 8.1 is very similar to version 7.0 (★★★★; January 2003). This is clear even if you don't own the previous release, as the current version ships with the version 7.0 user guide, supplemented only by a 13-page pamphlet that covers the new features. The Mac release lags behind the Windows version, which supports voice-over-IP devices, Session Initiation Protocol (used by Apple's iChat), and a Continuous Scan option.

Agents at Work

By itself, LANsurveyor provides only information from ICMP (Internet Control Message Protocol) ping responses. It's also designed to gather such information from agents running on the networked computers. The program displays data provided by companion product Neon Responder, as well as the Dantz Retrospect (★★★½; June 2004), Netopia Timbuktu (★★★★; June 2004), and SNMP (Simple Network Management Protocol) agents. SNMP agents are most often found on network devices (printers, switches, and routers) in the workgroup and enterprise markets. The low-end routers and printers designed for home use are often not SNMP capable.

LANsurveyor is available in three versions: Management Station (with 20 Neon Responder agents), Workgroup Edition (with 100 Neon Responder agents), and Enterprise Edition (with 500 Neon Responder agents). Deciding which version to buy is a matter of figuring out how many Neon Responder agents you need—usually one for each computer you manage.

Easy Mapping

LANsurveyor makes it easy to begin mapping your local network. Just select New Map from the File menu and choose the services you'd like to map: Neon Responder agents, SNMP devices (such as printers and routers), Timbuktu clients, and computers backed up by Retrospect, ICMP ping, or AppleTalk networks. Enter the range of IP addresses and the number of the range's hops (the devices the information passes through as it goes from one point to another), and the program generates a map (see "Mapping Your Network"). LANsurveyor with Neon Responder agents installed on client computers can save a lot of legwork by reporting a wealth of information.

Neon Responder agents provide details on the operating system, mounted volumes, installed applications, and running processes. However, a bug caused the software to consistently misidentify a 700MHz iBook G3. Neon is aware of the problem and plans to address it in the next release.

You can create a software meter report based on the running processes and a software inventory report based on the installed applications.

Depending on a device's support for SNMP, it may already offer a wealth of information. For example, a high-end Cisco router shows details about its software version, all configured networks (including virtual LANs and variable-length subnets), IP transmission statistics, and its ARP cache. New in version 8.1 is LANsurveyor's ability to display a device's physical port on a managed switch.

The software's Map Notes feature lets you embed notes in a device's map record, and optionally display those notes on the map. This is particularly useful if advanced agents aren't available for a device, or if you want to add inventory information.

Powerful but Inscrutable

LANsurveyor is powerful, but its interface isn't friendly, and it doesn't look or feel like a native OS X application. Navigation is often awkward. For example, you click on the Reports button and then choose from additional buttons to bring up yet another window to customize the report. It's easy to forget how you got to a certain option. Neon should consider adding scripting capabilities so users could automatically run custom reports. However, once you've mapped your network, you can easily generate a variety of software, hardware, process, disk-space, file-type, and other platform-independent reports.

The program's IP Poll list is generated from each node on your network at a time interval of your choosing. Set the poll interval to something as long as five minutes, and you can identify nonresponsive polls and view statistics of missed packets to find out whether a problem is transient or needs to be addressed.

LANsurveyor also lets you remotely manage networked computers running Neon Responder agents. You can direct them to shut down, restart, sync their clocks, and more. Remote management of networked computers is a prime example of where scripting would allow automation of common tasks.

Macworld's Buying Advice

LANsurveyor 8.1 is a powerful program for monitoring and managing a medium-size or smaller network, and it's worth the price of the upgrade from version 7.0. But the interface is awkward, and the application lacks some of the automation features that would be appreciated by people running regular reports and remotely managing machines on a network. □

RATING: ★★★½

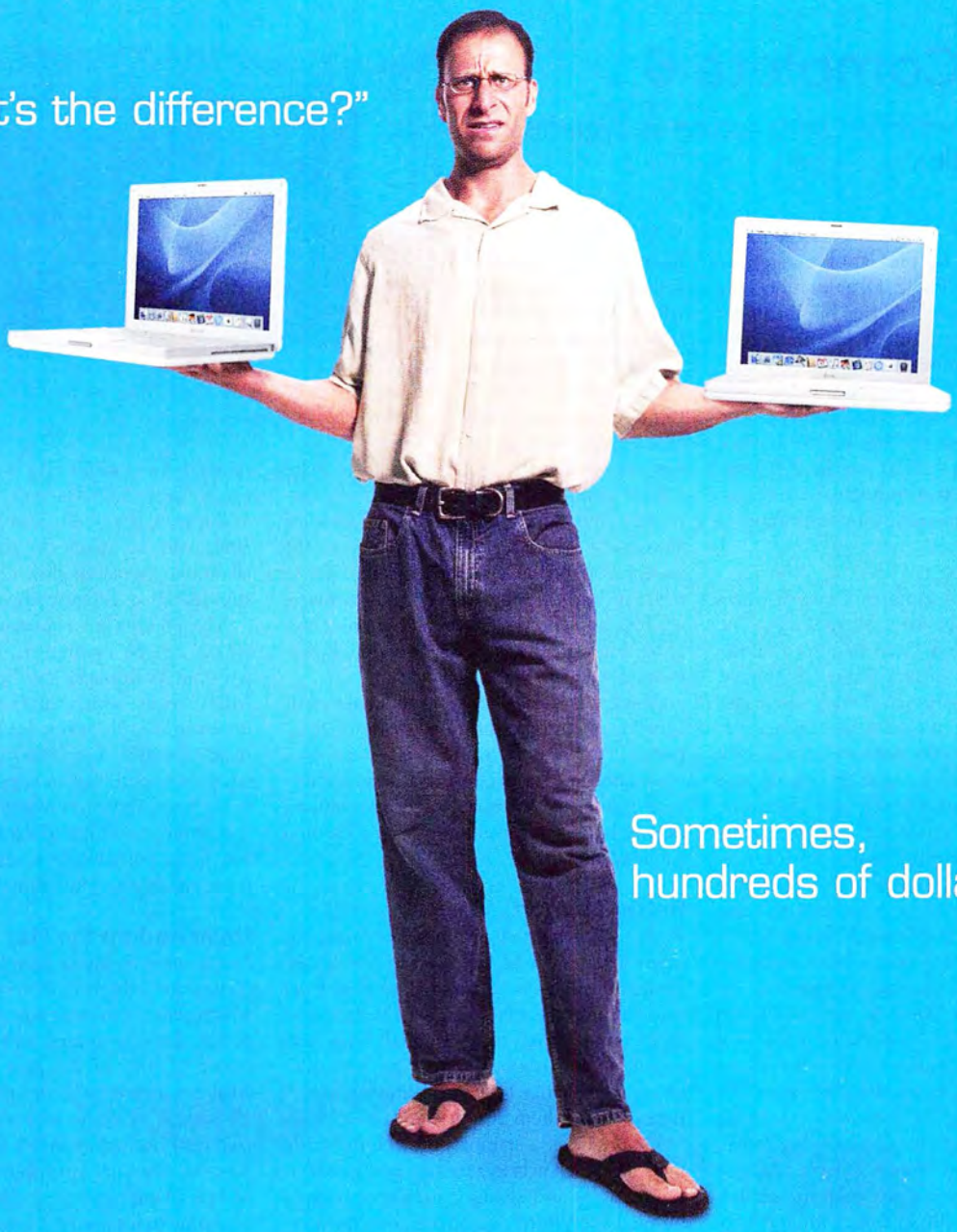
PROS: Easy mapping and managing of small to medium-size networks; generates platform-independent reports; monitors nodes for availability; remotely manages clients; performs software audits; good for businesses with or without IT departments.

CONS: Unfriendly interface; requires proprietary client software to obtain any real benefit; difficult to automate common tasks.

PRICE: Management Station, $495; Workgroup Edition, $995; Enterprise Edition, $12,500; upgrade, $199 to $2,999, depending on the number of Neon Responder agents

COMPANY: Neon Software, www.neon.com

"What's the difference?"



Sometimes,
hundreds of dollars.

Small Dog Electronics is an Apple Specialist that understands value. We know how difficult it is to save money these days, especially when it comes to buying a computer.

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Maya Complete 6

Industry-Standard Visual-Effects Application Upgrades Tools, Adds Photoshop Support

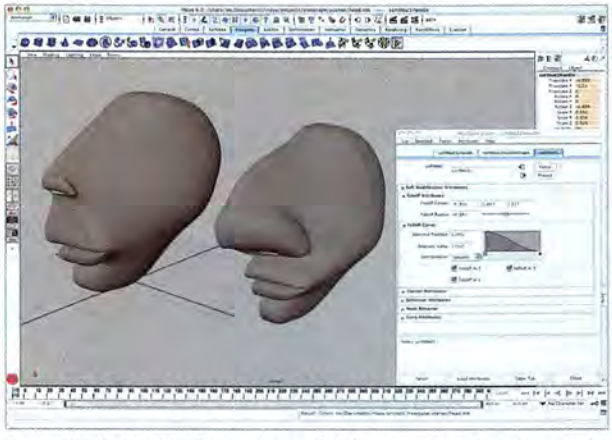
BY SEAN WAGSTAFF

Maya Complete 6, the latest version of Alias's do-everything 3-D–animation and –effects system, doesn't offer bucketfuls of flashy new features. But it has enough of them, as well as enough welcome improvements in usability and performance, to make an already good package significantly better. The upgrade is a no-brainer. And while newcomers might balk at the $1,999 price tag, Maya Complete 6 competes with visual-effects packages that cost thousands more.

More Complete

Alias has squeezed some cool new features and improvements into Maya Complete. The new Soft Mod Deformer tool allows smooth sculpting of any group of objects. For instance, if you select and move the points that form a character's nose, the region surrounding the nose will also deform with a smooth falloff, as if the whole face were made of elastic putty (see "Fantastic Plastic"). Other modeling enhancements include better beveling tools, and a new curve-editing suite that lets you lock the length of a curve or deform curves with Curl, Bend, Straighten, and Smooth functions.

Maya remains one of the most comprehensive dynamic animation systems, on any platform, for creating natural effects such as smoke, fire, and water. One new feature in version 6 that will delight effects artists is the ability to use deformers on particle systems. It's now easy to make smoke curl around an overhanging lamp, for example. And Paint Effects, Maya's unique effects feature for painting everything from three-dimensional fur to flowers on a surface, can now be used directly on polygonal objects—it's far more user-friendly than it used to be.



Fantastic Plastic Maya's new Soft Mod Deformer turns surfaces into elastic putty—it's great as a modeling tool and for creating animation effects.

Maya also includes mental images' mental ray rendering engine, which offers advanced rendering features such as natural sky lighting. And mental ray is more tightly integrated with Maya 6 than with previous versions; many features, such as Paint Effects and particle effects, now render correctly in mental ray. It's also now possible for almost any Maya scene to benefit from the realism that mental ray rendering offers. Maya 6 also includes support for advanced hardware shaders, and you now have the option of creating high-quality hardware-rendered previews in standard working windows.

Maya still lacks a built-in rendering manager for queuing jobs on one or more computers. You'll have to rely on your own command-line scripts, or third-party distributed-rendering software, to do something as simple as batch-rendering two jobs on a single machine.

Better Support

Perhaps the biggest productivity boost for many artists will be the support for Adobe Photoshop files as textures. The new PSD texture node acts like a standard layered texture, but it links to individual layer sets within a Photoshop file. You can now add, delete, and change layers in a Photoshop texture and have them instantly update in Maya.

In previous versions, the Hypershade module, which acts as a catalog and an editor for textures and shading networks, simply lumped everything together in one disorganized mass. In Maya 6, this module lets you sort resources into named folders, and you can now use filters based on name or other criteria to display only certain nodes. It also caches data, and it's many times faster after loading for the first time.

Alias has substantially rebuilt the Trax editor, which lets you compile sequences of animation as you might in a typical digital-video editor. Adding characters and subcharacters to the Trax control panel is now easier, and you can readily copy animation from one character to another, even if the characters have different proportions or skeletal hierarchies. It's now much easier to redirect a character's animation. For example, a character animated with a walk cycle can be made to continue its walk around a corner or down a flight of stairs. And blending different clips is easier, too.

Feel the Texture Maya's PSD texture node lets you use layer sets from a standard Photoshop file as texture layers.

Maya 6 also incorporates a Web browser, which can be opened in a standard Maya window. Web pages can be populated with MEL scripts, which can then be executed as if run in Maya's Script Editor. This feature makes it easy to distribute custom tools along with corresponding documentation—a good thing for software as complex as Maya. And the program's online documentation system has been completely revamped; it's much more reliable and functional.

Unlimited on the Mac

Maya veterans know that the program also comes in a high-end version, Unlimited, which adds a variety of advanced effects (such as fur, cloth, long hair, and fluids) and costs about $7,000. In the past, we've criticized Alias for its failure to offer a Mac version of Unlimited—anyone who wanted its specialized features had to switch to Linux or Windows to upgrade. Version 6 marks the debut of Maya Unlimited on the Mac. This may be academic to users with a more down-to-earth budget, but studios that were hesitant to buy a product with no upgrade options can now worry about price, and about which users need the extended functionality, rather than about cross-platform parity.

Macworld's Buying Advice

This isn't a radical upgrade. But for people who need an all-purpose visual-effects app, Maya Complete 6 packs a bunch of new features and improved usability, and it's still less expensive than most of its competitors. □

RATING: ★★★★½

PROS: Outstanding character and effects animation features; mental ray rendering; new modeling and rendering features; Soft Mod Deformer; Photoshop support.

CONS: Complex; expensive.

PRICE: $1,999; upgrade from version 5.0, $899

COMPANY: Alias, www.alias.com

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FireWire

Ulysses 1.1

An Outstanding Writing Environment

BY WILLIAM PORTER

The Blue Technologies Group's Ulysses 1.1 is not a word processor, an outliner, or a text editor, but it incorporates aspects of each of these into its streamlined writing environment. While Blue Technologies describes Ulysses as a tool for creative writers, it will appeal to other types of writers as well.

Documents, Projects, and Panes

In Ulysses' one-window interface, you work on a project that consists of many documents. Ulysses' project window has many panes; each gives you access to an aspect of the project: there's a list of documents, the document editor, a versatile area for writing notes and storing images, a pane that displays a document's word count and other information, and panes that show another document's text and notes, for quick comparison. You can switch from one open document to another via OS X–style tabs. Reorganizing documents is a simple matter of dragging their names in the list.

Input and Output

Ulysses is great for brainstorming. If you have a flash of inspiration, just press ⌘-N and start typing. You can figure out where to put the new document later. This lets you focus on what you want to say rather than how it's going to look. (Ulysses' few formatting options are limited to font size, text color, and background color.) The program's Fullscreen mode provides a view of your primary document without the distractions of the other windows or the application's menu bar—there's nothing left on screen but your words.

The Writing Environment Ulysses' multipaned window makes comparison and organization extraordinarily easy.

Ulysses has no import command, but you can drag and drop HTML, Word, and RTF files onto the application icon (or an alias of the app). This creates a new Ulysses project. If a project is already open, Ulysses imports the text into a new document in the current project. If you paste text from Microsoft Word, however, all formatting is lost.

When the parts of a project finally gel, Ulysses' excellent export options allow you to save what you've written to another file (plain-text, RTF, or LaTeX) that can be formatted for presentation in a word processor. Within the document editor, you can mark three types of paragraphs (section titles, comments, and block quotations) for formatting after exporting to RTF. For example, I drafted an article in Ulysses, exported it to RTF, and then formatted it in Word. I exported from the Ulysses project only the documents I wanted to use in my finished article. Actual notes, as well as documents created for research or brainstorming, I left in Ulysses for reference.

What's Not to Like?

My main complaint about Ulysses is that all a project's documents are at the same hierarchical level and cannot be separated into folders. This makes organization cumbersome, and if you have more than 30 or 40 documents, you'll spend some time scrolling through them.

In addition, the relationship between saving documents and saving projects, and how the Revert To Saved command works with each, is confusing. You can't close a document in a project window without saving it, which makes sense. You can, however, close a project without saving all its documents, which doesn't quite make sense. Fortunately, when you do this, no changes to unsaved documents are lost, because the documents *are* saved in a cache.

Macworld's Buying Advice

If your writing process includes free-form note-taking and does not follow a straight line or a preordained structure, Ulysses 1.1 is an excellent writing environment. It's a snap to use, and its interface is conducive to brainstorming. But if your project will require extensive formatting, using a word processor from start to finish may make more sense. □

RATING: ♦♦♦♦

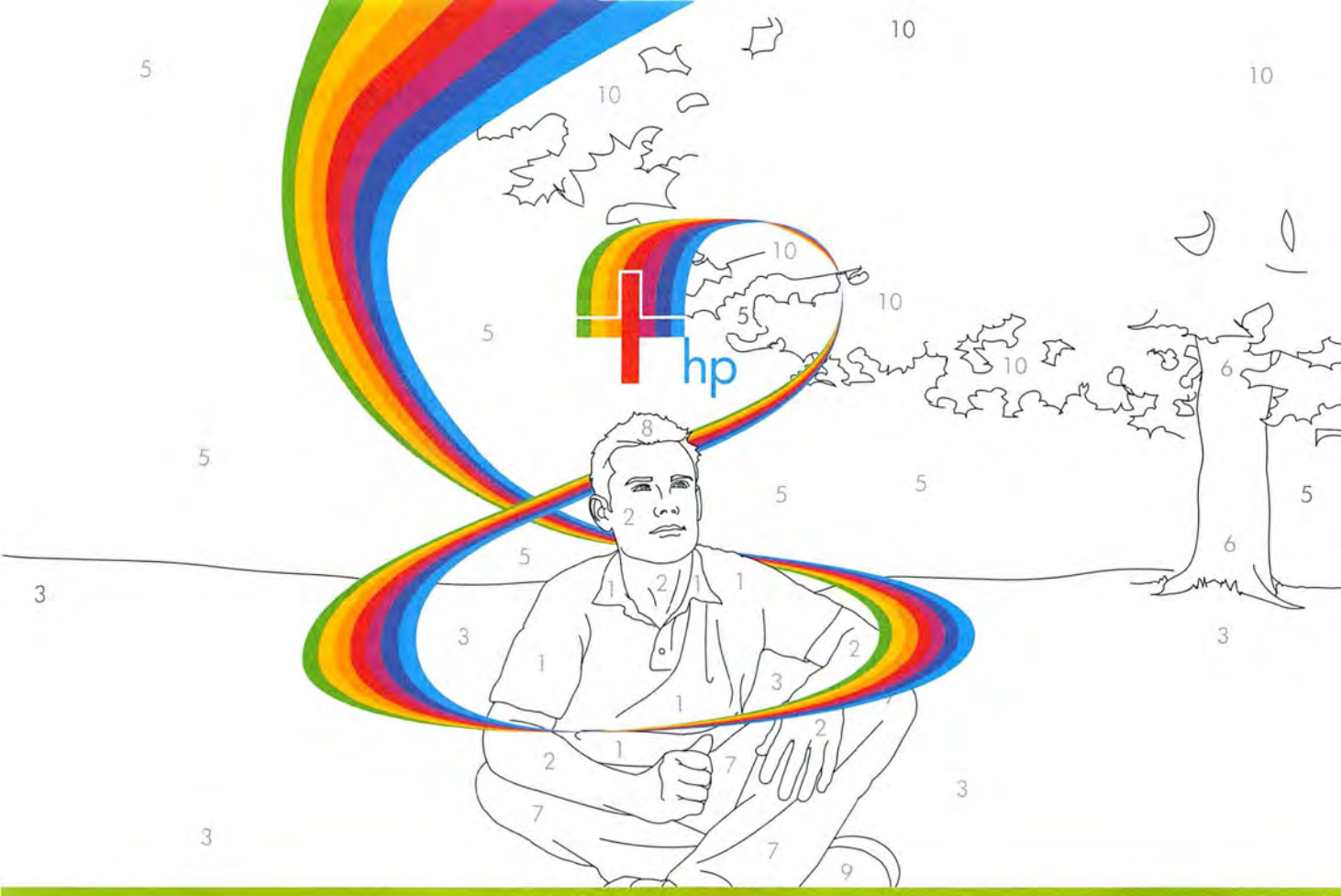
PROS: Full-screen editing; great organizational features for brainstorming.

CONS: User interface can be confusing at first; can't organize and file documents inside folders.

PRICE: $120; academic version, $60

COMPANY: The Blue Technologies Group, www.blue-tec.com

www.InsideMacRadio.com



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SketchBook Pro 1.1

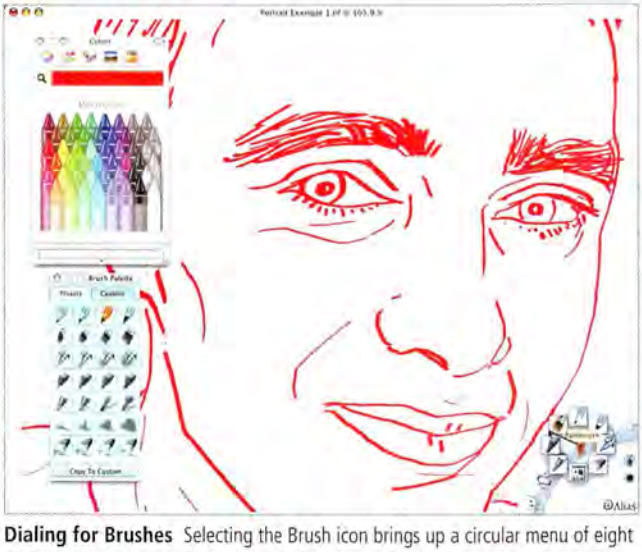
Combination Painting and Drawing Tool Debuts on the Mac

BY NICK SPENCE

SketchBook Pro 1.1, the first version of Alias's painting and drawing app available for the Mac, is a simple tool designed to work with graphics tablets such as the Wacom Intuos2 (★★★★½; February 2002). Its clean, unfussy whiteboard interface lets you start sketching within minutes of launching the program. SketchBook Pro's simplicity is its major strength; it's easy enough for a child to use.

Flexible Interface

Initially, the application fills the screen with a white canvas. A small artist's palette well, located at the bottom left or bottom right corner, provides quick access to all pens, pencils, markers, and brushes. You hold your pen to select additional tools, layers, and options via a circular eight-option menu (see "Dialing for Brushes").



Dialing for Brushes Selecting the Brush icon brings up a circular menu of eight choices; then selecting the Current Tool icon reveals presets you can customize.

While you can begin sketching even if you have few or no drawing skills, SketchBook Pro has obvious benefits for professional illustrators, animators, graphic designers, technical engineers, storyboard artists, and even courtroom artists—especially pros who need to move through projects quickly.

The unobtrusive Marking Menu palette frees up valuable screen space and makes drawing more intuitive. You can hide the tool palette and menus completely to further maximize screen space. But if this feels too minimalist, you can allow both the brush and color palettes to remain on screen for a more traditional feel. Selecting the pens, pencils, markers, and brushes feels almost like drawing with traditional pen and paper. Pen responsiveness is excellent and customizable, with none of the delay sometimes associated with memory-hungry graphics programs. You can also create and save brushes, erasers, or airbrushes, and you can vary their size, transparency, roundness, slant, and stamp spacing (a brushstroke property).

Program Updates

Though Mac users have no basis for comparison, Alias has added new features to SketchBook Pro, including 26 hot-key functions, a single-layer copy tool, and a redesigned brush editor. A built-in screen-capture utility lets you take a snapshot in any application, including a Web browser. This feature saves valuable time when you're importing images from third-party applications.

Nondestructive templates, including a library of background images such as storyboard panels, page layouts, charts and graphs, and musical notation, can be downloaded from the Alias Web site to help streamline your workflow. The layers option is useful but rudimentary, with none of the blending modes Adobe Photoshop offers. However, you can add an unlimited number of new layers (including imported photographs), and adjust the opacity with a simple slider for easy tracing. Notes to clients and art directors can be added on separate layers, for instance, without the need to duplicate images.

You can e-mail your masterpiece to a friend, colleague, or customer from within the program—it's automatically attached in JPEG, PNG, or TIFF format within your default mail program. Support for Apple's Rendezvous, however, would be a bonus, as would be the ability to save files in Photoshop's native PSD format.

Color palettes are initially limited: preset colors are represented by a neat pack of digital crayons. SketchBook Pro 1.1 makes use of OS X's Color Picker, which lets you save additional palette colors.

The program can open and save images as large as 8,191 by 8,191 pixels. The default canvas size is the size of your monitor. To change this, go to Preferences, click on Custom Size, and type in your chosen width and height (in pixels). SketchBook Pro 1.1 uses a best-fit approach when printing, which means results can look odd. Images are automatically created in landscape layout—not portrait. You can open SketchBook Pro's TIFF documents in Photoshop and Painter, but any layers you may have created will be merged.

Using the pen tool in Adobe Illustrator and Macromedia FreeHand to trace a sketch done in SketchBook Pro 1.1 was simple and gave impressive results; this will save you scanning time.

Macworld's Buying Advice

As part of the creative process, SketchBook Pro 1.1 is an excellent, though not essential, artistic tool. It won't replace Photoshop's vast range of functions or Painter's ability to simulate natural media. Rather, SketchBook Pro 1.1 can render images and ideas with a minimum of fuss, allowing full artistic flow without the distractions of a heavy manual or complex commands. □

RATING: ★★★★½

PROS: Easy to use; intuitive interface; wide appeal; efficient visualizing tool; affordable.

CONS: Limited preset brush palette; layers will not be preserved when document is opened in other applications; no PSD support or print preview.

PRICE: $179

COMPANY: Alias, www.alias.com

FINAL DRAFT 7.0.0.52

★★★½; Final Draft, www.finaldraft.com; $229; upgrade, $85

In the August 2004 *Macworld*, our review of Final Draft 7 (★★) stated that the program didn't live up to its predecessors' good reputation. We noted problems with screen redraw, instant crashes when trying to print, text-editing goofs, general instability, and horrible telephone support. Two updates later, Final Draft has released version 7.0.0.52.

This update brings Final Draft 7 to a usable level, similar in stability to version 6. Text editing is much more reliable. The scrolling artifacts are gone. We still noticed sporadic screen-redraw issues, most notably text creeping into the toolbar and ruler area (it disappeared after about 20 seconds).

We discovered another bug while testing this time. When outputting scripts to Rich Text Format, Final Draft 7 ignores the screenplay-style text-case formatting (putting lowercase letters where capital letters should be). And some punctuation marks, such as em dashes (—), are handled incorrectly.

Previously, it was impossible to reach Final Draft support. The company has since established a 24-hour toll-free support line. They do charge for support, but the first 20 minutes are free for new customers.

Final Draft's 7.0.0.52 update puts its flagship product back on track. The support hotline is also welcome.—ANTON LINECKER

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*File capacity figures provided by Jon Peddie Research. For details see jonpeddie.com

MailSteward 2.2

Mail-Archiving Program Improves Searching but Needs Work

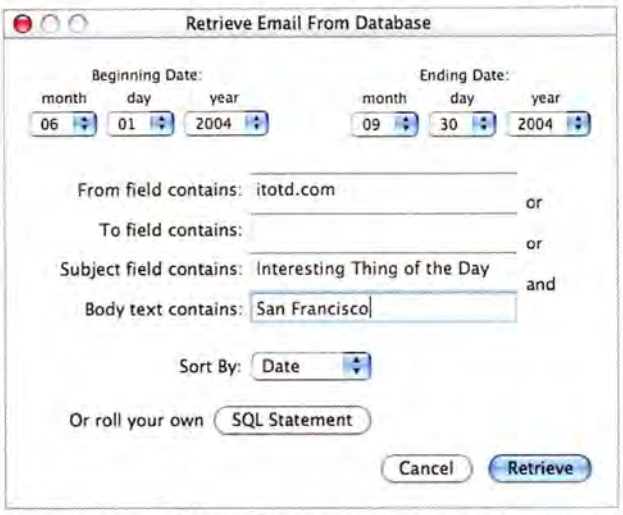
BY JOE KISSELL

Searching through thousands of stored e-mail messages in Apple's Mail can be time-consuming and frustrating. The Spotlight feature in the upcoming OS X 10.4 (Tiger) will eventually facilitate this task—until then, John Seward's MailSteward 2.2, like John Carlsen's eMessage Archiver 4.0.2 and Moth Software's MailArchiver X, can provide a searchable e-mail archive. The program stores Mail messages in a database for fast, flexible searching, but it's limited in many ways.

One limitation is that MailSteward supports only POP (Post Office Protocol, a common e-mail standard) and .Mac accounts (as well as messages saved in local mailboxes). The developer plans to add support for IMAP (Internet Message Access Protocol, which stores messages on the server). In our test on a 1GHz PowerBook G4, MailSteward took more than an hour to store approximately 18,500 messages. And each time you add a message to the searchable database, MailSteward goes through the entire e-mail archive as it updates—a lengthy, cumbersome process.

A further limitation is that MailSteward doesn't archive attachments (the developer says that support for attachments is coming). Even worse, MailSteward stores and displays only plain text. It strips the formatting from Rich Text messages, and HTML messages without a plain-text alternative display as HTML code, which makes certain messages illegible.

MailSteward's strongest features are its searching speed and flexibility: you can comb through even a huge database quickly by searching for terms in the To, From, and Subject fields and the message body (or any combination thereof), by choosing a date range, and/or by employing a custom search string (if you know SQL).



Golden Retriever MailSteward lets you use very specific criteria, including complete phrases, to search for messages.

RATING: 2½
PROS: Fast, flexible searches; easy e-mail backups.
CONS: No IMAP support; slow message storage; no support for styled text or attachments.
PRICE: $30
COMPANY: John Seward, www.mailsteward.com

Macworld's Buying Advice

MailSteward 2.2 is an unpolished implementation of a good idea. POP users with a moderate number of plain-text messages will find that the new searching capabilities are helpful, but the program offers other users little reason to buy it. □

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
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Diskology Disk Jockey

Hard-Drive Cloner Is a Mac Consultant's Best Friend

BY JEFFY K. MILSTEAD

Seasoned IT veterans have the battle scars: scraped knuckles from frequent plugging and unplugging of drives within the sharp metal confines of an open Mac chassis.

While Diskology's Disk Jockey won't dull those razor-sharp edges, it will minimize the number of replugging sessions by letting you quickly clone, verify, or wipe hard drives. And you won't have to dedicate an entire Mac to these tasks.

The Disk Jockey is a compact unit, featuring power and IDE connections for attaching two drives. It also has two FireWire 400 ports and one USB 2.0 port, to connect to your Mac. Its eight operating modes are Standard, Mirrored, Spanned, Copy, Compare, Disk Check, Erase, and Secure Erase.

RATING: ♦♦♦♦

PROS: Compact; clones hard drives without a dedicated computer.

CONS: Can't automatically remap bad disk blocks; minimal interface.

PRICE: $329; Disk Jockey Expander, $25

COMPANY: Diskology, www.diskology.com

The Disk Jockey's strength lies in its stand-alone capability. The Copy mode clones one drive to another; a Compare operation is recommended after copying. Disk Check inspects the media for integrity, while Secure Erase is a more thorough version of Erase mode. These operations can be performed with two drives connected.

The minimal three-LED interface takes a little deciphering—you have to count the number of LED flashes to check the unit's progress. Drive operations can take a long time to complete, especially with large-capacity drives.

Unfortunately, the Disk Jockey has some disadvantages that conventional external FireWire drives don't: the Mac can't boot from a Disk Jockey volume, and after a power failure, someone has to manually turn the Disk Jockey back on.

While the Disk Jockey performed admirably in our tests, we did run into one obstacle: if it discovers a bad disk block, it can't automatically remap the bad block to a good one. Instead, it stops in its tracks until you can repair the block with Apple's Disk Utility.

Finally, when you're cloning a smaller-capacity drive to a larger-capacity drive, the extra space is lost unless you run the Disk Jockey Expander utility, which costs $25. Since most users will need this, it should be included with the unit. Serial ATA and laptop drive adapters are also available.

Macworld's Buying Advice

The Disk Jockey is a worthy addition to the IT professional's toolbox. It's a compact unit for mundane disk cloning. While an LCD screen would be an immense improvement and bad-block remapping would be convenient, their absence won't put off a hard-drive–lovin' IT geek. □

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."

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Macworld
The Mac Product Experts

SwordfishExpress 2.0

New Version Brings Postage Printing Back to the Mac

BY DAN FRAKES

For some time now, Mac users haven't had a good way to print labels that include United States Postal Service (USPS) postage, but buyolympia.com, the maker of SwordfishExpress (4½; "More Mac Software Bargains," May 2003), has teamed up with the online postage service Endicia to change all that, with SwordfishExpress 2.0. The new version is currently the only USPS-authorized Mac client for creating postage-paid labels. (It does not support Express Mail or international mail, but the company says that both will be available in a future release.)

Express Mail SwordfishExpress 2.0's main window asks you for all the information required to send your package via the United States Postal Service.

The SwordfishExpress 2.0 software is free, and it's a great label-printing program even if you don't want to print postage. If you do, you need to sign up for an Endicia account (www.endicia.com), which costs $20 per month or $200 per year, plus the cost of any postage used. Since the USPS discounts services such as Delivery Confirmation and Signature Confirmation when you use electronic labels, these savings will quickly make up for the recurring fee if you do a lot of shipping. However, users who ship only a few items a month will wish there were a per-package fee instead, based on the postage used.

Convenient Label Creation

To create a mailing label, you provide the software with all the relevant information, such as the recipient's address, the service you want to use, and the weight of the package. (If you have a supported scale with a USB connection, the weight can be entered automatically; if you don't have such a scale, you must weigh the parcel on a separate scale and enter the weight manually.) SwordfishExpress 2.0 then calculates the total fee and prints the label on 8.5-by-11-inch paper. Although you can't yet print directly onto envelopes, the program can print to Zebra label printers and Dymo LabelWriters such as the LabelWriter 330 Turbo (4½; March 2004). As you create and print postage labels, you're shown the balance in your Endicia account. Adding postage to your account is simple. Click on a button and indicate the amount of postage you want.

To make inputting information easy, SwordfishExpress supports vCards, provides direct access to OS X's Address Book (a downloadable plug-in, available from the buyolympia.com Web site, even lets you generate labels directly from a contact in Address Book), and supports OS X services—so you can create a label from an address in any services-aware application.

Good Track Record

SwordfishExpress 2.0's Mailing Log keeps track of information on every parcel mailed via the application. You can even print official USPS mailing records or export the log for use in a spreadsheet or a database. If your business uses its own inventory or fulfillment software, you can also create workflows—using AppleScript, XML, or a downloadable command-line tool—that print labels and track costs from within your software.

When shipping valuable items, you have the option of purchasing insurance through Endicia. The company says that its service is less expensive than insurance from the USPS and less of a hassle when making claims; we didn't test this service.

Macworld's Buying Advice

If you run a Mac-based business with even a moderate USPS shipping volume, SwordfishExpress 2.0's convenience and tracking features will likely be worth the service fee. If you're a home user, the product's usefulness will depend largely on how much mail you send. In any case, SwordfishExpress 2.0 is a handy (and free) tool for creating labels. □

RATING: 4½

PROS: More convenient and less expensive than going to the post office; provides package log and tracking; integrates with OS X's Address Book; works with other software via AppleScript or XML.

CONS: Can't print Express Mail or international labels; service fee a drawback for low-volume users.

PRICE: free; postage printing, $20 per month or $200 per year for Endicia subscription, plus cost of postage used

COMPANY: buyolympia.com, www.buyolympia.com/software

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17. I certify that the statements made by me above are correct and complete: Rick LePage, President; October 6, 2004.

Missing Sync for Palm OS 4.0

HotSync Manager Alternative Offers More Options, Faster Syncing

BY JONATHAN SEFF

For years, Palm's HotSync Manager, an application that synchronizes content between a Palm handheld and a desktop computer, has been problematic. An alternative, Mark/Space's Missing Sync for Palm OS 4.0, offers more features, a better user interface, and faster syncing.

HotSync Manager's flaws are apparent: it's slow, its interface is outdated and complicated, it has no real progress indicator, and it randomly duplicates calendar events. Also, after I used HotSync Manager to update contacts on either my Palm or my Mac, it often showed two records: the original and the new one. In comparison, Missing Sync, which works with existing Palm conduits (software plug-ins for the HotSync Manager application), didn't produce a single instance of erroneous duplication. It works quickly, and it syncs with the Palm Desktop application (or with Address Book and iCal, using a free conduit from Apple). In addition, Missing Sync's Conduit Profiles let users specify single conduits or sets of conduits to be activated, a time-saving option.

One feature that's lost when you switch from Palm's HotSync Manager to Missing Sync is the ability to sync with Palm's Memo section. Missing Sync includes the MemoPad application for iCal and Address Book users, and MemoPad works fine for creating new memos and syncing them between software and handheld, but several problems arose when I edited existing memos: Missing Sync either added a second memo instead of updating the original, or failed to recognize changes at all.

Missing Sync also lets you share your Mac's Internet connection with your handheld via either the USB cradle or Bluetooth, and the program integrates with iTunes and iPhoto.

Kitchen Sync Missing Sync lets you synchronize every conduit at once, or you can selectively update specific information at any time.

RATING: ★★★★½
PROS: Supports many handheld devices; fast; conduit grouping; Internet sharing.
CONS: Problems with editing memos.
PRICE: $50; download, $40
COMPANY: Mark/Space, www.markspace.com

Macworld's Buying Advice

If you're happy with the free Palm HotSync Manager, you probably don't need to spend $40 on Missing Sync. However, PalmSource said it will not update HotSync Manager for the next generation of Palm devices, so getting used to Missing Sync's added features and ease of use now may be a good idea. □

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Iomega Rev 35GB 1394/ FireWire External Drive

Removable Hard Disks Offer Big Storage in Small Package

BY KRISTINA DE NIKE

It takes 123 CD-ROMs to back up the average 80GB hard drive. If your backup needs are overwhelming your CD drive—or even your DVD drive—an Iomega Rev 35GB drive could be the solution. It's faster than a tape drive, and its removable disks are more portable than an external hard drive while providing a storage capacity that dwarfs optical media.

Each Rev cartridge contains a 2.5-inch hard disk and a spindle motor. Because the motor is inside a plastic case, there's no danger that dust will clog the motor. The drive heads and electronics are contained in the compact Rev drive case, which is smaller than a Harlequin paperback. This design makes the Rev drive more durable than portable drives; you can't damage the delicate drive heads by inadvertently dropping the cartridge. The whole package runs off of the power from a FireWire 400 connector, but it comes with an AC adapter for operation with a hub. The drive also comes with Dantz Retrospect Backup.

In our testing, the Rev drive was a snap to connect. It also proved to be twice as fast as an optical drive or a desktop tape drive, though it wasn't quite as fast as a FireWire hard drive. We were able to write to the Rev cartridge at 13 MBps and read from it at 23 MBps—just about what Iomega promises. A FireWire 400 external hard drive was twice as fast on writes and about 60 percent faster on reads.

A portable FireWire hard drive also costs less per megabyte than the Rev drive. You can get portable, 2.5-inch hard drives for around $3 per gigabyte, while the Rev drive starts at $13 per gigabyte. The Rev's price is competitive with that of portable hard drives only after you fill up eight or nine disks.

Removable media such as Iomega Rev cartridges have one advantage over hard drives: they let you easily create multiple backup sets, which you can then store off-site for greater security.

But you do need to consider compatibility: only time will tell whether the Rev format becomes widespread enough that you can give the cartridges to a service bureau or to friends.

RATING: ♦♦♦½

PROS: High capacity; small portable media; potentially more durable than a portable hard drive.

CONS: Relatively expensive; less ubiquitous than optical media.

PRICE: $400; cartridges, $60 each

COMPANY: Iomega, www.iomega.com

Macworld's Buying Advice

The cartridges for the Iomega Rev 35GB drive hold a hefty 35GB but are small enough to easily transport and store. However, the drive-and-cartridge combination is more expensive than external-drive alternatives. □

Audio Converters

Lynx Studio Technology L22, Metric Halo ULN-2

BY DAVID LEISHMAN

Want to improve the sound quality of your recordings without spending $1,500 or more on a FireWire digital-audio device (see *Reviews*, October 2004)? You might want to consider upgrading your current audio-conversion gear. We tested two dedicated converters—Metric Halo's ULN-2 and Lynx Studio Technology's L22—that leave the Mac's built-in converters in the dust.

The portable, FireWire-based ULN-2 can handle 24-bit audio at 96kHz. It provides four inputs, as well as balanced ¼-inch send-return jacks for routing to hardware effects units. Its eight outputs include pairs for master monitoring and routing, S/PDIF, and AES; it offers Word Clock in-and-out; and its two mike preamps sound great.

If you'd prefer a PCI card converter, the L22 is a first-rate choice. It offers two channels of 24-bit, 192kHz in-and-out, and it runs on balanced XLR cables that attach to it. A second cable supplies Word Clock timing control (via two BNC and XLR connectors), and you can buy expansion I/O cable modules for 16 channels of ADAT ($249), or eight channels of AES/EBU or S/PDIF ($469).

Both ship with software mixers that let you route any input to any output. One tip: download the latest drivers (and the L22's firmware update) for maximum compatibility.

Macworld's Buying Advice

For high-quality audio conversion, either unit will provide best-of-class performance. Metric Halo's ULN-2 is a great choice if you want a portable converter that'll connect to your Mac via FireWire. Lynx Studio Technology's L22 isn't portable and has no mike preamps, but it is less expensive. □

LYNX STUDIO TECHNOLOGY L22

RATING: ♦♦♦♦♦

PROS: Superb sound conversion; relatively inexpensive.

CONS: None significant.

PRICE: $749

COMPANY: Lynx Studio Technology, www.lynxstudio.com

METRIC HALO ULN-2

RATING: ♦♦♦♦♦

PROS: Superb sound conversion and mike preamps; portable; can receive power via FireWire.

CONS: None significant.

PRICE: $1,195

COMPANY: Metric Halo, www.mhlabs.com

SANcube800

Flexible, Shareable FireWire 800 Storage Hub for Small Workgroups Is in a Niche of Its Own

BY ANTON LINECKER

MicroNet's SANcube800—designed to be a centralized storage hub for as many as four users—is a huge step up from the original SANcube. Significant performance enhancements make the SANcube800 far more robust and reliable than its predecessor. The original's otherworldly style also has been replaced by a no-nonsense yet sleek enclosure.

A midlevel hard-drive storage device for multimedia or video producers, the SANcube800 fills a unique niche between FireWire 800 RAID drives such as the LaCie Bigger Disk Extreme or the Medea G-RAID, and more-powerful and more-expensive Fibre Channel SAN (storage area network) devices such as Apple's Xserve RAID with Xsan.

Speed and Reliability Boost

The obvious difference between the SANcube800 and its predecessor is the addition of FireWire 800, which transfers data faster to each connected computer. In our tests, the SANcube800 had no problem moving several simultaneous streams of DV video to separate Final Cut Pro 4 users. While we were able to capture and edit 8-bit uncompressed Standard Definition (SD) video, the SANcube800 did drop frames while playing back simultaneous, complicated, uncompressed SD projects on two separate G5 computers running Final Cut Pro (using RAID 5, which is slower than RAID 3 and 0).

But concentrating on the FireWire 800 angle doesn't tell the whole story. The SANcube800 has a hardware controller that can format the five hot-swappable drives together as RAID level 0, 1, 0+1, 3, or 5 arrays. Typically, FireWire RAID units offer only RAID 0 (striped) or 1 (mirrored) formatting, so users must choose between high data rates and redundancy protection. Configured as RAID 5 by default, the SANcube800 balances data transfer speed with safety—so even if a drive fails, you can continue working. This instills a lot of confidence.

As a SAN, the SANcube800 supports four simultaneous users: all can have read access to the volume, but as with many simpler SANs, only one user at a time can write. Curiously, the unit has only two FireWire 800 ports. If there are four users, two need to route through a desktop Mac with a PCI FireWire 800 expansion card (which acts like a FireWire hub with extra ports). While this is somewhat inconvenient, it does work, even when the intermediary computer is off.

The SANcube800 uses Intech's MicroSAN software to control the drive mounting and read-write permissions. It worked well and was relatively intuitive. As with other SANs of this type, read-only users can't see newly written data unless they remember to refresh their index of the shared volume. This can be a drawback.

The SANcube800 is a noisy beast, with a fan that's reminiscent of a hair dryer set to medium. The included FireWire 800 cables are only 10 feet long, so sound baffling may be required.

Some people may balk at the $4,995 price, but storage area networks are not cheap. Indeed, four seats of Xsan or comparable SAN software can set you back $4,000—add a Fibre Channel switch, Fibre Channel cards, and Xserve RAID storage, and you could spend $12,000 or more. From that perspective, the SANcube800's price, though nothing to sneeze at, is competitive.

Macworld's Buying Advice

For small multimedia firms or collaborative DV environments, the SANcube800, with its improved reliability and speed, is a perfect fit. Having RAID levels 3 and 5 available in a FireWire 800 product is a fantastic enhancement that provides plenty of peace of mind. □

RATING: ♦♦♦♦½

PROS: Hardware RAID includes levels 3 and 5; serves multiple users.

CONS: Loud fan; SAN supports only one write user at a time; supports four users but has only two FireWire ports.

PRICE: $4,995 (1TB, serving four users)

COMPANY: MicroNet, www.sancube.com

Intego Personal Antispam X3:
The ultimate tool to fight spam

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Top Products

Scanners

MIDRANGE FLATBED SCANNER

★★★★ CanoScan 9900F ($400), from Canon (www.canon.com)

Inexpensive for its class, this flatbed scanner has a 3,200-ppi optical resolution, produces all-around good image quality, and includes hassle-free software (August 2004). find.macworld.com/0089

Digital Cameras

8-MEGAPIXEL DIGITAL CAMERA

★★★★ C-8080 Wide Zoom ($999), from Olympus (www.olympusamerica.com)

Good photo quality, durable design, and in-camera image editing, among other nice traits, make this camera an excellent choice if you need to make very large prints of digital photos (September 2004). find.macworld.com/0091

Printers

COLOR LASER PRINTER, $1,000 RANGE

★★★★½ C510n ($1,019), from Lexmark (www.lexmark.com)

The C510n provides very good image quality at a low cost per page. Generous RAM and preinstalled toner just add to the package (June 2004). find.macworld.com/0084

Macs

PORTABLE FOR GENERAL CONSUMERS

★★★★½ 12-inch iBook G4/1GHz ($1,099), from Apple Computer (www.apple.com)

This diminutive Mac's combination of performance, features, and affordability makes it a winner. You can pack it with up to 1.25GB of RAM and add an AirPort Extreme card (September 2004). find.macworld.com/0087

PORTABLE MAC FOR PROS

★★★★½ 12-inch PowerBook G4/1.33GHz with SuperDrive ($1,799), from Apple Computer (www.apple.com)

Our favorite out of the four we reviewed, the 12-inch PowerBook G4 packs a lot of power into a compact and elegant case (July 2004). find.macworld.com/0088

DESKTOP MAC FOR GENERAL CONSUMERS

★★★★½ 1.25GHz eMac ($999), from Apple Computer (www.apple.com)

This eMac may have received only a tiny speed increase, but its performance is impressive, due to a better graphics card and a fast SuperDrive. At this price, it's quite satisfactory for a bottom-of-the-line Mac (October 2004). find.macworld.com/0090

NEW: CAMCORDERS

MINIDV CAMCORDER

★★★★½ Optura 40 ($999), from Canon (www.canon.com)

The Optura 40 produces excellent video and respectable stills, sports professional features such as a true 16:9 mode, and is easy to use (November 2004). find.macworld.com/0130

Top Products are those we recently reviewed in a comparison of like products. As new products become available, we will update the list. For longer reviews of these products and for other product recommendations, go to www.macworld.com/reviews.

IN THE MACWORLD LAB

Hardware Products We Tested This Month

★★★★ Stylus Color CX4600 ($149), from Epson (www.epson.com)

An inexpensive general-purpose all-in-one that combines four-color, fade- and water-resistant printing with a 600-dpi scanner, the Stylus Color CX4600 can be used as a stand-alone copier and photo printer—just be prepared for slow printing and low-resolution scans. find.macworld.com/0112

★★★★ SDM-HS74P ($599), from Sony (www.sony.com)

This shiny black 17-inch digital LCD is nicely bright and offers rich, accurate, saturated colors, as well as legible text. Its wide picture-frame bezel actually makes it larger than many 19-inch displays. find.macworld.com/0111

★★★½ SDM-HS94P ($849), from Sony (www.sony.com)

Here's an inexpensive 19-inch digital LCD that offers a very good viewing angle with no pronounced color shifts. And it displays very legible text even at small point sizes. It produces colors that are accurate but a little undersaturated. find.macworld.com/0111

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> Railroad Tycoon 3
> Spider-Man 2: The Game
> Airburst Extreme
> Bud Redhead

The Game Room

Railroad Tycoon 3, an expansive new strategy game by MacSoft, puts you in the shoes of a fledgling railroad entrepreneur. Your job is to become profitable by laying track, building stations, buying locomotives, and doing whatever you can to add to the bottom line. To succeed, you'll need a good deal of cunning, business savvy, and foresight. Strategy-game fans won't want to miss this one.

Laying track can be quite an engineering challenge: Costs will increase if you must grade your track through hilly or mountainous terrain or build bridges over rivers. You also have to match the engine to the track. Certain vehicles may be great for short trips between neighboring cities, but you'll want to pick a long-haul train for cargo runs between distant points. And if you don't build enough service buildings and towers along the way, your trains will break down and you'll lose money and time fixing them.

All Aboard Build a thriving railroad empire while bankrupting your competition in Railroad Tycoon 3.

If you make a simple mistake while laying your track, you can undo it pretty easily. But be sure to pause the game first. If something else pops up on screen before you're able to undo your mistake—a collision alert, for example—you'll be stuck with your bad decision, which will then be costly to repair.

Just building a railroad network would be enough to challenge many players. But there's much more to this deep strategy game. You'll also have to consider the principles of supply and demand. Building a rail line between points A and B is one step in the process—but what if no one cares? To help you understand the market, Railroad Tycoon 3 offers map overlays that show you which areas offer particular goods and supplies, and which areas need them. Passengers may want to travel from Boston to New York, while a spurt of new population growth may require the transport of more lumber from Manchester, New Hampshire, to Worcester, Massachusetts. Nacogdoches, Texas, has oil, and Fort Worth has oil refineries. In this game, the devil is in the details.

And that's not all. As a railroad tycoon, you have interests that extend well beyond track and engines. The financial world is your oyster. You can issue stock in your company, pay your shareholders dividends to drive up demand (if your company is profitable, that is), issue bonds to finance your company's growth, and even attempt mergers with competitors.

You also can use your company's cash to invest in nonrailroad ventures. Have a line that services a busy hub city? Build a hotel, restaurant, and tavern for weary travelers. If you have the cash, you can acquire or create profitable businesses such as mills, refineries, car manufacturers, and distilleries.

Railroad Tycoon 3 features a series of single-player campaigns that you must complete in order to win—for example, hauling 30 cars' worth of coffee from Mexico to Texas. Along the way, you'll periodically receive a newspaper that can help you get a leg up on new technology or learn about new needs your company can serve. The missions get progressively more difficult as you go. And the challenges take on a wider scope. You'll move from the United States to Europe, to the rest of the world, and then to a short series of futuristic missions—such as building a rail system for the island of Cali-

continues

RAILROAD TYCOON 3
RATING: ♦♦♦♦½
PROS: Challenging campaigns; great production value; map editor and Sandbox mode let you focus on construction.
CONS: No cross-platform multiplayer support; frustrating undo feature.
PRICE: $50
COMPANY: MacSoft, www.macsoftgames.com

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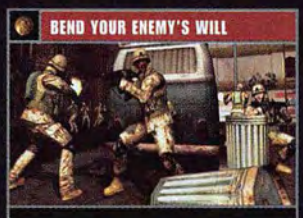

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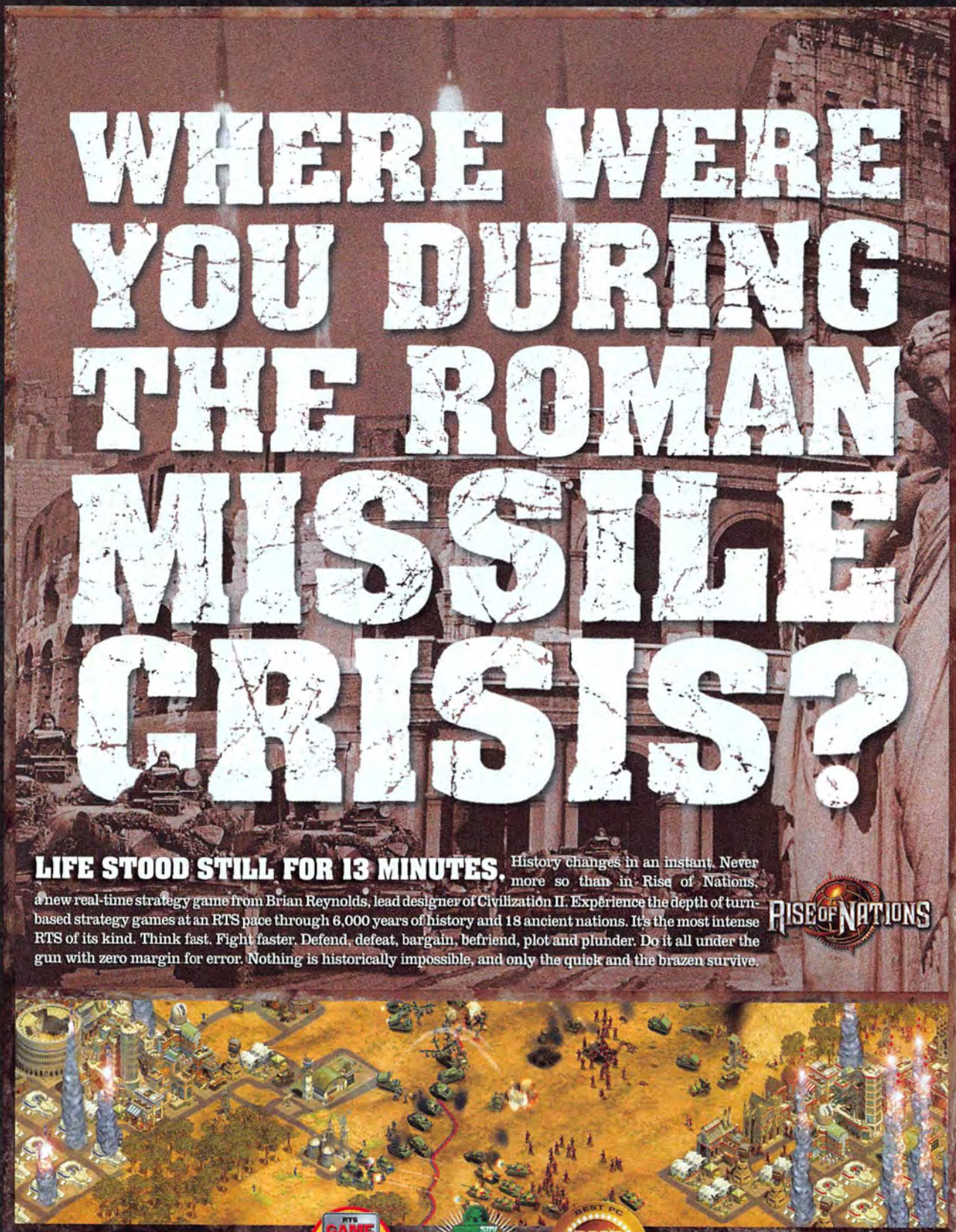
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fornia, after seismic activity has broken it away from the mainland.

The game also offers a series of separate challenges for players who want a break from the single-player campaigns. For example, you may have to link the f cities of the British Isles by ra a dawn of the industrial re all of develop a railway syste s offer newly reunified Ger cus sounds the Berlin Wall, don't worry. gobs and go ocus on building If the ut the pesky laws of more or how much money my's coffers. This mode my four-year-old son, an thusiast, who just wanted to and watch the diesel engines run. The game also includes an editor that lets you design your own maps.

Railroad Tycoon 3 supports online competition with other Mac players through the GameRanger service. Alas, you won't be able to compete against Windows players—the PC version relies on DirectPlay, a Windows-only technology.

The game's graphics are terrific, with beautiful detail in locomotives, cars, and environments. Its 3-D–graphics engine lets you zoom in from a satellite view of the terrain to an up-close look at your locomotives in motion. This is great for situational awareness: you can instantly check on how your lines and your competitors' lines are doing. (For best results, I recommend using a multibutton mouse with a scroll wheel.)

Sound effects are also top-notch. Each locomotive has a distinctive whistle. And when you zoom in on a particular location and pan around, you'll hear the sounds of people, livestock, and goods moving about. The music soundtrack is good—especially if you like the bluegrass and country strains traditionally associated with railroading. However, it gets repetitive after a while and is jarringly out of place in non–United States scenarios. Thankfully, you can turn it off.

The game requires a 400MHz or better Mac running OS X 10.2 or later.

The Bottom Line Railroad Tycoon 3 is unquestionably the best of the Tycoon series. I wholeheartedly recommend it to strategy fans.

Spider Bites

It was inevitable that game makers would try to capitalize on the success of *Spider-Man 2* with their own web-slinging adventures. Unfortunately, Aspyr has brought the worst of the lot to the Mac. Its new Spider-Man 2: The Game strips game play to its bare essentials. What's left is mediocre, bland, and unappealing.

Aspyr bills Spider-Man 2 as "a unique family-friendly adventure for ages six and up." That alone should be enough to send most self-respecting gamers running for the hills. But even as a family-oriented game, Spider-Man 2 fails. All but the youngest and least-experienced gamers are sure to be disappointed by the game's simplistic action. For example, every time Spidey comes up against a significant villain, the game presents you with a diagram showing exactly what you must do to win.

The game even manages to take the joy out of Spider-Man's greatest asset—his ability to swing from a web. Instead of offering a web-slinging system that lets you explore the expansive New York cityscapes, Spider-Man 2 forces you to

continues

SPIDER-MAN 2: THE GAME
RATING: ▮▮
PROS: Easy enough for little kids.
CONS: Simplistic game play; mediocre graphics; cheesy sound effects.
PRICE: $30
COMPANY: Aspyr Media, www.aspyr.com

Spidey Sense With uninspiring play and cheesy voice-overs, Spider-Man 2: The Game fails to deliver the excitement of the movie.

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aim your web at specific target icons on the sides of buildings. So you swing from block to block along a fairly pattern and end up feeling as though were on rails.

The game's graphics are better than those of the first Spider-Man game, which Aspyr converted from a PlayStation title several years ago, but they're far from impressive. Graphics are blocky and lack the sharp details and lighting effects you'd expect from a game like this. Sound effects are also disappointing, with some laughably bad voice-overs that call to mind Stan Lee's worst comic-book dialogue instead of the taut, emotionally compelling movie.

The game requires a 700MHz G3 or better and OS X 10.2 or later.

The Bottom Line If you've got a young kid who loves Spider-Man, Spider-Man 2: The Game might be worth your while. But if you're looking for a serious web-slinging action game, skip this one and try to get your hands on the console version. It's much better.

Bursting Your Bubble

Strange Flavour and Freeverse Software have teamed up once again, to release Airburst Extreme, an update to their popular 2001 arcade action game, Airburst. And as much as I hate the term "Extreme," it's a fitting moniker for this fast-paced sequel.

Airburst's premise is simple. You and other contestants are suspended on platforms high above the planet's surface by large canopies of balloons called Floaters.

AIRBURST EXTREME
RATING: ★★★★½
PROS: Great variety of game modes; awesome music; supports online competition.
CONS: Action is a bit too fast in some challenges.
PRICE: $30
COMPANY: Freeverse, www.freeverse.com

You punt balls with the hope of popping your opponents' balloons and making their Floaters fall while keeping your own intact. You can move your platform rot grab power-ups as they whiz by, Air yourself with a shield that but it Thanks to Floater. rounds are basically the same, may be too fast fo the action. possibly the game's

Airburst Extreme the game's new power-ups. My favo they Damage, which makes yo vicious teeth. The game also b many old favorites, such as Stick which make your shield grab balls as pass by, letting you perform precisi strikes against a pesky opponent.

Using your shield to continually volley back your opponent's ball (or balls, as is the case in multiple-ball modes) drives up your power meter, which in turn activates new Extreme Powers. One of my favorites is the Extreme Shield, which creates an impenetrable shield around your Floater so no one can hit you.

Airburst Extreme features a new, interactive Story mode, which lets you learn a bit more about the costumed characters that make up the Airburst world. But although this mode will hold your interest for a while, the game's strength lies in its 32 arena modes, which let you compete against the computer or other online players. Game modes range from the expected Deathmatch to other, more creative variations, such as Racing and Football.

In addition to fast-paced game play, Airburst Extreme has a killer soundtrack. It's a combination of rock, pop, and electronic music that really fits this eclectic and unusual game. The game's OpenGL-based graphics look fantastic; screenshots don't nearly do it justice—you should download the demo and have a look for yourself.

The game's system requirements are fairly modest: a 400MHz G3 or better with OS X 10.1 or higher. If you've registered the origina Airburst through Freeverse, you'll get a extra treat, by the way Entering that registration code in Airburs Extreme will unlock

e Airburst Extreme earns its name with lots of fast-paced game a variety of creative game modes.

new game mode—a nice little touch for loyal gamers.

The Bottom Line Airburst Extreme outdoes its predecessor in every way. The action is fast, furious, and fun. What are you waiting for?

Jump and Run

If you long for side-scrolling arcade games like Sonic the Hedgehog, you should check out Bud Redhead, a recently released shareware title from Phelios Software. Featuring fast-paced action and whimsical graphics, Bud Redhead is a lighthearted game with some classic flavor.

Old-School Fun Bud Redhead takes a page from classic side-scrolling games such as Super Mario Brothers and Sonic the Hedgehog.

BUD REDHEAD
RATING: ♦♦♦♦
PROS: Smooth arcade action; great graphics.
CONS: Clunky save-game system; some challenges are frustrating.
PRICE: $20
COMPANY: Phelios, www.phelios.com

Bud Redhead is out with his girlfriend when Feyatta—a greenish, feline-looking alien on the run from galactic authorities—absconds with her. As any good hero would, Bud immediately sets off to rescue his love. In the process, he travels through four different worlds, including a primeval forest, ancient Egypt, medieval castles, and a futuristic spaceship. Each world has five levels, including secret areas. To pass through each level, Bud has to collect coins that unlock a star gate (a game element heavily influenced by the movies and TV show of the same name).

Admittedly, Bud Redhead has a flimsy story and hackneyed plot. But this simple little gem is fun, and it has the perfect setting. You make Bud jump and run through imaginatively crafted levels chock-full of goodies to collect and foes to either avoid or dispatch. You vanquish your foes by using a pair of nifty antigravity shoes to bounce on them. Some of the levels and pitfalls, however, are challenging to the point of frustration.

My main complaint is with the game's clunky, console-like save-game system, which requires that you restart either from the beginning of a level or at a checkpoint. This limits the game's potential. Bud Redhead is a great diversion when you've got a few minutes at lunch or between meetings; it'd be great if you could simply save wherever you happened to be.

The Bottom Line Bud Redhead offers a return to the good old days of the early 1990s, when Sonic and the Mario Brothers ruled the world. Gamers looking for an homage to those classic titles should check it out. □

MacCentral.com Senior Editor PETER COHEN wishes it were as easy to clean up his kids' model train set as it is to clean up after playing Railroad Tycoon 3.

Recently Reviewed

STAR WARS: KNIGHTS OF THE OLD REPUBLIC

♦♦♦♦; Aspyr Media, www.aspyr.com; $50

Star Wars fans looking for a sprawling role-playing challenge need look no further than Aspyr's Star Wars: Knights of the Old Republic, which I previewed in the November 2004 *Game Room*. This rich and deep game offers dozens of hours of play in a world populated by lightsabers, wookiees, droids, and everything else you'd expect in a Star Wars game. You'll select one of nine customizable characters and travel between seven worlds as you try to defeat the evil Sith. Along the way, you'll learn new Jedi tricks and recruit other characters to join your missions. The decisions you make about how your character acts will determine whether he or she becomes good (and follows the light side of the Force) or evil (and serves the dark side). Be sure to also download the patch (available from Aspyr's Web site), which fixes a video problem on eMacs and resolves an autosave issue. You'll need a 1GHz G4 or faster, OS X 10.3, 256MB of RAM, and a DVD drive to play.

> BitPal
> BuddyPop
> WiFi Spy
> Booxter
> Detour

Mac Gems

If you ever lug around a laptop or a PDA just in case you need contact or schedule information, the $16 **BitPal 2.5** (★★★½; www.bitpal.com), from the company of the same name, may allow you to leave your portable computing devices at home. BitPal is a svelte information manager that keeps track of your contacts, calendars, and to-do lists.

It's designed to be stored on solid-state media—a USB flash drive or a CompactFlash card, for example. Since the BitPal application and all its data are stored in the same folder, you need to copy only that one folder to your storage medium. When you need access to your data, simply mount your device or card on any computer and launch BitPal. When you're done, you unmount and remove it, and no trace of your personal data is left behind. The BitPal folder, including your data, takes up only 5MB of space, so it will fit on any flash medium on the market and still leave room for documents and other files.

Little Flash Book BitPal lets you keep your contacts and calendars handy, even when your laptop or PDA isn't.

In case your life is cross-platform, BitPal also comes in a Windows version—you can store both versions on a Windows-formatted media card and have quick access to your information on any computer running Windows or OS X. And since it's easy to lose a tiny flash drive, you can protect your personal data by encrypting it with the Blowfish algorithm.

If you're already using OS X's Address Book and iCal, BitPal can import your data from those applications. (Unfortunately, it doesn't sync with them.) Furthermore, the Windows version of BitPal can import data from Microsoft Outlook, making BitPal one of the easiest ways to access Outlook contact and calendar information under OS X. Even if you don't use BitPal as your primary information manager, it's a great way to keep your data handy in case you need it in a pinch.

An Old Friendship Renewed

Speaking of contacts, last year I told you about one of my favorite OS X utilities, Tynsoe.org's BuddyPop (★★★★; October 2003), which gives you quick access to your contacts without making you open the Address Book application—you simply press a keyboard shortcut and type the first few letters of a contact's name. Over the past year, BuddyPop, which costs 7 euros (approximately $9 at press time), has been updated several times, and if you haven't yet tried it, the current version, **BuddyPop 2.2** (★★★★½; find.macworld.com/0122), deserves a look—especially if you have a Bluetooth-enabled cell phone. Once your phone is paired with your Mac and in range, you can call any contact just by double-clicking on his or her phone number in BuddyPop's contact window. Even cooler, the utility provides an on-screen Caller ID feature that's more useful than the one Address Book provides: when someone calls your mobile phone, a window pops up showing the incoming phone number and—if the person is in your Address Book—the caller's name and picture. You can choose to answer the call, silence the ringer, or deny the call altogether (which with most cellphone providers will send the caller straight to voice mail).

The newest version of BuddyPop also includes modem-dialing features and many more display options. It's a significant upgrade to the last version I looked at, and well worth the paltry shareware fee.

Hello, Old Friend The latest version of BuddyPop offers integration with Bluetooth phones.

Wi-Finder

When traveling on business or just around town, I often find myself wondering if there are any nearby wireless networks to which I can connect my PowerBook for a quick e-mail check. Although there are a number of software products that can search for open networks, using them means unpacking your laptop, turning it on, and launching the application—a waste of time if no network is found (not to mention an unnecessary drain on your laptop's battery). For fre-

continues

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I Spy Wi-Fi The WiFi Spy tells you if a Wi-Fi network is nearby—but whether or not you can connect is another story.

quent travelers, a tool like Marware's $30 **WiFi Spy** (★★★★; www.marware.com) can really come in handy. This keychain-size device has a single button and four LEDs; hold the button down, and the LEDs tell you if you're in range of an 802.11b or 802.11g network and indicate the signal strength. It's even directional, which helps you close in on the source.

One of the problems I've had with other such detectors was that they couldn't differentiate between Wi-Fi networks, microwave ovens, and cordless phones, all of which use frequencies in the 2.4GHz range. But in my tests, the WiFi Spy correctly identified Wi-Fi networks while ignoring phones and microwaves.

Of course, just because the WiFi Spy detects a network doesn't mean that network is open—it might use security measures to keep passersby from accessing it. That's when you'll need to whip out your PowerBook and give it a try. But at least you'll be doing so only when there's actually a network within range.

Contemporary Card Catalog

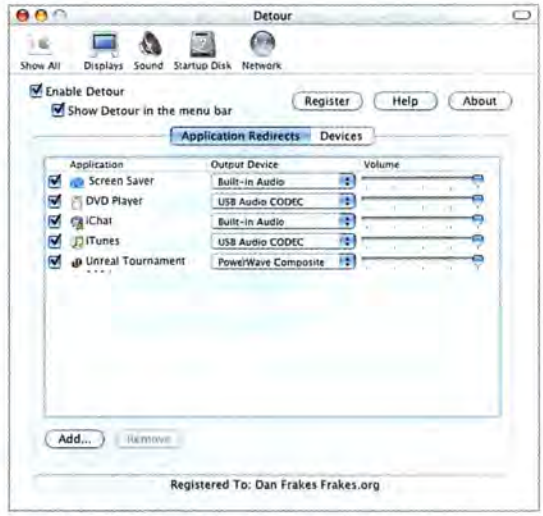
Our house is full of books: technical, history, fiction, and much more—we like to read. One problem we have is how to keep track of all those books. There are a number of great book-cataloging utilities for OS X, but Deep Prose Software's $15 **Booxter 1.5.3** (★★★★; www.deepprose.com) has a feature that makes it stand out: the ability to add books to your catalog by "scanning" their UPC codes with an iSight or DV camera. (You can also use a handheld scanner.) You just hold a book up to your camera, make sure the bar code is in focus, and click on the Scan button in Booxter; the program extracts the book's ISBN (International Standard Book Number) and then searches the Library of Congress Web site and Amazon.com for all the details—title, author, publisher, number of pages, price, book description, cover design, and so on—and adds the book to your catalog. You can also add books by manually typing in their ISBNs—one at a time or in bulk—or by importing them from a text file or a spreadsheet.

EyeSBN Booxter uses a digital video camera to scan your books—then it adds their catalog information to your library.

Booxter also stores all the data you'd expect a book-cataloging utility to: personal rating, price paid, borrowing and lending information, series numbers, and much more—over 30 fields in all. The iTunes-like interface makes it easy to browse your library by any criterion, and you can even create Smart Book Lists to quickly view books that fit particular sets of criteria. If you have books overflowing your bookcases, Booxter might be the tool you need to keep track of them all.

Sound Sorting

Macs have many options for audio output—the built-in speaker(s), headphone jack, USB or FireWire audio, PCI audio cards, and (with G5-based Macs) optical output—but one of the limitations of OS X is that almost all audio must go through the same output. (OS X 10.3 lets you play system alerts through a different output.) Even though you can play games and movies through a set of external speakers to get great sound with bone-jarring bass, you're also stuck with iChat AV notifications that can scare you out of your seat.



Sounding Out Detour directs each application's sound to your preferred output.

Rogue Amoeba Software's $12 **Detour 1.5** (★★★★; www.rogueamoeba.com) aims to fix this problem. Using Detour, you can route each application's sound to a different output; for example, you can send DVD Player's audio through your Mac's optical output to your 5.1 home theater system while restricting iChat AV's notification sounds to your Mac's internal speaker. You can also control the volume of each audio output separately.

Even if your only audio option is a set of speakers connected to your minijack output, Detour can help by allowing you to control the volume level of each application independently of the others. So you can blast your favorite game while keeping your e-mail–notification sounds subtle. No matter how many audio sources and outputs you have, you'll appreciate the ability to sort your sounds. □

Senior Writer DAN FRAKES (www.danfrakes.com) is the author of *Mac OS X Power Tools*, second edition (Sybex, 2004), and the reviews editor for Playlistmag.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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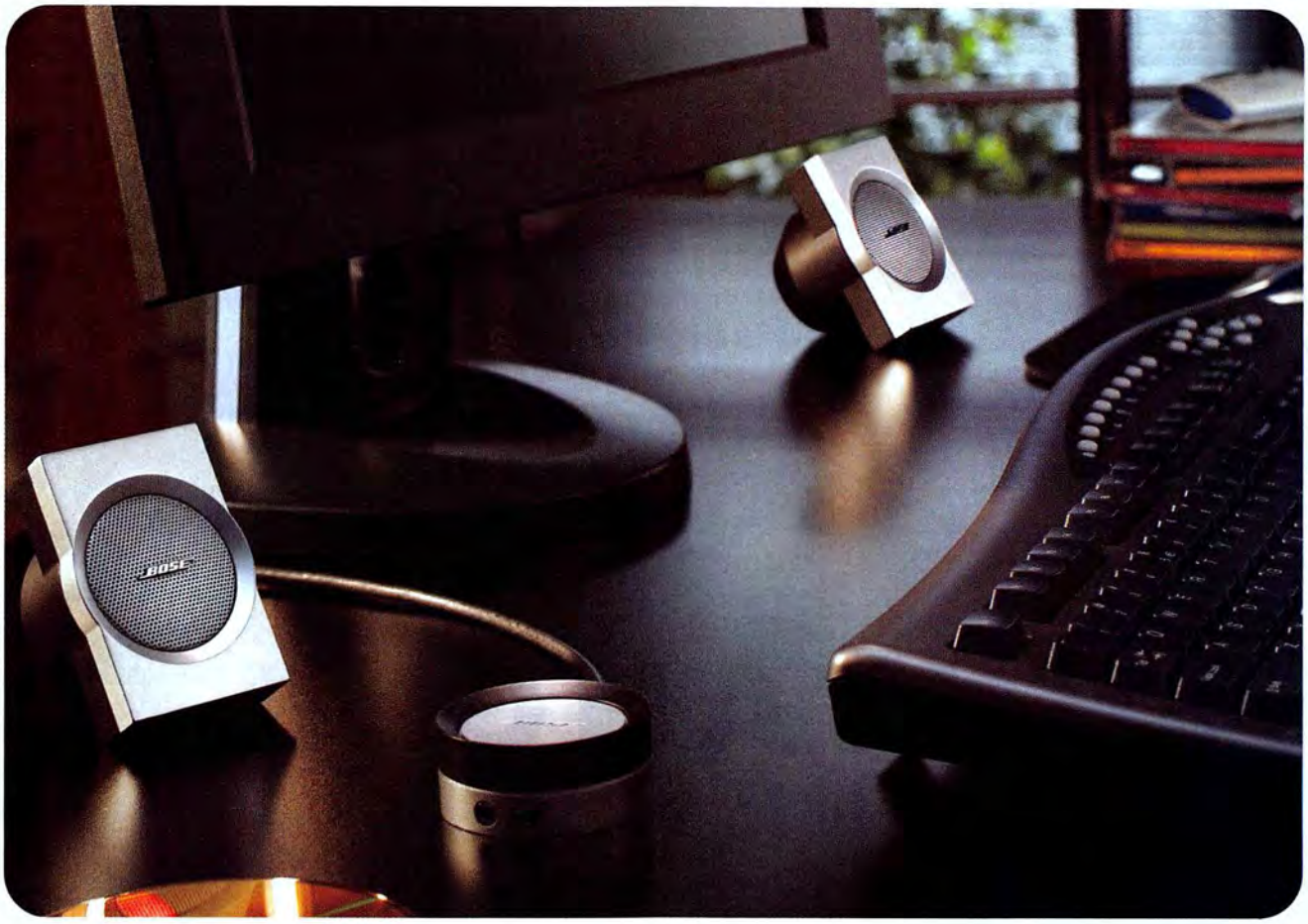

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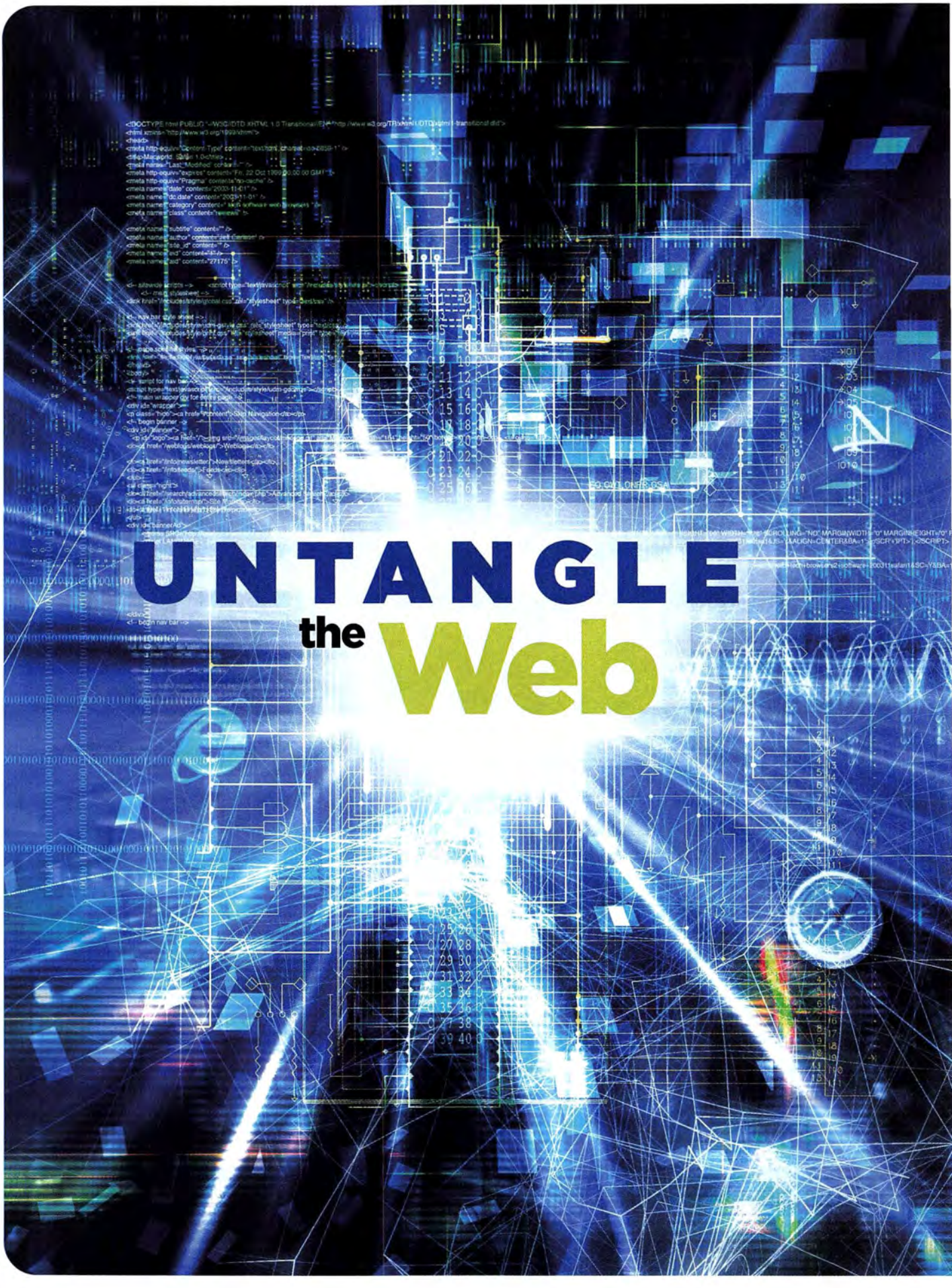

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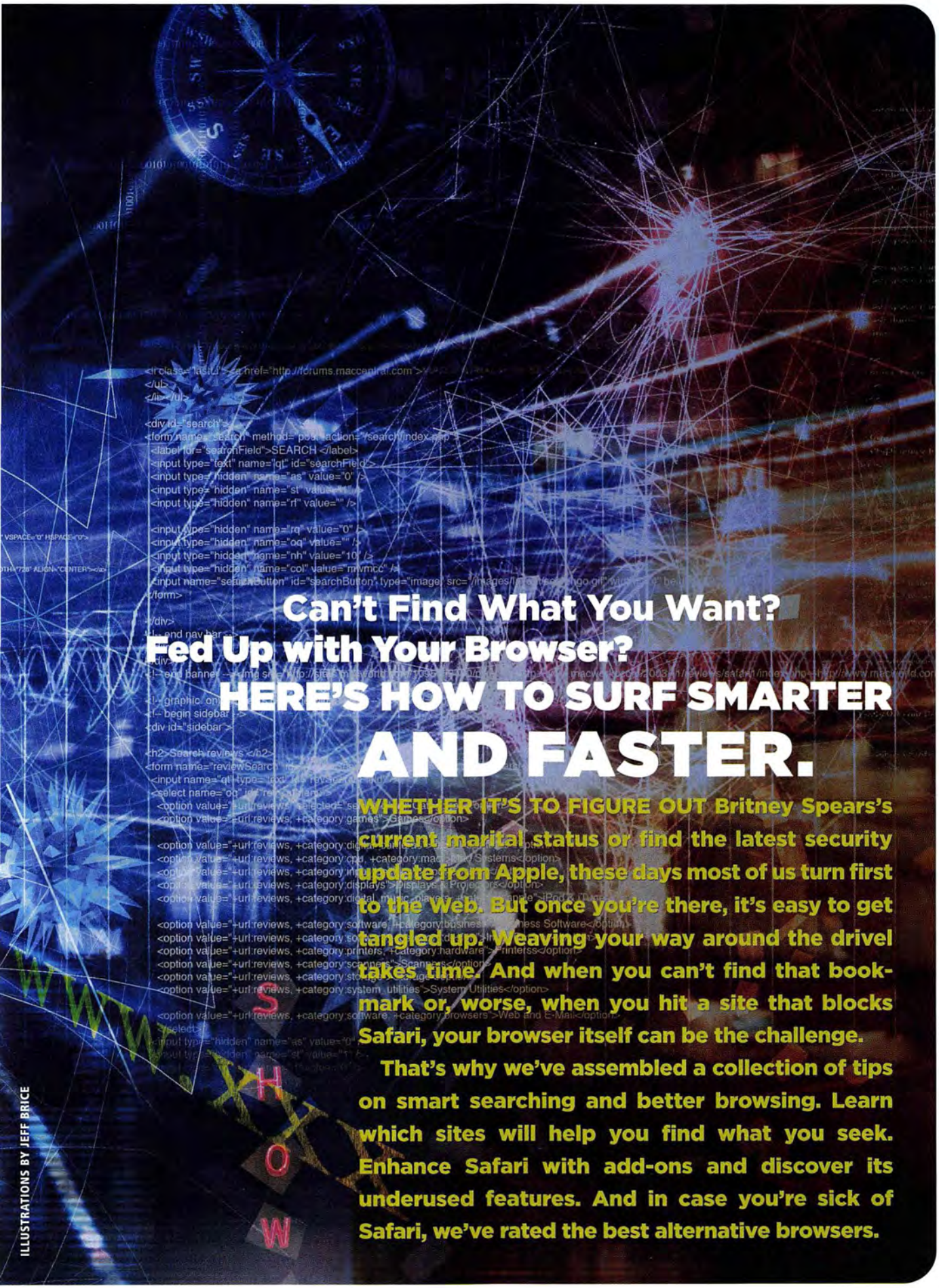

Can't Find What You Want? Fed Up with Your Browser?

HERE'S HOW TO SURF SMARTER AND FASTER.

WHETHER IT'S TO FIGURE OUT Britney Spears's current marital status or find the latest security update from Apple, these days most of us turn first to the Web. But once you're there, it's easy to get tangled up. Weaving your way around the drivel takes time. And when you can't find that bookmark or, worse, when you hit a site that blocks Safari, your browser itself can be the challenge.

That's why we've assembled a collection of tips on smart searching and better browsing. Learn which sites will help you find what you seek. Enhance Safari with add-ons and discover its underused features. And in case you're sick of Safari, we've rated the best alternative browsers.

ILLUSTRATIONS BY JEFF BRICE

SEARCH SMARTER

BY SARAH MILSTEIN

THE WEB IS TRULY A GREAT INVENTION—right up there with the wheel and dashboard cup holders. But it wouldn't be much fun if you couldn't find anything on it—a distinct possibility, as it grows by at least five million pages a day. While more pages mean more information and media to meet your needs, they also mean that to find the good stuff, you have to sort through a digital pile that's growing even as you search.

While most people get stuck in the rut of using the same search engine to look for everything, savvy searchers try to use the right tool for each job. Here are a few sites worth bookmarking—and some secrets about them few people know. (To learn more about advanced search techniques, see "5 Query Tricks.")

Google, the Granddaddy of Them All

It's news to approximately nobody that Google is an awesome and hugely popular search engine. In fact, the good engineers at Apple like it so much that they built a Google search box right into the Safari toolbar—so you don't have to hop over to www.google.com to run a Google search. Instead, just type your terms into the search box and let 'er rip. (If you're interested in a Google toolbar that has a lot more features, take a look at Mozilla's Firefox browser.) What few searchers realize is that Google has a lot of seldom explored—yet tremendously useful—features.

Find Images Fast If you want to find graphics on the Web—including photos, maps, cartoons, posters, and more—Google's Images is a trove of 880,000,000 pictures you can search by keyword. To use it, go to http://images.google.com, or click on the Images link on Google's home page. You can also run a regular search and then click on the Images link at the top of your results page to run that same search in Google's image bank. Google shows you your results in the form of thumbnail images; click on one to view the page where Google found it (see "Get the Picture").

Get the Picture When you're looking for a picture, click on Google's Images link to narrow your search. For example, a search for *Cookie Monster* brings up photos, drawings, and cartoons of the puppet. (Bear in mind that pictures you find on the Web usually belong to someone. If you want to use one, contact the site's Webmaster to ask for permission.)

Get All the News Google also has a news site, which is constantly updated with stories culled from more than 4,500 sources (http://news.google.com). Of course, it's a good place to find breaking news. But because Google News draws from so many media sites, its real benefit is that it lets you compare the way different outlets cover the same story. For example, you can easily see how New York and Boston newspapers approach the Red Sox–Yankees rivalry differently, or whether big-city media cover NASCAR adequately.

Compare Prices Similarly, Froogle—Google's price search engine—lets you compare the prices different online retailers charge for the same goods. Try it, at http://froogle.google.com. (Incidentally, if you click on the Froogle logo, the list of recent searches is updated. That list is a good way to get ideas—or just to see the freaky stuff people have tried to price out.)

Do Conversions and Calculations In addition to its array of sites, Google has a few tricks up its regular search box. First, it's a calculator. If you type in 2+2= and then press return, Google recognizes that you're doing a calculation rather than looking for Web sites, and it shows you a results page with 2+2=4 (see "The Convenient Calculator").

The calculator is a great way to do math without moving your fingers from the keyboard. Incredibly, you're not limited to basic equations (use the aster-

The Convenient Calculator You can use the Google calculator for simple or complex equations. Even better, you can use it to do conversions—try time (*how many fortnights in a year?*), mass (*13 tons in stones*), data (*13 kilobytes in bits*), volume (*how many teaspoons in 12 gallons?*), and much more. The Google calculator knows a surprising array of units, and it takes less than a second to find out whether it can convert the measurements you need.

Auction Helper Use the pop-up window next to the Vivisimo search bar to limit your search to eBay. As you can see on the left side of the page, the search engine clusters your results *by category*. This search tool is a lot more sophisticated than eBay's, and it lets you home in quickly on the goodies you want to buy.

isk [*] for multiplication and the slash [/] for division). It can also do square roots, logarithmic functions, exponentiation, factorials, and more. And you can do unit conversions—in plain English. For example, you can enter `How many feet in a meter?`, `A mile in inches`, or `10 miles in km`. You can find an excellent rundown of the calculator features at GoogleGuide (find.macworld.com/0126), an unofficial Google help site.

Find a Phone Number The plain old Google search box is also a U.S. phonebook. Type in the name of a person or a business, as well as the city and state or zip code, and Google will give you an address and phone number. To use the search box as a yellow pages, type in the kind of business you're looking for and a zip code or city and state, like this: `dog kennels Boulder CO`. Google gives you a list of canine boarders near Boulder (click on the top link—in this case, Local Results For Dog Kennels Near Boulder, CO—to get a full listing). The yellow pages feature, called Local Search, is very handy for planning a trip or finding, say, a pizza place in an unfamiliar town.

Google is also a reverse phonebook. If you type in a phone number, you'll get a name and address. And if you type an area code, you'll get a link to a map of the corresponding area.

But Wait, There's More! Here are two more Google tricks. First, to get the definition of a term (rather than pages that mention it), type `define:` and then the word you want to define. For example, `define:hippopotamus`. (Don't worry about whether there's a space after the colon—your search will work either way.) Second, to look up the status of a package delivery on a carrier's Web site (FedEx, UPS, or U.S. Postal Service), simply type the tracking number into the Google search box. The first line of your results will be a link to the page about your package.

Other Sites for Other Jobs

Of course, Google isn't the only search engine in town. Others can turn up different results or display them in ways that may be more useful to you.

Vivisimo Most search engines show you your results as a fairly straightforward list. Vivisimo (www.vivisimo.com), on the other hand, clusters your results into categories, which is a terrific system for helping you find exactly what you want—not just something close to it. For example, if you search Vivisimo for the word *volleyball*, the site clumps your results into groups such as Equipment, Adult Leagues, Beach Volleyball, Rules, and so forth, letting you home in on the aspect that interests you.

Even better, you can use Vivisimo to search specific sites, including eBay, whose own results are sometimes chaotic and hard to sift through. (The pull-down menu next to the search box lets you

START WITH THE RIGHT SITE

Looking for something really specific—like the text of an appropriations bill making its way through Congress? Bypass search engines altogether and go to a site that focuses on your topic. Here are some good sites for finding specific kinds of information.

TO FIND INFO ABOUT . . .	. . . CHECK HERE	NOTES
Government	www.firstgov.gov	Thoughtfully designed portal to the astounding array of U.S. government sites.
Health	www.medlineplus.gov	Run by the National Institutes of Health, with links to tutorials, clinical trials, and medical journals.
Law	www.nolo.com	Indispensable, plain-language explanations of all things legal.
Movies	www.imdb.com	Look up the cast, crew, and other details about practically every movie ever made—or search by person and find every movie or TV show an actor or a director has worked on. You can also search for quotes from movies.
News	www.topix.net	Very well-organized news from more than 7,000 sources.
People	www.accurint.com	Surprisingly detailed information on individuals, but the site is not free.
Reference	www.refdesk.com	A treasure trove of links to every kind of reference information available on the Web—from almanacs to opinion polls to zip codes.
Words	www.onelook.com	Runs your search in 970 dictionaries at once; also does translations.

Go Fetch Multimedia! Dogpile lets you go beyond a simple search for images to choose exactly what you want to find. If you search for a song and select Audio, you'll get a list of sites offering the song for download.

choose a site or sites to search.) Because Vivisimo's results are so well organized, you can get both a great overview of what's up for auction under your search terms and a direct path to the specific stuff you're interested in (see "Auction Helper").

Dogpile Dogpile (www.dogpile.com) is a metasearch engine, which means that it runs your search through a bunch of engines simultaneously and then shows you the best results from each—a great efficiency trick (and it clusters results, as Vivisimo does). For example, when you want to find the top results of a search for the term *"history of poker chips"* from Google, Yahoo, Overture, Ask Jeeves, About, LookSmart and FindWhat, you can use Dogpile to search all of them at once—saving you trips to seven separate search engines.

QUERY TRICKS

SEARCHING IS SIMPLE, RIGHT? Just head over to a search engine, type your search term—for example, `Milky Way`—and press return. Within milliseconds, you're staring at a list of six trillion pages that contain your query words. Unfortunately, 99.9 percent of those pages probably aren't about your favorite galaxy. You need to filter out the flotsam. These simple yet sophisticated tricks work with nearly all search engines.

1 Include Quotation Marks If your search term is actually a phrase, put it in quotes, like this: `"Milky Way"`. Doing so eliminates any pages that contain just *milky* or only *way*. This trick is also good for names (`"Dan Rather"`) and lyrics (`"Mary had a little lamb"`), and for ensuring that your search engine doesn't ignore common and small words such as *a, and,* and *the*. Many search sites consider these words superfluous unless you specify that they're part of a phrase. So typing `"to be or not to be"` can get you vastly different results than `to be or not to be`.

2 Be Negative When you put a minus sign in front of a word in your query, search engines ignore pages that contain that word—which is a fantastic way to weed out irrelevant pages and focus your results. For example, in your search for *"Milky Way"*, eliminate words such as *chocolate* and *candy*—so the whole query looks like `"Milky Way" -chocolate -candy`. The results of that search won't include any pages mentioning either chocolate or candy. (Incidentally, this example shows you something else important: you can mix and match query tricks.)

3 Use Wildcards A wildcard is a symbol—usually an asterisk (*) but sometimes a question mark (?)—that stands in for words or partial words you don't know. For instance, if you can't remember just what it was Mary had, enter `"Mary had a little *"`. Your search results are likely to start with instances of *Mary had a little lamb,* but they could also include variations, such as *Mary had a little headache.*

Some search engines—unfortunately, not Google—let you use a wildcard to substitute for part of a word, such as `"G* Bush"`—which gives you results including *George Bush.* The partial-word wildcard is critical when you can't remember how to spell something. Another search engine I haven't mentioned—AltaVista (www.altavista.com)—lets you use that trick.

4 Ask an Answer When you have a question—"What color is Brad Pitt's hair?"—what you really want to find is the answer. Therefore, your best bet is to search for the answer: `"Brad Pitt's hair is *"`. (If you search for a question, you'll find pages asking the same thing.) The wildcard and quotation marks come in handy in these queries, though you may have to try a few variations, for example, `"Brad Pitt has * hair" -facial`.

5 Try an Advanced Search Almost all search engines have a form for running an advanced search (look for a link on the home page). This form lets you specify additional conditions to narrow your search. Different engines offer different options, but common choices include date ranges (good for filtering out current or stale news); domains (a nice way to narrow your search if you're looking for, say, pages from nonprofit companies); and languages (if you want only sites in Farsi, this is the way to get them).

Advanced search pages often let you block adult content from your results. However, this "safe searching" can occasionally block legit pages.

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TIP

TIP: AVOID UNDERCOVER ADS

With most search sites, you get results that include boxes with links to one side, or links with colored backgrounds. These are ads. For example, if you search Google for the term *My Life, the Bill Clinton memoir,* you'll see ads for Amazon.com and Barnes & Noble. However, Yahoo includes paid listings in your results with no indication that somebody paid for placement. These make up a small percentage of most Yahoo results, but they can displace results that better meet your needs. So when you run a search in Yahoo, make sure to look beyond the first page, or try another engine to track down the best stuff.

Dogpile also offers a twist: it can look for things Google can't, namely audio and multimedia files. If you run a search for a song title in Google (or any other engine that looks for text), you'll get a list of sites that mention that song. If you type in the same title on Dogpile's home page and then select the Audio option above the search box, you'll get a list of sites from which you can download that song.

Yahoo A regular Yahoo (www.yahoo.com) search can sometimes unearth a page Google has missed. But one of Yahoo's most useful features—a form that lets you search for particular kinds of information—is totally buried. If you run a Yahoo search, your results page has a Shortcuts link in the upper right corner. This takes you to a page with a slew of very specific search options, including area codes, traffic reports, weather, movie show times, exchange rates, and a whole lot more. You can get to the shortcuts page directly by pointing your browser to find.macworld.com/0127.

Finders Keepers

A lot of people find that the hardest part of successful searching is training themselves to try a few different things. Get in the habit of testing different queries and alternative search engines, and soon you'll be pulling needles out of the digital haystack every time.

BROWSE BETTER

BY DORI SMITH

DO YOU WISH THERE WERE AN EASIER WAY to search sites *other* than Google? Do you long to read online PDFs without the hassle of downloading them first? You can do all this—and much more—by taking advantage of a diverse selection of Safari plug-ins. And like Apple's browser, most of these add-ons cost absolutely nothing. Still not satisfied? Then check out "Beyond Safari" for browser alternatives.

1 The All-in-One Power Tool

Hao Li's $10 **Saft 7.0.1** (★★★★½; http://haoli.dnsalias.com/Saft) is one of the few Safari plug-ins that you have to pay for. But considering everything this add-on can do, it's nothing short of a bargain at its low price.

Get the News Saft's customizable RSS sidebar (on the left) lets you choose which headlines you want to read in your Safari browser.

Saft is packed with features you may not have realized you wanted—but which you'll likely discover you can't do without. The program lets you search your bookmarks and page history, save a group of tabs to reuse later, use the Google search box to target other search engines, quickly export a Web page as a single-page PDF file, and a lot more.

Here's another neat trick: you can set Saft to automatically access all the sites you had open when you quit Safari. This means that you won't lose your research if you need to leave suddenly. Saft also adds an RSS (Rich Site Summary) reader to Safari for quickly accessing news feeds—something Apple won't have ready until the next version of OS X (see "Get the News").

2 The PDF Viewer

One of the main features I missed when I moved from Microsoft Internet Explorer to Safari was Explorer's ability to display PDFs inside the browser. So I was thrilled to find Schubert IT's **PDF Browser Plugin 2.1** (free for noncommerical use; www.schubert-it.com), which makes the other program's PDF feature look positively anemic.

With PDF Browser Plugin installed, you'll no longer have to worry about accidentally clicking on a link to a PDF and then being doomed to wait for Acrobat Reader to launch. Instead, PDFs will open right in Safari. The plug-in also lets you print, save,

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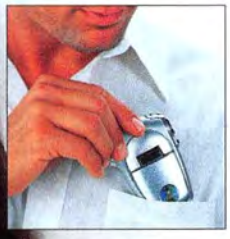

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©2004 Fisher Multimedia. All rights reserved. LCD screen image is simulated. As of October 1, 2003 the Fisher FVD-C1 CameraCorder™ is the world's smallest/lightest high-resolution MPEG-4 video camera and 3.2 megapixel digital still camera combined in one unit for consumer use.

resize, and otherwise tweak the PDFs you encoutner online.

3 Superior Searchers

Safari makes it easy to search Google—you simply type your search terms into the ever-present Google box and press return. But what if Google isn't the search engine you want to use? If that's the case, turn to one of three free plug-ins that let you specify your search destination: **AcidSearch 0.23** (free; find.macworld.com/0099), **SafariKeywords 0.5** (free; http://safarikeywords.sourceforge.net), or **Sogudi 0.4.3** (free; find.macworld.com/0100). All three plug-ins use keyword searches or pull-down menus to let you quickly search the sites of your choice via the address bar and the Google search box. For example, with Sogundi you can enter `mov Will Smith` to search the Internet Movie Database for all movies that feature Will Smith. The plug-ins also let you add your own custom search shortcuts.

4 The Safari Customizer

If you're comfortable working in Terminal, you can already change much of Safari's appearance and behavior. But if you aren't, there's **Safari Enhancer 2.5.2** (free [donations accepted]; find.macworld.com/0101), a free utility that lets you easily make those same changes. Safari Enhancer lets you set custom link colors, choose whether links should be underlined, adjust the number of items in your history, deactivate the cache, and so on. And unlike most other utilities, Safari Enhancer is a stand-alone program. You simply make your choices and then close the application—which means you won't have to worry about it causing instability as other plug-ins sometimes can.

5 The Web Developer's Toolbox

If you design and build Web sites, you'll appreciate **SafariStand**, by Hetima Computer (free; find.macworld.com/0098). SafariStand includes some of the same tools you'll find in Saft (such as exporting a page to PDF), as well as some unique features designed specifically for developers. For example, it supports syntax coloring, which color-codes a Web page's source code to help you quickly scan for particular tags. It also lets you peek at a site's cookies, CSS, and JavaScript files.

SAFARI'S HIDDEN POWERS

Are you getting all you can from Safari? Go online to read about two Safari tricks you shouldn't miss (find.macworld.com/0128).

My favorite feature, however, will appeal to anyone who gets tired of squinting at tiny Web graphics. SafariStand lets you resize a site's images in a new browser window. This is a wonderful way to work around developers who assume that everyone has great eyesight and a large monitor.

6 The Quick Fix

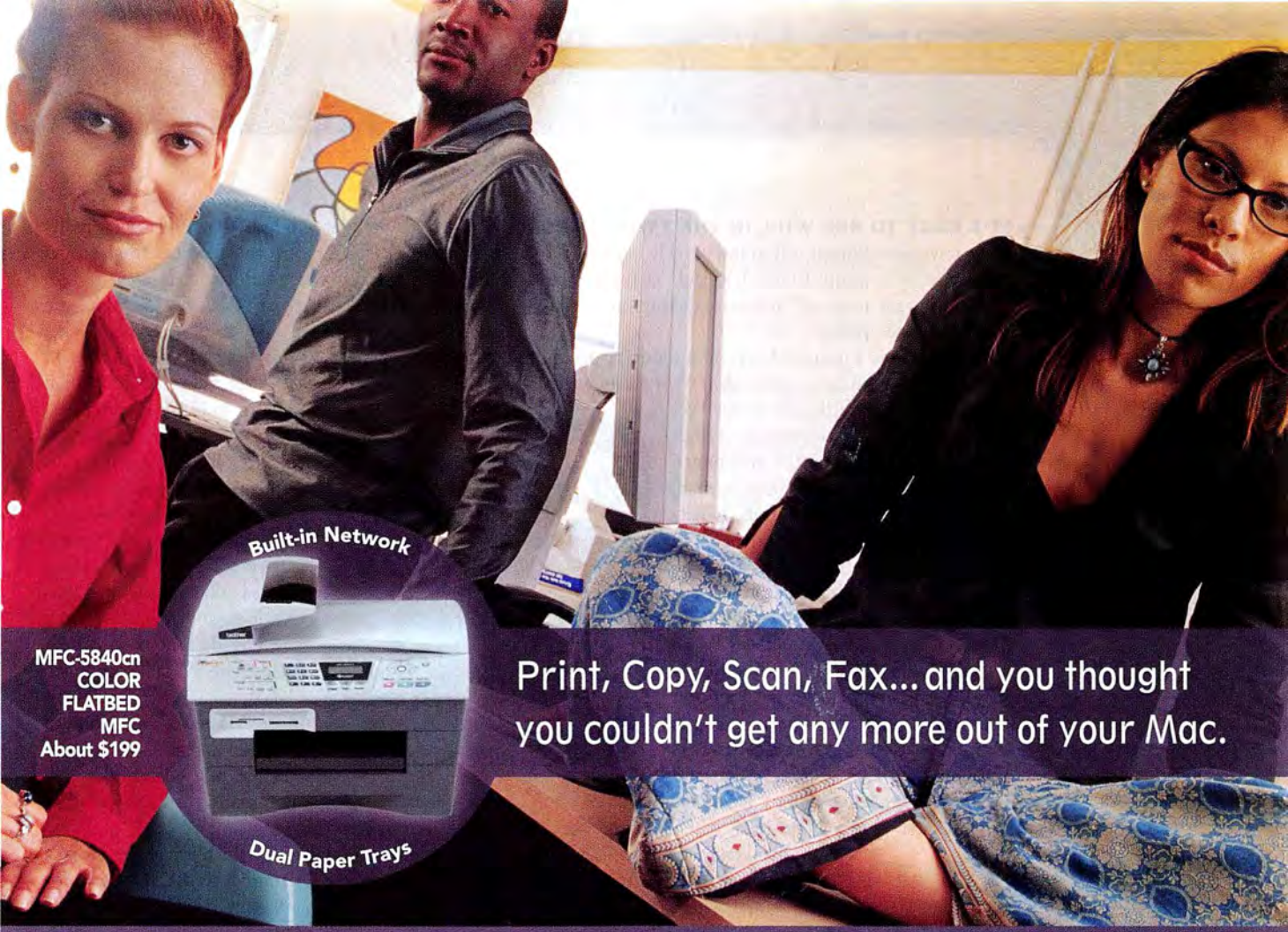
But what if you're looking for something a little more specific? For example, maybe you need a one-click way to resize your browser window, or to turn selected text into a search term in the iTunes Music Store. In many cases, you can add small features like this to Safari via a *bookmarklet*—a tiny piece of JavaScript code that lives in Safari's Bookmarks folder.

You can find many useful, prefabricated Safari bookmarklets on the Web. In fact, Apple has posted bookmarklets not only for the previously mentioned tasks but also for many others (find.macworld.com/0102).

If you're handy with JavaScript, you can also create your own Safari bookmarklets. I use my homegrown bookmarklets many times a day—for everything from relocating browser windows to posting items to my Weblog and checking a page for standards compliance. For a tutorial on how to create these bookmarklets and much more, go to find.macworld.com/0103.

Find Your Own Favorites

These are a few of my favorite Safari add-ons, but it's certainly not an exhaustive list. There are many more available online. You can find these tools on shareware sites such as VersionTracker.com. It's very likely that someone out there has created a plug-in for the exact feature you've been longing to have.



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GO BEYOND SAFARI

BY TOM NEGRINO

IT'S EASY TO SEE WHY, IN THE TWO YEARS since it was introduced, Safari has quickly become the dominant browser for OS X: It's sleek, fast, and free, and it beats the pants off of former champion Microsoft Internet Explorer.

But that doesn't mean Safari is right for every person and occasion. Sometimes you might want a lean, mean browser that does little but render Web pages quickly and accurately. Other times, you might want a full-blown Web-application suite, with e-mail, chat, and HTML-editing tools. Whatever you need, there are plenty of Safari alternatives to choose from.

I looked at nine alternative browsers: Firefox 1.0 Preview Release, Camino 0.8.1, and Mozilla 1.8, all from Mozilla; America Online's Netscape 7.2; Microsoft Internet Explorer (IE) X 5.2.3; The Omni Group's OmniWeb 5.01; Freeverse Software's BumperCar 1.0; Opera Software's Opera 7.54; and Alexander Clauss's iCab X 2.9.8.

The first thing I noticed when taking these browsers for a spin was that they're all pretty much equal when it comes to speed. With the exception of IE, which is noticeably slower, rendering performance is roughly equal.

I also found that most have good if not excellent support for Web standards. In that respect, they're all superior to the most widely used browser on the Internet, IE 6 for Windows. The one exception I found was iCab, which simply failed to display most test pages correctly. As a result, I eliminated it from further consideration.

Quick Like a Fox If you're looking for a lean, austere browsing experience, Firefox delivers.

Under the Hood

One reason for the uniformity of performance is that these browsers are based on just five different rendering engines. (The rendering engine is the software core of a browser. It's responsible for interpreting the HTML, CSS, JavaScript, images, and other components of a Web page.) OmniWeb, BumperCar, and Safari all rely on Apple's WebCore engine. Firefox, Camino, Mozilla, and Netscape use Mozilla's Gecko engine. (Both WebCore and Gecko are open source.) Only Opera, IE, and iCab use proprietary engines.

Broadly speaking, browsers that use the same engine will perform almost identically in terms of speed, and the pages they render will look the same. What really separates the browsers are the features they do (or don't) have on top of those rendering engines.

Mozilla's Different Flavors Take, for example, the various Mozilla browsers. They're all based on Gecko, but they vary widely. At the one end is Mozilla itself, which includes tools for everything from e-mail and chat to HTML editing. At the other is Firefox, which removes everything extraneous, leaving only an excellent, uncluttered browsing tool.

For pure browsing, Firefox is hard to beat. My only complaint is that it lacks the Mac OS look-and-feel. For that, you need Camino, which melds the Mozilla code to Cocoa, so it looks and feels more Mac-like. But Camino has been updated sporadically over the past year, and it still lacks essentials such as automatic forms. Still, it's a browser to watch.

Then there's Netscape 7.2, which is just the Mozilla suite with the addition of annoying advertisements for America Online and an integrated AOL Instant Messenger client that isn't compatible with iChat. It's the weakest browser of the Mozilla bunch.

Making Mozilla Yours One great thing about the Mozilla browsers is that people have written plug-ins that let you add new features. There are hundreds of these extensions (available at find.macworld.com/0129), and they range from improved ad blocking to tools for Web developers. If Firefox and Mozilla lack a feature you want, you'll probably find an extension that has it.

Tabs Done Better OmniWeb puts thumbnails of tabbed pages in a drawer on the side of the browser window. If you have too many tabs open, you can switch to a text list.

iTrip mini shown
(actual size)

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Quick, where do you most often listen to music? In your car, right? The easiest way to enjoy all of that music in your car is the Griffin iTrip. Snap iTrip on your iPod or iPod mini and suddenly your music is filling up your next road trip, daily commute or business trip - right through the built-in FM stereo of any car. Buy an iTrip for your iPod or iPod mini and your favorite song will always be on the radio.

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Apple at the Core

The one browser that really stands out is OmniWeb. It reimagines the whole idea of tabbed browsing, it gives you detailed control over your browsing experience, and it has a slew of other innovations that power users will love.

In some browsers, including Safari, the horizontal tab bar is too thin to handle many tabs; the names of each tab shorten to become unreadable and then spill off the edge of the window. OmniWeb fixes that by putting thumbnail pictures of your tabs in a drawer on the side of the window, making it easy for you to switch between tabs (see "Tabs Done Better"). The Workspaces feature saves collections of windows you've browsed (including their position and size on your screen), so if you have a particular set of sites you browse often, you can bring them all back up with a click. If your Mac crashes, OmniWeb automatically restores and reloads all the pages you were browsing.

Other features are equally well thought out. Some sites use annoyingly small fonts or are otherwise hard to read. OmniWeb's per-site preferences solve that problem; you can change the text zoom, fonts, and page colors for the site, and those changes remain the next time you visit. In addition to blocking pop-up windows, OmniWeb blocks ads on pages.

The bad news about OmniWeb is that, unlike most other browsers here, it isn't free. (There is a free 30-day trial.) I think the innovative features and terrific interface are worth the $30—but not everyone will.

The Rest of the Pack IE still performs reasonably well, but its time has past. One IE feature I long for is the Scrapbook, which saves copies of Web pages—perfect for saving maps and receipts from online purchases. Opera is fast but not free; a version without annoying ads will cost $39. It has integrated e-mail and IRC chat support but doesn't look or feel like a native Mac program. And iCab would have been a good browser in 1998, but you can skip it today.

If you're a parent concerned about where your kids are going online, you might consider BumperCar. Based on OmniWeb, it focuses on protecting children from objectionable Web content; its excellent filters let you control your kids' browsing experience.

Macworld's Buying Advice

For regular browsing, there's no reason not to stick with Safari; it will serve you well. If you need to work with Macs and Windows machines, and want the same browsing experience on both platforms, then Firefox is an excellent choice. For Mac power users, OmniWeb should be the first alternative choice.

SARAH MILSTEIN is a coauthor of *Google: The Missing Manual* (O'Reilly, 2004). TOM NEGRINO is the author of *Macromedia Contribute 3 for Windows and Macintosh: Visual QuickStart Guide* (Peachpit Press, 2004). DORI SMITH (www.dori.com) is a coauthor of *JavaScript for the World Wide Web: Visual QuickStart Guide*, fifth edition (Peachpit Press, 2004).

SAFARI ALTERNATIVES COMPARED

When it comes to OS X Web browsers, Apple's Safari isn't the only game in town. Using Safari 1.0 (★★★★; November 2003) as a baseline, here's how we rate nine alternatives.

COMPANY	PRODUCT	MOUSE RATING	PRICE	CONTACT	PROS	CONS
Alexander Clauss	iCab X 2.9.8	★★	free	www.icab.de	Quick at displaying simple HTML pages; extensive preferences.	Unacceptably poor page rendering.
Freeverse Software	BumperCar 1.0	★★★[A]	$50	www.freeverse.com	Simple parental-control settings; effective filters; fun launch page.	Some controls too advanced for younger kids; not free.
Microsoft	Internet Explorer X 5.2.3	★★★	free	www.microsoft.com/mac	Scrapbook feature still unrivaled; good Web-page rendering.	Slower than most browsers we tested; no pop-up blocking or tabbed browsing; no longer being updated.
Mozilla	Camino 0.8.1	★★★½	free	www.mozilla.org	Native Mac OS look-and-feel from a Gecko-based browser; intuitive and uncluttered.	Lacks automatic forms; poor history implementation.
Mozilla	Firefox 1.0 Preview Release	★★★★	free	www.mozilla.org	Excellent page rendering; uncluttered interface; extensible with plug-ins.	Lacks Mac look-and-feel.
Mozilla	Mozilla 1.8	★★★½	free	www.mozilla.org	Excellent page rendering; extensible with plug-ins; includes e-mail, IRC chat, and HTML-composing features.	Too many features; outdated look-and-feel.
Netscape	Netscape 7.2	★★★[B]	free	www.netscape.com	All the benefits of Mozilla, except AIM replaces IRC chat.	AIM implementation incompatible with iChat; annoying ads for America Online.
The Omni Group	OmniWeb 5.01	★★★★	$30	www.omnigroup.com/applications/omniweb/	Innovative tabbed browsing and workspaces; per-site preferences; better searching and ad blocking; RSS reading.	Not free.
Opera Software	Opera 7.54	★★★½	$39[C]	www.opera.com	Small and fast; very good page rendering.	Ad-free version costs money; awkward interface.

continues

When testing these Web browsers, we checked the following sites: Amazon.com (www.amazon.com), Backupbrain.com (www.backupbrain.com/), CSS Zen Garden (www.csszengarden.com), css/edge (www.meyerweb.com/eric/css/edge), Discovery.com (www.discovery.com), Electoral Vote Predictor (http://electoral-vote.com), and ESPN.com (www.espn.com). [A] *Reviews*, November 2004. [B] *Reviews*, December 2002. [C] Free version (with advertising) available.

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MACWORLD'S GEAR GUIDE

Choose the Perfect Gift—or a Cool New Toy for Yourself—from 37 of Our Favorite Gotta-Have-It Gadgets

The Mac is famously "lickable"—and today's Mac-compatible gadgets are enough to make you drool.

This selection of our favorites—a feast for the Mac lover's senses—includes products that have universal appeal and products designed for a particular type of person. So read on to find the perfect gift for everyone: office workers, photographers, moviemakers, nature lovers, travelers, gamers, music lovers, new parents, teens, and geeks. And after you've crossed the last name off your list, reward yourself with your favorite Mac treat.

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OFFICE WORKERS

Spyware »

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$36; Edge Tech, www.edgememory.com

PHOTOGRAPHERS

« Lighten the Load

With a bagful of camera gear, do you also want to haul a PowerBook or an iBook to your next shoot? The SmartDisk FlashTrax is an alternative to dumping digital images onto a laptop or carrying armloads of media cards. The built-in 3.5-inch screen is too coarse for detailed photo reviews, but that's not the point of this device. A 20GB, 40GB, or 80GB built-in hard disk stores your pictures and video (taken from digital still cameras), and even holds audio files. Back at your Mac, connect via USB to mount the FlashTrax as an ordinary hard drive on your desktop, or use the video-out port to hook it up to a television.—JEFF CARLSON

20GB, $400; 40GB, $500; 80GB, $700; SmartDisk, www.smartdisk.com

continues

PHOTOGRAPHERS

Seeing Nemo

Your eyes may be looking at the bluest water you've ever swum in, but your camera sees only gray, blurry splotches. When your photo explorations take you into the ocean, invest in a waterproof housing for your digital camera. The Olympus PT-016 features easy-to-press controls (great for zooming) and a flash diffuser, and it's waterproof down to 130 feet. A viewfinder hood lets you preview your images while you're still underwater, rather than making you wait until you're landlocked at home. Note that the PT-016 fits only three Olympus cameras; for a long list of other housings and compatible cameras, see find.macworld.com/0123.—JEFF CARLSON

$200; Olympus, www.olympusamerica.com

PHOTOGRAPHERS

Tripod Mini

It used to be that every self-portrait you took showed your stretched-out arm. Now your camera's self-timer makes more-sophisticated pictures possible, but you're still balancing your camera on a rock. Try the Hakuba Multipod. This miniature tripod extends to 10 inches, yet it folds down to 7.5 inches and weighs a mere 4.8 ounces. The universal ball-head mount fits small cameras, and the innovative clamp secures cameras without a screw thread—it even works for camera phones.—TERRI STONE

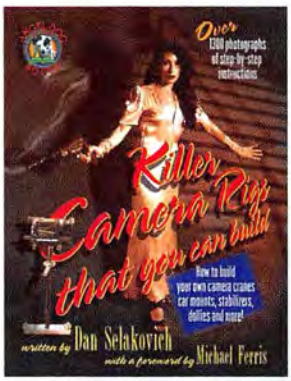
$17; Hakuba, www.hakubausa.com

MOVIEMAKERS

This Medium Is the Message

You don't make movies—you create cinematic masterpieces. And when you burn them to DVD, you want your media to be special, too. With a look that mimics traditional film reels, Verbatim's DigitalMovie DVD-Rs and DVD+Rs mark you as the auteur you are. The 4.7GB discs, which hold as much as two hours of your sequel to *Citizen Kane*, come in packs of three, five, or ten.—TERRI STONE

three-packs, five-packs, and ten-packs, contact Verbatim for pricing; Verbatim, www.verbatim.com



MOVIEMAKERS

Big On Rigs

Tired of loading up on Dramamine before watching your nephew's shaky skateboarding videos? Help him develop a steady hand with Dan Selakovich's *Killer Camera Rigs That You Can Build* (Angel Dog Books, 2003) and a gift certificate for $50 worth of supplies from Home Depot. The book's 339 pages and 1,300 photographs meticulously detail the construction of 11 different camera rigs, such as a dolly for smooth tracking shots, a car mount to attach a camera safely to a moving vehicle, a crane for panning up to a second-floor window, and a camera stabilizer to make handheld shots actually look good.—DAVID SAWYER McFARLAND

Killer Camera Rigs That You Can Build, $35; www.dvcamerarigs.com; Home Depot gift certificate, $50; Home Depot, www.homedepot.com

MOVIEMAKERS

Stop-Motion Movies

It's cold outside, and you've exhausted every possible subject in your house. Time to unleash your inner Ray Harryhausen. With a digital camcorder, a few cans of Play-Doh, and Boinx Software's iStopMotion, you can make stop-motion movies reminiscent of Harryhausen's movie monsters. Create shapes, add a few toys, and film their interactions one frame at a time using iStopMotion's intuitive interface. Then dump the footage into iMovie for editing, and squoosh the Play-Doh into colored, swirly blobs. (To see an example, go to find .macworld.com/0124.)—JEFF CARLSON

Play-Doh, $1 a can; Hasbro, www.play-doh.com; iStopMotion, $40; Boinx Software, www.istopmotion.com

MOVIEMAKERS

Second Helpings

Digital video has become the monster that eats everything in its path. Remember when a 4.7GB DVD disc seemed like a lot of space? Ha! That's a mere appetizer today. To keep up with digital video's insatiable appetite, LaCie's d2 burner handles newer DVD+R DL (also known as DVD+R9) media, which can store up to 8.5GB on a single dual-layer disc. That's roughly four hours of MPEG-2 DVD video, which most DVD-ROM drives and consumer DVD players can play back. One downside: to turn on the d2, you have to push the power button in and to the left. But once you're beyond that, this drive should keep digital video at bay . . . for now.—JEFF CARLSON

16× d2 DVD±RW Double Layer DVD Burner, $230; LaCie, www.lacie.com

continues

Capture the holiday season with the innovative line of digital cameras from PENTAX.

*ist DS

With 6.1 megapixels and the abiltity to interchange lenses, the *ist DS makes the perfect high quality, compact digital SLR. Its lightweight body hosts enough user-friendly features to keep even the most advanced photographer satisfied.

Optio SV

For a more compact, point-and-shoot digital camera, there's the Optio SV. With 5.0 megapixels and a powerful 5X optical zoom packed into a pocket-size 5.3 ounce body, this camera doesn't sacrifice on quality.

Optio X

With a new twist on design, the sleek Optio X is the slimmest camera PENTAX offers. Only .7" thick, it can still take high quality 5.0 megapixel images and give you the power to take photos from nearly any angle.

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NATURE LOVERS

Thanks for the Memory

No longer must your Swiss Army Knife be reserved for carving walking sticks or trimming tent ropes. The SwissMemory is a pocket knife with a blade, a nail file, a screwdriver, scissors, a ballpoint pen, and 64MB or 128MB of removable USB flash storage. It also comes in a version without the pointy objects that cause problems at airports.—JONATHAN SEFF

64MB, $63; 128MB, $81; Victorinox, www.victorinox.com

NATURE LOVERS

Charge! >>

Some outdoor types are minimalists who like to see how little they can carry into the woods. But for the rest of us, there's the Solar Jacket from ScottEvest. Its thirty pockets are designed to hold cell phones, PDAs, iPods, and other mobile devices. But the really cool part is the array of solar panels on the jacket's back, which let you keep all your USB-compatible gadgets juiced—as long as the sun is shining. If the Solar Jacket is too geeky (or pricey) for you, check out the Voltaic, a backpack with built-in solar panels that also carries and charges your gadgets.—DAN MILLER

Solar Jacket, $535; ScottEvest, www.scottevest.com; Voltaic, $229; Voltaic Systems, www.voltaicsystems.com

DENSION

The ultimate car integration kit for your iPod.

Finally, you can discard cassette adapters, FM modulators, and cigarette lighter chargers and start enjoying CD quality audio on your existing car entertainment system.

The ice>Link will seamlessly integrate with most factory systems, allowing you to command your iPod from existing controls found in your vehicle. This is especially great if you have steering wheel controls.

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NATURE LOVERS

Hotheaded >>

Headphones? Hat? With Burton's Headphone Beanie, you no longer have to choose when venturing out into the cold. Featuring a pair of headphones integrated into its earflaps, as well as an inline volume control for the times when your iPod is stuck deep inside your jacket or pack, the Headphone Beanie lets you enjoy your tunes—no matter the weather—while you're speeding down the slopes or just waiting at the bus stop.—DAN FRAKES

$40; Burton, www.burton.com

continues on page 76

FIVE LAST-MINUTE GIFTS

Sometimes you can't wait for a gift to come by snail mail; sometimes you can't even dash to the mall. Turn to the Internet when you need instant—but thoughtful—presents.

1. A subscription to Netflix (www.netflix.com) pleases movie and TV watchers who are tired of the local video store's selection and late fees. You can buy gift certificates for as little as one month of service ($22) and as much as a full year ($264). Just make sure the recipient has a DVD player.
2. Every iPod-equipped music lover will welcome an iTunes gift certificate (www.apple.com/itunes/store). Amounts range from $10 to $200, accommodating a range of budgets. And you won't have to guess what the kids are listening to nowadays.
3. A year of .Mac (www.mac.com) may befuddle some recipients—until they realize the worlds it opens. Thanks to your $100 gift, families can share photos and video, job seekers can post resumes, travelers can store files, and anyone can enjoy freebies such as downloadable games and music tracks.
4. Instant access to *Consumer Reports* research (www.consumerreports.org) is a great gift for people who want in-depth information before they buy. A one-year subscription to the Web site is $26. Who knows—you may save the beneficiaries so much money that next year they'll give you a pile of presents!
5. Virtual credit at Powell's Books (www.powells.com) has several benefits. The site not only has a huge selection of new, used, and out-of-print books, but also has indie cred to burn. The idea of supporting a scrappy David in a field of Goliaths should appeal to every Mac user on your gift list. You can purchase any amount of credit.—TERRI STONE

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Boostaroo
Put the ho-ho-ho in your stocking. Plug in your iPod and share your playlist three ways while enjoying a 40% boost in power.

naviPod - Remote control for your iPod. TechTV says "the naviPod is a must-have accessory." Plus, green accents on the naviPod go well with mistletoe.

Sportsuit Convertible - "The best iPod case for a workout" says ExtremeiPod.com. The Convertible comes in a variety of colors, has a sporty removable case and a clip system that's great for any athlete.

MARWARE

Lilipod - iPodlounge calls LiliPod "a great-looking watertight housing for the iPod." Snow-white and padded, LiliPod protects the iPod from bumps and splashes and lets you boldly take iPod where hydrophobes fear to tread.

LiliPod

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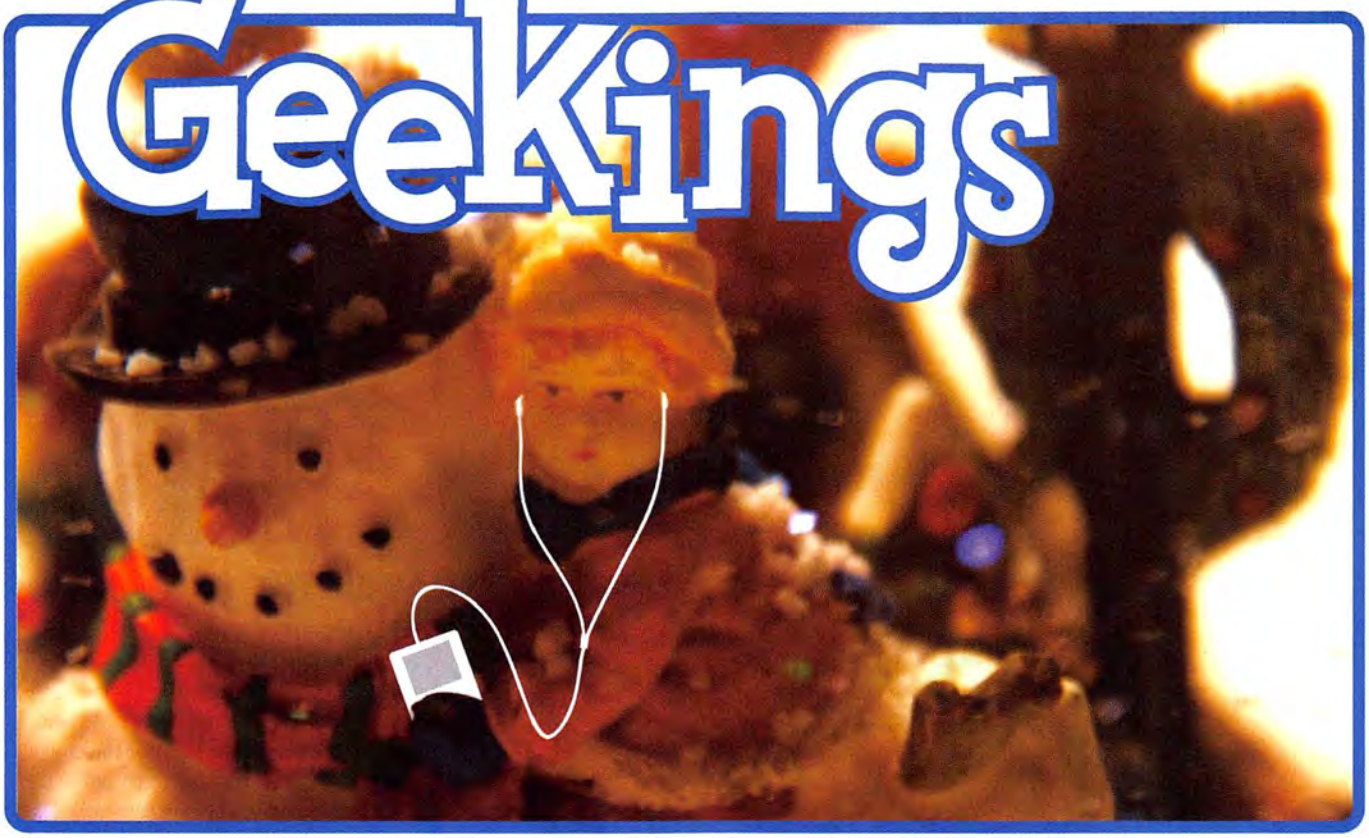

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KOSS

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- *iPodlounge*

matias corporation

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MARWARE

Podium CoolPad
The ultimate in functional elegance. The CoolPad gives any PowerBook or iBook a healthy tilt to a more usable angle.

ROAD TOOLS

Sportfolio
Is there a PowerBook or iBook in Santa's bag? It shouldn't be without a Sportfolio case to carry it in.

MARWARE

PhoneValet
Get those elves off the phones and back to the factory. PhoneValet makes your Mac a feature-rich voice mail system.

PARLIANT

TechTool Pro
Next generation system analysis for Mac OS X. TechTool keeps your Macs running on all cylinders by finding and repairing system problems.

MICROMAT

iKlear
iKlear will remove the sticky goo from your iPod and leave it sparkling like new fallen snow.

klear screen

Where Santa shops for all his Mac & iPod stuff

TRAVELERS

Java Jive

Say you want to keep a beverage hot while you work, but you don't have access to a microwave because you're on the road. ThinkGeek's USB Cup Warmer plugs into a Mac's USB port and warms your mug for 30 minutes, providing heat directly from your computer. This gadget is also great for lazy office workers.—CYRUS FARIVAR

$13; ThinkGeek, www.thinkgeek.com

TRAVELERS

USB Juicer

Do you know Mac users whose cell phones always run out of juice? The Zip-Linq Wireless Phone Charger can restore their gift of gab. It plugs into a Mac's USB port and includes a 6-volt booster. There are two versions (I and II), so check the lists of compatible phones on the company's Web site before you buy. For more powering options, you can pair the charger cable with the company's wall-outlet and car adapters.—TERRI STONE

versions I and II, $30 each; Zip-Linq, www.ziplinq.com

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TRAVELERS

Keep Cool

While your PowerBook might make you *look* cool, the Kensington FlyFan actually makes you *feel* cool. This portable, lightweight fan draws power directly from your laptop's USB port. The cord is flexible and durable; you can bend it in nearly any direction and it will hold that position. The blades are made of soft nylon, so if you accidentally get caught in them, you won't get hurt. Now it'll never be too hot to work outside.—CYRUS FARIVAR

$10; Kensington, www.kensington.com

GAMERS

Satisfy a Sweet Tooth

If you'd like to treat a hard-core Mac gamer to the sweetest eye candy, ATI Technologies' Radeon 9800 Pro Mac Edition card is just the thing. It supports the pixel and shading effects you'll see in the latest games; includes DVI, VGA, and 128MB of VRAM; and even has an S-Video connector so you can hook up your Mac to a TV. There's also a Power Mac G5–only Special Edition version that doubles the VRAM to 256MB and nixes S-Video and VGA support, but adds an ADC connector for Apple's older Cinema Displays.—PETER COHEN

Mac Edition, $349; Special Edition, $399; ATI Technologies, www.ati.com

continues

GAMERS

<< What's Your Sign?

Carrying a PDA and a Game Boy just means more clutter in your backpack. Combine the two with Tapwave's Zodiac: a full-featured Palm OS–based PDA designed for gamers, with 3-D–graphics acceleration on a big screen, a built-in analog thumbstick controller with vibration effects, and a growing library of games. Built-in Bluetooth makes wireless synchronization a breeze, though you'll need Missing Sync from Mark/Space (see our review, page 38) because the Zodiac doesn't come with Mac software.—PETER COHEN

Zodiac, $300; Tapwave, www.tapwave.com;
The Missing Sync, $40; Mark/Space,
www.markspace.com

GAMERS

Surrounded by Sound >>

3-D positional surround sound is gaining traction in Mac games, thanks to M-Audio's Revolution 5.1 card and OpenAL. Gamers looking for real 3-D sound that won't annoy roommates or coworkers will appreciate Zalman's ZM-RS6F Theatre 6 Surround Headphones, which use the discrete front, center, and rear inputs on sound cards such as the Revolution 5.1 to generate 3-D sound—no signal-delay trickery here, as on cheaper sets. Great for LAN parties, too.—PETER COHEN

$50; Zalman, www.zalmanusa.com

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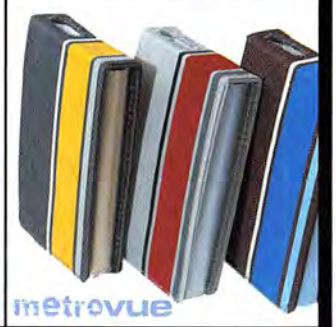
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MUSIC LOVERS

Digital Boom Box

Remember the 1980s, the glory days of the boom box? Digital Lifestyle Outfitters' new iBoom is a boom box for the iPod generation. Plop any dockable iPod in the iBoom's dock slot, and you've got a 20-watt sound system that can hold 10,000 songs and still fit on your shoulder. (There's also a small slot on top that serves as a handle.) The iBoom includes an FM radio and an auxiliary input, so you're not limited to your iPod's music selection. The iBoom runs off AC power or six D batteries.—DAN FRAKES

$149; Digital Lifestyle Outfitters, www.everythingipod.com

MUSIC LOVERS

Bend It, Shape It

Thanks to Apple's GarageBand, closet rock stars can now afford to make music at home. Recording vocals for your creations is easy and affordable with the MacMice MicFlex. It's a unique USB microphone that you can use for everything from voice-overs to lead vocals to acoustic-guitar ballads. The flexible steel tube bends into many configurations, and you can remove the mike from the base and plug it directly into your Mac.—JEFF TOLBERT

$50; MacMice, www.macmice.com

continues

Naughty or Nice? Give an iSkin.

For the iPod owner.

iSkin eVo / eVo2 : iPod Protector

The iSkin eVo and eVo2 is the perfect gift for every iPod owner. It provides a snug form fitting protective layer that includes a screen protector and removable belt clip. It comes in a variety of beautiful colors including glow-in-the-dark.

For the iPod mini owner.

iSkin 'mini' : iPod mini Protector

The iSkin 'mini' will bring a smile to the faces of iPod mini owners. It's sleek and form fitting and gives a secure, anti-slip grip. It also comes with a ultra-clear screen protector and removable belt clip. It also comes in a variety of colors including glow-in-the-dark.

For the iMac or PowerMac owner.

ProTouch XT : Apple Keyboard/Wireless Keyboard Protector

The ProTouch XT is ideal for those who do just about everything at their computer. It helps to protect against dust, dirt wear and spills. It is form fitting and allows for normal typing. It comes in a variety of colors for a splash or coolness.

For the iBook/ PowerBook owner.

ProTouch PB : Apple iBook/PowerBook Keyboard Protector

The ProTouch PB provides a layer of protection against dust, dirt and spills that could get between the keys of the iBook/PowerBook and cause damage. It's soft and plyable and does not restrict normal typing. And it's available in a variety of cool colors!

iSkin

Learn more about iSkin products and where to buy at:

iSkin.com

MUSIC LOVERS

Share the Love

True music fans aren't happy just enjoying their tunes alone; they want to recruit new disciples of their latest melodic discoveries. Two portable speaker systems from Harman Multimedia let the audiophiles in your life share their tunes wherever they go. The JBL OnTour (pictured) is a slick little package that hooks up to computers, MP3 players, CD players, and more through a stereo minijack. For better sound, try the JBL OnStage, a donut-shaped docking station; its included adapters can accommodate all iPods. (A stereo minijack lets you connect almost anything else.) Then add a copy of *Playlist,* Mac Publishing's new cross-platform magazine devoted to digital music.—FRITH GOWAN

JBL OnTour, $100; JBL OnStage, $200; Harman Multimedia, www.harman-multimedia.com;
Playlist, $6 on newsstands; www.playlistmag.com

NEW PARENTS

Instant Pictures

With constant feedings, burping, and diaper changes, it's a small miracle if parents can manage to take a shower, let alone get pictures made from digital images of their little bundle of joy. Help out with a printer that makes creating 4-by-6 prints of their baby as easy as can be. Harried parents can pop most digital cameras' memory cards into the Epson PictureMate and have pictures in minutes.—FRITH GOWAN

$199; Epson, www.epson.com

continues

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NEW PARENTS

<< Moving Pictures

Your newest grandchild, niece, or nephew may live halfway across the country, but that doesn't mean you can't see the baby just about anytime, through the miracle of video chat. Give the parents a tiny, easy-to-use Apple iSight video camera, and you'll be able to see and hear the little one—spit-up and all—through a broadband connection. The new family will think the gift is for them, but you'll know better.—FRITH GOWAN

$149; Apple Computer, www.apple.com

GO TO WEB:

There's more! We found so many great gadgets that we couldn't fit them all in the magazine. Go to find.macworld.com/0125 for the rest.

NEW PARENTS

All-Around Camera >>

For parents with a new baby, every coo, giggle, and step is priceless documentary material. They can build a digital archive with Canon's 5-megapixel digital camera, the PowerShot A95. It boasts 14 shooting modes (including a video mode that can capture a full three-minute giggle fest, walking attempt, or crying jag) and enough pixel power to print images larger than 8.5 by 11 inches. Nice touches like a rotating LCD monitor, variable autofocus frame selection, and manual shutter and aperture options ensure they don't miss a moment.—FRITH GOWAN

$400; Canon, www.canon.com

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TEENS

Not Just a Pretty Face

Kids today! They like bling, but they aren't careful with it. Happily, the Olympus Verve Stylus digital camera is here to save you from another repetition of the "When I was your age" lecture. Its shiny, funky body (which comes in six colors) will please the most trend-conscious teen, and it's rugged enough to withstand splashes of water and life in the bottom of a backpack.—TERRI STONE

$350; Olympus, www.olympusamerica.com

TEENS

They Copied Kenny! >>

Turn your teenager's next video chat into an episode of *South Park* (without the swearing, of course!). The O'Rite Technologies Webcam 352 not only resembles TV's most imperiled preteen; it's also a 30-fps VGA camera with 640-by-480-pixel resolution that plugs into the Mac's USB port. And while the built-in microphone may not be professional quality, its audio is a lot easier to understand than Kenny.—TERRI STONE

$39; O'Rite Technologies, find.macworld.com/0105

TEENS

The Coolest Cases

Don't leave the iPod-loving teen princess in your life stuck with nothing but a boring black case to tote her tunes. An Aneta Genova case may be pricey, but to the lucky young fashionista who receives it, it's worth every one of your hard-earned pennies. With everything from corseted, metallic pink cases to ones Sid Vicious would be proud to carry, you'll find a model to suit any sartorial style. A metal hook and a detachable wrist strap even make them a tad—dare we say—practical.—FRITH GOWAN

cases range from $79 to $129; Aneta Genova, www.anetagenova.com

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GEEKS

<< I'm Too Sexy for My Shirt

What do you get the geek who has every gadget ever made? A T-shirt in which he or she can transport the gizmos, of course. Available in black or white, Koyono's BlackCoat-T sports a red center zipper that speaks tantalizingly of the mysteries within—namely, two compartments that can safely stash PDAs, cell phones, MP3 players, or whatever else your geeky sweetie can stuff inside. The shirt works under clothing, but we can't imagine why you'd want to hide style like this.—FRITH GOWAN

$35; Koyono, www.koyono.com

GEEKS

Card Carrier >>

Mac geeks are proud to display their allegiance at every opportunity. Give The Missing Bite's Retractable Badge Holder to an office-dwelling geek you love, and every working moment will be an excuse to evangelize. The clip features the beloved Apple logo, and a retractable cord connects to a loop that snaps to an accommodating badge.—FRITH GOWAN

$10; The Missing Bite, www.missingbite.com

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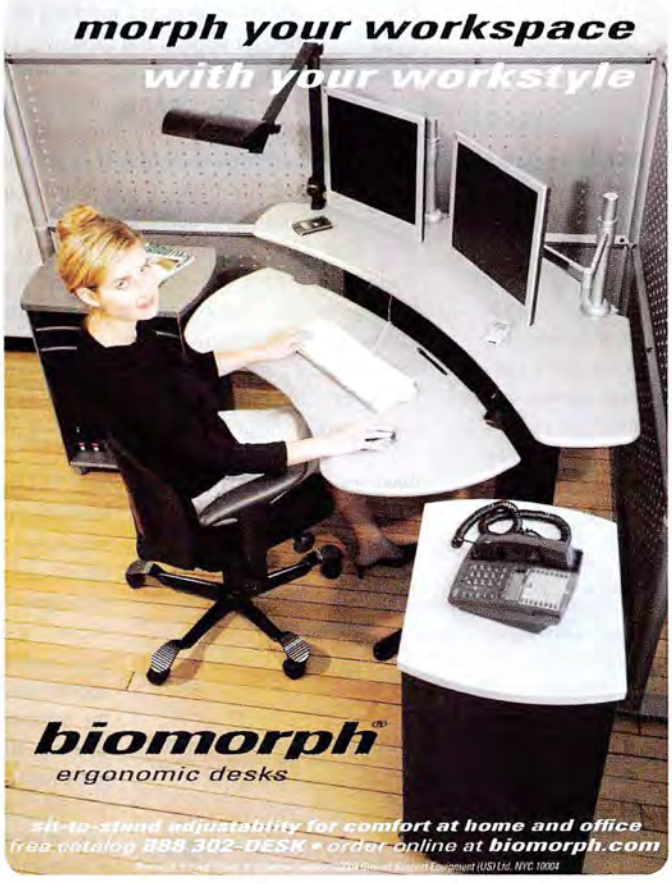


14 Office Problems Solved

Microsoft Office 2004 is, in nearly every way, a great step forward for the productivity suite. But that doesn't mean all is perfect. There are a few areas where Office doesn't behave as you'd expect. In this article we'll show you how to work around the worst of these annoyances.

Office 2004

Some (or all) of the Office 2004 applications quit at launch with no warning message at all. What should I do?

Incorrect file permissions on some files and folders on your hard drive can cause this problem. The easy fix is to use the Repair Disk Permissions tool in Apple's Disk Utility program. Go to Applications: Utilities, and launch Disk Utility. In the left-hand column of the main application window, select your hard drive. Under the First Aid tab, click on Repair Disk Permissions. The process can take five to ten minutes, but when it's done, your Office 2004 applications should launch.

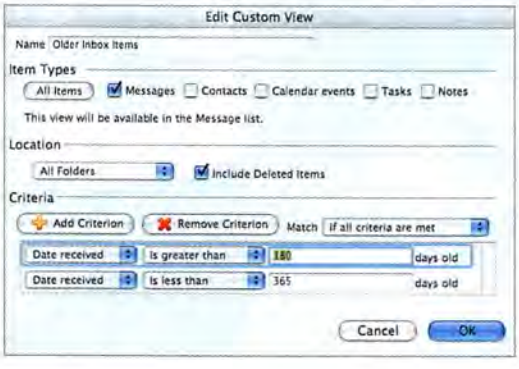
Word 2004

I prefer to use the Reviewing pane when making comments. But how do I edit a comment as I'm writing it?

You can edit a comment in the Reviewing pane, which you access from the Reviewing toolbar (View: Toolbars: Reviewing), by clicking on the Show pop-up menu. But you can't do some things, such as dragging and dropping text to rearrange it or pressing delete to remove a word. Strangely, the forward delete key (⌦; delete on some third-party keyboards) works. If you need that kind of editing flexibility, you'll have to enable the Track Changes balloons, which display comments and changes to the side of the main text. Open Word: Preferences, click on Track Changes in the left-hand pane, and select Use Balloons To Display Changes. You can see the balloons only in the Page Layout and Online Layout views (under View).

Archive by Date

To create your own "archive by date" function in Entourage, start with a custom view. This one will find all e-mail between six months and a year old. Make sure you set the Match pop-up menu to If All Criteria Are Met, as shown.



When viewing a document with comments, I sometimes see brackets around text, and sometimes see an empty set of brackets. When the brackets are empty, I can't get the Comment contextual menu to appear, nor can I click on the comment to make it show in the Reviewing pane. How can I fix this?

You get empty brackets when you add a comment without selecting text first. If you make a selection, comment brackets surround that text. There's no way to automatically hop to one of these "no text selected" comments in the Reviewing pane, unless you already know which one you're looking for. Instead, enable the Track Changes balloons to see and edit these comments.

How do I disable Quartz text smoothing in Word 2004? On my slower machine, this made scrolling much faster.

Unfortunately, the ability to disable Quartz text smoothing has been removed from every Office 2004 application, with the exception of Excel. Smoothing is now handled by the system in the other applications.

How do I open a document that was created and encrypted in Office 2003 for Windows and requires a password?

Word 2004 doesn't support Office 2003's encryption features. To open the file, you'll have to ask its creator to save it in a format that doesn't use encryption. If the file's security is important, the author could encrypt it with a cross-platform program such as PGP Personal Desktop, from PGP (www.pgp.com), after saving it.

How can I copy and paste text from Word into Apple's iChat? When I try, the pasted text is sent as a black rectangle.

Due to an incompatibility between Office and iChat, you'll have to make a detour through an intermediate application. Select and copy the text in Word or Excel and then paste it into another application, such as a new Apple Mail message or a blank TextEdit document. Select this newly pasted text and then copy and paste it into iChat, and it will work as expected.

Excel 2004

How do I enable an in-line spelling checker in Excel 2004?

Excel can't check spelling as you type. Instead, use Tools: Spelling on the entire worksheet or on a range of cells after you've entered your text.

Why does the cursor move down a row after I press return? I'd rather have it stay in the same spot.

Go to Excel: Preferences, and click on Edit in the left-hand pane. Deselect the Move Selection After Return

option, and the cursor will no longer move after you press return. You could also change the default behavior by changing the Direction pop-up menu from Down to another direction.

Entourage 2004

When I want to print my calendar, it fails to print, giving me an "Error -30876" message. What's wrong?

You probably have a corrupted printing form. Quit Entourage and go to Users: *username:* Documents: Microsoft User Data. Delete the entire Printing Forms folder therein—don't worry; it will be re-created the next time you launch Entourage.

When I'm in Month view and I want to see a particular day in detail, I double-click on it. But Entourage opens a new event on that date. I tried clicking on the Day view button, but that just takes me back to the current day.

At the lower left of the Entourage window is a miniature calendar. Double-click on any date in this calendar, and that day's detail view will open.

How can I archive e-mails by date? The Export tool lets me export only items in a project or category, or all of my e-mails.

Start by creating a custom view for your in-box (File: New: Custom View). In the dialog box that appears, enter a name for the view and add two criteria—both using the Date Received criterion from the leftmost pop-up menu. One is for the minimum age of the messages to archive; the other is for the maximum age. Make sure Match is set to If All Criteria Are Met, and click on OK (see "Archive by Date"). Also, create a new folder in your folder list and give it a meaningful name (such as Jan–Jun 04). When the custom view has taken effect, select all the messages in your in-box and then drag them to the Jan–Jun 04 folder. Drag this folder to a location in the Finder, and wait while Entourage copies the messages. When it's done (use the Finder to verify that it worked), delete the Jan–Jun 04 folder and the messages in your in-box.

PowerPoint 2004

Why do dragged objects seem to jump to a new, somewhat arbitrary location when I drop them?

Make sure you've disabled Snap To Grid on the Drawing toolbar. Open that toolbar (View: Toolbars: Drawing); then click on the toolbar's first object and make sure there's no check mark next to the Snap To Grid menu item. You might try disabling the rulers, too. If they're visible, select View: Ruler to disable them. Now you *should* be able to drop objects exactly where you want them, but this hasn't worked for all users.

How do I create a password-protected PowerPoint presentation that I can distribute for others to see but not change?

None of the Mac versions of PowerPoint support password-protected presentations (nor can you open protected presentations created in Windows). But there are a few workarounds. Using the built-in PDF capabilities of OS X, save your presentation as a PDF via Print: Preview. You'll lose the animations and transitions in it. You can also use the File: Make Movie option to create a stand-alone QuickTime movie of your slides. Unlike Keynote, PowerPoint can't create interactive movies, so your audience will have no control over the slides. You could use File: Save As to save your presentation as a series of Web pages—but you'll need a server on which to save the pages for others to see.

The embedded QuickTime movies in my presentation played perfectly with PowerPoint X. But in PowerPoint 2004, they have very slow frame rates and choppy sound. Is there a way to fix this?

Select the troublesome clip and then choose Format: Picture. Under the Size tab, click on the Best Scale For Slide Show option, set the Resolution pop-up menu to match your output device's resolution, and then click on OK. This will probably change the size of your QuickTime movies, but it should make them play much more smoothly. □

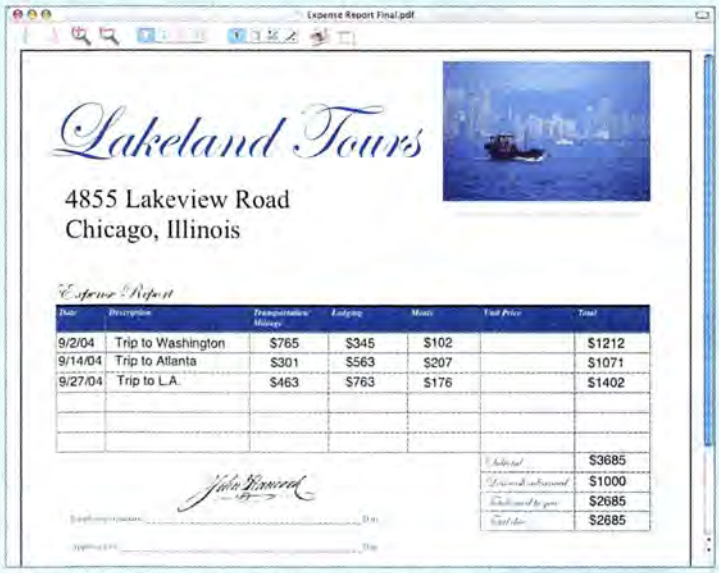
Contributing Editor ROB GRIFFITHS is the author of *Mac OS X Power Hound, Panther Edition* (O'Reilly, 2004) and runs the Mac OS X Hints Web site (www.macosxhints.com).

ICON BY PAUL HOWALT

CHECK IT OUT

Low-Cost Acrobat Alternative

Pricey Adobe Acrobat 6.0 (Professional, $449; Standard, $299; www.adobe.com) isn't your only choice if you want to do more than just *look* at PDF files. SmileOnMyMac's $30 PDFpen (www.smileonmymac.com) lets you add text, images, and simple line graphics to any PDF document with a few clicks—it's an ideal way to add a scanned signature to a form, for example (see "On the Line"). PDFpen used to be hampered by bugs and slow performance (●●½; April 2004), but this release sports enough improvements to merit a second look.—FRANKLIN N. TESSLER



On the Line PDFpen is handy for completing and signing business forms.

Fix GarageBand Glitches

GarageBand has been a breakthrough for aspiring Mac musicians. Thanks to its simplified interface and hard-to-beat price ($49 with Apple's iLife '04 suite), even novices can start recording digital masterpieces. But things can go wrong in GarageBand—missing loops, silent instruments, and so on. Here are some recipes for solving the most-common GarageBand problems.

Your Loop Browser Is Empty

Adding loops to GarageBand isn't just a matter of stuffing them into a folder on your hard drive. You also have to make GarageBand *aware* of them. To do that, you must force GarageBand to *index* new loops, thereby building an internal card catalog of the loops and their locations.

If anything goes wrong with GarageBand's loop index, you may discover that all the buttons in the Loop browser are dimmed and no loops appear in its list. Some loops may exist in name only.

In these situations, the solution is to rebuild the GarageBand loop index.

Step 1 Quit GarageBand. In the Finder, open your hard drive and go to Library: Application Support: GarageBand: Apple Loops. Inside, you'll see the text files that constitute your current index (see "Out with the Old"). Drag these files to the Trash.

Step 2 Restart GarageBand and click on the Loop Browser button (which looks like an eye). GarageBand will display the No Apple Loops Found dialog box. Click on OK and return to the Finder.

Step 3 Open your hard drive and go to Library: Application Support: GarageBand. Drag the Apple Loops folder from the GarageBand folder into any visible portion of GarageBand's Loop browser. GarageBand will dutifully re-create its loop index, based on the current location and contents of that Loops folder.

By the Book This article is an excerpt from *GarageBand: The Missing Manual*, by David Pogue (2004; reprinted by permission of O'Reilly Media).

Out with the Old If you're having loop problems, trash your old loop index files.

Step 4 If you've installed the Jam Pack, drag its folder (also in Library: Application Support: GarageBand) into the Loop browser, too.

No Sound from a Mike or a Real Instrument

If GarageBand doesn't seem to be "hearing" anything from your microphone or line input, the Mac probably hasn't been taught to listen to the right audio source. Open OS X's Sound preference pane and click on the Input tab. Select the sound source you want to record, and then adjust the Input Volume slider for your singing or playing. (The loudest notes should briefly illuminate the rightmost bars.) Return to GarageBand and open its Audio/MIDI preferences. Click on the Audio Input pop-up menu and make sure that the correct input is selected.

If the problem persists, try these steps:

Step 1 Make sure that you're working with a blue Real Instrument track. If a green Software Instrument track is selected, GarageBand ignores your microphone or instrument.

Step 2 Make sure that you haven't muted this track or soloed another one. (The speaker icon in your track's header should be blue, but no other instrument's headphones icon should be lit up.) While you're at it, make sure the track's volume slider isn't set to zero.

Step 3 GarageBand may be set up to listen to the wrong channel. Double-click on the track header and examine the Input pop-up menu and Format (Mono/Stereo) settings.

Step 4 If you're using a mixer or an audio interface, make sure that its volume is turned all the way down.

Step 5 Check whether you're hearing any sound from the instrument. If it's electric, make sure that it's turned on, with the volume turned up. Also make sure all the connections are good—especially if you've incorporated plug adapters into the mix.

Step 6 If you're using a Griffin iMic adapter, make sure that you've connected the mike or instrument to the iMic's input jack (the one with a microphone symbol). Also be sure to switch the iMic's selector toward the microphone symbol. Open GarageBand's Audio/MIDI preferences and choose

iMic USB Audio System from the Audio Input pop-up menu.

No Sound from a MIDI Instrument

Having trouble getting GarageBand to hear an external MIDI instrument, such as a keyboard controller or a MIDI guitar? If so, your MIDI status light can help you identify the culprit (see "Lighting the Way").

Status Light Doesn't Respond If the MIDI status light doesn't flicker when you play, MIDI information may not be reaching GarageBand. Make sure that the instrument is turned on and connected to the Mac.

If a MIDI interface box is involved, double-check your connections. It's very easy to get the MIDI In and MIDI Out cables confused.

Open GarageBand's Audio/MIDI preferences. The MIDI Status line should read "1 MIDI Input(s) Detected" (or however many instruments you have connected). If it doesn't, your MIDI interface may require its own driver software. Visit the manufacturer's Web site to seek out an OS X–compatible driver.

Status Light Does Respond If the indicator *does* flicker on and off, then everything is correctly hooked up. In that case, make sure that you've selected a green Software Instrument track. Also check that you haven't muted this track or soloed another one.

If you still encounter the problem, go to Window: Keyboard to open the on-screen keyboard. Click on a few keys to ensure that the selected track has a working instrument selected. You might also try double-clicking on the track header to open the Track Info dialog box. You should have an instrument and effects preset active in the top two lists. In the Details panel, try turning off your effects one by one until you find the problem. (It's possible to fiddle with the effects so much that no sound emerges.)

Finally, check whether you, in fact, have any Software Instruments available. Double-click on a track header to see if anything is in the list. If you or somebody else has been doing some naughty playing in the Library: Application Support: GarageBand folder, the files may be so dismantled that you need to reinstall GarageBand to get it going again.

No Sound from External Speakers

Ordinarily, GarageBand plays back sounds through your Mac's audio circuitry—either through your Mac's built-in speakers or through speakers connected to its headphone jack. But what if you've bought fancy USB speakers? Or what if you've connected an audio interface box that's hooked up to its own sound system? In those cases, you'll need to adjust your audio options. Open GarageBand's Audio/MIDI preferences. Click on the Audio Input Driver pop-up menu to select the name of your external speakers or interface box. If you don't see it listed, you may need to install the appropriate driver—this usually comes with the speakers or audio box.

ICON BY PAUL HOWALT

CHECK IT OUT

One-of-a-Kind Gifts

Looking for something unique to give this holiday season? Why not turn some of your favorite digital photos into personalized gifts? Many online photo services have branched out with stylish and unusual offerings, from fashion accessories to coasters to scrapbooks—and even personalized stamps (see *Hot Stuff*, page 124). Here's a sampling:

Photo Handbag ImageStation.com offers some of the most fashionable photo bags we've seen (pictured). Trimmed in leather with full-image panels on the front and the back, they're sure to get noticed ($135; find.macworld.com/0109).

Snapbooks Most photo sites offer hardbound photo books. But for a more casual—and less expensive—option, check out Shutterfly.com's Snapbooks. These small spiral-bound books feature one photo per page and an optional caption ($10 for a 20-page book of 4-by-6-inch prints).

Metal Trivet Know someone who likes to cook? PhotoAccess.com and Snapfish.com both offer to put your favorite photo on a cast-iron trivet—which can serve as a hot pad or a wall decoration.—KELLY LUNSFORD

Lighting the Way The handy MIDI indicator A flickers blue whenever GarageBand is receiving note data.

Panned Tracks Still Play in Both Speakers

In GarageBand, you can use the Pan knob to place a certain track's instrument all the way to the left or right side of the stereo field. If you do this but still hear the darned thing coming out of both speakers, there are two possible explanations.

The likeliest culprit is an Echo or Reverb effect that you've applied to that track. When you select these options for an individual track, you're not really applying a *different* echo or reverb to the track. Instead, you're telling GarageBand how much of the *master* track's echo and reverb to apply. As a result, you'll hear your fully panned track reverberating through both speakers, courtesy of the master echo or reverb. The solution, then, is to turn off the panned track's Echo and/or Reverb effect. Double-click on its track header, and deselect the corresponding options.

This problem can also occur if you've used the Compressor effect. Turning on Compressor for the master track forces all tracks to play in both the left and the right channels. To solve the problem, turn off the master track's Compressor effect. (Turning off Compressor for an individual track won't make a difference.) □

Contributing Editor DAVID POGUE is a technology columnist for the *New York Times* and the creator of the *Missing Manual* book series. He has been a digital composer since 1985.

Survive the Switch to InDesign

Moving to a new place can be hard. Comfortable habits must be left behind. You haven't learned the quickest route to work, you don't know which newspaper has your favorite comic strip, and the local coffee shop even uses different terminology. Moving to a new page-layout program can be like that, too. If you've recently switched from QuarkXPress to Adobe InDesign CS, the following tips will smooth your transition.

Make New Friends

When you're just starting to explore InDesign, you need to know the basics. If you're a little more experienced, you can skip to the next section, "Get to Know the Neighborhood."

Measurements Palette In QuarkXPress ($945; www.quark.com), the Measurements palette is almost indispensable. The InDesign CS ($699; www.adobe.com) equivalent is the Control palette (Window: Control), which offers options that change depending on what's selected in the file. The Control palette also takes the place of XPress's Modify dialog box.

Item, Content, and Type Tools InDesign's tool palette contains two selection cursors. The black arrow cursor, called the Selection tool, grabs whole objects and grouped objects, as does XPress's Item tool. The white arrow cursor, called the Direct Selection tool, selects items inside a frame; it's similar to XPress's Content tool. The Direct Selection tool *also* selects an object's individual line segments and control points. Although the Direct Selection (white arrow) tool's flexibility can be helpful, former XPress users may unintentionally drag on a side or a corner of a text frame with this tool, pulling the frame's edges out of alignment.

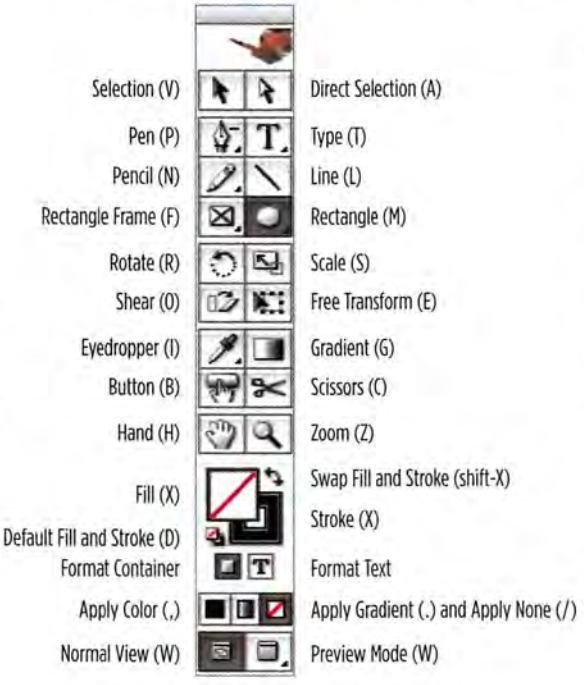
And unlike XPress, InDesign gives you a separate tool for working with text: the Type tool.

Get Text and Get Picture XPress's Get Text and Get Picture commands are absent from InDesign, which provides a Place command (File: Place). This command invokes a loaded cursor for text or images. Using the loaded cursor, you can click on a page to directly place text or an image. To create a new frame of a specific size while placing text or an image, use the loaded cursor to draw an area on the page.

Runaround and Text Options Instead of XPress's Runaround dialog box, InDesign has a palette called Text Wrap (Window: Type & Tables: Text Wrap), which has the same function. Settings for text inset, columns, the first baseline, vertical text justification, and ignoring text wrap can all be found in the Text Frame Options dialog box (Object: Text Frame Options).

Link Tool XPress has Linking and Unlinking tools that connect text across two or more text boxes. In InDesign, text frames have in and out ports (small white squares on the sides of text frames) that you click on with either selection tool to link text from frame to frame. This process is called *threading*. You break an existing text thread by clicking on a text frame's out port and then clicking on that text frame again.

Collect for Output Are you ready to send your first InDesign file to the print shop? Instead of the Collect For Output command, use InDesign's Package command (File: Package). It also includes a Preflight tool (File: Preflight), which checks for potential printing problems, such as missing fonts, images in RGB mode, and low-resolution images.



Switch with a Single Letter You can move between items on InDesign's toolbar by pressing just one key on your keyboard.

Get to Know the Neighborhood

Seasoned designers rely on key commands to quickly perform common page-layout tasks. If you're a QuarkXPress power user, some of the keyboard commands in InDesign CS may frustrate you at first.

Change Tools with One Hand You can use single keys (without modifier keys) to cycle through InDesign's toolbar—see "Switch with a Single Letter" for the complete list. But pressing a character key can yield undesirable results when you're working on text inside a text frame. For example, holding down the spacebar temporarily switches to the Hand tool. But if you're in a text frame, pressing the spacebar adds spaces to your text. To avoid typing extra spaces or random letters in your text frames, ⌘-click anywhere on the InDesign page to deselect any live text frames before pressing the spacebar or any other single-letter tool-selection keyboard command.

Explore Your Options InDesign ventures into unfamiliar territory with the option-click. When you're using any tool other than the Type tool, option-clicking and dragging an item creates a copy of the item. If the Type tool is selected and you're editing text, option-clicking causes the Hand tool, for dragging the page around, to appear, just as it does in XPress.

Edit Text There's a speedy shortcut for editing text in InDesign. When you're using either selection tool, just double-click on any text box—your cursor will immediately change to the Type tool.

Define Your Own Shortcuts InDesign's keyboard-shortcut editor lets you add, remove, or change most shortcuts (except mouse-click shortcuts such as control-click and ⌘-click). Choose Edit: Keyboard Shortcuts to begin customizing, or choose the provided shortcut set that closely follows the shortcuts XPress users already know.

Unpack the Boxes

You may have left XPress behind, but that doesn't mean you must abandon your XPress documents. InDesign CS can open an XPress file and automatically convert it *if* it's from XPress version 3.3 to 4.11. XPress 5 lets you save documents as XPress 4 files. But XPress 6 users have to save files to version 5, open them in XPress 5, and save them again as version 4 files. If you don't have XPress 5, try Markzware's $199 MarkzTools 5.5 (www.markzware.com), an XTension for QuarkXPress 4 and 5 that opens XPress 6 files and saves them to XPress 4 in one step.

Damaged in Transit No matter how you do it, the conversion process may not be perfect. Clipping paths, style sheets, and dashed lines are all common problem areas in converted files.

A clipping path may not align correctly with its associated image. Open the Clipping Path dialog box (Object: Clipping Path), turn off the clipping path, and close the dialog box. Open the Clipping Path dialog box again and turn the path back on.

Paragraph and character style sheets may not appear in alphabetical order in their respective palettes. To correctly sort the style names in the Paragraph Styles and Character Styles palettes, create a new style in each palette and then delete those new styles. Your style palettes will now be correctly sorted—it's as easy (and as illogical) as that.

Dashed lines won't match the original dash and gap settings. Select the objects with dashed lines and choose the dashed-line setting, in InDesign's Stroke palette, that's close to your original settings.

Pinpoint Problems Plenty of other glitches can occur during conversion. One quick way to compare old and new documents is to open the original file in XPress, save it as a PDF, and then place the PDF in a separate, semitransparent layer in the converted InDesign file. (When the PDF is longer than one page, go to File: Place and put a check mark in the Show Import Options box to select individual pages.)

Align the PDF to the edges of the InDesign page and click on the PDF layer's lock icon. Make changes to the layout items until the layers match. Then delete the PDF reference layer and the imported PDF.

Settle into Your New Home

The process of moving—to a new home or a new application—comes with plenty of challenges. But once you get used to the differences, you'll find that many changes were for the better. Soon, you'll even remember the proper lingo for ordering your cappuccino just the way you like it. □

JONATHAN WOOLSON is the owner of thinkplaydesign (www.thinkplaydesign.com), a print- and Web-design studio.

ICON BY PAUL HOWALT

CHECK IT OUT

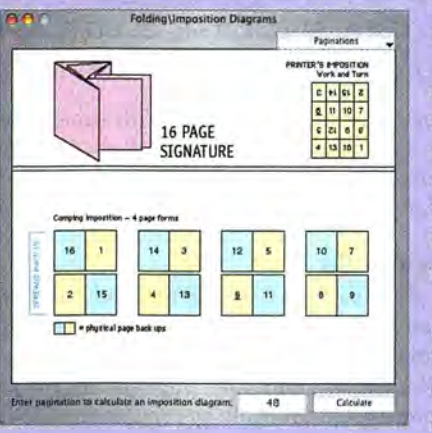
A Bundle of Joy

The long-running success of the Swiss Army Knife proves that people enjoy being able to tackle many problems with one handy tool. Veenix: Design & Type Tools, a $25 software bundle from Lake Group Software (find.macworld.com/0115), brings that concept to the world of designers and illustrators.

Veenix can help with color, font, page-layout, and prepress tasks. Its Color Grabber copies any pixel on your display to the clipboard and shows the nearest Web-safe equivalent. The Color Explorer palette holds as many as six complementary colors.

A WYSIWYG font list displays all active fonts, and you can display and print complete character sets. Enter a phrase in the Type Sampler Slide Show box to see that phrase displayed sequentially in all active typefaces.

The imposition diagrams and calculator make child's play of setting up a document so it folds correctly (see "Easy Imposition"). And a prepress checklist reminds you of important details to take care of before you entrust your job to a print shop.—TERRI STONE



Easy Imposition Veenix's pagination calculator and imposition diagrams help you set up multipage documents correctly.

Make Yourself Presentable

You've spent weeks polishing your presentation. You've honed your timing to Olympic perfection. But when it's finally time to deliver your magnum opus, your first slide is barely legible, and then, a few minutes later, the screen goes completely dark. It's every presenter's nightmare, and it may even make you wish you'd left your Mac at home and brought that dependable old slide carousel instead.

It doesn't have to be this way. With some ahead-of-time preparation and a few tweaks to your Mac, your software, and the on-site hardware, your next computer-based presentation can run like a dream.

Before You Go

A little planning before you hit the road can make a big difference when you're giving your presentation.

Find Out What Kind of Projector You're Going to Be Using Even if you run your presentation off your own laptop, you'll probably be using someone else's video projector. Like desktop computer monitors, projectors support different resolutions and different types of connections. The more you know about the projector you'll be using, the better off you'll be, so ask about its resolution and physical connections in advance.

Match Your Slides to the Projector Presentations look best when the slide size is the same as the projector's native resolution, so images and text don't have to be scaled up or down for display. Apple's Keynote lets you choose a resolution of 800 by 600 or 1,024 by 768 when you select a theme for your presentation. You can change the resolution later (File: Slide Size), but you'll have to resize all your text and graphics to fit. Microsoft PowerPoint defaults to a resolution of 720 by 540. To change it to 1,024 by 768, go to File: Page Setup and enter `14.22` and `10.66` inches for the width and height of on-screen slides. (For 800 by 600, enter `11.11` and `8.33` inches for the width and height.) Ignore the warning about exceeding your printer's margins. If you can't determine for certain what kind of projector you'll be using, you'll probably be OK using 1,024 by 768, which most projectors support.

Burn Copies to CD You never know what might go wrong on your way to the presentation. Just in case the worst happens and your laptop can't run your slides, make Mac- and Windows-friendly copies of your presentation and burn them to a CD you can then play on any handy computer. If you use Keynote, save the presentation as a QuickTime movie so it'll run on any QuickTime-enabled system.

Make the Right Connections Most video-projector cables have analog VGA connectors, so you can hook them up to any iBook or PowerBook that has VGA ports, using the adapter that came with the computer. The mini-DVI ports on current 12-inch PowerBooks and the DVI ports on recent 15- and 17-inch PowerBooks can also make VGA connections using the adapters that accompany them. Some newer video projectors sport digital DVI inputs; you can connect them directly to the DVI ports on 15- and 17-inch PowerBooks, or to the mini-DVI ports on current 12-inch PowerBooks, with the supplied adapter. (The first 12-inch models came with VGA ports like the iBook's.) When in doubt about what kind of connector you'll need, bring along both VGA and DVI adapters.

Juice It Up Even if you plan on plugging your laptop into an AC power source, make sure that your battery is fully charged. You'll be able to keep going if someone accidentally yanks the power cord.

At the Venue

Don't wait until the last minute to connect your laptop to the projector—show up at least 30 minutes early and do a dry run to make sure your setup is working properly.

Presenter's Tool Kit

Laptops have a way of misbehaving just when you need them most—particularly, it seems, when you're giving a presentation on the road. To avoid disaster, here's what you should toss into your bag for your next road trip:

> VGA and DVI cable adapters.

> A CD containing your presentation.

> Disk-recovery software and installer CDs for your system and presentation software.

> A handheld remote control such as Keyspan's Presentation Remote ($59; www.keyspan.com) or Salling Software's Salling Clicker ($20; http://homepage.mac.com/jonassalling/Shareware). (The latter, when coupled with Bluetooth on your laptop, turns your PDA or mobile phone into a remote control.)

Hook It Up Newer iBooks and PowerBooks work fine if you hook them up to a projector when they're already running, but it's wiser to make the video connection before you power up the computer. Even if you don't normally tighten thumbscrews, do it now, just to ensure that everything holds together. If your presentation includes audio, or if you're presenting to a big room, figure out how to connect your laptop's audio-out jack to the room's PA system.

Test It Out Power up the projector, wait a minute or two for it to warm up, and then boot your laptop. If you don't see your desktop on the projection screen by the time it appears on your computer's LCD, check your connections and use the projector's push buttons or handheld remote control to verify that you've chosen the correct video input.

Keep Your Mac Awake One of the most annoying things that can happen in the middle of a presentation is for your screen saver to start up when you pause the slide show for a bit. To prevent that from happening, disable your screen saver—in System Preferences: Desktop & Screen Saver, select the Screen Saver tab and move the slider all the way to Never. While you're in System Preferences, go to the Energy Saver pane and move the sliders for computer and display sleep all the way to the right, so your Mac won't nap while you're talking to the audience. Note that some video projectors also have power-saving features; if that's the case, disable them, too.

Adjust the Mac's Display Settings The Displays preference pane's Display tab is where you specify the settings for the projector (see "By the Numbers"). The box on the left lists the available resolution and refresh-rate combinations—simply choose the proper resolution (1,024 by 768 or 800 by 600) from the list. For most video projectors, the refresh rate should be 60Hz, but you can try a higher rate if the image looks distorted.

Disable Video Mirroring Most PowerBooks give you the option of running in *nonmirrored* video mode, which means that the internal and external screens are independent. If you turn mirroring off when you're using PowerPoint 2004 or Keynote, you can display notes and upcoming slides on your laptop while your slide show stays up on the big screen. To disable video mirroring, open the Displays preference pane and deselect the Mirror Displays option under the Arrangement tab. iBooks support only *mirrored* video, where the LCD shows exactly what the audience sees. Because of that, iBooks in mirror mode may not be able to keep up with presentations that include lots of complex movies and transitions. In that case, leave them out of your presentation.

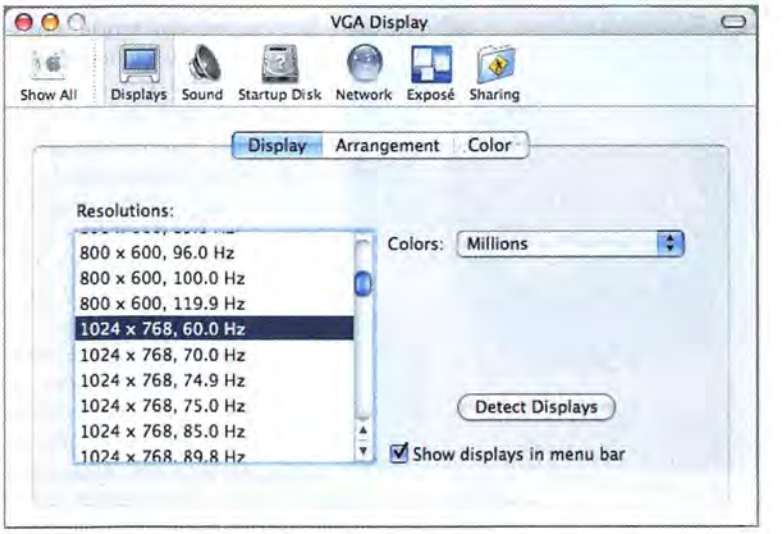
Tweak the Projector Most modern projectors optimize the image automatically every time a new video source is selected. This sometimes takes a few seconds, so don't panic if you don't see an image right away. If you're the only one using the projector, you may get even better results by manually adjusting the color, contrast, brightness, and other settings using the projector's built-in controls.

ICON BY PAUL HOWALT

Presentation Insurance

Nothing is more embarrassing for a speaker than to have a dazzling computer presentation ruined by technical glitches. Our tips won't keep your audience from falling asleep—but as long as they're awake, they'll see exactly what you planned. □

FRANKLIN N. TESSLER is a radiologist and longtime *Macworld* writer who lives in Birmingham, Alabama.



By the Numbers A VGA projector shows up as a generic VGA display in the Displays preference pane.

CHECK IT OUT

Portable Protection

It's a rough-and-tumble world out there. So your spotless new iBook, PowerBook, or iPod won't stay that way for long unless you adopt some prophylactic tactics. Here are a few options.

> Radtech's **PowerSleevz** line provides form-fitting sleeves for your iBook or PowerBook, protecting it from abrasions, even those caused by zippers and carrying-case buckles ($23–$25; www.radtech.us).

> The iSkin **ProTouch PB** is a flexible, washable silicone keyboard protector that prevents dirt and food from getting in between your PowerBook's or iBook's keys—but lets you see the keys as usual. It keeps the keys from scratching the screen when the lid is closed, too ($20; www.iskin.com).

> Acme Made's **iCover II** is a microsuede sheath that slides over your iBook or PowerBook screen to protect both the front and back; it doubles as a screen cleaner ($25–$26; www.acmemade.com).

> Klear Screen's **iKlear Apple Polish** works on the iPod and iBook, but it also cleans DVDs, CDs, LCD and CRT monitors, G3 and G4 towers, iMacs, and more ($10 for 12 wet packs; $25 for 12 wet packs, five-ounce pump, and polishing cloth; www.iklear.com).

> Monster Cable's **Monster iClean Screen Cleaner** has no alcohol or ammonia, and cleans monitors, laptop monitors, and iPods safely ($15–$25; www.monstercable.com).

> iCleaner's **iCleaner Scratch Remover** is a nonabrasive cleaner designed specifically for removing scratches from the plastic parts of the iPod and the white iBook case. The Pro version also includes a polish for banishing deep scratches and shining up the iPod's metal back ($15–$19; www.ipodcleaner.com).—FRITH GOWAN

Cool Geek Tricks

Geeks are the magicians of the Mac community. Like Houdini, we use our knowledge to get out of bad situations. And like David Copperfield, we use sleight of hand to dazzle the uninformed. With these three tricks, you can conjure up some magic of your own in the New Year.

1 Resurrect Lost Print Jobs

You printed something weeks ago—perhaps an airline-ticket receipt. Now you want to print it again, but you didn't save a copy of the Web page and can't find the information on the airline's site. What to do? Reprint it from your automatically saved backup of every document you've ever printed, of course.

The first thing you need to know is that a piece of Unix software called CUPS (Common Unix Printing System) controls printing in OS X. CUPS includes an option that lets you save and reprint previously printed documents (print jobs). Here's how:

Edit the CUPS File To enable the option, you have to access and edit a file named cupsd.conf (save a copy of the original). Select the Go To Folder command from the Finder's File menu and type `/etc/cups`. Locate the cupsd.conf file.

If you have Bare Bones Software's $49 TextWrangler or $179 BBEdit (www.barebones.com), you can open the file by dragging it to the application icon. If you're using TextEdit, get Brian R. Hill's $15 utility Pseudo (find.macworld.com/0093) and drag the TextEdit icon to its icon. This opens TextEdit with root access, which you need in order to save the edited file. (BBEdit and TextWrangler have this ability built in.)

Next, locate the following text in the document: `#PreserveJobFiles No`.

Change `No` to `Yes` and delete the pound symbol (#) at the start of this line. This tells the CUPS software to save print jobs and to treat the line as an active instruction rather than as a comment to be ignored.

Now locate `#MaxJobs 500`.

Change the line so it reads `MaxJobs 50`. (Again, you are deleting the pound symbol.) You don't *have* to reduce the number, but your hard drive will thank you. Finally, save these changes. If you opened TextEdit using Pseudo, the document should save directly. If you're using BBEdit or TextWrangler, OS X will ask for your password.

Find a Saved Job Your next step is to figure out how to locate and reprint a specific saved job. To access the Web-based interface for the CUPS printing software, launch Safari (or your preferred browser) and type the following URL in the address field: `http://localhost:631`.

Select Do Administration Tasks. If you're using OS X 10.3.4 or later, a sheet will drop down asking you to fill in your name and password. Do so and click on the Log In button. You now have administrative access to the CUPS software.

Click on the Manage Jobs button. In the screen that appears, click on the Show Completed Jobs button. To see your most-recent print jobs, scroll to the bottom of the window that appears. To reprint a job, click on the Restart Job button next to its name (see "Print . . . Again").

Password Hassles If after you click on the Restart Job button, CUPS rejects your correct password, you may be mired in a Panther problem. Panther uses a new form of password encryption that CUPS can't decrypt. That's a problem if you created a brand-new user account in Panther and you're running OS X 10.3.4 or later.

Apple intends to fix this; in the meantime, you can delete the section of the cupsd.conf file that requires the password. Your Mac will be less secure, but you'll be able to use the feature. Locate the following lines near the end of the cupsd file:

```
<Limit GET>
AuthType Basic
AuthClass System
</Limit>
```

Delete these four lines, or add a pound symbol before each one to make them inactive.—TED LANDAU

2 Prevent Server-Log Wipeout

Every week, your Web server kicks out a log file that you want to download with the $39 Interarchy file-transfer software (★★★★½; November 2004) and process with your log-analysis program. This sounds

simple enough—but there's a glitch. By default, Interarchy uses file-name extensions to decide how to download files. Your logs use the *.log* extension; therefore, Interarchy doesn't recognize them as text files. What's a Webmaster to do?

From an Interarchy file listing, select one of your log files and choose Listing: Get Info. In the Get Info window, choose BBEdit or your favorite text editor from the Application pop-up menus for Open, View, and Edit (in case you want to view or edit the file). Then choose Text from the Encoding pop-up menu, choose your log-analysis program from the Post Process Application pop-up menu, and close the Get Info window. Now Interarchy will download all your log files as BBEdit text files and process them automatically in your log-analysis program.—ADAM C. ENGST

Put iChat on Autopilot

A friend of mine who recently began working from home told me he was terrified to step away from the computer in case the boss sent a message via iChat. I said bathroom breaks were acceptable. "Well," he began with some hesitation, "what if I need to take the dog to the beach?"

Obviously, he needed an iChat autoresponder that could identify a chat initiated by the boss and type a series of responses. Here's how to whip one up using Pygmy Software's free iCAR utility (find.macworld.com/0094), an iChat plug-in for creating autoresponses, and Script Software's $20 iKey (www.scriptsoftware.com), a very cool macro utility.

It works this way: in iChat you must click on a chat window to make it active. iCAR performs this service for you, but it also does something once it activates that window—it sends a message or triggers an AppleScript. If it sends a message, it reveals to your correspondent that it's autoresponding. Instead, you can set it to trigger an AppleScript—but you leave the AppleScript field empty. This generates an inconsequential error message that doesn't appear. Then iKey steps in and types your phony response.

The Setup To access iCAR's settings, install it and then open iChat. Choose iChat: Preferences, and click on the Auto-Reply tab. Set it to autoreply when your status is Available, Away, and Idle. Under Timing, choose Reply To Every Message. To keep iCAR from revealing that you're autoresponding, switch off the Message Prefix option at the bottom of the window, which by default types `Auto-reply:`. Under Source, select AppleScript and leave the selection field blank.

Next turn to iKey to create the sequence of responses. First select Shortcut: New Set: Select An Application and navigate to iChat. When you find it, click on Select. Choose Shortcuts: New Sequence. In the Shortcut: Sequence window, enable the Programmed option and choose After Activate from its pop-up menu. In the same window, select Defined from the Repeat pop-up menu and enter `10` in the Number Of Times field.

Print . . . Again Once you've modified your cupsd.conf file, you can click on Restart Job to reprint a document even if you've since lost or deleted the original file.

Now click on the Sequence tab and select Shortcuts: Utility: Wait Front Window With Title. In the window that appears, click on the Utility tab, choose Wait Window Title Contains from the Action pop-up menu, and enter your boss's iChat handle (whatever appears in the title bar when you two chat) in the Title/String In Title field. This tells iKey to wait until your boss initiates a chat.

In the same window, choose Shortcuts: Utility: Make A Pause, click on the Utility tab in the resulting window, and enter `8.0` in the Delay field. This tells iKey to pause in a natural manner before issuing its first response.

Next, choose Shortcuts: Keyboard: Type Text. Click on the Keyboard tab in the resulting window and type `Hang on a sec, I'm on the phone . . .` (a busy but casual response). Choose Shortcuts: Keyboard: Type/Press/Release Keys. Click on the Keyboard tab, click on the Key field, and press the Mac's return key. This sends the response to the boss.

I've set up a number of responses in this way, with longer pauses between each one (see "Fool the Boss"). A quick way to do this is to simply copy, paste, and customize the steps you composed earlier. Finally, tell iKey to type `Bye!` to end it. Create a 4-second pause. And for some final insurance, use the Type/Press/Release Keys shortcut to type ⌘-W and end the chat before your boss can ask questions. When you're done with the sequence, click on OK.

Fool the Boss The boss won't wise up to those 45-minute coffee breaks you're taking if you have a customized iChat autoreplier in place. Of course, you *could* use this technology for good instead of evil. Send a message to geekfactor@macworld.com if you come up with any brilliant ideas.

The Caveats Before you leave your Mac, make iChat the active application. iKey may not see the chat window if it's running in the background. If your boss logs out of the chat before the sequence is complete, he or she is going to be suspicious when you continue to send updates about how your call is going. And if your boss tries to contact you later in the day and is greeted with the same scheme, you're *so* busted.—CHRISTOPHER BREEN

Mac OS X Hints

Open the Sound and Displays preference panes with your keyboard, make Terminal listings flow numerically, move files between volumes, use speech recognition without wasting screen space, take advantage of the Inspector window, and dig into OS X for hidden images and icons.

Quickly Access the Sound and Displays Preference Panes

If you're a laptop user who opens the Sound and Displays preference panes a lot—to change sound input or adjust a secondary monitor's position, for example—you may be interested in undocumented shortcuts that take you directly to them from any application.

On your iBook or PowerBook, you can open either preference pane by holding down the option key and then pressing one of the volume- or brightness-controlling function keys (for Sound and Displays, respectively). So option-F1 or -F2 will open the Displays pane, and option-F3, -F4, or -F5 will open the Sound pane. If you have a desktop Mac and an Apple keyboard with volume controls, you can hold down option and press any of the volume keys at the top of the keyboard to open the Sound pane. Unfortunately, there's no shortcut to the Displays pane for desktop Mac users.

Numerically Order Terminal File Listings

Working with numbered files in Terminal is somewhat frustrating because the app doesn't properly sort the files in directory listings. Consider a simple directory containing 20 versions of a graphic—Logo-version 1, Logo-version 2, and so on. If you use the `ls -1` command (which lists one file per row of output) on this directory, you'll see something like this:

```
Logo-version 1
Logo-version 10
Logo-version 2
Logo-version 20
Logo-version 3
```

If you're tracking revisions, or otherwise looking for a file in a large group of files, this manner of sorting can be problematic. However, using Unix's ability to combine simple commands via the pipe (|) symbol, you can display files in numerical order, with *2* following *1*, and so on.

The key to this trickery is the `sort` command, which does what its name suggests—it sorts what it's given as input. Adding the `-n` option will sort data numerically. `sort` also needs to know which portion of the data you'd like it to sort by. You direct it by specifying a starting point within the string of text to be sorted, stated in terms of a field number and then a character position within that field. Fields are groups of characters separated by spaces; in this example, there are two fields in the file name. The first field (numbering starts 0, not 1) is the *Logo-version* portion of the file name (or field 0). The second field (or field 1) is the version number. You don't need to specify a location number within a field unless you want the sort command to start somewhere other than the beginning of the field.

Putting it all together, to sort the example output in numerical order, you'd type `ls -1 | sort -n +1`, which means "print a directory list, send its output to sort, and sort it numerically by the second field." When you run the command, you'll get a nicely organized list of your files that begins like this:

```
Logo-version 1
Logo-version 2
Logo-version 3
```

You can also use the optional character position for sorting numbered files that are lacking spaces in their names. For instance, for a series of files named ClientStuff1.txt, ClientStuff2.txt, and so on, you'd use the command `ls -1 | sort -n +0.11`. Since there are no spaces in the file names, there's only one field (field 0), and the numeric portion of the file names starts at the 12th character (position 11, since numbering starts at 0).

CHECK IT OUT

"Wreck a Nice Beach" in Less Space

If the title of this tip makes no sense to you, it may help to know that part of it was in the code name for the Apple project that added speech recognition to Mac OS—just say the part in quotation marks quickly, and you'll see why.

In any event, if you use speech recognition, you're quite familiar with the floating bubble that lets you manage the process. Unfortunately, if you're working on a small screen, the bubble often winds up exactly where you don't want it to be. But it doesn't have to be that way. You can minimize the speech bubble. Just double-click on the gray-lined area just below the middle, and the bubble will glide into the Dock.

Don't worry—speech recognition will work just as it did before. In fact, the docked icon updates when you press the speech-activation key and speak.

A Window with a View Using the Inspector window, you can reap the benefits of column-view windows—with previews of sounds and movies—without having to change from list- or icon-view windows.

Move (Don't Copy) Files between Disks

If you have more than one hard drive or partition in your Mac, you probably know that dragging an item from one volume to another copies it instead of moving it. If moving is what you're after, you need to copy the item and then delete the original.

An easier way to achieve the same result is to start the process as usual (click and drag the item), but before you release the mouse button at the destination, hold down the ⌘ key. Now take your finger off your mouse, and the Finder will take care of moving the file from the source to the destination—saving you the trouble of removing the original.

Use the Inspector to View Previews

The Finder's column view is a great way to see a bunch of information about a selected file. You can even play movies and sounds directly from column view. But if you prefer icon or list view, why should you have to give up the benefits of column view?

You probably know about OS X's Get Info window (⌘-I or File: Get Info, with any item selected in the Finder), whose Preview area will allow you to play audio and video files. However, opening a Get Info window for each file you want to preview is time-consuming and wastes screen real estate.

Get Info has a more powerful cousin called the Inspector, which you activate by pressing ⌘-option-I with an item selected in the Finder. The Inspector looks just like the Get Info window, but it's dynamic. As you select new files in the Finder, the contents of the Inspector window change to reflect the current selection, so you can easily access previews of all your files while still benefiting from icon- and list-view windows. Just open the Inspector in an unused portion of your screen, and leave it there while you browse (see "A Window with a View"). That way, when you want to preview a video or listen to an audio clip, it's just a mouse click away. □

ICONS BY PAUL HOWALT

UNIX TIP OF THE MONTH

Images Are Everything

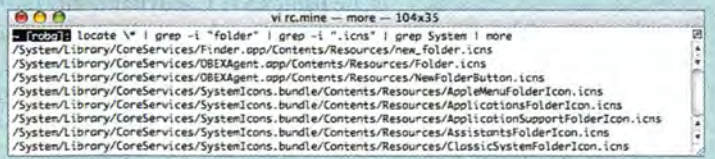
OS X is a treasure trove of hidden icons and images that you can use for everything from presentations to folder icons to desktop pictures. Hunting for these hidden images, however, can be frustrating. Most are stashed within an application's bundle, or in hidden Unix directories—neither of which is easily searchable from the Finder. And that's where Terminal comes in handy.

Your first step is to make sure that Unix knows where on your system all the files are. A Unix program called locate creates a list of files on your machine and allows you to search that list, and it runs automatically at regular intervals—if you leave your Mac on all the time. To update the file list by hand, open Terminal and type `sudo /usr/libexec/locate.updatedb`, press return, enter your admin password, and go grab a snack—the update will take several minutes to run.

The key to treasure hunting with locate is to combine it with grep, a Unix program that matches patterns in text strings, such as file names and directory paths. Say you want to find all the TIFF images related to Apple's iSync application. Just type `locate ".tiff" | grep "iSync" | more` and press return. This complex search command is actually relatively simple. First, locate is used to find all *.tiff* files on your machine. That long list, which you won't see, is then sent (via the Unix pipe symbol) to grep, which looks for the word *iSync*. Finally, those results are sent to the program more, which does nothing more than pause the output after each screenful. Presto, you've got an instant list of every TIFF file related to iSync. To open any of the images in Preview, copy and paste an entire row from the list in Terminal with the command `open "filepath"`. Press return, and the image opens in Preview.

There's additional syntax for the locate program that's very useful. If you run `locate \* | more`, you'll see the entire contents of the locate file. This will help you overcome a key limitation of locate—the fact that it's case sensitive. So a search for *.TIFF* will find different files than a search for *.tiff*. To work around this case sensitivity, you can use the `grep` command, which lets you ignore case. Say you're looking for folder icons in the System folder. You're not sure exactly how these icon files are named, but you're guessing that they have *folder* somewhere in their names. Try this command to see them all: `locate \* | grep -i "folder" | grep -i ".icns" | grep -i "System" | more`.

This is the same as the first example, except it takes a few more trips through grep. First, you're searching the entire file for *folder*, with the `-i` flag, which tells grep to ignore case when searching. This list is then searched for *.icns*, again in a case-insensitive manner. Finally, the command finds any remaining lines that contain *System*, this time paying attention to case, since you want to search the System folder (see "Show Me the Icons").



Show Me the Icons A few Unix commands can help you quickly find hidden treasures in OS X, such as this list of folder icon files in the System folder.

Contributing Editor ROB GRIFFITHS is the author of the recently released *Mac OS X Power Hound, Panther Edition* (O'Reilly, 2004) and runs the Mac OS X Hints Web site (www.macosxhints.com).

Mac 911

You're here for the inside dope, yes? You've come to the right place. This month's *Mac 911* is all about insights on the *inside*—including changing icons hidden *inside* Mac OS, using Terminal to get *inside* the NetInfo directory, removing artwork that is *inside* music files, and an *insider's* view on the downside of an upside-down iSight.

Iconology

Is there one folder that holds OS X's icons? I'd like to change the icons that appear in the Finder, but copying a new icon into a Get Info window doesn't seem to work.

Adam R. Totten

The procedure is more complicated than you might think. You can find many of the icons in OS X by going to System: Library: CoreServices and then control-clicking on SystemIcons.bundle. In OS X 10.3, you can then select Show Package Contents to rummage through the Resources folder within the Contents folder. However, the root owns these icons, so you can't edit them in place. Rather, you must make copies (after making a full backup of the Resources folder so you can restore things if necessary), edit the copies, and replace the originals with the edited versions. But there's even more to it than that, and because there is, I'll refer you to InterfaceLift (find.macworld.com/0106), which spells out the procedure in all its command-line glory.

I Want Candy!
CandyBar makes it easy to update your Mac with yummy icons.

Or you can take the easy route: Purchase Panic's $13 CandyBar utility (www.panic.com). Its drag-and-drop interface lets you replace an icon by dragging a new icon into a well where the old icon resides (see "I Want Candy!"). It's as simple as that. CandyBar also supports iContainers—prepackaged collections of icons—that you can load with a double-click. For tips on working with icons and images in Terminal, see this month's *Mac OS X Hints*, page 96.

Setup Assistant Redux

Is there a way to force OS X's initial Setup Assistant to run again?

Rick Roder

Yes, but unless you have a very good reason for running the Setup Assistant—your Mac won't start up because your user account appears to be hosed, for instance—don't do it. And if you must, back up your data first. Then keep these two points in mind: First, in order to retain access to the files associated with the current user—including music, e-mail messages, contacts, and calendars—the user you create in Setup Assistant must have exactly the same name as the current user. Otherwise, the transfer of permissions between your new and old identities will end up a mess, and, until you change file permissions with a tool such as BatChmod (http://macchampion.com/arbysoft), you won't be able to open some files.

Second, if you've created additional users on your Mac—an account for troubleshooting or one for your spouse, for example—you won't be able to access those users from the login screen.

Now that you've been warned, here's how to run the Setup Assistant again: Restart your Mac while holding down ⌘-S to boot into Single User mode. When the prompt appears, type the following, pressing the return key after each line (note the spaces):

```
mount -uw /
cd /private/var/db/netinfo
mv local.nidb local.old
rm ../.AppleSetupDone
exit
```

Translation: You've navigated to the hidden NetInfo directory and renamed the NetInfo database—which contains the Mac's user settings—in such a way that the Mac will create a new database when Setup Assistant runs. You've then removed the

TIP OF THE MONTH

Calendars Redux

In your August 2004 column, you suggested that in order to publish all your calendars to .Mac, you could print a compiled monthly calendar as a PDF file and then publish it to a .Mac home page. A more graceful solution is to create a new calendar, give it a name such as All Calendars, and export all your other calendars to the desktop. Then drag the .ics files from the desktop to the new calendar entry you created to add all those events to the calendar. Finally, publish this single calendar to .Mac.

John Moskalyk

AppleSetupDone file. When the Mac doesn't see this file, it runs the Setup Assistant that allows you to create a new user.

If you'd like to put things back the way they were before you undertook this procedure, boot into Single User mode again and type the following:

```
mount -uw /
cd /private/var/db/netinfo
mv local.nidb local.1old
mv local.old local.nidb
exit
```

This gives the new NetInfo database the name local.1old and restores the original NetInfo database.

Away with Artwork

I've heard that iTunes' artwork is embedded into music files. How do you back up artwork and remove it?

Dylan Drazen

Artwork is indeed embedded in music files (and rightly so, as you'd want the artwork to transfer when you move audio files to another computer). But iTunes is more than happy to let you archive and remove it. To back up the artwork, launch iTunes, select a track whose art you want to archive, press ⌘-I to produce the track-information window, click on the Artwork tab, and drag the artwork to the desktop, where it turns into a picture clipping. To delete the artwork, click on it and then click on the delete button.

Old OS, Old iPod

Can you use an iPod with OS 9?

Ivan Manson

Third- and fourth-generation iPods and the iPod mini require OS X, or Microsoft Windows 2000, XP Home, or Professional, but you can use the first two generations of iPods—which have navigation buttons arrayed around the scroll wheel—with OS 9. Because Apple no longer sells these models, you'll have to find a used one.

To make the device work with OS 9, you need compatible versions of iTunes and the iPod software. You can download the last OS 9–compatible version of iTunes—that would be 2—from find.macworld.com/0107. And you'll find the iPod Software 1.3 Updater for Mac OS 9 at find.macworld.com/0108.

Mouseless Menus

With my Windows PC at work, I use the keyboard to activate a menu. When I type a letter, the first menu entry that begins with that letter is highlighted. Then I can just press the enter key to select that menu option. I would like to do this on my Mac at home, but I don't know how.

Jason Kuebelbeck

Recent versions of OS X let you do the same thing. Just hold down the control key and press F2. The Apple menu will drop down. To move to the next menu to the right, press the keyboard's right-arrow or tab key (press the left-arrow key or shift-tab to move to the left). In OS X 10.3, typing a letter will take you to the first item that begins with that letter. You can use the up- and down-arrow keys to move up and down in the menu. If a menu contains multiple items that begin with the same letter, type the first couple of letters of a particular command name to highlight it. If an item has a submenu, use the right-arrow key to open it.

Upside-down iSight

I'd like to find a more aesthetically pleasing way to incorporate my iSight into my work environment. I thought I had found the perfect solution—mounting it under a bookshelf—but the image is flipped, and iChat doesn't have any control for rotating it 180 degrees. Is there a fix for this?

Blair Feldman

It's possible to flip the video image with software—for example, Ben Software's $50 SecuritySpy (www.bensoftware.com/ss) can do it. But as you've discovered, flipping images isn't among iChat's talents, and because Mac OS allows only one application at a time to use video input, you can't flip the image in one program and then use that flipped image in iChat.

I'm afraid you must turn to mechanics to solve your problem. You could do it with mirrors—point your iSight at a concave mirror (which flips your image, much as a shiny spoon would), and angle a second mirror so that the camera can see you. As deliciously scientific as this setup may be, it adds more clutter to your room.

Instead, look at MacMice's $30 SightFlex (www.macmice.com). It features a FireWire cable built into a flexible, 20-inch arm that's attached to a solid base. Connect the iSight to the top of this arm, place the base in a convenient spot, and twist the camera into a position that shows your best side. □

Contributing Editor CHRISTOPHER BREEN's business card also includes the words *Editor in Chief, Playlistmag.com.*

UNSOLICITED ADVICE

Extras for Excel

I've been using Microsoft Excel more frequently of late, and I wanted to pass along a couple of spreadsheet tips.

If you want to insert the date as a time stamp (so it won't change when you next update the document), press control-semicolon (;). To insert the time, press control-shift-semicolon. If you'd like a date and time that updates, type `=NOW()` into a cell.

And here's a cool way to make a pop-up menu: Enter values—Giants, Dodgers, Rockies, Padres, and Diamondbacks, for example—in a series of out-of-the-way cells, such as J1 to J5. Click on the cell you'd like the pop-up menu to appear in. Choose Validation from the Data menu, click on the Settings tab, and choose List from the Allow pop-up menu. In the Source field that appears, enter `=J1:J5` and click on OK. A pop-up menu containing your team names appears. To tidy up, select the team names in the J column and apply a white font color so they'll be invisible (just remember not to enter other values in these cells!).

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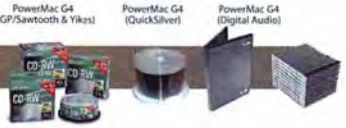

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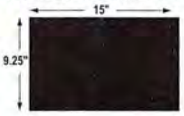

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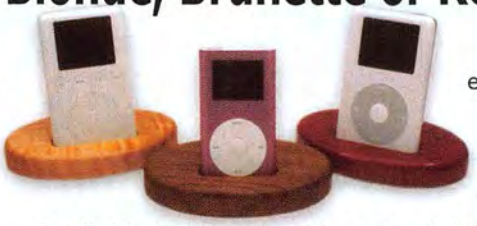

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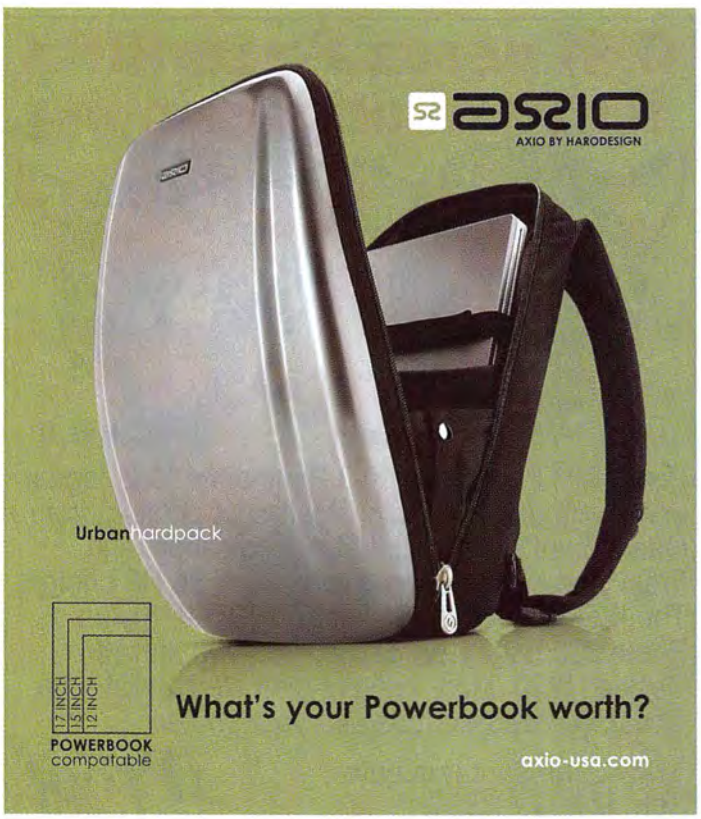

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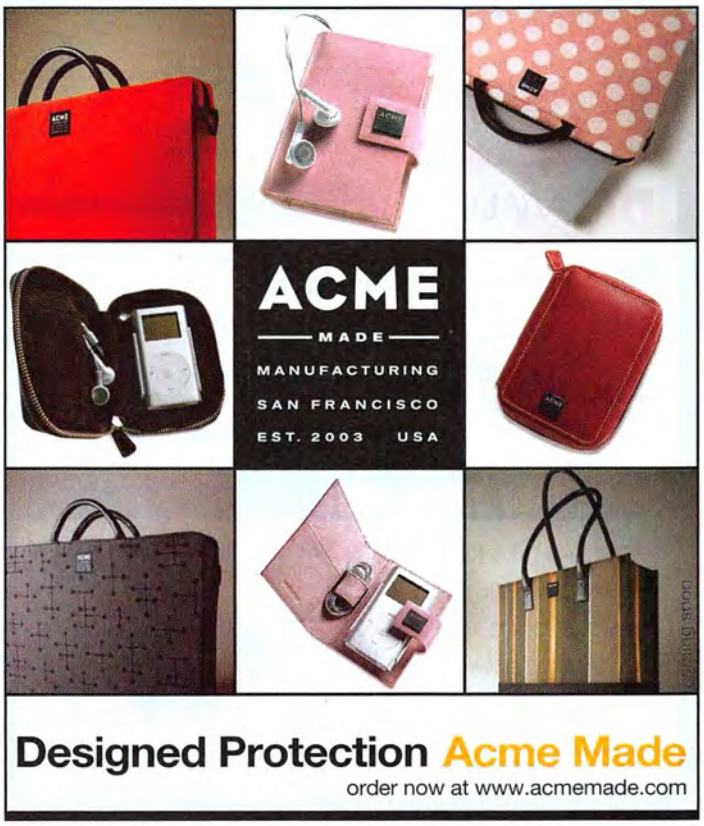

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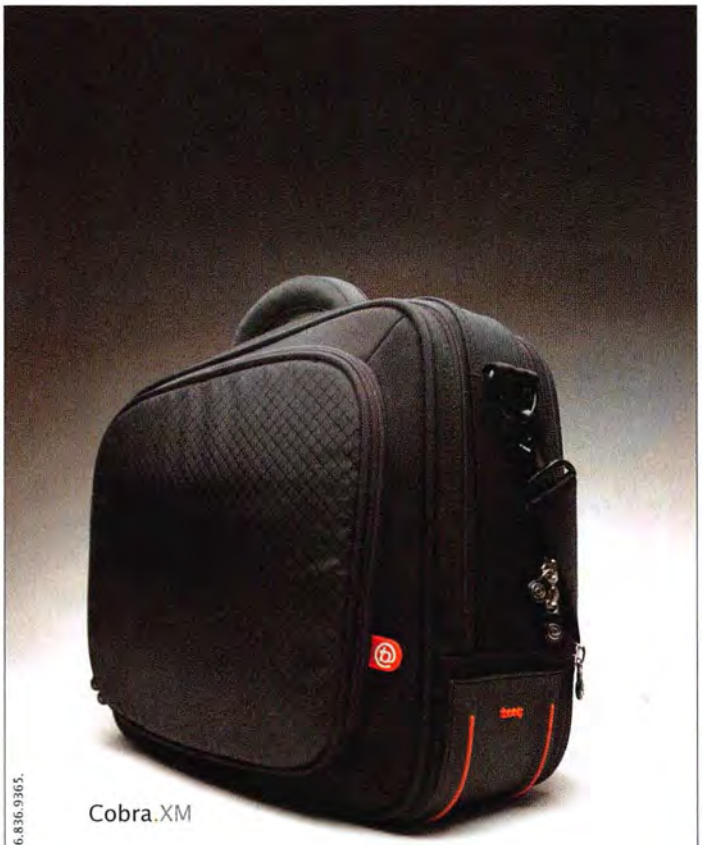

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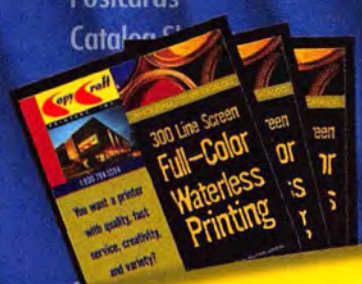

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8.5" x 11" 95# Gloss Cover Two sided AQ Coating	4/4	$325	$425	$590	$880
BROCHURES		1,000	2,500	5,000	10,000
11" x 17" 100# Gloss Book Two sided AQ Coating	4/0	$245	$380	$500	$780
	4/4	$465	$570	$725	$995
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POSTCARDS		1,250	2,500	5,000	10,000
4.25" x 6" 12 pt. C2S Front sided AQ Coating	4/4	$145	$185	$245	$390
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Hot Stuff

The Month's Coolest Developments

FROM THE EDITORS OF MACWORLD

PHOTOSTAMPS

Gone are the days when you had to be a president, an endangered waterfowl, or Elvis to get your face on a stamp. Thanks to PhotoStamps (a service of Stamps.com), you can personalize your postage with pictures of your kids, your dog, or even yourself. The privilege doesn't come cheap—one sheet of 20 37-cent PhotoStamps, for example, costs $16.99 (nearly 48 cents per stamp). But just imagine the look on your friends' faces when they see your mug on their mail (http://photo.stamps.com).

Sonos Digital Music System ▲

Sure, the AirPort Express lets you stream music to a stereo in your home—but you can control it only from your Mac, and listen to the music in only one room at a time. For Bang & Olufsen–esque design—and price—combine one or more $499 Sonos ZonePlayers (wired or wireless networked audio players that distribute, play, and amplify digital music through your speakers) and $399 Sonos Controllers (wireless handheld devices with color screens and scroll wheels for controlling the ZonePlayers). The result is a shared-music system that you'll be proud to have in plain sight (www.sonos.com).

Logitech MX1000 ▲ Laser Cordless Mouse

Optical mice offer more-precise tracking than moving-parts models—until it's time to mouse over high-gloss surfaces such as lacquered tabletops and photo paper. Logitech's $80 cordless MX1000 with Fast RF for wireless connectivity swaps optical technology for laser, to boldly go where few mice have gone before. Logitech claims that the laser mouse has 20 times more sensitivity to surface detail than LED optical mice—ensuring that your mouse won't falter on even the trickiest of surfaces (www.logitech.com).

iSync's Bluetooth Support

When it comes to convenience, there's nothing like setting your cell phone or PDA on your desk, launching an app on your Mac, and having the two wirelessly exchange contact, calendar, and to-do information. The hassle of adding numbers to your phone no longer needs to be a barrier to upgrading to the newest hardware. The latest version of Apple's free iSync supports even more Bluetooth-enabled phones from Nokia, Sony Ericsson, and Siemens, as well as several handhelds. And if you get bored with using Bluetooth just to synchronize data, you can also easily transfer photos taken with your cell phone to your Mac, or even use your cell phone as a wireless modem (albeit a slow one) when you have to get online on the road (www.apple.com/isync).

Painter IX's New Oil Brushes

Thanks to a new feature in Corel's Painter IX, digital art truly does imitate life. The next version of the $299 natural-media painting software includes jaw-droppingly realistic Artists' Oil brushes that closely mimic the look and behavior of traditional oil paints. The brushes hold a finite amount of paint, so your strokes become lighter as the oil runs out. It's just like working on a real canvas—without the unpleasant fumes (www.corel.com).

WHAT'S HOT A Quick Look at the World of Macs

1. **A *Business Week* survey of 500 business executives names Apple the most innovative company of the last 75 years.** *"In your face, General Electric," exults a triumphant Steve Jobs.*
2. **Sony reluctantly adds MP3 support to some of its music players.** *Says Sony Chairman Nobuyuki Idei: "We think this exciting new technology provides a new way to enjoy the disco music craze that is sweeping the globe."*
3. **Apple releases a security fix for iChat AV.** *Among the fixes: a patch that automatically blocks video chats with anyone not wearing pants.*
4. **Apple may be near a settlement in its legal dispute with The Beatles' Apple Corps.** *The terms of the deal rename Apple's headquarters at One Infinite Loop in Cupertino "Sir Paul McCartney's Summer Home."*

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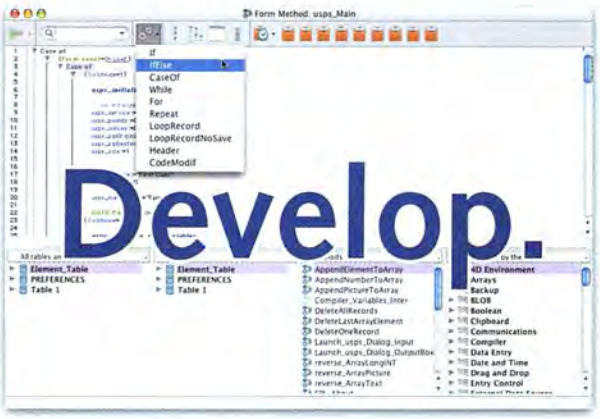

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