

EXTENDED WARRANTIES: When They're Worth Buying

**TV ON
DEMAND**
Your Shows, Your Way

PCWORLD



NEVER GET LOST! Top
Mapping Sites, Gadgets

We Test New **MOTHERBOARDS**

TERABYTE DRIVES
MAXIMUM SPACE FOR DATA,
MUSIC, VIDEOS, AND MORE



MAY 2006 • TECHNOLOGY ADVICE YOU CAN TRUST® • WWW.PCWORLD.COM

BEST **FREE** STUFF

COOL NEW DOWNLOADS, SITES & SERVICES

Windows Utilities

Search Engines

E-Mail Services

Browser Add-Ins

Security Tools

Entertainment

Photo Sharing

Office Helpers

101

EDITORS' PICKS



They're your servers. And your network. (It's time you took back control of them.)

Is managing your servers and your growing storage needs getting to be too much? Then server optimization may be just the answer. From storage management to networking, CDW has a full line of HP servers featuring AMD dual-core processors. So your network can handle higher capacities, without slowing down applications. So call CDW and get your server solution today. It's time you took charge of your network.



Additional hard drives
sold separately

HP ProLiant DL145 G2 Rack-mount Dual-core Server

- AMD Opteron™ 246 Processor (1.80GHz)
- 80GB hard drive
- Maximum performance at an affordable price
- Complete tools for essential system management
- Universal ID (UID) for easy identification in large-scale rack deployments

\$2562⁹⁹
CDW 810216



AMD Opteron™ Processor

- Works with HP ProLiant DL145 G2 Rack-mount Series Servers
- AMD Opteron™ Processor (1.80GHz)
- Provides a highly scalable architecture to deliver next-generation performance as well as a flexible upgrade path from 32- to 64-bit computing

\$929.99 CDW 811566

HP Smart Buy instant savings reflected in price shown. HP Smart Buy savings based on a comparison of the HP Smart Buy price versus the standard list price of an identically configured product if purchased separately; savings may vary based on channel and/or direct standard pricing. Offer subject to CDW's standard terms and conditions of sale, available at CDW.com. © 2006 CDW Corporation



Hard drives
sold separately

SMART BUY -
\$500 INSTANT
SAVINGS*



HP ProLiant DL385 Rack-mount Server

- AMD Opteron™ 250 Processor (2.40GHz)
- Proven two-way AMD Opteron™ performance and 2U density
- Memory: 1GB std., 16GB max.
- Six SCSI hot-pluggable drive bays

\$2279

CDW 876533



HP Ultra320 SCSI Universal Hard Drives

- 15,000 rpm, internal, hot-pluggable
- Offers the flexibility and expandability to meet your growing storage capacity requirements

36.4GB \$301.99 CDW 442236

72.8GB \$485.99 CDW 442238

HP ProLiant DL385 Dual-core Rack-mount Server

- Dual Core AMD Opteron™ 265 Processor (1.80GHz)
- Memory: 1GB std., 16GB max.
- Six SCSI hot-pluggable drive bays
- Large internal storage capacity for everything from Web applications to databases
- Easily connects to storage networks and is easily managed from one place

\$2804⁹⁹

CDW 811471



Hard drives
sold separately

HP StorageWorks® 1/8 Tape Autoloader Ultrium 460

- 1.6TB native LTO Ultrium-2 tape storage system
- Flexible tape automation solution with the ability to automatically back up multiple servers without operator intervention

\$4571.99 CDW 813323



Hard drives
sold separately

HP ProLiant DL585 Rack-mount Dual-core Server

- Two AMD Opteron™ 865 Dual Core Processors (1.80GHz)
- Memory: 2GB
- Four hot-pluggable drive bays
- Redundant power supply
- 32-bit computing performance, extends the performance of memory-constrained applications and 64-bit capabilities to x86-based environments

\$9599⁹⁹

CDW 792310



HP StorageWorks® MSA1000 SAN Starter Kit

- 4x 146GB 15K hard drives
- Two FCA24214 Host Bus Adapters for Windows® or Linux® servers
- Dual hot-pluggable fans/power supplies

\$12,961.99 CDW 872344

The Storage Solutions You Need When You Need Them.



The Right Technology. Right Away.™

CDW.com • 800.399.4CDW

In Canada, call 888.898.CDW • CDW.ca

Your potential. Our passion.™
Microsoft



A Company Tracking 9 Million Container Moves a Year.
Running on Microsoft SQL Server 2005.





Jettainer manages shipping containers for Lufthansa and US Airways on 3,000 flights to 400 airports every day. To keep up with a database growing at 30% a year, they upgraded to SQL Server™ 2005. See how at microsoft.com/bigdata



Toshiba recommends Windows® XP Tablet PC Edition.

Satellite®

Smart notebooks for every budget.

Starting at \$699

Tecra®

The reliability business demands.

Starting at \$1,199

Portégé®

Thin, light and powerful.

Starting at \$1,599

Qosmio™

4-in-1 personal entertainment center.

Starting at \$1,699

Tecra® M4 Tablet PC

Combines high-performance notebook technology with tablet functionality.

Intel® Centrino® Mobile Technology

Genuine Microsoft® Windows® XP Tablet PC Edition 2005

Toshiba EasyGuard™ enhancements¹ for increased mobile security, system integrity, network connectivity and overall ease of use

Starting at \$1,699

ToshibaByDesign.com/M4
1.800.TOSHIBA

1. Toshiba EasyGuard technology comprises a number of features some of which may or may not be available on a particular Toshiba notebook depending on the model selected. See www.easyguard.toshiba.com for detailed information. 2. Toshiba's shock absorption technology provides higher impact protection for your system as compared to Toshiba systems without similar shock protection features based on Toshiba's drop tests. Toshiba's standard limited warranty terms and limitations apply. Visit www.warranty.toshiba.com for details. ConfigFree, Portégé, Satellite and Tecra are registered trademarks and EasyGuard and Qosmio are trademarks of Toshiba America Information Systems, Inc. and/or Toshiba Corporation. Intel, the Intel logo, Intel Inside, the Intel Inside logo, Celeron, Intel Centrino, the Intel Centrino logo and Pentium are trademarks or registered



Toshiba Trusted Platform Module (TPM)

Chip embedded on motherboard helps protect your data with NSA-level encryption.



HDD Protection Design²

Shock-absorbing materials and integrated 3D accelerometer help safeguard your hard drive from falls, impacts or vibrations.



High-Resolution Video Display

14" diagonal SXGA+ display offers an extended viewable range and more vivid visuals — plus, the polycarbonate protective surface offers an authentic pen and paper experience.



Patented Diversity Antenna

Improves wireless signal reception by strategically placing a dual-band Wi-Fi[®] antenna in the notebook display.



ConfigFree[®] Software

Simplifies finding and connecting to networks and allows collaboration between connected users and workgroups.

The power of versatility.

The ability to adapt to your surroundings is a key component of success. The Tecra[®] M4 Tablet PC brings together state-of-the-art notebook technology with innovative tablet functionality to become Toshiba's most advanced notebook yet. It works around you, instead of the other way around. That's innovation 360[°].

Where can innovation take you?

ToshibaByDesign.com/M4

TOSHIBA

Innovation **by design.**

trademarks of Intel Corporation or its subsidiaries in the United States and other countries. Microsoft and Windows are registered trademarks of Microsoft Corporation in the United States and/or other countries. Wi-Fi is a registered certification mark of the Wi-Fi Alliance. All other trademarks are the property of their respective owners. While Toshiba has made every effort at the time of publication to ensure the accuracy of the information provided herein, product specifications, configurations, prices, system/component/options availability are all subject to change without notice. Toshiba is not liable for pricing, typographical or photography errors. Prices listed are based on products listed at ToshibaDirect.com at time of publication printing. Reseller/Retailer pricing/products may vary. © 2006 Toshiba America Information Systems, Inc. All rights reserved.

Strobe XP 300

Duplex Mobile Scanning Solution!

- **Fast Duplex Scanner**
6 seconds/page, simplex scanning*
6 seconds/image, duplex scanning*
- **Patented AutoLaunch Technology**
Insert document to start scan automatically!
- **Scan to PDF**
Convert documents into searchable PDF files!
- **Mobile**
USB-powered or wall-powered modes!
- **Flexible**
Scan business cards, plastic ID cards, up to legal-sized documents!



visioneer
Strobe™ XP 300

9 out of 10 buyers choose Visioneer for their mobile scanning solution*

Perfect for busy mobile professionals who need a fast and reliable duplex scanner with a small footprint. Now you can scan and file all of your documents and photographs electronically right alongside your electronic documents from Microsoft Office, PDF files from Adobe Acrobat and image files from numerous other applications. Measuring only 2" x 2.5" x 12" and weighing a mere 20 ounces, the Strobe XP 300 is slim and lightweight. Fits neatly on a desk and packs easily alongside your laptop or in your briefcase. Scans anything, anywhere because it's both USB-powered through your USB port or wall-powered mode to conserve your laptop battery. Now you can quickly scan, file and store all of your documents, plastic ID cards, photos, articles, brochures and business cards no matter where you are.

Perfect for the Office, on the Road or at Home!

For information visit our website at www.visioneer.com/pcw5

Copyright 2006. Visioneer, Inc. All rights reserved. The Visioneer brand name, logo and Visioneer Strobe are registered trademarks of Visioneer, Inc. Visioneer, Inc. 5673 Gibraltar Drive, Suite 150, Pleasanton, CA 94588. *The NPD Group/NPD TechWorld (January–May 2003), 200 dpi black and white mode.



PC WORLD

M A Y 2 0 0 6
VOLUME 24 ♦ NUMBER 5
WWW.PCWORLD.COM

FEATURES

WARRANTIES

91 Are Extended Warranties Worth It?

We've often knocked these extra-payment plans. But when we surveyed readers on their experiences and talked to experts, we arrived at some unexpected conclusions.

MAPPING TOOLS

105 Never Ask for Directions Again

It's a big country to get lost in. Traveling in an unfamiliar place—or even around your own city—can be a daunting experience. We looked at mapping sites and in-car GPS devices that can help you find your way.

MOTHERBOARDS

129 Motherboard Mania!

Get the power you want as well as the features you need. Here's how to find a motherboard with just the right CPU, graphics, storage, and other connections for your dream machine.



COVER STORY

76 101 Fabulous Freebies

Considering the dazzling array of great free stuff available online, why would anyone pay good money for software and services? We uncover the best of the best, from a full-service suite of business productivity software to powerful search services to easy-to-use image editors and video sharing services. So put away your wallet and fire up your browser.

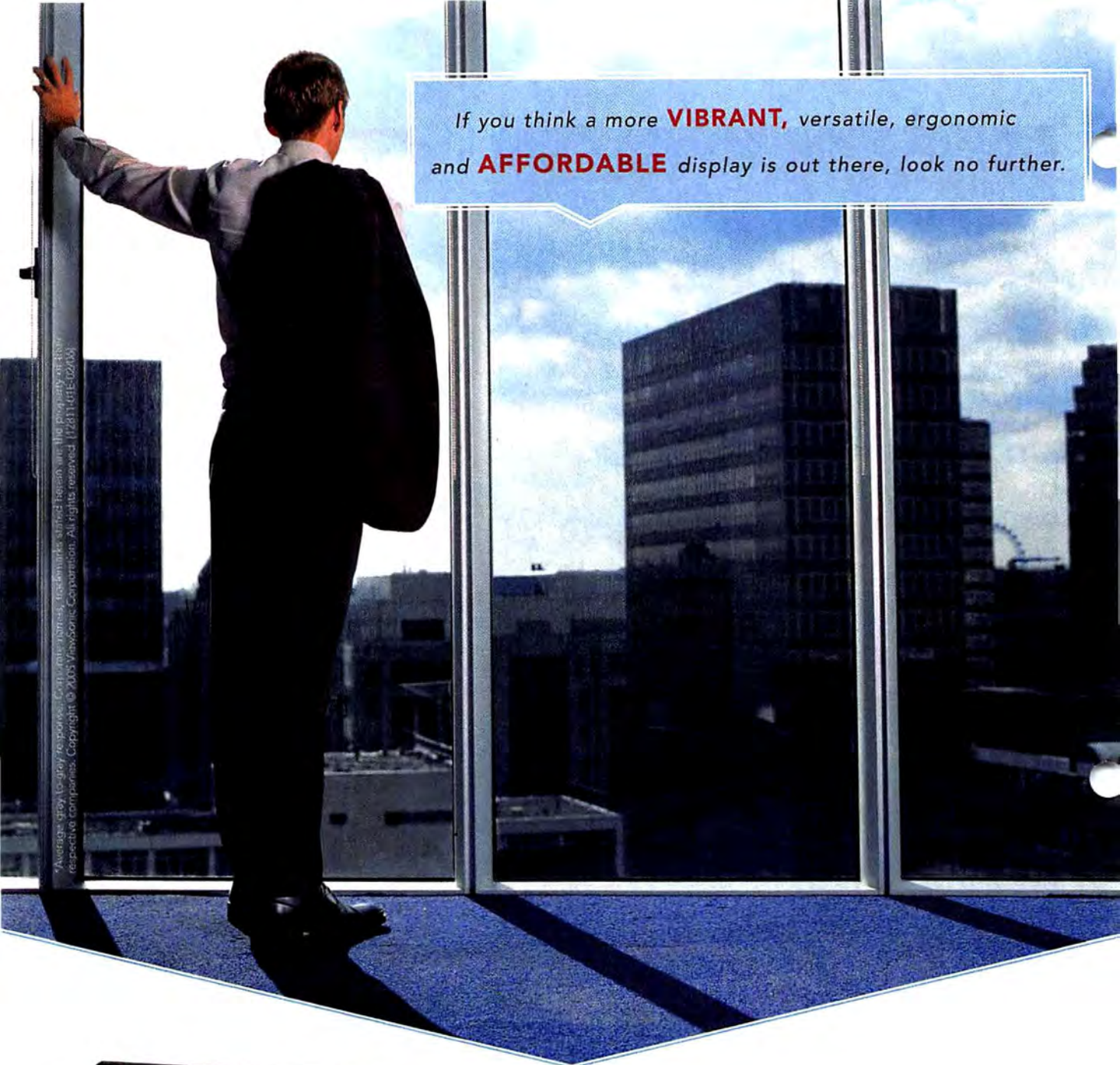


Cover graphics by Greg Silva.

ON THE COVER



If you think a more **VIBRANT**, versatile, ergonomic and **AFFORDABLE** display is out there, look no further.



VP920b. | VIEWSONIC'S PREMIUM DISPLAY.

See the best of the best. 4ms response time. Thin bezel design. Multiple display setup. Built-in speakers. Multiple analog/digital inputs. 160 degree viewing angles. Pivot/height adjustment. The VP920b LCD display combines superior technology, performance, ergonomics and design into one premium display at a value price. Brought to you by the visual experts of ViewSonic.

CONTACT VIEWSONIC INSIDE SALES AT SALESINFO@VIEWSONIC.COM OR CALL 866-881-8781 TO ORDER TODAY!

VP920b. See the premium VP series at viewsonic.com/professional.

ViewSonic 
the choice of professionals

REVIEWS & RANKINGS

- 50 Hard Drives**
Eight 1-terabyte models from Anthology, Buffalo, Infrant, Iomega, LaCie, Maxtor, and WiebeTech
- 54 LCD Monitor**
Dell UltraSharp 3007WFP
- 54 Digital Radio**
Boston Acoustics Receptor Radio HD
- 56 Top 5 Ultraportable Notebooks**
- 58 LCD Calibration Tool**
Pantone Huey
- 58 Digital Audio**
Linksys Wireless-G Music Bridge (WMB54G)
- 60 Internet Suite**
Mozilla.org SeaMonkey
- 62 Top 5 Graphics Boards**
- 64 Business Software**
HumanConcepts OrgPlus 6 Professional
- 66 Top 10 17-Inch LCDs**
- 67 Video Camera**
Canon ZR500
- 67 Notebook**
Apple MacBook Pro
- 68 Top 10 Digital Cameras**
- 69 Wireless Router**
Kyocera Mobile Router
- 70 MP3 Player**
Creative Zen VisionM
- 72 More Reviews**

See page 50 for a complete list of new products reviewed.

FIND-IT URLS

TO ACCESS INFORMATION about any item in *PC World* with an accompanying Find-It URL, enter find.pcworld.com/xxxxx (where xxxxx is the appropriate five-digit number) into your browser's location field. You'll jump to a Web page containing the information you want.

COMING UP IN JUNE

Tech Support Rx: Fix many PC woes yourself. Plus: Pros tell how to grease the tech support wheels.

Best and Worst Places to Shop: How and where to shop—online and on foot—to get the best deals.

Ditch Your Desktop? Today's powerful laptops make going entirely mobile a more practical choice.

Cell Phones: We test both standard and PDA models, and direct you to the most congenial phone.



70



68



134



69

DEPARTMENTS

- 17 Up Front**
Great freebies abound, but some may not last.
- 31 Letters**
Our antivirus roundup prompts a few quibbles.
- 35 Consumer Watch**
A dozen top tips for avoiding tech hassles. Plus: Protect your system with a fingerprint reader.
- 41 Hassle-Free PC**
Salvage images from a flash memory card when you accidentally deep-six your digital camera.
- 45 Gadget Freak**
Car gadgets: intriguing but (maybe) intrusive.
- 47 Bugs and Fixes**
Security holes in Windows Media Player and Java.
- 152 Full Disclosure**
Now in perpetual beta—join the testing today!

NEWS & TRENDS

- 18 Brave New TV**
Emerging technologies that send TV to your PC or cell phone will change your viewing habits.
- 22 A Faster, Denser Hard Drive Debuts**
Perpendicular magnetic recording has arrived.
- 24 Should the Internet Play Favorites?**
Equal treatment of data packets may soon end.
- 24 Bulk E-Mailers Buy Their Way In**
"E-mail tax" may let spam get into your inbox.
- 26 First High-Def Players: No Copying**
Antipiracy spec for next-gen DVDs is released.
- 28 Plugged In**
Much of today's PC hardware fails to meet copy protection standards for playing high-def content.

HERE'S HOW

- 134 Hardware Tips**
Easily improve your monitor's image quality.
- 138 Windows Tips**
Use Windows' Event Viewer for troubleshooting.
- 140 Internet Tips**
Boost security with our Internet Tool Kit 2006.
- 142 Answer Line**
Prevent meddling with PC security settings.
- 143 Office Tips**
Regular maintenance for your Office software.

RESOURCES

- 12 How to Contact PC World**
- 145 PC World Marketplace**
- 151 Advertiser Index**

NO Compromise on **M**assive & **M**essy Chargers/ Power Cords



N

L

Y

POWER

My **C**haracter

- Illuminated Voltage Indicator
- Attachable Voltage Selector Key
- 16-Step Selectable Main Output
- 2 Auxiliary Outputs
- Simultaneous Multiple-Chargings
- No AC Power Cords
- Absolutely Compact & Handy
- Easily Changeable AC Plugs & DC Tips
- Output Tip with Lock Feature
- AC 100–240V Worldwide Voltages
- Over 90% Efficiency (70W)
- Usable on Cars, Planes & Boats
- DC 12–24V Power Sources[†]
- Low Operation Temperature
- Worldwide Safety Approvals



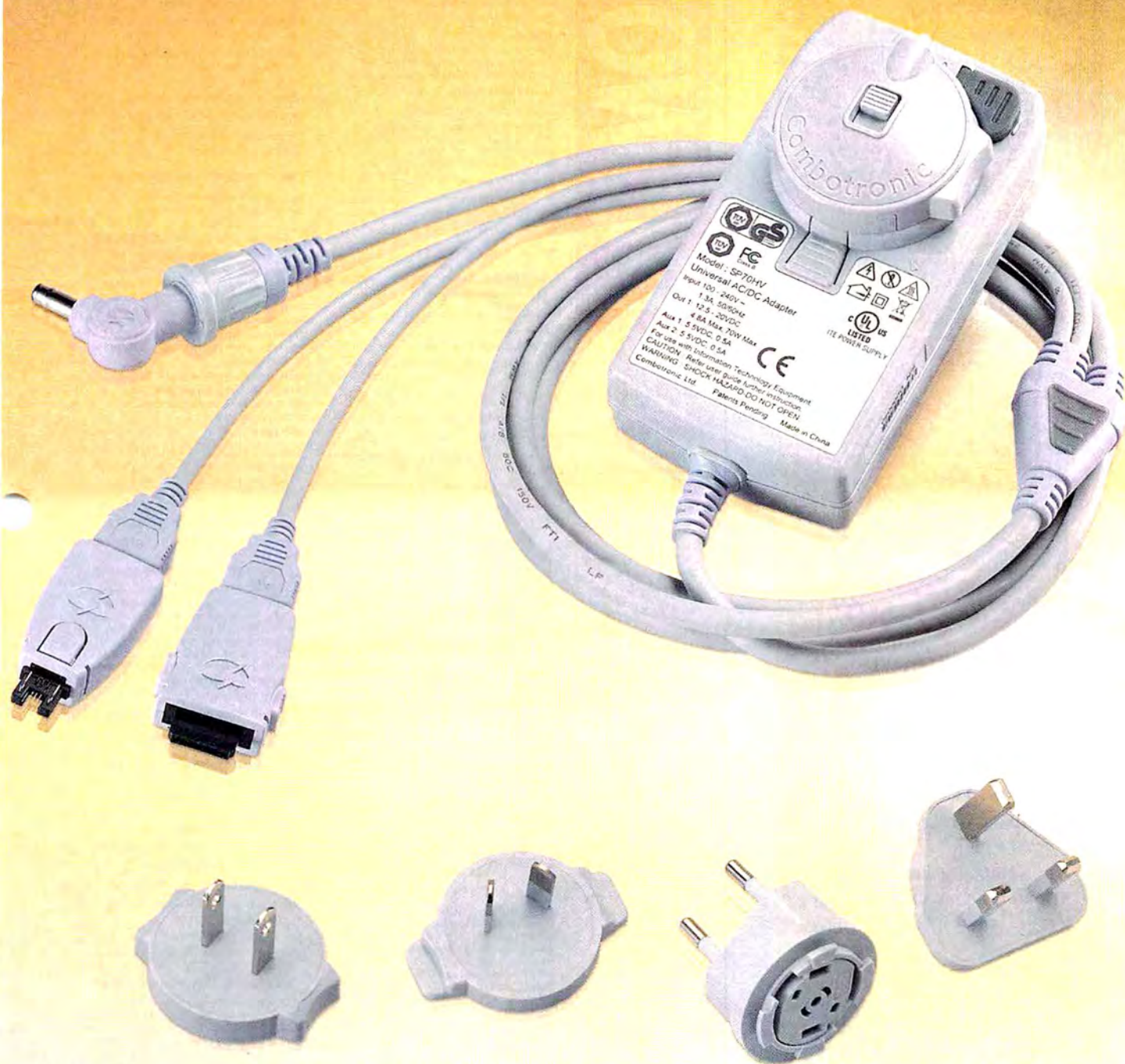
YOU WILL NEED



Combotron Ltd., Hong Kong

Welcome to www.combotronic.com

★ Accept Ordering through our official website effective 15 March 2006 ★



Patents
Pending

- Notebook ● Mobile ● PDA ● Digital Camera ● DV Device ● iPod ● PSP Game
 - Game Boy ● Other Electronic Devices
- Go to find.pcworld.com/52310

† DC Booster SD70 Series Required



**A more powerful gear
when you need it.**

Get multiple high
demand tasks done at
the same time with the
Ajump LifeStyle System
powered by the Intel®
Pentium® D Processor
with dual-core processing.



**FREE 250GB
USB 2.0 HD***
w/ 1-Button
Instant Backup

**Multimedia Storage System
with data security.**

- ✓ Share movie, music and files
w/ easy to carry USD2.0 HDD
- ✓ TV tuner to capture your
favorite shows.
- ✓ Dual HDD configured in RAID 1
(mirror) for optimal backup.
- ✓ DVD+-RW & 15-in-1 card reader

AJUMP
.com

Just Click It

* with purchase of Ajump LifeStyle system.
offer good from 4/23/06 to 5/31/06. Monitor not included.
©2006 Ajump.com Inc. All rights reserved. Celeron,
Celeron Inside, Centrino, Centrino Logo, Core Inside, Intel,
Intel Logo, Intel Core, Intel Inside, Intel Inside Logo, Intel
SpeedStep, Intel Viiv, Itanium, Itanium Inside, Pentium,
Pentium Inside, Xeon and Xeon Inside are trademarks or
registered trademarks of Intel Corporation or its
subsidiaries in the United States and other countries.

PCWORLD

PHONE:
415/243-0500

FAX:
415/442-1891

E-MAIL:
letters@pcworld.
com

WORLD WIDE WEB:
www.pcworld.com

MAIL:
PC World Editorial
501 Second St. #600
San Francisco, CA
94107

STAFF E-MAIL
ADDRESSES:
To contact any PC
World staff member,
simply format the
address as follows:
firstname_lastname@
pcworld.com

EDITOR IN CHIEF Harry McCracken
CREATIVE DIRECTOR Robert Kanes
EDITOR, PCWORLD.COM Ramon G. McLeod
MANAGING EDITOR Kimberly Brinson
EXECUTIVE EDITORS Edward N. Albrow, Randy Ross
TEST CENTER DIRECTOR Ulrike Diehlmann

EDITORIAL

ASSISTANT MANAGING EDITOR
Paul-Michael King

SENIOR EDITORS
Yardena Arar, Eric Dahl, Kalpana
Ettenson, Rex Farrance, Karl Koessel,
Tom Mainelli, Amush Yegazarian

SENIOR WRITER Alan Stafford

SENIOR ASSOCIATE EDITORS
Andrew Brandt, Eric Butterfield,
Anne B. McDonald, Dennis O'Reilly,
Melissa J. Perenson, Narasu
Rebbapragada, Dan Sommer

SENIOR REPORTER Tom Spring

ASSOCIATE EDITORS Danny Allen, Laura
Blackwell, Liane Cassavoy, Erik Larkin

SENIOR WEB PRODUCER David Lake

SENIOR COPY EDITORS

Stephen Compton, Steven Gray,
Tracy Yee-Vaught, Sally Zahner

EDITORIAL ASSISTANT Amber Bouman

INNOVATION JOURNALISM FELLOW
Erika Ingvald

FOUNDER David Bunnell

FOUNDING EDITOR Andrew Fluegelman

ART AND DESIGN

ART DIRECTOR Barbara Adamson

DEPUTY ART DIRECTOR Pierre Granier

ASSOCIATE ART DIRECTORS Jeff Berlin,
Beth Kamoroff, Carolyn Perot

DESIGNER Chip Taylor

DIGITAL IMAGING SPECIALIST Rick Rizner

CONTRIBUTING EDITORS

Grace Aquino, Steve Bass, Scott Dunn,
Stuart J. Johnston, Anne Kandra, Dan
Littman, Stephen Manes, James A. Martin,
Aoife M. McEvoy, Scott Spanbauer,
Lincoln Spector, Kirk Steers, Carla
Thornton, Dan Tynan

PC WORLD TEST CENTER

MANAGER OF BENCHMARK DEVELOPMENT

James Moch

DATA MANAGER

Jeffrey Kuta

SENIOR PERFORMANCE ANALYST

Elliott S. Kirschling

SENIOR DATA ANALYST

Tony K. Leung

DEVELOPMENT ANALYST

Thomas Luong

PERFORMANCE ANALYST Chen Xing Wang

SENIOR TEST CENTER COORDINATOR

Greg Adler

MAILING LISTS

Occasionally we make our subscribers' names available to other companies whose products may interest you. To have your name excluded from these mailings, send a request along with your mailing label to PC World Subscriber Services, P.O. Box 37571, Boone, IA 50037-0571 or e-mail us at pcwcustserv@cdsfulfillment.com.

BACK ISSUES

PC World issues are available in digital format starting with the July 2002 issue. Go to www.pcworld.com/singlecopy. PC World issues and article copies are available on microfilm and microfiche from UMI, 300 N. Zeeb Rd., Ann Arbor, MI 48106-1346; 800/521-0600.

PCW COMMUNICATIONS

PRESIDENT, CEO Jeff Edman

VP, PUBLISHER - PC WORLD MAGAZINE
Wayne Silverman

VP, PUBLISHER - PCWORLD.COM,
CUSTOM PUBLISHING
Michael Carroll

SENIOR VP, COO/CFO Vicki Peilen

VP, HUMAN RESOURCES Kate Coldwell

VP, CONSUMER MARKETING
Shawne Burke Pecar

NEW PRODUCT ANNOUNCEMENTS

Send press releases via e-mail to
newproducts@pcworld.com.

SUBSCRIPTION SERVICES

Access your subscription account online—24 hours a day, 7 days a week—at www.pcworld.com/customer. You can use online subscription services to view your account status, change your address, pay your bill, renew your subscription, report a missing or damaged issue, get the answers to frequently asked questions, and much more.

MAIL: PC World Subscriber Services,
P.O. Box 37571, Boone, IA 50037-
0571 (Include a mailing label with
correspondence.)

INTERNET: www.pcworld.com/customer

E-MAIL: pcwcustserv@cdsfulfillment.com
(Send your full name and the address at
which you subscribe; do not send
attachments.)

PHONE: In the U.S. 800/234-3498
New orders 800/825-7595

FAX: 515/432-6994

QUESTIONS AND SUBMISSIONS

Send material electronically to the appropriate online address listed below, or mail it to PC World. We reserve the right to edit letters. PC World pays \$50 for published *Here's How* tips and questions; accepted submissions will be acknowledged by payment. Editors cannot guarantee personal responses to all questions.

ANSWER LINE: answer@pcworld.com

BUGS AND FIXES: bugs@pcworld.com

CONSUMER WATCH:
consumerwatch@pcworld.com

FULL DISCLOSURE: steve@cranky.com

HARDWARE TIPS:
kirk_steers@pcworld.com

HASSLE-FREE PC:
hasslefreepc@pcworld.com

INTERNET TIPS: nettips@spanbauer.com

LETTERS: letters@pcworld.com

ON YOUR SIDE: onyourside@pcworld.com

PLUGGED IN: eric_dahl@pcworld.com

PRIVACY WATCH:
privacywatch@pcworld.com

WINDOWS TIPS: scott_dunn@pcworld.com

REPRINTS AND PERMISSIONS

You must have permission before reproducing any material from PC World. Write to PC World, Reprints and Permissions, 501 Second St. #600, San Francisco, CA 94107, or e-mail permissions@pcworld.com; include a phone number. To order reprints of your company's editorial coverage in PC World, call 717/399-1900 ext. 135.

ASUS recommends
Microsoft® Windows® XP



The power of dual-core in a thin, light design

Life in Style— In your work and in your play, people admire you for your style.

Your air of freedom. Your impeccable taste. One company offers you the freedom of superior mobile performance with styles that inspire. The ASUS W2J notebook, based on Intel® Centrino® Duo Mobile Technology, enables high definition capabilities for a stunning home theater experience anywhere. Unique design details—like its sleek, brushed aluminum chassis—provide an unmatched tactile elegance. Because life without style is like bottom shelf vodka.



A vivid 1680x1050 17" cinematic widescreen LCD draws you into the action.



An integrated TV tuner lets you pause, record, and fast forward live TV.



At nearly 1" thin, the W2 received Reddot and iF design awards in 2005.



NewEgg.com
800.390.1119

TigerDirect.com
800.800.8300

ZipZoomFly.com
510.739.1890

usa.asus.com/style/pcworld/

IRONMAN POWERED BY DELL

UNTIL NOW, THE ONLY THING HARDER THAN
COMPETING IN THE IRONMAN
TRIATHLON WAS BEING A FAN.



Seamlessly delivering coverage of the 17-hour endurance event that is the Ironman Triathlon to 1.5 million online fans isn't exactly easy. But with a little help from Dell, it's still a cakewalk compared to what the athletes go through. Over the course of a 2.4-mile swim, 112-mile bike ride, and 26.2-mile run in remote Kailua-Kona, Hawaii, Dell helps Ironman webcast everything from live video footage to timing data on individual athletes. Which means Dell servers have to pass an endurance test of their own: transmitting 11.9 terabytes of data while managing huge traffic spikes on ironman.com. From start to finish, Ironman isn't just one of the most exciting sporting events on the web. It's also a grueling test of the outer limits of human – and computing – endurance.

POWEREDGE™ 2850* RACK SERVER

\$1899

Lease as low as **\$51/mo.** (48 prnts*)
E-VALUE Code: 07689-pe2850-min
Small Business Pricing

High-Speed 2U Rack Server – Optional Dual-Core Processing on Select Configurations

- Intel® Xeon® Processor (2.80GHz, 2MB Cache, 800MHz FSB)
- Upgradable to Dual-Core Intel® Xeon® Processor featuring dual-core processing (2.80GHz, 2x2MB L2 Cache, 800MHz FSB)
- 1GB ECC DDR2 SDRAM (Up to 12GB)
- 73GB* (10,000 RPM) Ultra320 SCSI Hard Drive
- 24X IDE CD-ROM
- Dual Embedded Intel® PRO Gigabit* NICs
- 3-Yr Basic Enterprise Support (Next Business Day On-Site Service* M-F 8am-6pm, Hardware Warranty Support)
- System including Microsoft® Windows® Server 2003 R2, Standard Edition Operating System, starting at \$2698

POWEREDGE™ 1855* BLADE SERVER

\$1799

Lease as low as **\$48/mo.** (48 prnts*)
E-VALUE Code: 07689-pe1855-bsapp
Small Business Pricing

Optional Dual-Core Processing on Select Configurations

Dual Processor Blade Server Configuration Per Blade:

- Intel® Xeon® Processor (2.80GHz, 2MB Cache, 800MHz FSB)
- Upgradable to Dual-Core Intel® Xeon® Processor featuring dual-core processing (2.80GHz, 2x2MB L2 Cache, 800MHz FSB)
- 1GB ECC DDR2 SDRAM (Up to 12GB)
- 36GB* (15,000 RPM) Ultra320 SCSI Hot-Swap Hard Drive (Up to 600GB*)
- 3-Yr Basic Enterprise Support (Next Business Day On-Site Service* M-F 8am-6pm, Hardware Warranty Support)
- Requires PowerEdge™ 1855 Enclosure for operation; not included. PowerEdge™ 1855 Enclosures start at \$2999.

POWEREDGE™ 830 TOWER SERVER

\$799

Lease as low as **\$22/mo.** (48 prnts*)
E-VALUE Code: 07689-pe830sapp
Small Business Pricing

1P Value Tower Server – Optional Dual-Core Processing on Select Configurations

- Intel® Celeron® D Processor 326 (2.53GHz, 256KB Cache, 533MHz FSB)
- Upgradable to Intel® Pentium® D Processor 840 featuring dual-core processing (3.20GHz, 2x1MB L2 Cache, 800MHz FSB)
- 512MB ECC DDR2 SDRAM (Up to 8GB)
- 80GB* (7200 RPM) SATA Hard Drive
- 48X CD-ROM, 680MB, INT
- Embedded Broadcom Gigabit* NIC
- 3-Yr Basic Enterprise Support (Next Business Day On-Site Service* M-F 8am-6pm, Hardware Warranty Support)

*These devices have not been approved by the Federal Communications Commission for use in a residential environment. These devices are not, and may not be, offered for sale or lease, or sold or leased for use in a residential environment until the approval of the FCC has been obtained.

THE TOTAL ENTERPRISE SOLUTION.

Reliable. Expandable. Scalable. And just plain "able." Dell™ PowerEdge™ servers with Intel® Xeon® Processors provide unique answers for businesses of all sizes. Especially when working in tandem with network support products like PowerVault™ storage, PowerConnect™ switches and Dell's OpenManage™ Systems Management software. Together, they offer flexible, high-performance technology, security, and the power to run critical apps. Sounds like just the edge you're looking for.



NEW DELL™ POWERVAULT™ 110T LTO-3 TAPE DRIVE

Automated, high-capacity back-up and recovery data solution with WORM protection for enterprise and departmental servers and Network Attached storage.

\$4549

Best SMB Switch

— InfoWorld 2006 Technology of the Year Award

Dell PowerConnect 3424P

Delivers an array of enterprise-class features in a tidy package



POWERCONNECT™ 3424P POWER-OVER-ETHERNET GIGABIT SWITCH*

Robust 24-Port Managed fast Ethernet switch delivering industry-standard technology that integrates data, voice, and power on standard Ethernet infrastructure.

\$999



The Service & Support Professionals Association (SSPA), the leading organization for IT support professionals, has awarded Dell Enterprise Services its STAR Award for service excellence in the category of mission-critical support.

DELL
ON CALL™
HERE TO HELP

Create a customized IT infrastructure with Dell's Custom Network Assessment for Installation & Implementation. Dell-certified IT Professionals can assess and evaluate your current network infrastructure and business requirements and help develop a comprehensive optimization plan for your exact needs. So whether you're upgrading an existing network or installing a new one, Dell can recommend and deploy the optimal mix of hardware, software and services you're looking for. Call and find out what Dell can do for your business. Chances are it's a lot more than you think.

Visit dell.com/smb/DellOnCall for more details.

dell.com/pcworld

IT'S GOING BEYOND BOUNDARIES.



call 800.938.3807

Call: M-F 7a-8p Sat 8a-5p, CT

***Pricing/Availability:** Pricing, specifications, availability, and terms of offer may change without notice. Taxes, fees, shipping, handling and any applicable restocking charges, other than free shipping offer, if applicable, are extra and vary. Offers may be combined with other select offers or discounts. U.S. Dell Small Business new purchases only. Items leased will be subject to applicable end-of-lease options or requirements. Dell cannot be responsible for pricing or other errors, and reserves the right to cancel orders arising from such errors. **On-Site Service:** Service may be provided by third-party. Technician will be dispatched, if necessary, following phone-based troubleshooting. Subject to parts availability, geographical restrictions and terms of service contract. Service timing dependent upon time of day call placed to Dell. U.S. only. **Leasing:** Monthly payment based on 48-month Fair Market Value ("FMV") QuickLease and does not include taxes, fees, shipping and handling charges. Your monthly payment may vary, depending on your creditworthiness. QuickLease arranged by Dell Financial Services LP ("DFS"), an independent entity, to qualified Small Business customers. Minimum transaction size of \$500 required. At the end of the FMV QuickLease, you can: purchase the equipment for the then FMV, renew the lease or return the equipment to DFS. Please contact your DFS representative for further details. All terms subject to credit approval and availability, and are subject to change without notice. **Gigabit Ethernet:** This term does not connote actual operating speed of 1Gb/sec. For high-speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required. **Hard Drive:** For hard drives. GB means 1 billion bytes; actual capacity varies with preloaded material and operating environment and will be less. **Trademarks/Copyright Notices:** Dell, the stylized E logo, E-Value, Dimension, Inspiron, Latitude, OptiPlex, PowerEdge, Dell Precision, PowerConnect, PowerVault CompleteCare, ExpressCharge, Tri-Metal and UltraSharp are trademarks of Dell Inc. Intel, Intel logo, Intel Inside, Intel Inside logo, Pentium, Pentium Inside, Celeron, Celeron Inside, Xeon and Xeon Inside are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. Digital Light Processing, DLP, the DLP logo and the DLP medallion are trademarks of Texas Instruments. Microsoft and Windows are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries. Ironman and M-dot are registered trademarks of World Triathlon Corporation, used here by permission. ©2005 Dell Inc. All rights reserved.

Pine scent not included

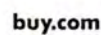


In today's environmentally-conscious world, the P150 Quiet PC Case establishes a new benchmark in computer cases. Designed around the highly-efficient Neo HE 430-Watt power supply, the P150 draws less power and reduces the impact your computer has on the power grid. A gleaming snow white finish and innovative Quiet Computing technologies round out the package, making your computer whisper-quiet and unobtrusive. Throw in some pine-scented air freshener and you might even forget you're at the office — it will give a whole new meaning to "computing environment".

Learn more about the P150 at www.antec.com.

Go to find.pcworld.com/51712

Antec
The Power of You





Living in the Free World

More and more great software and services are gratis. But for how long?

FOR AGES, PC WORLD'S annual cover stories on the Web's best freebies were newsstand blockbusters. And then an odd thing happened: We quit doing them. The planet's supply of no-charge gems seemed to be dwindling, as some acquired price tags and others simply vanished.

Recently, however, free stuff has come roaring back. Which is why, once again, the words "Best Free Stuff" are gracing a PCW cover.

The feature story inside, "101 Fabulous Freebies" (page 76), reflects the efforts of three intrepid freebie hunters: the article's author Dylan Tweney, and Associate Editors Laura Blackwell and Liane Cassavoy, who double-teamed the project to reality.

Dylan, a PCW contributor for a decade, confesses that he fretted at first about finding enough winners to fill the article. "In the old days," he remembers, "free stuff was full of quirky interfaces and bugs."

No longer. In fact, he says, "assuming you've paid for Windows, almost everything else you use could be free, and you could be happy." (Linuxheads, of course, will contend that you don't even need to pony up for an operating system.)

Why the renaissance of free? Some of our picks—such as the OpenOffice.org suite—come from the booming open-source community, whose volunteers give away some terrific software.

Even for companies that hope to turn free stuff into profits, the cost of doing cool things on the Web is plunging. For instance, many sites and services are built on existing open-source code, giving their developers a big head start. Google



FINDERS OF FREE STUFF: from left, Liane Cassavoy, Dylan Tweney, and Laura Blackwell, the team behind this issue's cover story.

and others offer automated advertising networks that let sites subsidize themselves with ads, without hiring an army of salespeople. Then there's the ever-shrinking cost of disk space, now pennies per gigabyte; these days, services can afford to give you plenty of elbow room for your e-mail, photos, or documents.

FREE TODAY, GONE TOMORROW?

FOR SOME FREE-STUFF purveyors, all this good news seems to have led to a new bout of the old dot-com bug known as irrational exuberance. Lately, I've met more than one giddy CEO who has postponed the little detail of figuring out how to make a buck. Some of them point to Google, which has pocketed billions by placing text ads on free services, and which famously launches new products without a strategy for monetizing them.

Any company can fantasize about being the next Google—even Microsoft, whose new Live services have a Google-esque, ad-based business model. Whether any can *succeed* is a different matter.

And it's an issue that even those of us who merely consume no-charge goodies need to ponder. A company without a rational plan for staying in business is one that you can't depend on to meet your needs and protect your info.

Smart freeloaders should keep these tips in mind:

- Don't use an unproven no-cost service as the primary repository for critical data you can't replace.
- Consider upgrading to fee-based versions of tools; paying customers are entitled to be fussier, and your purchase might help ensure the provider's solvency.

- Check out support options *before* you need them, to make sure they exist.
- Always ask yourself one simple question: What would you do if a favorite freebie suddenly went away?

The bottom line is that the mortality rate for these sites, services, and software is likely to remain high. (Of the 60 or so items we recommended in our March 2001 "Free Stuff" feature, only half are still around and still without charge.)

So enjoy the free ride—I sure am—but be careful out there. It's a lot easier to savor a free lunch when you're not completely dependent on it. ■

Harry McCracken is editor in chief of PC World. Contact him at mageditor@pcworld.com; read his blog at blogs.pcworld.com/techlog.

NEWS & TRENDS

EDITED BY EDWARD N. ALBRO

**22 PERPENDICULAR DRIVES
STORE MORE DATA**

**24 SHOULD WEB SITES HAVE TO
PAY FOR NET PRIORITY?**

**24 SPAMMERS TO PONY UP FOR
GUARANTEED INBOX ACCESS**

**26 FIRST HIGH-DEF DVD PLAYERS
WON'T ALLOW COPYING**

**28 PLUGGED IN: THE HIGH COST
OF HIGH-DEF ON A PC**

TV Your Way

FROM IPTV TO CELL PHONE SERVICES, NEW TECHNOLOGIES ARE POISED TO CHANGE HOW AND WHERE WE WATCH TV—NOT TO MENTION THE PROGRAMMING ITSELF. BY DAN TYNAN

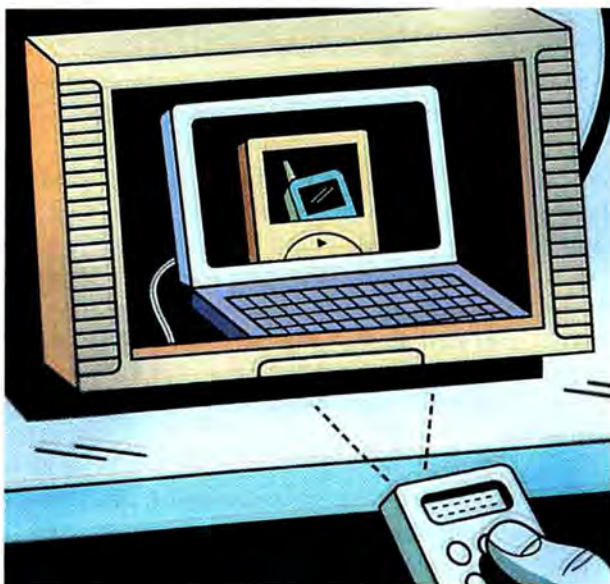
TO CO-OPT AN old slogan, the revolution may indeed be televised—but not on the TV that you grew up with.

The idiot box and the Internet have finally collided. From Internet Protocol Television (IPTV) to video over broadband and cellular networks, the nature of TV is changing before your eyes.

Such services intend to let you watch whatever you want, whenever you want, on devices ranging from big-screen displays to cell phones. They may also provide broad access to alternative content—and to smarter, weirder, more personal forms of television.

TRIALING FOR DOLLARS

SIMPLY PUT, IPTV employs Internet protocols to deliver TV shows and other content



over private high-speed networks. The technology promises to combine the interactivity of the Net with Hollywood's vast vaults of content. But most people may have to wait several years to get IPTV—

and even longer before it delivers on all of its potential.

Someday IPTV will bring the latest Web collaboration features to your living room, so you can rate TV programs, view other people's recom-

mendations, or even exchange messages while watching. IPTV's massive pipes will deliver high-def channels, movies on demand, fantasy sports and gaming, and (eventually) user-controllable multiple camera angles for live concerts and sporting events. IPTV carriers will also gather anonymous viewing data that will help marketers send you more-precisely targeted ads.

In addition, the technology might even let you turn your home into a mini-broadcast studio, says Ed Graczyk, director of marketing and communications for Microsoft's TV division, which provides software for IPTV services such as AT&T's U-verse TV.

"If TV brought the world to your living room, IPTV can bring your living room to the world," Graczyk says.



PORCINE PROGRAMMING: VIEWERS of Dave TV have access to channels such as BBQTV, where you can watch folks grilling ribs.

A bigger draw for most people may be so-called "triple play" services, in which a single company delivers entertainment, broadband access, and phone services via one fat pipe (followed up by an even fatter bill). If your mom calls while you're watching *Survivor*, her Caller ID information appears on your set, so you can hit the pause button and pick up the phone (or not).

Such technology is "the stuff of *The Jetsons*," says Gartner analyst Laura Behrens, "and it's tantalizingly close."

However, to deliver IPTV to the masses, telephone companies like Verizon and AT&T (which gained its IPTV service by buying SBC Communications) must expand their fiber-optic networks, which are currently available only in parts of the United States (see the chart on the next page).

IPTV providers also must jump through the same regulatory hoops that cable companies have faced. "Having to secure a FiOS franchise in every town has been our biggest roadblock," says Shawn Strickland, vice president of product management for Verizon's FiOS TV service.

Today's IPTV offerings are more like typical cable or satellite service, albeit with spiffier program guides and search tools. For example, most of FiOS TV's 180-odd channels are delivered via the same technology as cable TV; only the interactive programming guide, search tools, and video on demand are true IPTV services. More advanced features are still several years away.

FROM NET TO SET

OTHER OPTIONS for disgruntled cable and satellite subscribers are available now via broadband. Buy a set-top box from a company such as Akimbo, Dave TV, or ITVN and hook it up to your cable or DSL modem, and you can discover a brave new world of TV programming. Typically, these services offer channels of content, either streamed "live" like traditional broadcasts or delivered on request as a download to watch later.

The problem is unearthing something worth watching, let alone paying for. For example, the freebies among Dave TV's 100 channels of streaming or downloadable video include BBQTV (where you

watch people cook meat) and Wheels.tv (collections of racing videos). But some shows, like *The Girls of Asian Love Palace*, cost up to \$25 apiece. Because Dave TV distributes or sells content from virtually anyone who has a video and a marketing agenda, it's a bit like the Web equivalent of a public-access cable station.

For a fee of \$5 per month (plus a \$99 set-top box), ITVN offers content ranging from "Live TV" (obscure streamed programming—a recent entry showed Lance Armstrong playing Frisbee golf) and the Lacrosse Channel to the Silver Screen Network (old movies) and an impressive quantity of X-rated material. ITVN's remote control even has a panic button you can press to blank the screen if someone walks in while you're watching, say, *Miss Piggy Gets Jiggy* (an actual ITVN movie).

Akimbo's 111 channels feature content you may actually have heard of, including programming from the BBC, Cartoon Network, CNN, Discovery Kids, and the History Channel, as well as original Web video from sites like Rocketboom.com and iFilm.

But Akimbo is strictly a download service. Select the shows you want from an on-screen guide or from Akimbo's Web site, and they will show up on the \$70 set-top box within an hour or two, or overnight. Also, since you frequently must pay for the programs (on top of the service's \$10-per-month charge), your monthly costs could end up exceeding your cable bill.

Higher-quality programming might be on the way, however. At press time ITVN was planning to roll out an ▶

IN BRIEF

Tidbyte



BEATING BLUR: The latest hot feature in digital cameras is antishake technology, which helps reduce photo blurriness resulting from a shutterbug's jitters. Several leading camera makers have introduced antishake features in their affordable point-and-shoot lines.

The cameras combat blur in assorted ways. The \$400 Casio Exilim EX-Z850 employs that company's own Anti Shake DSP software, while the \$500 Sony Cyber-shot DSC-H5 and the \$400 Cyber-shot DSC-H2 attack the problem with hardware, using a moving optical element in the lens to counteract slight hand movement.

The \$350 Pentax Optio A10 uses sensors that detect camera shake and in turn adjust the CCD image sensor's settings to compensate for the movement.

A fourth method involves increasing the camera's sensitivity to light, or its ISO setting. The higher the rated ISO capability, the better. Until recently, the ISO setting on most point-and-shoot models topped out at ISO 400. But three of the eight cameras we tested for this issue (see the chart on page 68) support an ISO setting of 800, and the new \$399 Fujifilm FinePix F30 is rated at ISO 3200.

on-demand music video service called Pulse, while Akimbo has signed a deal with MovieLink that will make Hollywood movies available for download (for fees).

SMALLER SCREENS

WHEN STEVE JOBS announced last fall that iTunes fans could buy episodes of *Lost* and *Desperate Housewives* for \$2 a pop, a market for portable TV shows emerged overnight. And services like MobiTV and Verizon's Vcast let cell phone owners watch TV on the go.

If your eyes can handle TV shows playing on screens as small as an inch on the diagonal, MobiTV's \$10-a-month service (available in the United States on Cingular, Sprint, and a few regional carriers) streams content from CNN, MSNBC, and other stations to a supported handset.

SERVICES

NEW TV OPTIONS FOR LIVING ROOMS AND CELL PHONES

EMERGING SERVICES DELIVER TV programming either in streams (much like live TV) or as downloads on request.

IPTV	Format	Platform(s)	Availability	Notes
AT&T U-verse TV find.pcworld.com/52564	Live programming	Set-top	San Antonio, TX	AT&T's offering will feature more than 200 digital channels, plus on-screen Caller ID and the ability to record four different programs simultaneously. Pricing and future availability were unavailable at press time.
Verizon FIOS TV www.verizon.com/fios	Live programming	Set-top	Boston; Dallas; New York; Southern California; Tampa, FL; Washington, DC	Base package provides 180 channels of digital TV, including 22 HD and 47 music channels, for around \$35 a month. Add another \$35 for basic broadband and \$400 (standard definition) to \$1300 (high-definition with DVR) for the set-top box.
BROADBAND TV				
Akimbo www.akimbo.com	Download	Set-top or Windows Media Center PC	Nationwide	Akimbo has an easy TiVo-like interface and lots of mainstream content, including programs like <i>Fawcett Towers</i> and National Geographic specials. Besides the \$70 set-top box and \$10 monthly fee, most shows require an additional on-demand charge between 50 cents and \$4.
Dave TV www.dave.tv	Streaming and download	Set-top or PC	Nationwide	Much of Dave TV is free (that is, ad-supported) and downloadable to portable devices as well as to your PC or set-top box (\$100 to \$200). But the content is weird and hard to find, and on-demand programs cost from 50 cents to \$25 apiece.
ITVN www.itvn.com	Streaming	Set-top	Nationwide	If you love obscure sports, old B-movies, and adult fare, ITVN might be for you. The service costs \$5 a month, plus \$100 for the set-top box. Lacrosse TV and XTV Network (adult) cost an additional \$10 and \$30, respectively.
MOBILE TV				
MobiTV www.mobitv.com	Streaming	Phone	U.S., UK, Canada	For \$10 a month, MobiTV streams live and packaged content from 30-plus channels, from CNN to ESPN to Toonworld, to your phone. Alltel, Cingular, Sprint, and some regional carriers offer the service; you'll need a phone capable of displaying high-quality video.
Verizon Vcast find.pcworld.com/52562	Live programming and download	Phone	181 U.S. metro areas	Service beams music, video, and 3D games to your Verizon cell phone for \$15 a month (plus on-demand fees).



IPTV PIONEER: TODAY, Verizon's FIOS TV looks like cable or satellite TV, but with a more sophisticated program guide and search tools.

Verizon's \$15-per-month Vcast lets you watch live TV, but only on phones that support Verizon's high-speed EVDO wireless service—and only in markets that offer it. Cingular recently announced plans to offer 18 channels of video as part of its \$20-a-month Media Net package. The service will include 3- to 5-minute clips from popular

programs such as *King of the Hill* and *That's So Raven*.

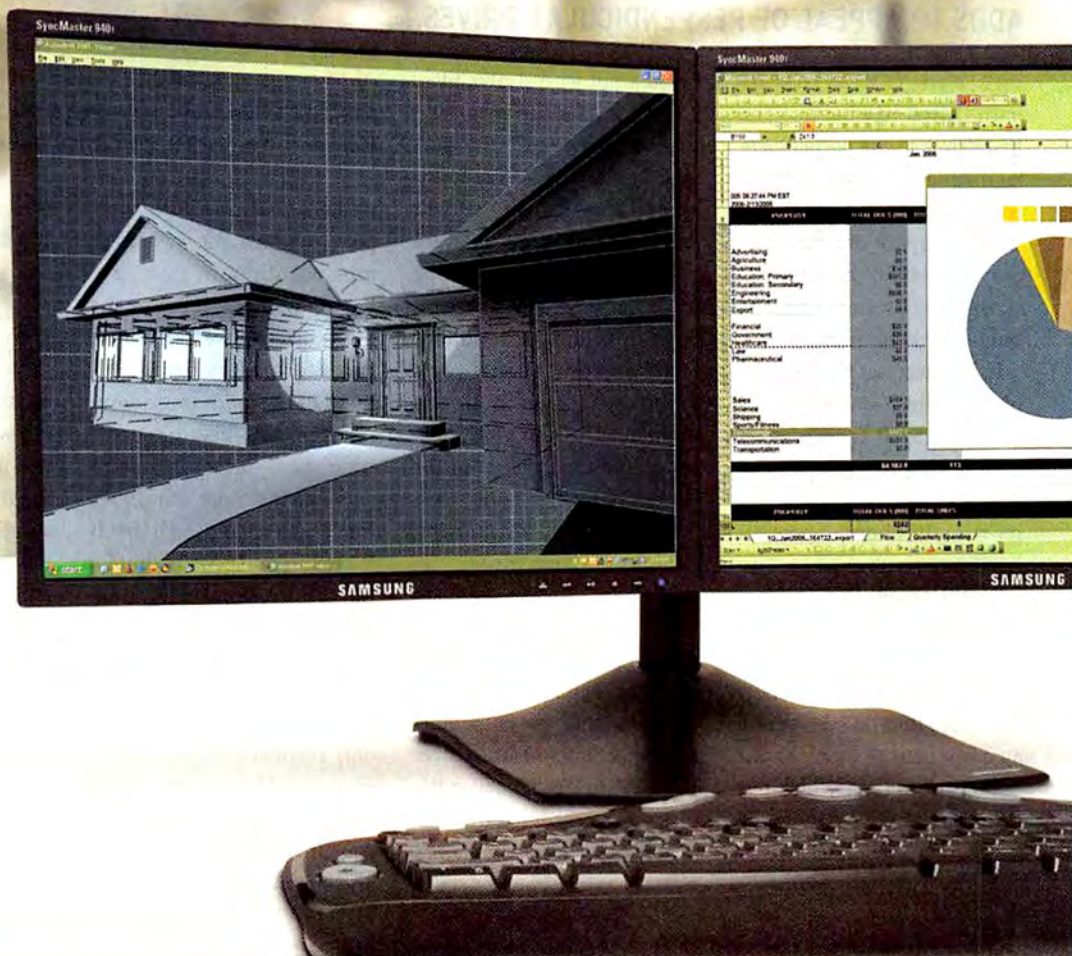
But don't expect to be watching *Desperate Housewives* on your handset any time soon. Mobile TV is more likely to promote conventional TV than to supplant it, says Kurt Scherf of Parks Associates. NBC, for example, says that iTunes helped boost ratings for *The Office*. And the pro-

ducers of ABC's *Lost* plan a spinoff for Verizon phones called *Lost Video Diaries*. Each 2-minute "mobisode" will have characters and plots that don't appear on the TV series. Similar mobisodes for Paris Hilton's *The Simple Life* are also said to be on the way.

TUNE IN TOMORROW

NEW WAYS TO distribute digital video may change the way you find as well as view programs. In the future, Gartner analyst Allen Weiner predicts, you'll discover your favorite shows via recommendations from friends on social networks, or through video sharing sites such as Revver and YouTube or search engines such as Blinkx and Truveo.

You can't yet watch *Monk* or *Firefly* reruns on demand, but that day is certainly coming. Don't touch that dial.



imagine having a better view of the big picture.

Imagine the potential you'll see in the 940T from Samsung. Thanks to its ultra-thin bezel, this 19" workhorse lets you move almost seamlessly from one monitor to another. A 1000:1 contrast ratio (1500:1 on the 17" 740T) renders graphics and type crystal clear — reducing eye strain to help keep you sharp, productive, and more profitable. With award-winning displays from Samsung, it's not hard to imagine. To learn more, visit www.samsung.com/monitor

SAMSUNG

STORAGE

A Faster, Denser Hard Drive Debuts

BOOST IN CAPACITY AND PERFORMANCE ADDS TO APPEAL OF PERPENDICULAR DRIVES.

THE REORIENTATION OF hard drives has begun: The first drives to use perpendicular magnetic recording (PMR) technology to pack more data into less space are out. And our tests reveal that they not only boost storage capacity but perform faster as well.

In our tests of the Seagate Momentus 5400.3 and its non-PMR 5400.2 predecessor, the PMR unit showed a modest boost overall, completing its runs in about 7 percent less time; results just for sustained throughput were even more impressive with a 15 to 17 percent gain. The PMR drive's greater areal density has little effect on seek speed, a component of many of our tests, but helped when our tasks focused on sustained

throughput with sizable files.

PMR aligns the magnetic markers on a hard-disk surface in a different way to increase areal density so you can store more data on every platter. Existing technology was approaching its areal density limits, and drive manufacturers spent several years working to overcome the problem. The result for you is more and cheaper room for your data—which is no small concern in a world moving to high-definition media.

INSIDE THE DRIVE

TO VISUALIZE THE difference between today's longitudinal and the new perpendicular recording, picture a drive platter. The bits of data on the disk are represented by mag-



SEAGATE'S NEW 160GB Momentus 5400.3 drive with PMR technology (top) and the older 120GB Momentus 5400.2 drive.

netized particles with their poles oriented one way or the other. Until now, they have been aligned parallel to the disk surface, like concentric rings formed by tiny dominoes. PMR stands those dominoes on end—also in concentric circles—meaning you can squeeze far more dominoes into a given surface ("How It Works: New Drive Technology" at find.pcworld.com/52532 shows the difference).

Toshiba has already shipped 40GB and 80GB, 1.8-inch PMR drives. At press time, only Toshiba's Megabeat MP3 players, sold in Japan, feature them, but they'll be in various consumer electronics devices and laptops soon. The second taste of PMR comes courtesy of Seagate's new 2.5-inch Momentus 5400.3 line, which ranges from 30GB to 160GB. The 160GB model is now the biggest notebook drive available, surpassing the previous 120GB notebook champ. The new drive not only has more storage, it uses less energy and gives off less heat, making for quieter, cooler micro PCs and digital video recorders. One caveat: Many BIOSs do not support drives larger than 137GB natively. Systems with Windows XP SP1 and

later, as well as Linux, though, supplant such BIOSs and can recognize the full 160GB.

FUTURE DISKS

SEAGATE PREDICTS THAT relatively soon PMR technology will deliver at least a four-fold increase in capacity. That means 2-terabyte, 3.5-inch single-platter disks for desktops; 1TB, 2.5-inch disks for laptops; and even 50GB for tiny 1-inch drives in MP3 players in the near future.

Headroom for tomorrow is good, but how much do you gain today? The highest-capacity (500GB), 3.5-inch drives currently on the market have an areal density of 125 gigabits per square inch; the PMR Toshiba models and the Momentus 5400.3 have 133 gbps. That's a measurable, if marginal gain, but compared with the average drive's approximately 100 gbps, it's a significant improvement.

With a winning combination of more storage and greater speed, the new drives should be a welcome addition to your storage arsenal. And they cost about the same \$2 per GB as current drives—you'll find the 160GB Seagate drive kit for \$320 (list).

—Jon L. Jacobi

TEST REPORT

NEW DRIVE SHOWS ITS METTLE

A DISK USING perpendicular magnetic recording technology handily outperformed an earlier generation on our copying tests and kept a slim edge on other tests.

PRODUCT	Drive technology	Time in seconds to complete:			
		Copy files & folders	Copy large file	Find file	Symantec Virus-Scan
Seagate 160GB Momentus 5400.3 find.pcworld.com/52480	Perpendicular	290	228	132	108
Seagate 120GB Momentus 5400.2 find.pcworld.com/52478	Longitudinal	340	274	136	119

CHART NOTES: Both 5400-rpm, 2.5-inch drives had 8MB of buffer and used the ATA-100 interface. Shorter times are better. Bold denotes best score. Tests conducted by the PC World Test Center. For details on how we test, go to find.pcworld.com/52482. All rights reserved.

KNOCK OUT DEALS



LIMITED TIME. CALL NOW. GET CASH BACK AND DELIVERY IN 24 HOURS.*

Xerox Phaser® 8500 Color Printer

Starting Price: \$899

\$599

After \$300 Rebate



- Made for busy workgroups (5-20 users)
- Up to 24 ppm in color and black & white
- Outstanding first-page-out time as low as 6 secs
- Ready for your network

Xerox Phaser® 6300 Color Printer

Starting Price: \$1,299

\$999

After \$300 Rebate



- "Best of the Year" Award (PC Magazine '05)
- Color: Up to 26/36 ppm
- Black & white: Up to 36 ppm
- Widest array of features

Xerox WorkCentre® C2424 Color Multifunction System

Starting Price: \$1,999

\$1,749

After \$250 Trade-Up Rebate



- Print/Copy/Scan
- Up to 24 ppm in color and black & white
- Automatic two-sided scanning
- Rich, vivid colors

CALL NOW

1-866-460-2230

OR VISIT **xerox.com/deal**

XEROX
TOTAL
SATISFACTION
GUARANTEE

XEROX

Limited time offer. Offer is valid for end users who purchase any of the following: Xerox Phaser 8500N, Phaser 8500DN, Xerox Phaser 6300N or Phaser 6300DN between 4/1/06 and 5/31/06; Xerox WorkCentre C2424DN, WorkCentre C2424DP, WorkCentre 2424DX between 3/1/06 and 6/30/06. Xerox must receive the completed rebate claim submission fax coversheet (provided at the time of claim submission), printer startup page and a copy of the invoice no later than June 30, 2006 (C2424 offer paperwork must be received no later than July 30, 2006). This offer cannot be combined with any other Xerox end user incentive. Xerox will mail the eligible rebate check directly to end user. Allow 6 to 8 weeks for delivery. Open to US end user customers with a valid US mailing address. Xerox resellers, agents, dealers, distributors and retailers are not eligible. All claims exclusively subject to Xerox final approval. Not responsible for late, lost, misdirected or postage-due mail. Proof of purchase required. Void where taxed, restricted, or prohibited by law. Applicable tax, if any, is the sole responsibility of end user. For rebate details visit website, <http://www.xerox.com/office/1989>. For WorkCentre C2424 trade up details, visit website <http://xerox.tradeups.com>. Trade-in an eligible Dell, HP or Xerox/Tektronix laser printer or an HP, Lexmark, or Xerox multifunction product. Traded products must meet trade guidelines set by Xerox. *24 hour delivery based on product availability and customer choice of shipping option.

© 2006 Xerox Corporation. All rights reserved. Xerox®, Phaser®, and WorkCentre® are trademarks of Xerox Corporation in the U.S. and/or other countries.

CONSUMER ALERT

Should the Internet Play Favorites?

BUSINESSES MAY BE CHARGED FOR EXPRESS HANDLING OF THEIR DATA PACKETS.

YOUR FAVORITE WEB sites may be relegated to the Internet's slow lane if the companies that run its backbone network have their way. Proposed services from telecommunications and cable companies would let ISPs and other Web businesses pay extra to receive preferential treatment for their data packets carrying everything from video to music to text over the Internet. Such packet prioritization would deliver a more responsive Web to those sites' visitors—a valuable perk for high-bandwidth services like streaming video.

Prioritizing content based



on type—meaning giving first crack at available bandwidth to services that need a quick, uninterrupted data flow, such as streaming media—is supported by both consumers and content providers. But charging the providers extra for special delivery of these

packets is opposed by some Internet firms and consumer groups.

Critics argue that the scheme goes against a basic tenet of the Internet, that all packets are treated equally. They claim that prioritization will allow established firms with deep pockets to stack the virtual deck against smaller, potentially innovative competitors. Critics also fear that qualifying Internet traffic paves the way for telecom and cable providers to lock out certain companies and services—for example, those offering competing Voice-over-IP services or audio and video downloads.

Telecoms and cable firms counter that the proposal does no such thing. "We will not block, impair, or degrade content, applications, or services," said Walter B. McCormick Jr., president and CEO of the U.S. Telecommunications Association, when he testified before a Senate committee earlier this year. Those who favor prioritization argue that such services will give incentives to the telecom and cable firms—by giving them a new revenue stream—to upgrade their networks, which will boost overall service quality.

Both sides are lobbying Congress and the Federal Communications Commission. Those in favor of packet prioritization want no ▶

E-MAIL

BUYING A WAY INTO YOUR INBOX

IN A MOVE seen as yet another threat to Internet neutrality, America Online and Yahoo say they'll charge bulk e-mailers for guaranteed delivery of their messages to AOL and Yahoo inboxes.

The companies will use the third-party e-mail accreditation system called Goodmail CertifiedEmail to allow bulk e-mail to bypass their own filters, which typically block some 80 percent of junk mail before it enters an ISP's network.

Because CertifiedEmail would be visually distinguished as approved mail, order transactions, newsletters, and marketing messages would neither be mistaken by recipients as spam or identity theft ploys nor be accidentally blocked by an ISP's e-mail filter, says

AOL spokesperson Nicholas Graham. Yahoo says it will use the Goodmail program only for transactional messages, such as bank statements and receipts.

Many in the Internet community give the plan a resounding thumbs-down. Fifty nonprofits, including the Electronic Frontier Foundation, Gun Owners of America, MoveOn.org Civil Action, and the Association of Cancer Online Resources, are pressuring AOL to quash what they call the "e-mail tax."

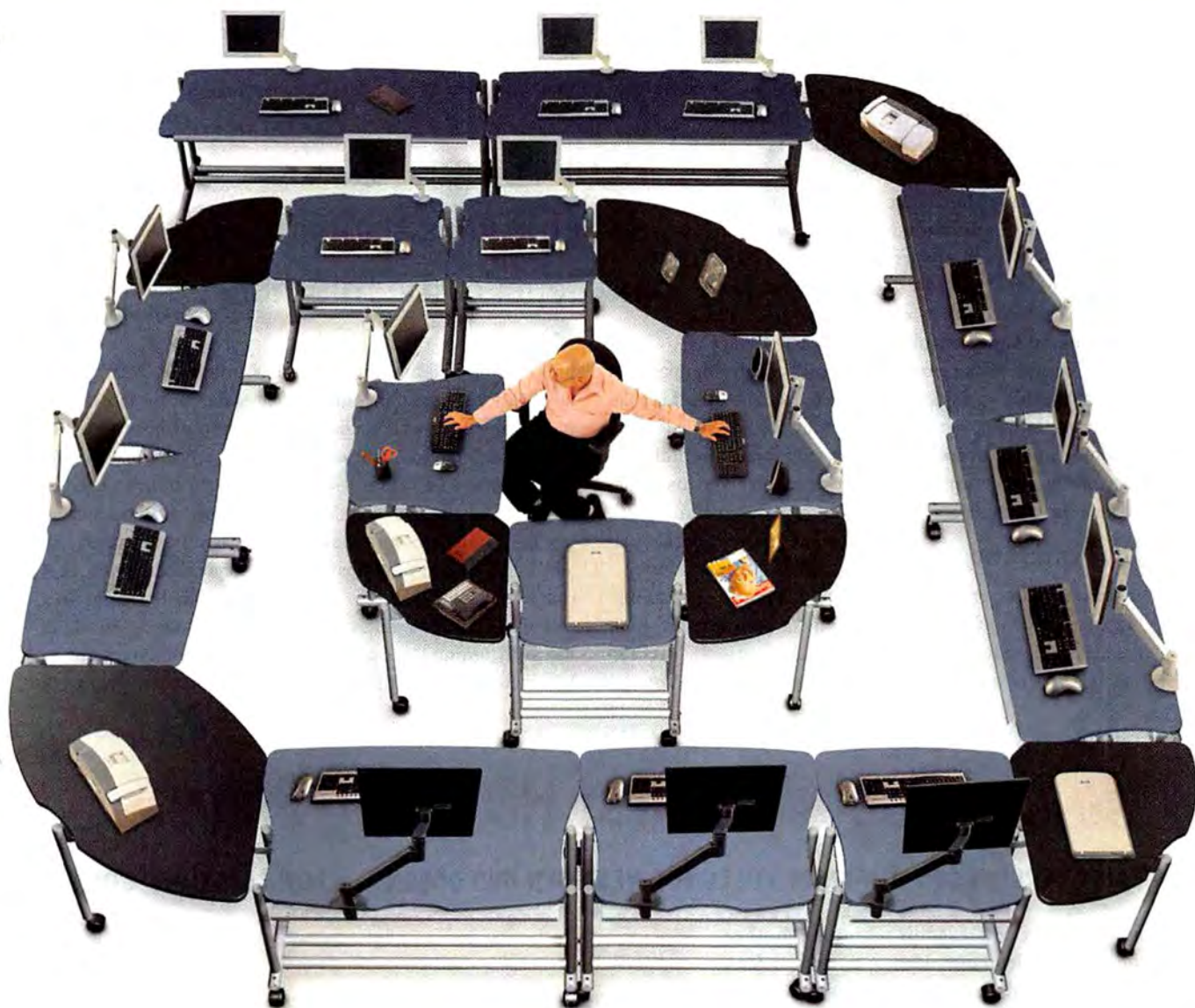
Critics insist that charging for access to inboxes could hurt small businesses and Internet retailers who can't afford to pay the fees. "Those who did not pay would increasingly be left behind with unreliable service," says Eli Pariser,



executive director of MoveOn.org. For nonparticipants, the existing get-past-the-spam-filters game would continue.

Goodmail charges bulk e-mailers \$2 to \$3 per 1000 messages and claims to do background checks on its clients. Analysts say the system will have no measurable impact on cutting down spam volumes and will confuse recipients.

—Tom Spring



you could if you wanted to

Maybe your ideas are just too big for a standard sized desk. Here our Fit System® Units are connected to create a workstation that you can add to until you run out of floor space or ideas. The point? To show you that Anthro's built-in modularity lets you



do things with furniture that you never thought possible. So for a workstation that fits you and your work exactly, contact our friendly and knowledgeable folks at **800.325.3841** or anthro.com/pcw. We'll help configure something just for you!



60" w Fit System® Standard Unit



Fit System® Console Unit



24" w PrinterCart

change to existing laws, while opponents want to codify network neutrality principles in new telecom legislation to ensure that all Internet packets remain on equal footing. A bill proposed in March, the Internet Non-Discrimination Act of 2006, would ensure network neutrality and expressly forbid companies from favoring the transmission of data from sibling companies. The bill's passage is uncertain, however, and recent drafts of the overhauled telecom laws do not appear to include these protections.

CONTROL AND COST

NETWORK OPERATORS ARE looking to recoup the cost of the fiber-optic cable and other infrastructure pieces that

make a high-speed Internet possible. They argue that the upgrades are necessary to deliver such innovations as high-definition video-on-demand and high-quality teleconferencing. They expect businesses and consumers to share the cost of network upgrades. The current hands-off regulatory approach has let the Internet thrive, according to the operators, who insist that market competition would prevent abuse of packet prioritization by their industry.

Opponents allege that discrimination is not only more than theoretical, but has already occurred. Vonage

CEO Jeffrey A. Citron said before the Senate committee that smaller network opera-

in packet prioritization, may mandate a tiered Internet. But telecoms and cable firms hope prioritized Internet traffic arrives much sooner.

However, with broadband competition often limited in many areas to one DSL and one cable provid-

er, Kenneth DeGraff, policy analyst for Consumers Union, the nonprofit consumer group that publishes *Consumer Reports*, warns that we need to protect network neutrality so as to "avoid a world where telephone and cable wires get to decide what you get over the Internet versus you telling those wires what you want."

—Anush Yeghazarian

Critics argue that the scheme goes against a basic tenet of the Internet.

tors had blocked his company's VoIP service so it could not compete for phone customers in the regions those operators covered. Citron also said that businesses already pay for bandwidth, and that additional charges are basically double-billing.

New technology, such as the forthcoming IPv6, a new Internet standard with built-

VIDEO

No Copying With First HD Video Players

FIRST VERSION OF ANTIPIRACY RULES FOR NEXT-GEN DVD DOESN'T ALLOW CONSUMER COPIES.

BY THE TIME you read this, the first high-definition video players should be on sale. These initial models, however, won't let you make copies of commercial content. Manufacturers expect to add this capability to later HD DVD and Blu-ray Disc products.

The recently adopted interim Advanced Access Content System spec protects prerecorded content in both formats contending to succeed today's DVD. But members of the consortium that developed the specification were unable to agree on its so-called managed copy component, which will dictate how content providers will be able to authorize customers to legally copy con-

tent, whether for free or for a fee, to a home server, another disc, or devices such as portable media players.

"We are still working out the policies for that," says Richard Doherty, spokesperson

for the AACS Licensing Association. The interim spec was released so that consumer electronics firms could begin delivering players of AACS-protected content; the final spec, not expected until late spring at the earliest, will likely allow studios to offer a vari-



TOSHIBA'S HD-XA1 HD DVD player.

BD-1000 Blu-ray Disc players were due later this spring.

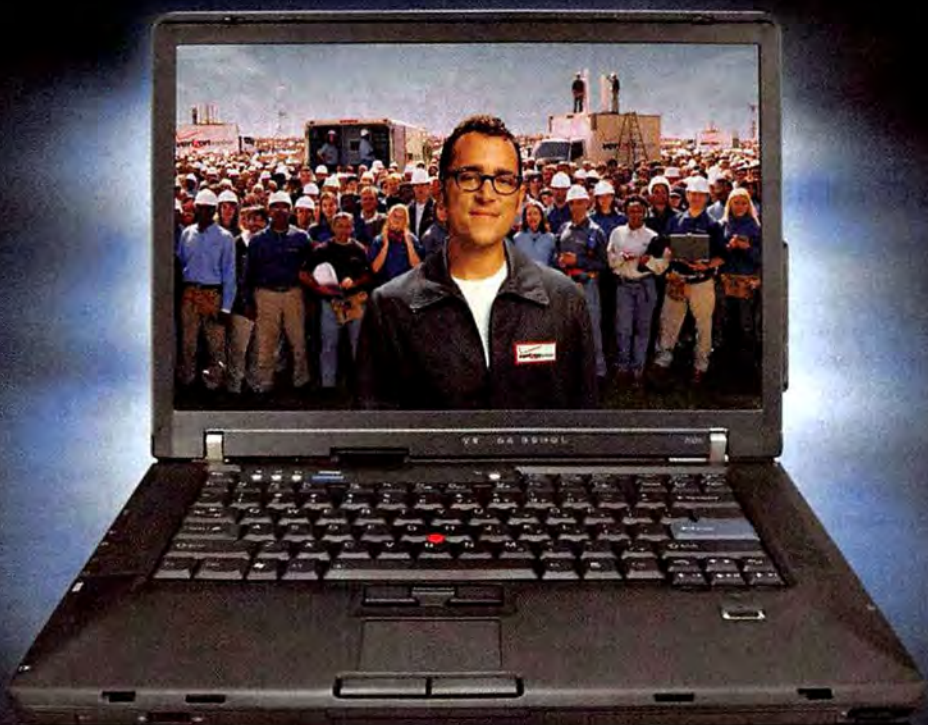
All of these players were expected to incorporate the interim AACS spec, and they won't support consumer copying or sharing over

a home network. Unless you can't imagine wanting to copy prerecorded high-def movies for use on other devices or as a backup, consider waiting for equipment that will give you more flexibility with your new high-quality content.

In early March, Toshiba said its first HD DVD players, the \$499 HD-A1 and the \$799 HD-XA1, would be on sale by the time you read this, while Pioneer's \$1800 Elite BDP-HD1 and Samsung's \$1000

—Melissa J. Perenson

IT'S THE NETWORKSM THAT'S BUILT IN TO THE LATEST NOTEBOOKS.



BroadbandAccess built in. Only from Verizon Wireless.

- For the first time ever, access to Verizon Wireless' BroadbandAccess service is built in to the most innovative notebooks from HP and Lenovo. So you can work wirelessly without a PC card or the hassle of Wi-Fi hotspots.
- With BroadbandAccess built in, there's never been an easier or more convenient way to work on the nation's largest high-speed wireless broadband network.
- Already have a notebook but are still interested in the power of BroadbandAccess? You can get a BroadbandAccess-capable PC card that slides directly into most notebooks.
- There's only one carrier that gives you BroadbandAccess built in. Verizon Wireless. It's the Network.SM

ThinkPad



verizonwireless.com/notebooks

BroadbandAccess is available in 181 major metro areas covering over 148 million people. Wireless service not included with notebook. Access limited to coverage area of Verizon Wireless. Check with Verizon Wireless for availability and coverage in your area.

PLUGGED IN

ERIC DAHL

The High Cost of High Definition

PLUS: ROBOTS CONTINUE TO INVADE; SEAGATE PACKS 12GB TO AN INCH.

WANT HD?
BUY A NEW PC

The Buzz: Are you thinking you can use your computer as a quick way to try out the new Blu-ray or HD DVD discs before committing to a living room player? Well, think again. Playing prerecorded HD movies on your PC won't be a simple matter of adding a new optical drive. In November we reported that most current monitors don't support the HDCP copy protection standard high-def content requires. Recently, news emerged that existing ATI graphics cards that had advertised HDCP support don't really have it. In fact, at press time no shipping graphics boards fully supported



HDCP. Factoring in the cost of a new drive, a copy of Vista (XP won't support encrypted Blu-ray or HD DVD discs), a new graphics board, and a new monitor, PC-based HD is starting to look pretty costly.

Bottom Line: Anyone who's recently spent \$500 on a state-of-the-art graphics board or \$1000 for a wide-screen monitor deserves better.

ROBOSAURS
REVISITED

The Buzz: Sony may be out of the household robot market—it killed off its Aibo robot dog this January—but our dream of a semi-useless robot pet in every home isn't dead yet. The latest sure-to-be-hot robotic creation comes from Caleb Chung, one of the inventors of the Furby. Ugobe's Pleo, a little robotic dinosaur, uses over 30 sensors to explore and interact with its environment and features a number of distinct emotional states as well as some amazingly lifelike movements. The critter should be available this fall for around \$200 (see www.ugobe.com).

Bottom Line: First we had a dog—then we had two dinosaurs (Pleo and WowWee's Roboraptor). So is it me, or are robots evolving backwards? RoboTrilobite must be just around the corner.

GIVE 'EM AN INCH...

The Buzz: Not much is certain in this world. Death, taxes, ever-increasing hard-drive capacity, and—well, that's about it actually. The last of these will get a big boost this fall when Seagate bumps the capacity of its 1-



inch hard drives to 12GB. Though flash memory is making inroads in devices like CompactFlash cards, small MP3

players, and cell phones, a 12GB drive is significant. That much flash storage won't be affordable for quite a while, and 12GB is enough space to make video storage on small devices practical.

Bottom Line: Seagate's pushing the drive for video-ready cell phones, PDAs, and portable media players. I'm just looking forward to an update to its 5GB "hockey puck" drive—no more juggling USB thumb drives for me. ■

You can contact PC World Senior Editor Eric Dahl at eric_dahl@pcworld.com; visit find.pcworld.com/31643 to read additional Plugged In columns.

FUTURE TECH

A Cell Phone/Projector?

GENERALLY I'M ALL for miniaturization. But when that means a 2-inch or smaller screen on a device that's supposed to play video, something's gone sideways. That's



where Light Blue Optics' tiny PVP projector comes in (find.pcworld.com/52512). The matchbook-size, laser-based projector can create a 15-inch-diagonal video image, and the

whole assembly is small enough to be integrated into cell phones, portable video players, and laptops. Light Blue Optics' current prototype projects a monochrome image for that retro-PC-display look, but the company plans to have a full-color version ready by year's end.

Microsoft®

- ☐ CAN IT HELP CONTROL COSTS AS WE GROW
- ☐ CAN WE DEPLOY IT QUICKLY
- ☐ HOW RELIABLE IS IT
- ☐ ARE THERE HIDDEN COSTS
- ☐ IS IT LINUX
- ☐ OR WINDOWS SERVER

☒ GET THE FACTS.

RAYOVAC CHOSE WINDOWS SERVER SYSTEM AND EXPECTS TO SAVE NEARLY ONE MILLION DOLLARS.

"By choosing Windows Server™ over Linux for our new SAP APO solution, we'll save an estimated one million dollars in software, staffing, and support costs over the first four years. We needed performance, security enhancements, and reliability at a reasonable price, and Linux would have presented additional risks in all of those areas. It may be the new thing from a technical perspective, but Linux doesn't cut it from a business perspective—I need a proven IT environment that I'm sure we can support."

—Rick Dempsey, Chief Information Officer, Rayovac

RAYOVAC®

For these and other third-party findings, go to microsoft.com/getthefacts

Microsoft®
**Windows
Server System™**



ONCE YOU KNOW, YOU NEWEGG.

- 98% of orders ship within 1 business day
- 300,000 product reviews from customers
- 30,000 customer testimonials
- "A" rating on ANY merchant ranking site



BEST PLACE TO BUY
 - ONLINE - SOFTWARE
 - PERIPHERALS - CORE COMPONENTS

Visit Newegg.com for today's prices, complete product list, and in-depth product info.



AMD Athlon™ 64 3800+ Venice
 1GHz HT
 512KB L2 Cache
 Socket 939 Processor

\$305.00



AMD Sempron™ 64 3300+ Palermo
 800MHz HT
 128KB L2 Cache Socket
 754 Processor

\$125.00



AMD Athlon™ 64 Technology

- The #1 Windows®-Compatible 64-bit PC Processor.
- Leading-edge performance and unparalleled technology with simultaneous 32-bit and 64-bit computing.
- Cool'n'Quiet™ technology conserves power while enabling a whisper-quiet computing environment.



AMD Athlon™ 64 X2 4600+ Manchester
 1GHz HT
 2 x 512KB L2 Cache
 Socket 939
 Dual Core Processor

Dual-Core technology is like having two processors, and two working together is better and faster than one working alone. Do more in less time with the AMD Athlon™ 64 X2 Dual-Core processor.

\$589.00

110% OF YOUR DAILY REQUIREMENT OF VITAMINS C-P&U.

ViewSonic



\$369.99

ViewSonic VX922 19" LCD
 SXGA 1280x1024dpi D-Sub DVI-D

Microsoft



\$146.95

Microsoft Windows XP Pro
 With SP2 Single User Pack - OEM

LINKSYS



\$69.99

Linksys WRT54GL Wireless-G
 802.3/3u 802.11b/g Broadband Router

Verbatim



\$24.99

Verbatim 8.5GB 24X DVD+R
 DL 10 Pack Spindle Disc

EVGA



\$199.00

eVGA 256-P2-N553-AX GeForce
 7600GT 256MB 256-bit GDDR3 PCI



\$499.00

Sapphire Radeon X1900XTX
 512MB 256-bit GDDR3 VIVO PCI

XFX



\$309.99

XFX PVT70KUAD7 GeForce 7800GS
 256MB 256-bit GDDR3 AGP 4X/8X

Antec



\$138.98

Antec Performance One P150 ATX
 430-Watt ATX12V v2.2 Power Supply

Enter Promo Code PCW10506 at checkout for a **FREE T-SHIRT**

©2006 Newegg Computers. All rights reserved. **Pricing and Availability:** Prices good from 3/27/06 to 5/06/06 or while supplies last. Prices, availability and terms of offers may change without notice. Taxes and shipping charges, if applicable, are not shown. Newegg is not responsible for pricing or other errors and reserves the right to cancel orders arising from such errors. All items sold as retail unless otherwise noted. OEM products may be sold without packaging, documentation or other articles.



NO PAYMENTS FOR 6 MONTHS
 WITH YOUR **NEWEGG.COM PREFERRED ACCOUNT**

See Newegg.com for more info. Promotion expires 06/30/06.

LETTERS

LETTERS@PCWORLD.COM

ONLINE OMITS WEAKEST LINK

NOT-SO-FAST BROADBAND

MAINFRAME TYRANNY REDUX?



ANTIVIRUS SOFTWARE: CONFLICTS, DEBATES

IN YOUR ARTICLE "The New Virus Fighters" [March], the first-place product BitDefender 9 Standard was listed as "superior" and "inexpensive," so I downloaded an evaluation copy.

My evaluation was short-lived. You state, in part, that "speed was sluggish." My machine came to almost a screeching halt (I am running a Dell XPS, big and fast). It took me hours to figure out that the download brought with it a file called vsserv.exe. Not until I got into Task Manager/Processes to stop this executable could I uninstall this "superior" product.

Mel Stricker, Valrico, Florida

Editor's response: The file vsserv.exe is the BitDefender Virus Shield. The company says such problems likely stem from users' having other antivirus software installed or not properly uninstalled. (In general, you should not run two antivirus programs at once.) Also, while it hopes to increase its U.S. tech support, BitDefender recommends that people use its 24/7 live chat support, which routes inquiries to a larger staff in Romania.

-Narasu Rebbapragada

YOU DIDN'T INCLUDE System-Suite (now by V-Com). I've used this program successfully for years. It doesn't slow my system down or plague me with intrusive pop-ups—just a box saying new updates are available.

Rick Nieber, via e-mail

I REALIZE THAT you can't test them all, but I was surprised that you didn't include NOD32 from Eset, about which there seems to be a lot of buzz lately.

Greg Randis, via e-mail

Editor's response: We chose not to review NOD32 because we were told its upgrade, while forthcoming, would not be available until soon after the article's publication.

-Narasu Rebbapragada

COPY PROTECTION

CONGRATULATIONS ON A well-written, well-researched article ["Hollywood vs. Your PC: Round 2," March]. Few people who I've talked to have even heard of these copy protection schemes, and few believe that any company would try to impose such anticonsumer measures.

You mention that "As happened with the backlash against Sony BMG's copy protection technology, users must reject bad DRM schemes." I go a step further: Since Sony is the primary content company pushing these hardware schemes, I am boycotting Sony products.

Consumers must band together to boycott the entire industry if content controllers refuse to show reason with respect to

these schemes. The MPAA and RIAA should be reminded they exist *because* of their consumers, not in spite of them.

Jeffrey Wherry, via e-mail

AS ONE OF the "rabid BitTorrent users" referred to in your article, I nevertheless empathize with the MPAA and others who feel such downloading is theft.

My suggestion: Look at BitTorrent sites that require you to register and log in before you can download. You must also "seed" as much as you "leech"—or you're blocked from newer releases and must wait or even be blocked entirely.

Name withheld by request, via e-mail

ONLINE BANKING DEFENDED

DESPITE THE CAUTIONS in the March *Consumer Watch* ["Banking on the Web: Risky Business?"], I prefer to do financial transactions online. Transaction security is excellent, as long as the user employs it. If people pay attention, the system will work just fine. Whether online, in person, or over the phone, customer data and transactions are entered into the same computer system.

I wish all transactions were paperless, mainly for security. I've had checks misdelivered by the post office and cashed fraudulently. It is almost always the human that is the weakest link, and online transactions completely bypass it.

Rick Cunningham, Tucson, Arizona

TAX PREP PROGRAMS

I WAS DISAPPOINTED that your review ["Intuit's TurboTax Retains Its Crown—Barely," *Reviews and Rankings*, March] did not include the many other Web-based tax programs available. I'm sure a lot of people would like a comparison that goes beyond TurboTax and TaxCut.

Dennis M. Kenealy, via e-mail ▶

TELL US WHAT YOU THINK

RATE THIS ISSUE by going to www.pcworld.com/pcwinput—you could win a \$500 gift certificate from Amazon.com. You'll need to provide the subscriber number from your mailing label to take this survey online. The site explains the official rules and also describes how you can participate in the drawing if you're not a *PC World* subscriber.

SUPERCHARGE YOUR SEARCH: USE PC WORLD'S FIND-IT SERVICE

PC WORLD

TECHNOLOGY ADVICE YOU CAN TRUST™

At *PC World*, we know you want to find quality information quickly and browse more efficiently. That's why we've developed an innovative Find-It service, which reduces any URL to a simple five-digit code.

HOW IT WORKS

Click the **USE FIND.PCWORLD.COM** button, located on every PCWorld.com page, and enter the five-digit Find-It number, or enter a Find-It URL (for example, find.pcworld.com/46300) in your browser.

PRODUCT INFORMATION

We now feature Find-It URLs specific to each ad, giving you a fast and easy way to get to the product information you want.

Don't waste valuable time searching for the information you want. Use *PC World's* Find-It service.

Perfect little addition

The new Maxtor Shared Storage Drive is simple and work files across your small office or home. Our easy-to-use software automates setup, folders private. And our exclusive Drag and Drop feature makes it a breeze to use. Meet the ideal playmate for your PC.

Go to find.pcworld.com/46843

ADVANCED CAMERA		PCW
1	Canon PowerShot G6 Best Buy \$579 find.pcworld.com/44872	8
Bottom line: The chunky G6 won best in show by performing well in all categories.		
2	Olympus C-7070 Wide Zoom Best Buy \$450 find.pcworld.com/48091	8
Bottom line: The C-7070 has been around a while, but it has a lot to offer.		
3	Canon PowerShot Pro1 Best Buy \$699 find.pcworld.com/43154	8
Bottom line: The Pro1's compact case makes it a pleasant surprise.		
4	Canon PowerShot S215 Best Buy \$499 find.pcworld.com/46308	7
Bottom line: This is Canon's only model with an optical image stabilizer.		
Fujifilm FinePix S9000		6

ADVERTISER'S INDEX

find.pcworld.com/ plus the five digit code directly to any advertiser in this issue.

Advertiser	Page Number	Find-It URL #	Advertiser
Acronis Inc.	18-19	46859	Lacie, Ltd.
Avast! Computer Tech.	102B-102C	46850	Lenmar Electronics
Avira Corp.	91-98	46849	LG Electronics
BitDefender	151	46858	Linksys
BitTorrent	119	46880	Maxtor Corp.
BitTorrent	66	46832	Microsoft

LETTERS

SO-SO BROADBAND

"BROADBAND TO GO" [March] looked at Verizon Wireless's BroadbandAccess service. My first impression of it was that I must be doing something wrong—it was not my idea of broadband. The article seems pretty favorable, but it states that complex Web pages could take 20 seconds to several minutes to load.

B. Nelson, via e-mail

COVER LINE EXPLAINED

THE COVER OF the March *PC World* indicates that you will tell us how to "share any printer." Where is that information located? I looked through "Get More Out of Your PC" but didn't find it.

Malcolm Howard, via e-mail

Editor's response: It appears in the sidebar on converting an old PC into a server (pages 72-73). We regret the confusion.

—Eric Dahl

WEB APPS? NOT SO FAST

HARRY MCCracken REALLY turned cheerleader-esque in his editorial about Web apps [Up Front, March]. Dude! It's the mainframe computer all over again. The PC liberated us from the autocracy of mainframe administrators for these many years past. Now folks have rediscovered the mainframe model—and its control. Once all your data is on a given Web site with its Web-based software, you can't get away and must obey all the site's rules.

Nigel Mends, via e-mail

PC World welcomes letters to the editor. We reserve the right to edit for length and clarity. Send e-mail to letters@pcworld.com. ■

CORRECTIONS

MARCH'S "GADGETS TO GO" (*News and Trends*) should have said that Royal's EZVue Vista USB flash drive will come in versions ranging from 128MB to 1GB.

In March's "The New Virus Fighters," we should have called the free version of Grisoft's application the AVG Home Edition.

PC World regrets the errors.

We bend over backwards

to carry every battery you need

over 1,000 models for over 20,000 portable devices



a better battery • a better value
backed by the best 1 year warranty

LENMAR®

For the best quality at the best price ask for Lenmar batteries at finer stores or go to:

www. **AAFES** .com www. **STAPLES** .com www. **Sears** .com www. **etro** .ics .com

Lenmar Enterprises, Inc. rechargeable battery solutions since 1965 (800) 424-2703 www.lenmar.com



Xtreme Gear

XTREME GEAR RECOMMENDS WINDOWS® XP



XG Xion 9000 AMD Athlon 64 X2 3800+

CoolerMaster Mini Aquagate Liquid Cooling System
Genuine Windows® XP Home Edition W/SP2
NVIDIA® nForce™ 4 SLI Dual x16 PCI-E Mainboard
Corsair 1024 MB Dual Channel DDR 400
250GB Serial ATA 150 7200 RPM 8MB Hard Drive
Dual (2) NVIDIA® 7900GT 256MB 16X PCI-Express Video
Sony 16X DVD+-RW Drive
Sony 16X DVD Rom Drive
7.1 nForce 3D Audio
Logitech X530 5.1 Subwoofer Speakers
Gigabit Network Card
PCI 802.11G 54 Mbps Wireless Network Card
XG Discover Case 420 Watt Power
1 Year Onsite Service + 24/7 Tech Support

\$1,449

XG Xion 7000 AMD Athlon 64 3500+

CoolerMaster Mini Aquagate Liquid Cooling System
Genuine Windows® XP Home Edition W/SP2
NVIDIA® nForce™ 4 SLI Dual x16 PCI-E Mainboard
Corsair 1024 MB Dual Channel DDR 400
250GB Serial ATA 150 7200 RPM 8MB Hard Drive
Dual (2) NVIDIA® 6800XT 256MB 16X
PCI-Express Video
Sony 16X DVD+-RW Drive
Sony 16X DVD Rom Drive
7.1 nForce 3D Audio
Logitech S100 Stereo Speakers
Gigabit Network Card
PCI 802.11G 54 Mbps Wireless Network Card
XG Xion II Case 420 Watt Power
1 Year Onsite Service + 24/7 Tech Support

\$919



XG Action 6000 AMD Athlon MT -32

AMD Turion 64 Mobile Technology
-AMD PowerNow! Technology
-HyperTransport Technology
-Enhanced Virus Protection Technology
Genuine Windows® XP Home Edition W/SP2
15.4" WXGA Wide-Screen TFT Display 1280x800 Pixels
Corsair 1024 MB Dual Channel DDR 400
80GB 5400 RPM SuperSlim Notebook Drive
Mobile ATI X700 x16 PCI-E 128Mb Video
8X DVD+-RW Drive
802.11G 54 Mbps Wireless Network,
10/100 NIC and 56k V.92 Modem
1 Year 24/7 Toll Free Tech Support

\$1,189

FREE SHIPPING!



- Provides leading-edge 32-bit performance for music, video and games and is ready for future 64-bit software
- Improves security against certain types of viruses, with Enhanced Virus Protection for Microsoft® Windows® XP SP2
- Conserves power and operates quietly with AMD Cool n'Quiet™ technology.
- Features HyperTransport™ technology for improved multitasking performance

Toll Free 1-888-937-5580
www.buyxg.com

Go to find.pcworld.com/51728

AMD®, the AMD® logo, AMD® Athlon™ and combinations thereof are trademarks of Advanced Micro Devices, Inc. All prices are subject to change without notice or obligation. Xtreme Gear is not responsible for any typographical and photographic errors. Copyright ©2006 Xtreme Gear. All rights reserved.



CONSUMER WATCH

ANNE KANDRA

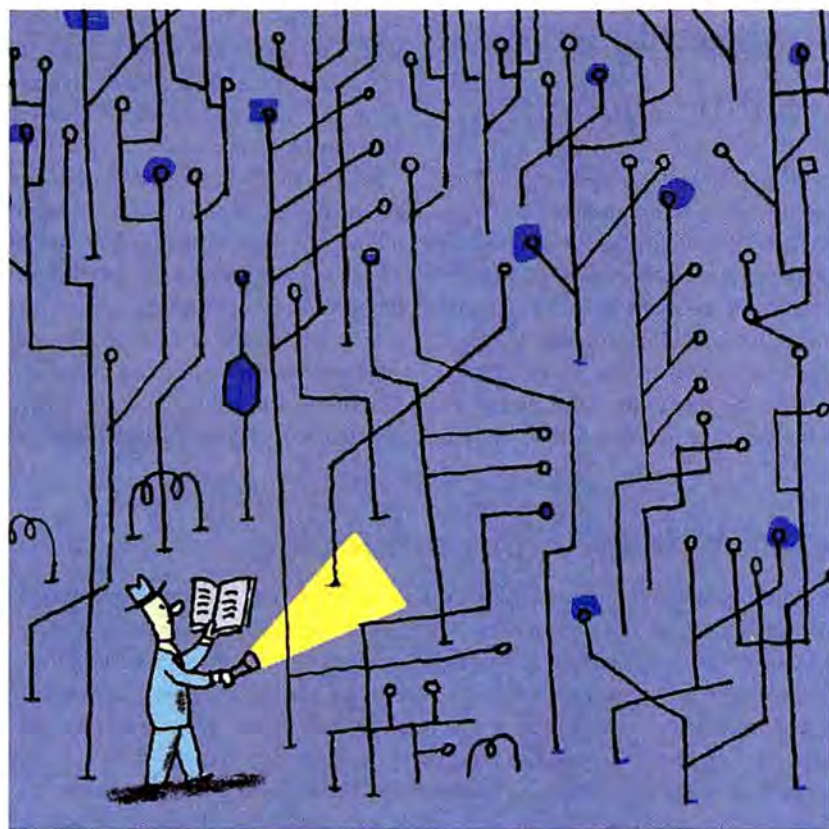
TOP TIPS FOR DODGING
PESKIEST TECH GOTCHAS

GETTING THE MOST FROM
A FINGERPRINT SCANNER

SPEED UP PC DELIVERY:
PICK A STANDARD MODEL

The Ultimate Tech Consumer Guide

Twelve tips to cope with (or bypass) the hassles of buying and using tech gear.



AFTER MORE THAN five years of writing about the numerous pitfalls that plague technology consumers, one can't help but pick up some pointers. So here's my compendium of tips to help you avoid persistent tech problems and maybe even save a few bucks, too.

Protect your tech: Take steps to guard your portable devices against ill-placed lattes, thieves, and other hazards. Use common sense: If you're headed for the tennis court, for example, consider leaving the Treo behind. Register your tech gear as a hedge against warranty ques-

tions. Ask your insurance agent about coverage for computers and other home-office equipment—you might be surprised at what your homeowner's policy doesn't address. For more on protecting your devices, see find.pcworld.com/52094 and find.pcworld.com/52096.

Make security seamless: While you might squirm at the thought of some software company surreptitiously reaching into your computer and implanting bits of code, do you really have the time and the patience to personally administer to every security patch, virus definition,

or update that comes along? For most users, the safest way to ward off threats is to enable automatic updates. And set up regular system backups, just in case.

Pare and compare prices: Online pricing engines such as Shopzilla.com and PCWorld.com's Product Finder (which uses PriceGrabber.com's pricing engine) can help you unearth the lowest prices—but we recommend going with the best price from a company you're familiar with. We've consistently found that buying from a company you've never heard of is asking for trouble, from bait-and-switch sales tactics to counterfeit goods or even credit-card fraud. And be sure to pay with credit cards; debit cards provide less consumer protection.

Go offline: If a retailer (Best Buy for example) offers the option, consider buying your item online and picking up the product at a nearby store. That way, you'll enjoy the convenience of online shopping without the shipping charges—or the wait for delivery. If there's a problem, returns will be easier—but don't forget to ask about restocking fees.

Manage your rebates: If you're counting on a rebate, study the rules and keep careful records. Web sites such as RebateTracker.com, as well as manufacturers' own sites, can help you do this.

Get a side of RAM: Remember to budget for extras such as RAM, software, memory cards, or other peripherals. Frequently the best "deals" turn out to be pretty bare-bones—and you do want to be able to store more than five or six photos in your new camera, don't you? For more advice on planning for key add-ons, see find.pcworld.com/52098. ▶

Auction with caution: Always read—and leave—feedback, and contact the buyer or seller with any questions before you close the deal. If you're the buyer, make sure the product includes everything it should, check the seller's return policy, and don't even consider paying with a wire transfer or completing the sale outside the auction site. For more auction tips, see find.pcworld.com/52100.

Protect your privacy: Does that online software outlet you patronized once really need to know your mother's maiden name? Of course not. When completing transactions online, provide only essential information (generally, your name, an e-mail address, billing address, and credit card number). Opt out of everything else, including offers to choke your in-box with spam. Consider using a secondary e-mail account—say, a free one from Hotmail or Yahoo—for online shopping and other such transactions. Use strong passwords with combinations of letters and numbers, and don't store them on a PC that others can access. For more password tips, visit find.pcworld.com/52102.

Help yourself: If there's anything more aggravating than trying to decipher cryptic error messages, it's spending time on hold waiting for a tech support rep 12 time zones away. The good news: There are lots of support resources online if you know where to look. Start by entering your error message or a brief description

Consider creating a second e-mail account just for online shopping.

of the problem into a search engine. That often leads to forums where you'll find feedback from other users who've had the same or similar problems. Check the vendor's site—many have user forums and tech support chat. For more tech support tips, visit find.pcworld.com/52104.

Read the fine print: What you don't know can hurt you, especially if it's bur-

ied deep within the legalese of an End User License Agreement. At the very least, you can boycott companies that don't make their EULAs easily available before you buy, and look for phrases such as "automatic renewal" that should raise a red flag. For more on software licenses, see find.pcworld.com/52106.

Do the right thing: Don't use—or let your kids use—illegal file-sharing software. Pay for the music, software, and other intellectual property you do use. Donate your old PC to a school, nonprofit, or charity—or find a recycling center that'll know what to do with it. See find.pcworld.com/52108 for more on recycling and find.pcworld.com/52110 for more on donating online.

Pass it on: Help an elderly neighbor set up a new computer, teach a class on online safety at a local school, or build a Web site for a resource-strapped youth group. One of the best things you can do as a savvy tech user is to share your knowledge with family, friends, and colleagues. The more educated we all are, the more efficient, accessible, and safe the world ►

PRIVACY WATCH

Protect Your Data, System With a Fingerprint Reader



BIOMETRIC FINGERPRINT READERS give you an easy method to log in to Windows—replacing a typed password with a fingerprint scan—and the software that accompanies many models can protect the privacy of your PC and data. Recently they've also

become inexpensive: You can find dependable ones for just \$30. Here's how to get the most out of a biometric reader.

Get a good scan: When you "register" your fingerprint with your scanner, its software creates a template to compare against future scans. One way to produce consistent readings is to place the very tip of your finger at the top center of the sensor and then roll your fingertip back onto the sensor plate. If your reader requires you to slide your finger along a sensor, take it slow and steady, from the first knuckle to the tip. Once you have a knack for this, you'll never be rejected again—not by your fingerprint reader, at least.

Use the reader instead of passwords: Most biometric readers come with password management software that lets you manage access to sensitive online accounts, encrypted documents, and anything else you secure with a password. Setup

usually involves simply entering your user name and password into either a Windows dialog box or a Web page, and then holding down a vendor-designated hot-key while clicking the Submit button. Thereafter, the password manager will prompt you to scan in your finger rather than type your password. This feature can circumvent keystroke-logging spyware.

Take your passwords with you: If you use one PC at home, another at work, and a laptop while traveling, you probably don't want to enter all your user names and passwords into a password manager on three separate computers. Sony's FIU-810 fingerprint reader, aka the Puppy (\$155), solves the problem by storing all fingerprint records and account access settings. Just install Sony's biometric software suite on each of your PCs and register your finger once; any saved passwords will travel along with the Puppy.

Encrypt data: Most biometric software suites also provide some way to encrypt data, using your fingerprint scan as the key. This is the easiest way to prevent someone from reading sensitive files you store on a laptop or portable media. If your biometric software supports this feature, use it! If your laptop ever disappears while you're traveling, you'll be glad you did.

—Andrew Brandt



HP PROLIANT
ML150 G2 SERVER

SAVE
\$200

\$977

- Intel® Xeon® Processor 3GHz/800MHz/2MB L2 cache
- Dual processor capability
- 1GB Total ECC SDRAM (expandable to 8GB)¹
- One 80GB SATA Hard Drive²
- Optional Lights-Out 100 Remote Management Card delivers essential remote management functionality at a cost-effective price³
- 1-year, next-business-day on-site support³
- New: Free Data Protector Express ProLiant Edition Software for secure backup

TREMENDOUS GROWTH OPPORTUNITY.

HP ProLiant servers offer expandability to better adapt to your business needs. Whether you're just starting out or already on the way, the HP ProLiant ML150 G2 Server, featuring the Intel® Xeon® Processor, is designed to keep pace with the fluctuating demands of your business. With features that give employees simultaneous access to your network, as well as the ability to share and store files effortlessly, productivity gets priority. Plus, with expansion capabilities like room for an additional processor, extra I/O cards and memory slots, ProLiant servers are ready for whatever your business requires. Add the DAT 72 and securely back up your company's important data, affordably. Giving you more reasons than ever to consider HP.

Right now, buy the HP ProLiant ML150 G2 Server and get \$200 off.

SMART ADVICE > SMART TECHNOLOGY > SMART SERVICES



\$699

HP STORAGEWORKS DAT 72
USB INTERNAL TAPE DRIVE

- Easily connects to the ML150 internal USB port
- No more SCSI interface costs or complications
- Same performance, capacity and reliability as DAT 72 SCSI
- Includes HP's exclusive One-Button Disaster Recovery for quick data recovery

Call **1-866-625-3577**

Click **hp.com/go/ML150mag9**

Contact **your local reseller**



Prices shown are HP Direct prices; reseller and retail prices may vary. Prices shown are subject to change and do not include applicable state and local taxes or shipping to recipient's address. Offers cannot be combined with any other offer or discount, are good while supplies last and are available from HP Direct and participating HP resellers. All featured offers available in U.S. only. Savings based on HP published list price of configure-to-order equivalent (\$1177 - \$100 instant rebate - \$100 instant savings = SmartBuy price \$977). Certain warranty restrictions and exclusions may apply. For complete warranty details, call 1-800-345-1518 (U.S.). 1. For hard drives, GB=Billion Bytes. Actual formatted capacity is less. 2. Optional Remote Insight Lights-Out Edition II (RiLOE II) sold separately. 3. Service levels and response times for HP Care Packs may vary depending on your geographic location. Restrictions and limitations apply. For details, visit www.hp.com/go/carepack. Intel, the Intel Logo, Xeon and Xeon Inside are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. © 2006 Hewlett-Packard Development Company, L.P.

of personal technology will become. And that can only be a good thing.

Speaking of passing things on, this is my last *Consumer Watch* column for *PC World*. I'm pursuing a new opportunity in educational publishing. Writing about consumer technology has been incredibly rewarding and occasionally frustrating—but always a lot of fun. So thanks to all of you who wrote in to share your stories, hassles, and insights. May your connections stay strong, your software secure, and your PC peaceful. ■

Anne Kandra is a contributing editor, Andrew Brandt is a senior associate editor, and Amber Bouman is an editorial assistant for *PC World*. E-mail them at consumerwatch@pcworld.com, privacywatch@pcworld.com, or onyourside@pcworld.com. To read previously published *Consumer Watch*, *Privacy Watch*, or *On Your Side* columns, visit find.pcworld.com/31703, find.pcworld.com/31706, or find.pcworld.com/31709, respectively.

ON YOUR SIDE

Waiting—and Waiting—for a New PC

IT'S BEEN NEARLY eight weeks since I ordered a complete PC system with additional peripherals from Lenovo's toll-free number after shopping on the company's Web site, which promised delivery in two weeks. I have received the wireless router that I ordered at the time, but no computer or keyboard.

I followed up by e-mail a month after ordering, and was promised delivery in three weeks, but that date has now also passed. Please, please help!

Karen Moore, Oak View, California

On Your Side responds: A Lenovo official informed us that Moore's system had shipped the day after she wrote us, and she confirmed that she finally received it—more than nine weeks after

she had called in the original order.

The Lenovo spokesperson acknowledged that Moore's computer should have shipped out much sooner, but said that a custom-configured system, such as the one Moore ordered, generally takes four to six weeks to arrive—not the two weeks she expected. The spokesperson speculated that Moore may have thought she had ordered one of the systems in Lenovo's Express program, which offers next-day shipping for commonly configured models.

If you're in a hurry to receive your new PC, other computer vendors also offer fast-ship programs—but you are generally required to pick from a few selected configurations.

—Amber Bouman

Freedom and Privacy, at Last!

Finally, you can coexist with each other doing your favorite things. Crank up the sound of your action movies or football games. Read your favorite books in the comfort of your couch without the TV noises. With IOGEAR's cool **Bluetooth Stereo Headphones**, you can experience new freedom and privacy—all without being tangled with wires. The Bluetooth Wireless Stereo Headphones work with any audio devices and Bluetooth-enabled cell phones, so you can have the best of everything.



A Bluetooth Wireless Stereo Headphone Kit!
To enter, go to www.iogear.com/pcBT2

IOGEAR INC.

Toll Free: 866-946-4327 • <http://www.iogear.com> • E-mail: sales@iogear.com

Go to find.pcworld.com/52258





ENHANCE YOUR
POWERPOINT
PRESENTATIONS
IN SECONDS!

New Companion Software for PowerPoint®

In just seconds, Ovation™ automatically turns lifeless PowerPoint® slides into a stunning, world-class presentation and then helps you deliver that presentation more effectively.

Breathtaking Visuals

At the click of a button, Ovation transforms boring slides into dynamic presentations so professional they look like they cost thousands of dollars to produce. These high-voltage visuals include better-looking text, smooth motion, subtle lighting effects and eye-catching animated backgrounds. Ovation takes presentations so far beyond plain PowerPoint, you can't appreciate the impact until you see it yourself.

New Tools for Better Delivery

Ovation also helps you deliver your material more effectively with a suite of innovative tools. The scrolling teleprompter helps you stay confident and on point while reminding you of key facts, figures and dates. The TimeKeeper™ keeps you on time during your presentation, and the powerful Go Deeper feature leaves you ready to respond to audience questions with expanded information.

With Ovation, your audience will be impressed – and other presenters will be dying to know your secret!



\$99⁹⁵ MSRP

***"Ovation makes me look great!
I can't imagine giving another
presentation without it."***

— David D.
Educator

FREE DOWNLOAD

30-day trial at www.pcovation.com

Available at:



and other fine resellers

SERIOUS
MAGIC

PowerPoint is a registered trademark of Microsoft Corporation. Ovation is not affiliated with Microsoft. ©Copyright 2006 Serious Magic, Inc.

Transcend
Exceeding Your Expectations

MP3 Player + USB Flash Drive

Easy to Operate TouchPad



T.sonic™ 310

A high capacity MP3 player with USB flash drive and built-in security system - all in one device that can be charged from any computer with a USB port. Go online today and see the different features that separate the Transcend T.sonic™ line of MP3 players from the rest - www.tsonic.com

T.sonic™ 610 MP3 Player



• TS612MMPH10 • TS610MPH10

T.sonic™ 620 MP3 Player



• TS6212MMPH20 • TS620MPH20

T.sonic™ 510 MP3 Player



• TS512MMPH10 • TS510MMPH10

T.sonic™ 520 MP3 Player



• TS520MMPH20 • TS5212MMPH20

Transcend Information, Inc.
www.transcendusa.com

© Transcend 2006. All rights reserved. Transcend and Transcend logo are registered trademarks of Transcend. Transcend reserves the right to change, without notice, product offerings or specifications. All other products, brand names, company names and logo are trademarks of their respective owners.

Go to find.pcworld.com/51724



STEVE BASS

HASSLE-FREE PC

Four Fixes for Memory Card Misery

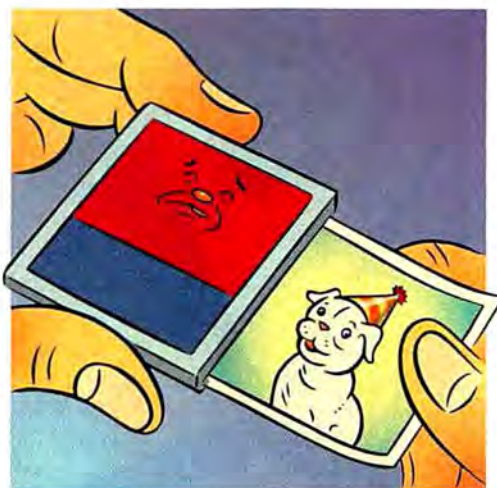
Plus: A powerful, low-cost tool for editing and converting digital videos.

SO YOU MADE a complete Bass of yourself by dropping a digital camera into the surf? I can help you retrieve the images; I can also help if you accidentally deleted a bunch of photos.

The Hassle: *My digital camera decided to take a dip in the ocean. Though I recovered it, the camera is toast. Is there any way to rescue the memory card—and all my precious photos?*

The Fix: I can't give you a step-by-step for resurrecting the camera (I lost one that way, too). But I've successfully recovered photos on both an SD and a CompactFlash card. It's critical to keep the card submerged in water (salt water if necessary) to avoid corrosion. When you're ready to start, soak the card in fresh water for a few minutes; rinsing isn't as good, since you need to remove the salt water from all internal contacts.

Air-dry it (don't use a hair dryer—it could damage the contacts). Gently clean the SD or SmartMedia contacts using a Q-tip and a small amount of isopropyl alcohol (don't saturate it). Once they're dry, lightly rub the contacts again with a clean pencil eraser. CompactFlash cards are tougher to work with. Using a small screwdriver, gently pry the enclosure



open just enough to slide the circuit card out. Work from the sides, not from the connector end. Then follow the steps above, starting with air-drying the card.

I'm not as optimistic about the camera. But if it's already dead, you can't hurt it, so go ahead and try the same rinsing routine outlined above. Then dismantle the camera, let it air-dry, and clean all the contacts. And keep your fingers crossed.

The Hassle: *I pulled my CompactFlash card out of my card reader while it was moving images to my PC. I can see some of the images on the card, but others aren't there at all*

and still other photos show up with only half an image. What's going on here?

The Fix: You found out the hard way that you need to wait until all reads and writes are complete before removing a media card. (Ditto for any other external storage device—MP3 player, hard drive, or flash drive.)

You'll need a tool to resuscitate those files. For deleted files (nope, they're not in the Recycle Bin), the undelete program you already own may work. If not, try my favorite, PC Inspector Smart Recovery. It's free, it's easy to use, and it brings dozens of file types back to life, including all

the standards (JPG, BMP, TIF, and GIF), plus AVI, MOV, and many types of RAW files. The downside is that the program is slow: It took 10 minutes to recover three deleted files (find.pcworld.com/51658).

If your image files are corrupted (on a memory card or on a CD), try Image-Recall. The \$40 tool restores deleted files, recovers damaged files, and determines whether your card is damaged. A trial version (available at find.pcworld.com/51662) recovers ten images.

Once you've moved the image files from the card to your hard drive, use your camera to reformat the card. That way you'll repair any allocation errors and save new images contiguously; subsequent photos will write faster and be easier to recover in case of a mishap. ■

TOOL OF THE MONTH

Convert and Enhance Your Video

WHAT A DOPE: I took a bunch of short videos with my digital camera while holding it in portrait orientation. When I played them back, the videos were sideways. After hours of fiddling around and searching the Web, I discovered AVS Video Converter (find.pcworld.com/51668). This \$30 tool has dozens of

features for converting and editing videos. Besides handling conversions between 20-odd video formats, it lets me choose from about 40 effects, including adding titles, changing perspective, and splitting or joining videos. And yes, I can also rotate them. The trial version places a banner across the image.

Contributing Editor Steve Bass writes the Bass Blog (see find.pcworld.com/50264) and is the author of *PC Annoyances*, published by O'Reilly (see find.pcworld.com/43818). Contact him at hasslefreepc@pcworld.com. To read his previous columns and newsletters, go to find.pcworld.com/50268.

Unleash THE POWER

CYBERPOWER RECOMMENDS WINDOWS® XP



All systems come with Free First Year On Site Service +
24/7 Tech Support

CyberPOWER Inc.

Order Toll Free 800-707-0393

www.cyberpowerpc.com

GAMER ULTRA 9900 PRO



AMD
Athlon™ 64 X2

4400+ CPU \$ 1755
4200+ CPU \$ 1559
3800+ CPU \$ 1495
AMD Athlon™ 64
FX-60 CPU \$ 2315
3500+ CPU \$ 1395

NVIDIA nForce-4 SLI Chipset MB w/ Dual 16X PCI-E
Genuine Windows® XP Media Center Edition 2005 w/SP2
Corsair 1024 MB PC3200 DDR400 MEMORY
250 GB SATA II 3.0 7200 RPM HD 16mb Cache
NVIDIA GeForce 7600 GT 256MB DDR3 16X PCI-E w/TV out
19" Viewsonic VA912P Xtreme BMS Gaming LCD Display
LG 16X DVD-ROM & LG 16X DVD+-RW Drive
nForce-4 7.1 3-D Surround Sound
Creative Cambridge Inspire P7800 7.1 Surround
Sound System
Logitech Office 104 Keyboard
Microsoft® Optical Intelli Explorer Mouse
Aluminum CoolerMaster Praetorian 750
Midtower Case 420W
Xtreme Liquid Cooling System
Free 802.11G Wireless PCI Network Adaptor

GAMER ULTRA 8000 DREAM



AMD Athlon™ 64 X2

4800+ CPU \$ 1285
4400+ CPU \$ 1099
4200+ CPU \$ 999
3800+ CPU \$ 939
AMD Athlon™ 64
3500+ CPU \$ 839
3200+ CPU \$ 799

NVIDIA nForce-4 SLI Chipset MB w/ Dual 16X PCI-E
Genuine Windows® XP Media Center Edition 2005 w/SP2
Corsair 1024 MB PC3200 DDR400 MEMORY
250 GB SATA II 3.0 7200 RPM HD 16mb Cache
NVIDIA GeForce 6800XT 256MB DDR 16X PCI-E w/TV out
Powered By XMDIA
LG 16X DVD-ROM
LG 16X DVD+-RW Drive
nForce-4 7.1 3-D Surround Sound
600 Watts Subwoofer Speaker System
Logitech Office 104 Keyboard and Logitech Optical
Wheel mouse
Raidmax Sagitta Mid Tower w/
MOD See Through Windows
Free 802.11G Wireless PCI Network Adaptor



• The AMD Athlon™ 64 X2 dual-core processor enables everyone to do more in less time by delivering exceptional multi-tasking capabilities and increased performance

on digital media.

• Dual-core technology is like having one processor responsible for running programs in the background while a second runs the applications you want to work on. The AMD Athlon™ 64 X2 dual-core processor brings true parallel processing to the desktop and can increase computing performance by up to 80%.

\$1,395

\$799

GAMER ULTRA SLI PRO



AMD Athlon™ 64 X2
4800+ CPU \$2095
4200+ CPU \$1799
3800+ CPU \$1745
AMD Athlon™ 64
FX-60 CPU \$2549
3500+ CPU \$1645

NVIDIA nForce 4 SLI Chipset MB w/
Dual 16X PCI-E
Genuine Windows® XP Media Center Edition
2005 w/SP2
Corsair 2048 MB PC3200 DDR400 Memory
250 GB SATA II 3.0 7200 RPM HD 8mb Cache
(2) NVIDIA GeForce 7900 GT 256MB DDR
30% performance gain over single video
card solution
LG 16X DVD+-RW Drive & 16X DVD-ROM
NVIDIA nForce-4 3D 7.1 Surround Sound
Creative Cambridge Inspire P7800 7.1
Surround Sound System
Logitech Office 104 Keyboard
Microsoft® Optical Intelli Explorer Mouse
Asus Venoo 3600 Xtreme Gaming Case w/
500 Watt Power Supply
Xtreme Liquid Cooling System
Free 802.11G Wireless PCI Network Adaptor

\$1,645

GAMER ULTRA SLI ELITE



AMD Athlon™ 64 X2
4800+ CPU \$1579
4400+ CPU \$1395
4200+ CPU \$1289
3800+ CPU \$1225
AMD Athlon™ 64
4000+ CPU \$1239
3500+ CPU \$1125
3200+ CPU \$1085

NVIDIA nForce 4 SLI Chipset MB
with Dual 16X PCI-E
Genuine Windows® XP Media Center Edition
2005 w/SP2
Corsair 1024 MB PC3200 DDR400 MEMORY
250GB SATA II 3.0 7200 RPM HD 8mb Cache
(2) NVIDIA GeForce 6800 XT 256MB DDR5
Powered By XMDIA. Over 80% Performance
Gain over single video card solution
LG 16X DVD+-RW Drive & 16X DVD-ROM
nForce-4 7.1 Surround Sound
600 Watt Subwoofer Speaker System
Logitech Office 104 Keyboard & Logitech
Optical Wheel mouse
Turbo X-Cruiser Case 420 Watt
with See Through Windows.
Xtreme Liquid Cooling System
6 Cool Custom Colors to Choose From
Free 802.11G Wireless PCI Network Adaptor

\$1,085

GAMER ULTRA SLI BASIC

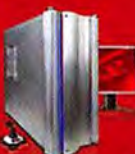


AMD Athlon™ 64 X2
4800+ CPU \$1259
4400+ CPU \$1169
4200+ CPU \$1059
3800+ CPU \$999
AMD Athlon™ 64
FX-60 CPU \$1819
3500+ CPU \$899
3200+ CPU \$859

NVIDIA nForce 4 SLI Chipset MB
with Dual 16X PCI-E
Genuine Windows® XP Media Center Edition
2005 w/SP2
Corsair 512 MB PC3200 DDR400 Memory
200 GB SATA II 3.0 7200 RPM HD 8mb Cache
(2) NVIDIA GeForce 6800XT 256MB DDR
16X PCI-E w/TV out. Over 80%
Performance Gain over single video
card solution
LG 16X DVD+-RW Drive
NVIDIA nForce-4 3D 7.1 Surround Sound
600 Watt Subwoofer Speaker System
Logitech Office 104 Keyboard and
Logitech Optical Wheel mouse
Xtreme Liquid Cooling System
Nxtt Nemesis Tower Case 425W w/
MOD See Through Windows

\$859

GAMER ULTRA CROSSFIRE 9000



AMD Athlon™ 64 X2
4400+ CPU \$1339
4200+ CPU \$1229
3800+ CPU \$1149
AMD Athlon™ 64
FX-60 CPU \$1985
3500+ CPU \$1069
3200+ CPU \$1029

Asus A8R-MVP Radeon Xpress200 CrossFire
Chipset Motherboard
Genuine Windows® XP Media Center Edition
2005 w/SP2
Corsair 1024 MB PC3200 DDR400 Memory
250 GB SATA II 3.0 7200 RPM HD 8mb Cache
(2) 16X PCI-Express ATI Radeon X1600XT
256MB Video Card w/TV out & DVI
Powered by PowerColor Running in
CrossFire Mode
LG 16X DVD-ROM & LG 16X DVD+-RW Drive
NVIDIA nForce-4 3D 7.1 Surround Sound
600 Watt Subwoofer Speaker System
Logitech Deluxe 104 Keyboard and
Logitech Optical Wheel mouse
Aluminum CoolerMaster Praetorian 750
Midtower Case 420W
Xtreme Liquid Cooling System
6 Cool Custom Colors to Choose From
Free 802.11G Wireless PCI Network Adaptor

\$1,029

MEDIA CENTER PC 5000



AMD Athlon™ 64 X2
4400+ CPU \$965
4200+ CPU \$879
3800+ CPU \$819
AMD Athlon™ 64
FX-60 CPU \$1415
3500+ CPU \$719
3200+ CPU \$679

Nvidia nForce 6100 Athlon 64 Motherboard
Genuine Windows® XP Media Center Edition
2005 W/SP2
Corsair 512 MB PC400 Dual Channel Memory
200GB 7200 RPM SATA II 3.0 HD 8MB Cache
16X PCI EXPRESS NVIDIA GeForce 6100
Video Onboard
Build In TV-Tuner w/ FM Radio
LG 16X DVD+-RW Drive & 16X DVD-ROM
7.1 3D Wave Surround Sound System
600 Watts Subwoofer Speaker System
6 IN 1 Digital Media Reader
Logitech Office 104 Keyboard and
Logitech Optical Wheel mouse
Philip Remote Control
Turbo X-Opac Portable Case 400 Watt w/
See Through Windows
5 Cool Custom Colors to Choose From

\$679

GAMER ULTRA 7500 SE



AMD Athlon™ 64 X2
4400+ CPU \$1305
4200+ CPU \$1199
3800+ CPU \$1139
AMD Athlon™ 64
FX-60 CPU \$1929
3500+ CPU \$1049
3200+ CPU \$999

PC World Best Buy
NVIDIA nForce-4 Chipset MB with 16X PCI Express
Genuine Windows® XP Media Center Edition
2005 W/SP2
Geil 1024 MB PC3200 DDR400 MEMORY
160 GB SATA II 3.0 7200 RPM HD 8mb Cache
NVIDIA GeForce 6600 256MB DDR with
TV out Powered by XMDIA
LG 16X DVD-ROM
LG 16X DVD+-RW DRIVE
nForce-4 3D 7.1 Surround Sound
19" Super Slim LCD DISPLAY
Logitech X530 5.1 Subwoofer speakers
6 IN 1 Digital Media Reader
Logitech Office 104 Keyboard and
Logitech Optical Wheel mouse
Turbo X-Cruiser Case 420 Watt with
See Through Windows

\$999



- Provides leading-edge 32-bit performance for music, video and games and is ready for future 64-bit software
- Improves security against certain types of viruses, with Enhanced Virus Protection for Microsoft® Windows® XP SP2.
- Conserves power and operates quietly with AMD Cool n'Quiet™ technology.
- Features HyperTransport™ technology for improved multitasking performance

Free Shipping!! All Notebooks.

GAMER XPLOER-64 9700



AMD Turion™ 64
Mobile Technology
MT-40 \$1379
MT-37 \$1345
MT-34 \$1299
MT-32 \$1275
MT-30 \$1265

AMD Turion 64 Mobile Technology
-AMD PowerNow! Technology
-HyperTransport Technology
-Enhanced Virus Protection
Genuine Windows® XP Media Center Edition
2005 W/SP2
1024MB PC3200 DDR400 MEMORY
60 GB Ultra ATA100 Hard Drive
Mobile ATI X700 16X PCI-Express 128MB Video
15.4" WXGA Wide-Screen TFT
Display 1280x800 Pixels
8X DVD+-RW Rewritable Drive
10/100 Network Card & 56K V.92 Modem
Wireless 802.11G 54Mbps Networking
3-in-1 Built-In Media Reader
1 Firewire IEEE 1394 & 4 USB 2.0 Ports
Weight only 6.39 lbs
7 Custom Colors to Choose From
1 Yr 24/7 Toll Free Support

\$1,265

GAMER XPLOER-64 8700



AMD Turion™ 64
Mobile Technology
MT-40 \$1325
MT-37 \$1285
MT-34 \$1249
MT-32 \$1219
MT-30 \$1208

AMD Turion 64 Mobile Technology
-AMD PowerNow! Technology
-HyperTransport Technology
-Enhanced Virus Protection
Genuine Windows® XP Media Center Edition
2005 W/SP2
512MB PC3200 DDR400 MEMORY
40 GB Ultra ATA100 Hard Drive
Mobile ATI X700 16X PCI-Express 128MB Video
15.4" WXGA Wide-Screen TFT
Display 1280x800 Pixels
8X DVD+-RW Rewritable Drive
10/100 Network Card & 56K V.92 Modem
Wireless 802.11G 54Mbps Networking
3-in-1 Built-In Media Reader
1 Firewire IEEE 1394 & 4 USB 2.0 Ports
Weight only 6.39 lbs
7 Custom Colors to Choose From
1 Yr 24/7 Toll Free Support

\$1,208

GAMER XPLOER-64 8000



AMD Mobile
Athlon™ 64
3700+ \$1119
3400+ \$1045
3200+ \$1035
3000+ \$999

SIS Athlon 64 Chipset Motherboard
Genuine Windows® XP Media Center Edition
2005 W/SP2
512 PC3200 DDR400 Memory
40 GB Ultra ATA100 Hard Drive
Mobile ATI Radeon 9700 PRO 128MB Video
15.4" WXGA Wide-Screen
TFT Display 1280x800 Pixels
8X DVD+-RW Rewritable Drive
10/100 Network Card & 56K V.92 Modem
Wireless 802.11G 54Mbps Networking
3-in-1 Built-In Media Reader
1 Firewire IEEE 1394 & 3 USB 2.0 Ports
1 PCMCIA Type II Slot
Weight only 6.39 lbs
Free Carrying Case
5 Custom Colors to Choose From
1 Yr 24/7 Toll Free Support

\$989

Order Toll Free 800-707-0393 www.cyberpowerpc.com

4802 Littlejohn Street, Baldwin Park, CA 91706 T: 626.813.7730 F: 626.813.3810 Technical Support: 877.876.4965 Hour: M-F 8:30am - 6:00pm Sat 9:30am - 3:00pm

Go to find.pcworld.com/51734

CyberPower PCs use genuine Microsoft® Windows® • www.microsoft.com/privacy/choice

A PLATFORM DESIGNED FOR

DIGITAL ENTERTAINMENT IN THE HOME



Get ready for a new kind of consumer entertainment PC that will change the way you enjoy entertainment at home. AOpen Viiv-ready system, based on Intel Viiv technology, delivers the multi-tasking power of a dual-core processor-based PC and sleek new designs that fit your life style. Digital media enthusiasts can usher in the next generation of digital media software for amazing high-definition video and photo editing, content creation, and audio mixing.

miniPC MP945-VX



Smallest Viiv Ready PC in the World, supports Intel Core Duo Processor. Measures just 6" x 6" x 1.97" Ultra quiet 29dBA operation, Component & Composite Connectors, slot loading optical drive. HD audio support
Visit: <http://minipc.aopen.com/US>

EPC945-m8



Slim Viiv Ready Entertainment PC for the living room. Supports Intel Dual Core Pentium D processor, ultra quiet 29dBA operation, Microsoft Windows XP Media Center Edition support and includes MCE remote control.
Visit: <http://usa.aopen.com/products/epc/epc945-m8.htm>

For Product Distribution:



Where to buy miniPC:

<http://minipc.aopen.com/US/wheretobuy>

Where to buy EPC:

<http://epc.aopen.com/US/wheretobuy>

Go to find.pcworld.com/52316

All logos are trademarks of their respective companies



1911 Lundy Ave, San Jose, CA 95131, 1-888-97-AOPEN



GADGET FREAK

DAN TYNAN

Cars That Are Smarter Than You Are

Hot new auto gadgets are coming down the road—but beware privacy potholes.

A FEW GADGETS have truly changed my life. One was a dual-screen DVD player that we put in our aging minivan. Overnight we could take the kids on long road trips without constant whining, fighting, or Happy Meal toys whizzing past my ear while I was negotiating traffic.

Yet that DVD player is nothing compared with what's coming down the pike. This year we'll see a whole fleet of automobile gadgets that combine navigation, safety, and entertainment systems, and possibly some products that deliver live video and Internet connections. But these gizmos certainly won't be cheap, and you may encounter speed bumps along the way.

AUTO MAGIC

THE CONVERGENCE of auto and digital technologies is clear from devices such as the Pioneer AVIC-Z1 audio system (\$2250, www.pioneer-electronics.com, out this spring), which offers turn-by-turn directions, connects to your iPod, and plays DVDs on a 7-inch LCD. Subscribe to XM Radio's NavTraffic (\$17 a month, including 150-plus channels of satellite radio), and the Z1 will alert you to traffic jams and suggest other routes. Garmin's StreetPilot 7200 (\$1616, www.garmin.com, available now) also features live traffic data from XM or Clear Channel on its 7-inch touch screen, along with SD Card support so you can load new maps or play MP3s and audio books.

This spring, Jaguar plans to offer an add-on entertainment system that plays back music, photos, or movies stored on flash memory cards such as SD, MMC, or Memory Stick, as well as a satellite-

based antitheft service. If your car is stolen, you can call your service provider to find out where it is; or you can subscribe to a \$15-per-month plan that "breadcrumbs" your vehicle, tracking its precise location and speed every few minutes.

Once available only in luxury models, such tracking systems are becoming inexpensive and widespread enough for

car reads back aloud. Spain says such features will eventually reach U.S. cars.

The best may be yet to come. Comcast, Delphi, and Sirius plan to send live video feeds to the backseat, possibly in time for 2007's cars. Aeris Networks, which offers cellular communications services for fleet vehicles, says it's designing a system for delivering broadband movies and music that's due before year's end.

BIG BROTHER ON BOARD

BUT YOU COULD pay a big price for all this cool stuff, and not just in money. If you can track your vehicle's movements, so can the cops or any attorney with a court order. Insurance firms will want your road data; some already offer discounts to customers who share their records (provided, of course, they don't drive like maniacs).

And when it comes to sharing your data with, say, a store or a restaurant that you drive by each day, data collectors are in the driver's seat. That doesn't mean your car will get beamed ads every time you pass a KFC, but you might receive other marketing offers based on your driving habits. Every company offering these products and services vows to protect the privacy of such information, and maybe they will. But U.S. firms have an extremely poor track record on other forms of data sharing.

My advice? Don't drive blindly into this new car tech. Ease into it with your eyes open and your foot near the brake. ■

Contributing Editor Dan Tynan is the author of Computer Privacy Annoyances (O'Reilly Media, 2005). You can send e-mail to him at gadgetfreak@pcworld.com.



every car owner to have one, says Hap Flaherty, vice president of marketing for MicroTrakgps in Dallas, which makes Jaguar's antitheft tracking system.

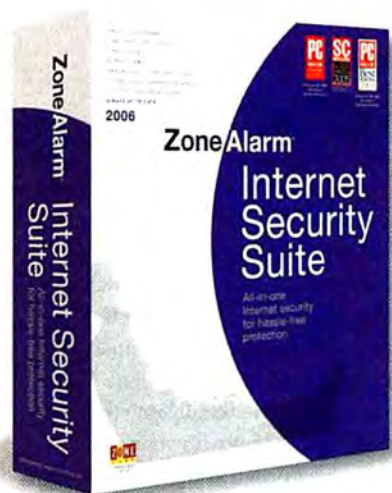
Microsoft is getting into cars in a big way. The software colossus provides navigation software for 61 models, as well as for the AVIC-Z1 and other add-on products, says Mark Spain, director of Microsoft's Automotive Business Unit. The company also recently teamed with European automaker Fiat to bring wireless Net connectivity to the road. When drivers see a warning light indicating a car problem, they can press a button on the Fiat's dash to receive an instant text response clarifying the issue, which the

SUITE.

SWEET.

ENTER THE ZONEALARM® SUITE SWEET SWEEPSTAKES

Protect your PC with the award-winning ZoneAlarm® Internet Security Suite, and you could win one of two **Dell™ XPS™ 600 Multimedia Desktops**, three **30 Gb Apple® iPod®s** or the **GRAND PRIZE - a 42" LG Plasma HDTV**.



When it comes to fighting hackers, spyware, viruses, worms, and more, you can't do better than ZoneAlarm Internet Security Suite. And now we're giving you a chance to WIN BIG PRIZES too. Just go to www.zonelabs.com/sweet to get the better-than-ever ZoneAlarm Internet Security Suite – and enter to win cool, electronic prizes in our ZoneAlarm Suite Sweet Sweepstakes.

GRAND PRIZE
LG Plasma HDTV

First Prize
(2 first prizes)

Dell PC

Second Prize
(3 second prizes)

Apple iPod

No purchase necessary. U.S. residents only. Void in Puerto Rico. Void where prohibited. Sweepstakes ends July 31, 2006. Terms and Conditions apply. See the Official Rules.



A Check Point
COMPANY

www.zonelabs.com/sweet

©2006 Zone Labs, L.L.C., A Check Point Software Technologies Company, 475 Brannan Street - Suite 300, San Francisco, CA 94107 USA. All rights reserved. All trademarks of Zone Labs used herein (including but not limited to ZoneAlarm, Zone Labs, and the Zone Labs logo) are trademarks or registered trademarks of Zone Labs, L.L.C. and/or Check Point Software Technologies, in the United States and other countries. All other trademarks are the property of their respective owners.

Go to find.pcworld.com/52326



BUGS & FIXES

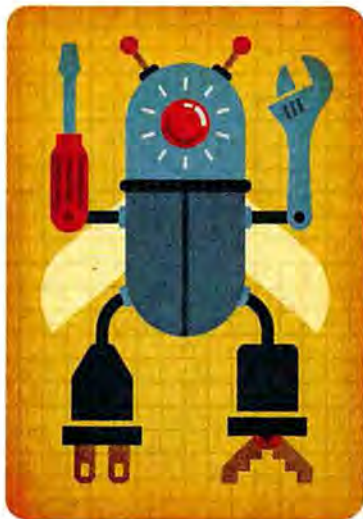
STUART J. JOHNSTON

Windows Media Player's Image Problem

Plus: Mozilla security woes, Java holes—and laptop battery life cut short.

I BET YOU never thought the album art that Windows Media Player shows while playing your favorite music could be the key to letting an attacker trash your computer. Or that downloading a new "skin" to change WMP's looks could open the door to your PC. But due to a problem with the way the player handles bitmapped images (.bmp files), that's just what might happen.

An attacker could use this hole to bypass your system's security and do anything from planting spyware to reformatting your hard disk for the heck of it. Aside from viewing poisoned photos of your favorite artists, or downloading music or a new skin from a questionable site, you can also be infected in more traditional ways, such as via booby-trapped links on a Web site or an HTML e-mail.



The bitmap image format is one of the most common. Unfortunately, the part of WMP that handles the display of bitmaps has a flaw that permits a malicious cracker to send you a file that literally drowns it with data. WMP then crashes, passing control of your PC over to whatever commands or programs your attacker has queued to hit next.

BUGGY MICROSOFT DRIVER DRAINS LAPTOPS

IF YOU PONIED up for a pricey new laptop using one of Intel's Core Duo (dual-core) mobile processors, you may not be getting all the battery life you paid for. The culprit is Microsoft's new USB 2.0 Advanced Configuration and Power Interface driver, which was introduced with Windows XP SP2. Ironically, ACPI is meant to help conserve power. But with this bug, using any built-in or external USB 2.0 devices can lead to extra battery drain. Microsoft released a partial workaround to PC makers last July, but it's deemed too complicated and risky for public release. Until there's a patch, save battery life by unplugging USB devices from your notebook when running on the battery.

Microsoft has distributed a patch to address this critical problem via Windows Update; you can also download it at find.pcworld.com/52144. All versions of WMP from 7.01 through 10 are at risk (but not earlier versions).

Don't delay in patching: At least two sites have already published code that takes advantage of this WMP hole, and it won't take a lot of effort to turn that code into a pre-fab component for use in a dangerous worm or virus.

JAVA HOLES

MEANWHILE, SUN IS dealing with its own security problems in its Java Runtime Environment, the so-called virtual machine that allows you to run Java programs. You most commonly get JRE as a plug-in so your browser can run Java applets.

A number of flaws could potentially let a cyberthug execute whatever code they want just by tricking you into clicking on a malicious link.

To check your JRE version, click *Start* and select *Run*; type **CMD** and click **OK**. At the DOS prompt, type **java -fullversion** and press **Return**. You're safe if you have J2SE (Java 2 Standard Edition) 5.0 Update 6 (which shows as 1.5.0_06) or J2SE 1.4.2_11—both already

IN BRIEF

Mozilla Woes

RESEARCHERS recently identified eight security holes in Mozilla's Firefox 1.5 browser and in pre-1.0 versions of Mozilla's SeaMonkey browser and e-mail suite, affecting Windows, Linux, and Mac users alike. Earlier Firefox versions are not affected. The worst of these flaws could result in an attacker taking over your system, but Firefox 1.5.0.1 and later or SeaMonkey 1.0 and later are safe. You should receive the Firefox updates automatically if you have at least version 1.5. Otherwise, get the latest Firefox at find.pcworld.com/52145 and the updated SeaMonkey at find.pcworld.com/52146.

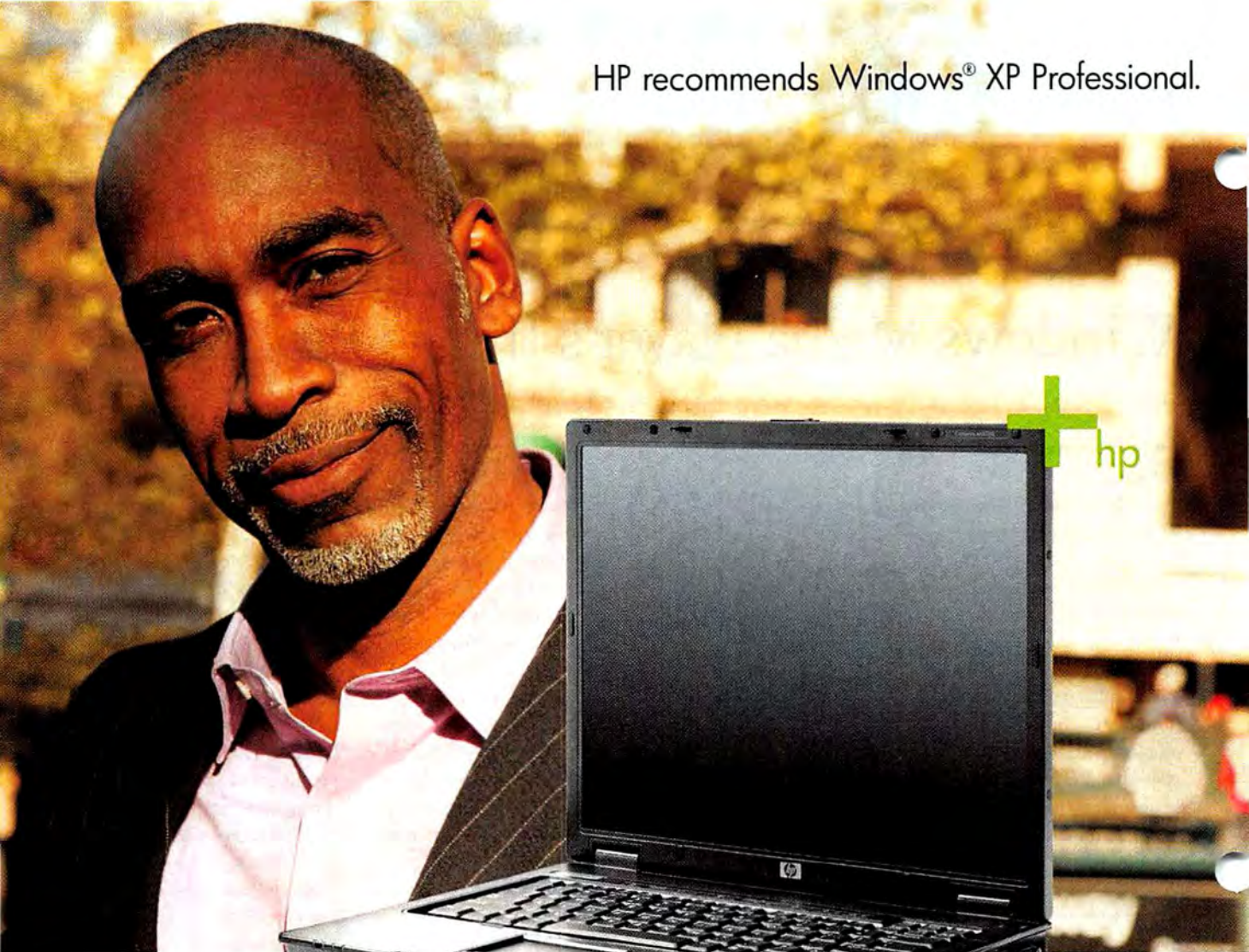
contain the updated JREs. If you don't, jump over to find.pcworld.com/52148 for Sun's advisory and to download the patched updates. ■

Stuart J. Johnston is a contributing editor for PC World. Visit find.pcworld.com/31580 to see more Bugs and Fixes columns.

BUGGED?

FOUND A hardware or software bug? Send us an e-mail on it to bugs@pcworld.com.

HP recommends Windows® XP Professional.



BUSINESS TOOLS FOR EVERY DAY. EVERYWHERE.

HP COMPAQ BUSINESS NOTEBOOK nc6320

\$1,799 Lease for as low as \$50 per month for 51 months

\$509 Instant Savings*

(\$2,308 - \$509 Instant Savings = \$1,799)

- Intel® Centrino® Duo Mobile Technology¹
 - Intel® Core™ Duo Processor T2500¹
(2MB L2 Cache, 2GHz, 667MHz FSB)
 - Intel® PRO/Wireless 3945ABG²
 - Microsoft® Windows® XP Professional
 - 15" XGA Display
 - 1GB DDR2 533MHz
 - Integrated HP Broadband Wireless^{3, 16}
 - 80GB S.M.A.R.T. Hard Drive⁴
 - Double Layer DVD+/-RW Drive
- GET EVEN MORE:
- HP Extended Life Battery, add \$129

All offers available from HP Direct and participating resellers. Prices shown are HP Direct prices, are subject to change and do not include applicable state and local sales tax or shipping to recipient's destination. Reseller prices may vary. Photography may not accurately represent exact configurations priced. Associated values represent HP published list price. 1. Lease products are available through Hewlett-Packard Financial Services Company (HPFSC) or one of its affiliates to qualified commercial customers in the U.S. and are subject to credit approval and execution of standard HPFSC documentation. Offer valid on all transactions greater than \$349 through 5/31/06. Other fees and restrictions may apply; please visit www.hp.com/go/HPFinancialServices. HPFSC reserves the right to change or cancel this program at any time without notice. 2. Instant saving and mail-in rebate offers are valid through 5/31/06 on qualifying HP Compaq nc6320 and nc6310 notebooks, HP Compaq dc7600 desktops, HP ProLiant ml110 G3 servers, HP Compaq tx4200 Tablet PCs, HP OfficeJet 5610 Printers and HP wv4300 Workstations from HP Direct and participating HP resellers. 3. Timing based on Powersave start. 4. Intel's numbering is not a measurement of higher performance. 5. Requires Caller ID, purchased separately. 6. Wireless access point is required and is not included. Wireless Internet use requires separately purchased Internet service contract. Availability of public wireless access points limited. 7. For hard drives, GB=1 billion bytes. Actual available capacity is less. 10. 24X Max CD-ROM Drive data transfer rates up to 3600 kbps. 11. 48X 32X CD-RW Drive data transfer rates may vary as follows: for recording to CD-R media, the max transfer rate may be up to 7200 Kbps (use 48X discs for best performance); for writing to CD-RW media, the max transfer rate may be up to 4800 Kbps (use 32X high-speed media discs for best performance); for reading CD media, the max transfer rate may be up to 7200 Kbps. Actual transfer rates may vary depending on media quality. 12. One-year limited warranty for parts, labor and next-business-day support. 13. Three-year limited warranty for parts, labor and next-business-day support. 14. Four-year limited warranty for parts, labor and next-business-day support. 15. Service levels and response times for HP Care Packs may vary depending on your geographic location. Restrictions and limitations apply. For details, visit www.hp.com/go/carepack. 16. Wireless use requires separately purchased service contract. BroadbandAccess is available to more than 140 million people in 171 major metropolitan areas and 63 primary airports. Access limited to coverage area of Verizon Wireless. Check with Verizon Wireless for availability and coverage in your area. Verizon Wireless BroadbandAccess offers download speeds of 400 to 700 Kbps. National Access provides download speeds of 60 to 80 Kbps. BroadbandAccess speeds are based on Verizon Wireless network tests with 5MB FTP data files without compression. National Access speeds are based on Verizon Wireless network tests with 101KB FTP data files. Microsoft and Windows are registered trademarks of Microsoft Corporation in the United States and/or other countries. Celeron, Celeron Inside, Centrino, Core Inside, Intel, Intel Core, Intel Inside, Intel SpeedStep, Intel Vix, Intel Xeon, Itanium, Itanium Inside, Pentium, Pentium Inside, the Centrino Logo, the Intel Logo and the Intel Inside Logo are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. ©2006 Hewlett-Packard Development Company, L.P.

Increase your productivity on the go. Introducing the HP Compaq nc6320 commercial notebook powered by Intel® Centrino® Duo Mobile Technology, HP's newest notebook with integrated broadband. No PC cards, no extra parts, just log on and go. And with the largest WWAN network, powered by Verizon Wireless BroadbandAccess, you'll have high-speed Internet readily available.⁶ Plus, with every HP Compaq nc6140 purchase, you get all the security that HP's ProtectTools offer, standard. Giving you more reasons than ever to consider HP.



Now buy select HP products and save instantly.



\$949

Lease for as low as \$26 per month for 51 months¹

HP WORKSTATION xw4300
\$345 Instant Savings²
(\$1,219 - \$270 Instant Savings = \$949)

- Intel® Pentium® 4 Processor 630 with HT Technology⁴ (2MB L2 Cache, 3GHz, 800MHz)
 - Microsoft® Windows® XP Professional
 - 512MB 533MHz DDR2 ECC
 - 80GB SATA S.M.A.R.T. III Hard Drive⁷
 - 48X/32X CD-RW/DVD Combo Drive¹¹
 - NVIDIA® Quadro NVS 285 128MB PCI-e graphics
 - Three-year on-site limited warranty¹³
- GET EVEN MORE:
- HP CarePack: Three-year, four-hour response, 24 x 7, add \$269^{13,15}
 - Additional 512MB 533MHz DDR2 ECC memory, add \$129



\$839

Lease for as low as \$23 per month for 51 months¹

HP COMPAQ BUSINESS DESKTOP dc7600
\$159 Instant Savings²
(\$998 - \$159 Instant Savings = \$839)

- Intel® Pentium® 4 Processor 630⁴ with HT Technology¹¹ (2MB L2 Cache, 3GHz, 800MHz FSB)
 - Microsoft® Windows® XP Professional
 - 512MB 533MHz DDR2
 - 80GB SATA S.M.A.R.T. III Hard Drive⁷
 - Multi-bay 24X CD-ROM¹²
 - Integrated Broadcom NIC
 - ADD 2DVI adapter for Dual Displays
 - Three-year next-business-day on-site limited warranty^{13,15}
- GET EVEN MORE:
- HP CarePack: Four-year 9 x 5 next-business-day on-site coverage, add \$99^{14,15}
 - L1506 15" TFT Flat Panel Display, add \$219



\$768

Lease for as low as \$21 per month for 48 months¹

HP PROLIANT ML110 G3 SERVER
\$100 Instant Savings²
(\$868 - \$100 Instant Savings = \$768)

- Intel® Pentium® 4 Processor (2MB L2 Cache, 3GHz, 800MHz)
 - 80GB SATA Hard Drive for maximum capacity⁷
 - 1GB ECC memory to help protect against memory failures
 - Remote Management option for greater control and flexibility
 - One-year next-business-day on-site limited warranty^{12,15}
- GET EVEN MORE:
- HP CarePack: Three-year next-business-day hardware support, add \$119¹⁵
 - DAT 40 USB external tape drive for fast, simple backup solution, add \$699



\$1,049

Lease for as low as \$29 per month for 51 months¹

HP COMPAQ BUSINESS NOTEBOOK nx6310
\$235 Instant Savings²
(\$1,284 - \$235 Instant Savings = \$1,049)

- Intel® Centrino® Mobile Technology⁶
 - Intel® Core™ Solo Processor T1300⁴ (2MB L2 Cache, 1.66GHz, 667MHz FSB)
 - Intel® Pro/Wireless 3945ABG⁸
 - Microsoft® Windows® XP Professional
 - 15" XGA+ BrightView Display
 - 512MB DDR2 533MHz
 - 60GB S.M.A.R.T. Hard Drive⁷
 - DVD/CD-RW Combo Drive
- GET EVEN MORE:
- Executive Leather/Nylon case, add \$69



\$1,549

Lease for as low as \$42 per month for 51 months¹

HP COMPAQ tc4200 TABLET PC
\$184 Instant Savings²
(\$1,733 - \$184 Instant Savings = \$1,549)

- Intel® Centrino® Mobile Technology⁶
 - Intel® Pentium® M Processor 740⁴ (2MB L2 Cache, 1.73GHz, 533MHz FSB)
 - Intel® PRO Wireless 2200BG⁸
 - Microsoft® Windows® XP Tablet PC Edition
 - 12.1" XGA Display
 - 512MB DDR2 533MHz (1 DIMM)
 - 40GB S.M.A.R.T. Hard Drive⁷
- GET EVEN MORE:
- Advanced Docking Station, add \$249



\$149

HP OFFICEJET All-in-One 5610

- Fast and reliable solution to help you get your work done efficiently
- Print and copy up to 20 ppm black/13 ppm color
- Automatically copy, scan and send faxes with the 25-sheet document feeder
- 33.6 Kbps black and color faxing with or without PC connection (junk fax barrier included¹)

SMART ADVICE > SMART TECHNOLOGY > SMART SERVICES

**FREE 60-DAY TRIAL
SMART DESKTOP
MANAGEMENT SERVICE**

Our integrated business
protection and security solution.

Call **1-866-625-0782**

Click **hp.com/go/mag2**

Contact **your local reseller**



REVIEWS & RANKINGS

EDITED BY NARASU REBBAPRAGADA AND DAN SOMMER

- 54 DELL ULTRASHARP 3007WFP
- 54 BOSTON ACOUSTICS
RECEPTOR RADIO HD
- 58 PANTONE HUEY
- 58 LINKSYS WIRELESS-G
MUSIC BRIDGE
- 60 MOZILLA.ORG
SEAMONKEY
- 64 HUMANCONCEPTS
ORGPLUS 6
PROFESSIONAL

58



1-TERABYTE BEST BUYS: The network-attached Infrant ReadyNAS NV (left) and the direct-attached Maxtor OneTouch III Turbo each pack 1TB of storage.



Big Hard Drives Take Center Stage

Whether you need extra storage space for business or for home, we have a 1-terabyte drive for you.

HARD DRIVES
TEST Center IN TODAY'S FLOOD of multimedia, a terabyte of storage no longer seems unfathomably large. Nor is it as costly as you might think: We tested eight units ranging in price from \$800 to over \$1300, including two models from Buffalo Technologies, and one each from Anthology Solutions, Infrant Technologies, Iomega, LaCie, Maxtor, and

WiebeTech. Each drive offers up to 1TB of total storage, depending on configuration.

From the eight we tested, we picked Best Buys in two categories: direct-attached storage (DAS), which is suit-

able for a single user with big storage needs; and network-attached storage (NAS)—ideal for multiple-user setups. In the NAS category, the winner was Infrant Technologies' ReadyNAS NV (\$1199),

a speedy performer packed with a slew of features. Of the DAS models, the one we liked best was Maxtor's well-rounded OneTouch III Turbo (\$825).

If you want something to augment a single PC, direct-attached storage is your best bet. You attach a DAS hard drive via USB 2.0, FireWire, or external SATA (eSATA)—and it's at least three times as fast as the speediest gigabit-

PCW RATINGS



FOR A COMPLETE explanation of our rating system and for information about our test methodology, visit find.pcworld.com/49902. Read more on page 72.

- 65 AVANQUEST SMALL
BUSINESS PRO 2006
- 67 CANON ZR500
- 67 APPLE MACBOOK PRO
- 69 KYOCERA KR1 MOBILE
ROUTER
- 70 CREATIVE TECHNOLOGY
ZEN VISIONM
- 72 MORE REVIEWS
AT PCWORLD.COM



67

- 56 TOP 5 ULTRAPORTABLE NOTEBOOKS
- 62 TOP 5 MAINSTREAM GRAPHICS CARDS
- 66 TOP 10 17-INCH LCD MONITORS
- 68 TOP 10 POINT-AND-SHOOT CAMERAS



54

ethernet-attached NAS units.

NAS boxes are only as fast as their networks, but they do have enough PC-like smarts (including a processor and an operating system) to store and serve files to anyone on the network, at any time. Since they're always accessible on the network, they make perfect multimedia jukeboxes for the home; if they are Universal Plug and Play or Digital Living Network Alliance-compliant, they can link to consumer electronics devices (for more on DLNA, see find.pcworld.com/52086).

DESIGN POINTS

WITH EVERY DRIVE we tested, we found setup easy and straightforward. The biggest differences in setup involved the connection interface and the drive configuration options (for features like RAID settings, folder sharing, and access permissions).

All of the NAS units we tested, and all but one of the DAS boxes (the \$799 LaCie d2 Big Disk is the exception) are user-accessible; as a result, you can swap out drives (and in some cases, upgrade capacity) as needed. Some models make this task simple: Buffa-

	DIRECT-ATTACHED STORAGE	PCW Rating	Features and specifications	Performance
1	Maxtor OneTouch III Turbo Best BUY \$825 find.pcworld.com/52069	83 Very Good	<ul style="list-style-type: none"> • 1000GB • 7200 rpm • USB 2.0, FireWire 800/400 • Cost per gigabyte: \$0.83 	<ul style="list-style-type: none"> • Overall performance: Good • Copy files: 139 seconds • File search: 87 seconds
	▶ Bottom line: This model's performance and backup software beat the rest, but its dual 500GB drives aren't readily accessible.			
2	WiebeTech SilverSATA II \$1332 find.pcworld.com/52066	82 Very Good	<ul style="list-style-type: none"> • 1000GB • 7200 rpm • External SATA-300, USB 2.0 • Cost per gigabyte: \$1.33 	<ul style="list-style-type: none"> • Overall performance: Superior • Copy files: 80 seconds • File search: 79 seconds
	▶ Bottom line: Blazing performance, quick-swap drives, and front panel access to RAID 0 and RAID 1 are pluses of this pricey eSATA unit.			
3	Iomega XL Desktop \$800 find.pcworld.com/52072	77 Good	<ul style="list-style-type: none"> • 1000GB • 7200 rpm • USB 2.0, FireWire 800/400 • Cost per gigabyte: \$0.80 	<ul style="list-style-type: none"> • Overall performance: Fair • Copy files: 299 seconds • File search: 83 seconds
	▶ Bottom line: Inexpensive storage box lags behind others in performance, but it is user expandable with easy-swap drive bays.			
	NETWORK-ATTACHED STORAGE			
1	Infrant Technologies ReadyNAS NV Best BUY \$1199 find.pcworld.com/52074	78 Good	<ul style="list-style-type: none"> • 1000GB • 7200 rpm • Gigabit ethernet • Cost per gigabyte: \$1.20 	<ul style="list-style-type: none"> • Overall performance: Very Good • Copy files: 372 seconds • File search: 100 seconds
	▶ Bottom line: The fastest NAS box we tested is loaded with features, and it's a breeze to upgrade. But its usable capacity is only 660GB.			
2	Buffalo Technologies TeraStation Home Server \$899 find.pcworld.com/52082	76 Good	<ul style="list-style-type: none"> • 1000GB • 7200 rpm • Gigabit ethernet • Cost per gigabyte: \$0.90 	<ul style="list-style-type: none"> • Overall performance: Good • Copy files: 645 seconds • File search: 88 seconds
	▶ Bottom line: Media server support is appealing for users running a multimedia-centric home network; includes backup software.			
3	Buffalo Technologies TeraStation Pro \$999 find.pcworld.com/52084	74 Good	<ul style="list-style-type: none"> • 1000GB • 7200 rpm • Gigabit ethernet • Cost per gigabyte: \$1.00 	<ul style="list-style-type: none"> • Overall performance: Good • Copy files: 646 seconds • File search: 105 seconds
	▶ Bottom line: This model lacks media server support but is simpler to upgrade than its second-place sibling, thanks to easy-swap drives.			

CHART NOTES: Price and ratings are as of 2/16/2006. Total capacity for each drive is 1000GB (1TB), but available capacity varies. For more on these products and those that didn't make the chart, see find.pcworld.com/52514. For more on how we tested, see find.pcworld.com/49974.

lo's TeraStation Pro, Infrant's ReadyNAS NV, Iomega's XL Desktop, and WiebeTech's SilverSATA II all use a chassis design that makes swapping out drives a simple mat-

ter of sliding the drives in and out of a modular bay. But Anthology Solutions' Yellow Machine PT-400T, Buffalo's TeraStation Home Server, LaCie's d2 Big Disk,

and Maxtor's OneTouch III Turbo require considerable work with a screwdriver before you can remove a drive.

In order to achieve 1TB of capacity, each of the units ▶

we tested combines their multiple drives into a single logical volume that Windows XP recognized as a unitary 1TB drive. Seven of the eight boxes that we tested used RAID to accomplish this task, while LaCie's d2 Big Disk used a technology called disk spanning for the same purpose.

With these external models, RAID is more about how you are safeguarding your data than it is about the drive's performance. Both Iomega's XL Desktop and Maxtor's OneTouch III Turbo defaulted to RAID 0 (which stripes data across both drives). But unlike the Maxtor, the Iomega is not user-configurable, which means you can't opt instead for the data redundancy that RAID 1 provides (mirroring, where the same data is written to both drives and total available capacity is halved). WiebeTech's SilverSATA II ships by default in a RAID 1 setting (with a usable capacity of 500GB); you can change this setting easily, though, via the unit's front status panel.

Among the NAS boxes, the two Buffalo TeraStations and the Anthology Yellow Machine (which fell short of the chart) defaulted to RAID 5, (which stripes data across all four drives with parity but reserves a quarter of the total capacity for fault tolerance, in this case yielding a storage capacity of 750GB). If one of the drives fails, you can keep working and the unit will rebuild the array once you've replaced the failed drive.

In addition, the Buffalo devices support disk spanning

and RAID 1. The Yellow Machine offers RAID 0, RAID 1, and RAID 1+0 (which works by striping data across two pairs of mirrored drive).

Infrant's speedy ReadyNAS NV uses the company's exclusive X-RAID (eXpandable-RAID) technology, which, as with RAID 5, uses parity to recover from losing a drive. This technology also lets you add

technology Solutions' six-license Retrospect 7.5 Pro, and Maxtor's Retrospect Express HD were the pick of the litter. WiebeTech's ultrafast SilverSATA II ships sans software.

TORTOISE OR HARE?

THE PC WORLD Test Center evaluated each unit's performance based on how ably it copied and read a 3.1GB fold-

Touch III Turbo, tested using its USB 2.0 interface, took 62 percent longer overall than the SilverSATA II to complete our tests. The USB 2.0 LaCie d2 Big Disk (which missed our chart) took 70 percent more time on average, and the USB 2.0 Iomega XL Desktop was the slowest, taking, overall, 96 percent more time than our WiebeTech front-runner.

When it came to the NAS boxes, drive performance depended to a large extent on the speed of the product's ethernet hardware. Overall, the gigabit Infrant ReadyNAS NV X-RAID easily outdistanced its competitors. Buffalo's pair of entrants—the TeraStation Home Server and TeraStation Pro—took significantly longer (12 and 18 percent, respectively) to complete our tests than the Infrant unit did, and the 10/100-megabit Anthology Solutions Yellow Machine P-400T took a whopping 72 percent more time to finish the tasks.

1TB FOR EVERYONE

IF YOU'RE LOOKING for top-of-the-line performance and price is no object, the direct-attached WiebeTech SilverSATA II is the box for you.

But we gave our Best Buy bouquet to the much cheaper Maxtor OneTouch III Turbo: This model manages a fine balance of price and performance, and throws in useful backup software, too.

Among the NAS models, our Best Buy pick is Infrant's ReadyNAS NV; this unit impressed us with its speed, its breadth of features, its software, and its overall design.

—Jon L. Jacobi



A TALE OF TWO BUFFALOS: the TeraStation Pro (left) has easy-access drives, unlike its sibling, the TeraStation Home Server.

drives without having to first back up, rebuild the array, and then restore the data. Unfortunately, this default configuration leaves you with only 660GB of usable storage.

The NAS boxes delivered a host of useful extras. For example, the Buffalo TeraStation Home Server and the Infrant ReadyNAS NV can act as printer servers for two USB printers. All of the NAS boxes are securely accessible via the Web, a convenience if you need your files while on the road. The Anthology Solutions unit has an integrated eight-port router.

Seven of the eight boxes came bundled with what we consider adequate (or better) backup software. Infrant's Genie Network Backup, An-

er of files, copied a 3.1GB file, and performed a text search and a virus scan on a drive loaded with 14.1GB of data (for the DAS models) or 8.1GB (for the NAS units). Our results played out exactly as the products' connective technologies led us to expect. The DAS boxes delivered two to three times the speed of their NAS counterparts, with eSATA showing a striking advantage over USB 2.0. With one exception—Anthology Solutions' Yellow Machine, which was tested while directly attached to a PC—the NAS models were connected via gigabit ethernet switch.

The eSATA-based WiebeTech SilverSATA II was the fastest direct-attached unit, by a large margin. Maxtor's One-



REDISCOVER THE MAGIC OF TELEVISION.

Remember how you loved TV as a child? Bring the same thrill back with a flat panel television from LG, the world leader in flat panel production*. Whether you choose our award-winning plasma with a built in HD-DVR, or any of our other HD LCD and Plasma TVs, you're getting stunning design and the innovative XD™ Engine — the technology behind our brilliant picture quality. LG, the world's largest manufacturer of flat panels and reasons to stay up late.



©2005 LG Electronics, Inc. Englewood Cliffs, NJ. LG Design and Life's Good are trademarks of LG Electronics, Inc. *Based on 2004 PDP and LCD module production revenue.



www.LGusa.com

Giant Dell LCD Is Not Quite a TV

LCD MONITOR

DELL'S 30-INCH **UltraSharp 3007WFP** wide-screen LCD dwarfs other monitors—even big ones. And at a native resolution of 2560 by 1600 pixels, it can more than handle high-definition content. However, the \$2199 display is not a TV and it lacks features found on smaller LCDs. But if you're hell-bent on a 30-incher, it looks comparable to and is \$300 cheaper than its sole

competitor, Apple's 30-inch Cinema HD Display.

The 3007WFP accepts DVI-Digital video input only, rejecting the component, composite, and S-Video inputs of its 24-inch sibling, Dell's UltraSharp 2405FPW (see find.pcworld.com/52230). This limitation keeps the 3007WFP from connecting to most DVD players. The \$2499 Apple display has the same setup, and both monitors' sole screen adjustment is brightness. The 3007WFP comes with no HDMI input and requires a DVI-D dual-link graphics card supporting 2560 by 1600 resolution.

I found the shipping version of the 3007WFP comfortable to use. In addition to

tilt adjustment, it has smooth height control. Its Apple rival has tilt only.

The 3007WFP was impressive in my subjective tests. Black letters appeared crisp against a white background, and flesh tones and bright colors looked pleasing. The 3007WFP played our test movie with minimal ghosting, and HD content looked sharp. I set the Dell monitor next to the Apple 30-incher and found both screens excellent, though I did perceive a faint pink cast on the Dell model.

It's natural to yearn for a



DELL'S 30-INCH WIDE-SCREEN LCD looks terrific but lacks inputs found on smaller displays.

huge LCD, and the 3007WFP looks great, but for most people a 24-inch model will serve amply at half the price.

—Laura Blackwell

UltraSharp 3007WFP

Dell

PCW Rating **84** Very Good

Impressive 30-inch LCD monitor is missing inputs available on smaller, cheaper models.

List: \$2199

find.pcworld.com/52222

Boston Acoustics HD Radio Has Sweet Sound

DIGITAL RADIO

BOSTON ACOUSTICS' **Receptor Radio HD** is the first tabletop AM/FM radio product to also deliver digital radio, the broadcast industry's answer to satellite. If your area receives digital stations—and you don't mind spending \$299 on what is, in the end, just a radio—then you'll like Boston's stylish unit.

The most compelling feature of digital radio (called, officially, HD Radio), is multicasting, in which a station divides its frequency into multiple channels. To move through channels, you adjust the tuning knob or press the up/down buttons on the remote control (about the size of a pack of chewing gum).



BOSTON'S RECEPTOR RADIO HD offers great sound and style.

This shipping radio handily locked on to both FM and HD stations (AM is spotty in my area), though it exhibited a slight delay in tuning to a station's second multicasting channel. Digital stations, marked with an HD Radio logo on the device's display, sounded subtly better than their analog FM counterparts.

Digital broadcasts lacked the hissing and crackling you can get with analog, and the bass sounded warmer and fuller. Audio gets a boost from the quality speakers. The second speaker is a separate piece for wider stereo sound.

The design of the Receptor Radio HD is impeccable. The display's blue text is bright,

albeit a bit small for reading song metadata (such as the title and artist information) from across the room. You can store up to 20 presets, as well as connect an MP3 player through the auxiliary input. Other perks include a headphone jack and dual alarm clocks. If you can stomach the price, this unit will put you on the cutting edge of radio.

—Cathy Lu

Receptor Radio HD

Boston Acoustics

PCW Rating **80** Very Good

This well-designed though pricey radio is a great way to bring digital and analog broadcasts into your home.

List: \$299

find.pcworld.com/52220



the DeeTee Bunch

5YEAR
WARRANTY

Our large family of Flash drives means there's one that's perfect for you.

With a wide range of models, capacities and features, DataTraveler® is the most popular storage family in town. These practical USB Flash drives get the highest ratings for securely storing, carrying and transferring all kinds of data, from reports and presentations to photos of your entire bunch. Backed by a five-year warranty and legendary Kingston® reliability, DataTraveler is the choice of consumers and corporations alike.

To learn more from others who use the versatile DataTraveler, and to meet the whole groovy family, visit kingston.com/dt. We have much more than a hunch you'll find the one for you.

Kingston
TECHNOLOGY
COMMITTED TO MEMORY®

buy.com.
the internet superstore™

newegg.com

TigerDirect.com

eCOST
Your Online Discount Superstore™



*Please note: Some of the listed capacity is used for formatting and other functions and thus is not available for data storage. For more information, please consult Kingston's Digital Media Guide at kingston.com/Digital_Media_Guide. ©2006 Kingston Technology Company, Inc. 17600 Newhope Street, Fountain Valley, CA 92708 USA. All rights reserved. All trademarks and registered trademarks are the property of their respective owners.

Go to find.pcworld.com/51732



TOP 5 ULTRAPORTABLES

Alienware Moves Into Lightweight Field

OUR TOP 5 ultraportables chart welcomes three newcomers this month. Nonetheless, Lenovo's ThinkPad X41, a carryover from last time, maintains its leadership position, helped by a price drop of \$200 since our February rankings. Our other holdover, Acer's TravelMate 3000, holds on to second position.

The new number three is Fujitsu's LifeBook P7120 Notebook. Though this lightweight unit is the most expensive ultraportable in our current group, it's well designed and attractive, and has a two-battery option and a fine keyboard. The P7120 improves on the LifeBook P7000 by making its hard drive user

replaceable, moving the optical drive from the left side to the right, and replacing hard-to-read icons with standard LEDs on the screen hinge. And instead of residing in the hinge, the speakers now flank the battery, still remaining exposed when the laptop's lid is closed. The new position is a welcome change.

Alienware's first ultraportable, the impressive Sentia m3200, puts the company—known for high-performance desktop PCs and heavy desktop replacement notebooks for gaming—on new ground. The Sentia turned in top-tier performance in our WorldBench 5 tests, and the unit offers a fine case design and a



ALIENWARE'S ELEGANT Sentia m3200 is the company's first ultraportable laptop, and a zippy performer.

bright display.

In fifth place, the HP Compaq nc4200 Notebook PC provides a great keyboard, one that any laptop user would be proud of, and yet the system weighs less than 4 pounds. Offering a superb layout, the keyboard has both eraserhead and touchpad pointing devices, both of which are uncommonly comfortable to use. This business-oriented laptop also has an external battery gauge, a powered USB port,

and built-in Bluetooth. However, no optical drive is built in, so you'll need to buy from HP's wide range of docks; a \$259 model houses an optical or second hard drive.

We also reviewed Systemax's Pursuit 4110 and Micro Express's Z3300. The Pursuit, which is sold online at TigerDirect.com for \$1380, narrowly missed the chart. The unit has a bright, 12.1-inch wide-aspect screen, an 80GB hard drive, and strong performance. Although the Pursuit is very similar to the Sentia m3200, Alienware's machine offers a better-designed case and superior documentation.

The Micro Express Z3300 is the fastest ultraportable we've tested and weighs only 3.4 pounds. But its battery life was the shortest we've recorded among ultraportables, and you will be stuck with its DVD-ROM/CD-RW combination drive; you can't order an internal DVD burner.

—Dan Sommer

ONLINE

FOR MORE information about the ultraportable notebook PCs reviewed in this chart, including testing details, go to find.pcworld.com/50932.

	ULTRAPORTABLE NOTEBOOK	PCW Rating	Performance	Features and specifications
1	Lenovo ThinkPad X41 Best BUY \$1999 find.pcworld.com/50500	79 Good	<ul style="list-style-type: none"> WorldBench 5 score: 66 Fair Overall design: Very Good Tested battery life: 6:02 	<ul style="list-style-type: none"> 1.6-GHz Pentium M 725 12.1-inch screen 3.3 pounds DVD-ROM/CD-RW
2	Acer TravelMate 3000 \$1199 find.pcworld.com/48906	78 Good	<ul style="list-style-type: none"> WorldBench 5 score: 78 Good Overall design: Good Tested battery life: 3:58 	<ul style="list-style-type: none"> 1.73-GHz Pentium M 740 12.1-inch wide screen 3.2 pounds DVD-ROM/CD-RW
3	Fujitsu LifeBook P7120 Notebook \$2149 find.pcworld.com/52028	77 Good	<ul style="list-style-type: none"> WorldBench 5 score: 60 Fair Overall design: Very Good Tested battery life: 6:26 	<ul style="list-style-type: none"> 1.2-GHz Pentium M ULV 753 10.6-inch wide screen 2.8 pounds DVD±R DL/DVD±RW
4	Alienware Sentia m3200 \$1525 find.pcworld.com/52022	77 Good	<ul style="list-style-type: none"> WorldBench 5 score: 92 Superior Overall design: Good Tested battery life: 2:53 	<ul style="list-style-type: none"> 2-GHz Pentium M 760 12.1-inch wide screen 4.8 pounds DVD±R DL/DVD±RW
5	HP Compaq nc4200 Notebook PC \$1549 find.pcworld.com/52024	76 Good	<ul style="list-style-type: none"> WorldBench 5 score: 79 Very Good Overall design: Good Tested battery life: 5:12 	<ul style="list-style-type: none"> 1.86-GHz Pentium M 750 12.1-inch screen 3.9 pounds No optical drive

CHART NOTES: Prices and ratings are as of 2/16/06. Weight does not include the AC adapter, power cord, or optical drive.

KONICA MINOLTA

KONICA MINOLTA BUSINESS TECHNOLOGIES, INC., TOKYO, JAPAN



Color Laser Printers

800-523-2696 • buymagicolor.com

magicolor laser printers and all-in-ones will enhance your image

When it's time to make a great impression, count on magicolor® laser printers and all-in-ones from KONICA MINOLTA. For just pennies a print, add vivid, bold color to your presentations, sales proposals, and marketing brochures. Then watch the positive impact color makes on your business.

magicolor 2480 MF

Color Laser All-In-One

- Print/Copy: 5 ppm color, 20 ppm b&w
- Scan: 24-bit color
- PC Fax: Send & receive
- Camera Direct Photo Printing
- USB 2.0
- Windows® compatible



magicolor 5440 DL

Extreme Speed

- 27 ppm color and b&w
- 2400 x 600 dpi
- Fast Ethernet® & USB 2.0
- Windows, Mac®, & Linux® compatible



magicolor 5450

Ultimate Speed & Quality

- 27 ppm color and b&w
- 9600 x 600 dpi-class quality
- Gigabit Ethernet®, USB 2.0, & parallel
- Windows, Mac, & Linux compatible
- PostScript® 3 & PCL® 6 emulations

Buyers Laboratory Pick of the Year

Act now for special pricing. Ask your KONICA MINOLTA reseller for information.



KONICA MINOLTA

Copyright © 2006 KONICA MINOLTA PRINTING SOLUTIONS U.S.A., INC. KONICA MINOLTA and the KONICA MINOLTA logo are trademarks or registered trademarks of KONICA MINOLTA HOLDINGS, INC. magicolor is a trademark or registered trademark of KONICA MINOLTA PRINTING SOLUTIONS, U.S.A., INC. All other trademarks or registered trademarks are the property of their respective owners. Specifications subject to change without notice.

Monitor Calibration for the Masses

LCD CALIBRATION TOOL

IF YOU'VE EVER fought to get the photos you print at home to look like the images you've been adjusting on screen, an incorrectly calibrated monitor was likely at the heart of your problem. Enter the Pantone Huey, an inexpensive monitor calibration tool that works well so long as it plays nicely with your graphics board.

Setup is simple through the basic software, which offers

Huey

Pantone

PCW Rating **79 Good**

The Huey monitor calibration tool is easy to use, though its controls are basic.

List: \$89

find.pcworld.com/52228

few adjustable settings. You change color temperature and contrast by selecting one of nine presets, several of which are optimized for specific situations such as photo viewing and gaming. Just stick the Huey sensor on your screen, and help the software along with an occasional mouse click as it flashes a series of color and gray patches on screen for the sensor to read.

The Huey conveniently provides periodic recalibration—from every 10 seconds to every 4 hours—based on the room's changing lighting conditions. You place the sensor in its stand, facing you. As nighttime falls or as your overhead lights turn on, the software adjusts the monitor's

color temperature and luminosity. When I covered up the sensor, the software dimmed my monitor; when I shone a light directly at it, the screen brightened.

Getting the Huey to function may require that you update your graphics board's drivers. I tried the shipping product on three PCs running Windows XP. The software worked as expected on the desktops with ATI Radeon X600 and nVidia GeForce2 MX boards installed, but the product was unable to calibrate an LCD hooked up to an ATI Radeon X300 card until I updated the X300's drivers

PANTONE'S Huey calibrates your monitor as lighting conditions change.



from ATI's tech support site.

If basic monitor calibration is all you need, you'll likely find the Huey's color presets and minimal features adequate and easy to use.

—Eric Butterfield

Linksys Music Bridge Links PC and Stereo

DIGITAL AUDIO

MY NOTEBOOK PC would make the best jukebox imaginable if not for its tiny speakers. That's why I tried the \$100 Linksys Wireless-G Music Bridge (WMB54G), which lets me stream music from my laptop to my stereo. It worked like a charm—that is, when it worked; unfortunately the product doesn't play well with all recent Wi-Fi routers.

Controlled by a simple desktop utility, the Music Bridge wirelessly diverts all PC audio from your networked Windows computer straight to your home stereo.

When I ran the screenless device on a network outfitted

with a standard 802.11g router, wizard-based adjustment of the Music Bridge's Wi-Fi settings went smoothly. After hooking up the device to my stereo receiver using the supplied cable, I was soon streaming everything

LINKSYS'S MUSIC BRIDGE sends PC audio to your stereo.



from Windows alert sounds to iTunes tracks from my 802.11g-equipped notebook. The audio was mostly great, though I had occasional and irritating brief outages—particularly when I tested with an 802.11b adapter.

This shipping version of the Music Bridge worked poorly with my Belkin Pre-N Wireless router based on Airgo Networks' original MIMO technology. No fix exists at this time, but Linksys says that newer Airgo-based products, such as Linksys's SRX400 router, don't have this issue.

Also, to switch between PC and stereo-system sound, you

must first shut down all music player software on your PC or you risk disabling all Windows audio—PC and stereo. Linksys says it is adding a warning to future releases.

Still, if you survive the setup and don't demand flawless playback, this clever device provides an affordable means of enjoying digital music on your home stereo.

—Yardena Arar

Wireless-G Music Bridge (WMB54G)

Linksys

PCW Rating **80 Very Good**

This affordable music-streaming device doesn't work with all recent Wi-Fi gear.

Street: \$100

find.pcworld.com/52246

BUFFALO™

Game On!

Wireless Gaming Made Easy.

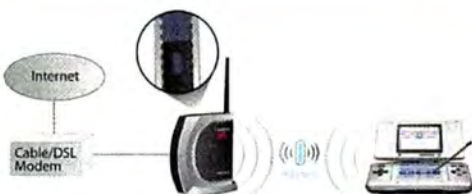
"Buffalo AOSS™ (AirStation One-Touch Secure System™) Routers make hopping online with your Nintendo DS™ a painless procedure. The press of a single button will have you online in seconds, a task even the youngest gamer can accomplish with ease."

— Kevin Cassidy, GoNintendo.com

Works Seamlessly with Nintendo DS

One-Touch Secure Wireless Setup with AOSS

Extended Range at an Affordable Price



**AOSS –
One Touch.
One Click. Done!**

WHR-G54S
WHR-HP-G54

To learn more about Buffalo High Performance Wireless Routers, go to www.buffalotech.com/pcw-gameon

Now Available at



© Buffalo Technology (USA), Inc. Buffalo Technology, Buffalo Technology logo and AOSS are registered trademarks of Buffalo Technology (USA), Inc. The names and logos of other companies mentioned herein belong to their respective owners.

Go to find.pcworld.com/51702

SeaMonkey Offers Browser, E-Mail, and Chat

INTERNET SUITE

VOLUNTEER DEVELOPERS have resuscitated a group of Internet tools built by Netscape—whose spin-off, Mozilla, brought out the popular Firefox Web browser. Renamed **SeaMonkey**, version 1 of this free open-source suite integrates Web browsing, e-mail, chat, and an HTML editor in a robust, easy-to-use package that works well despite a few bugs. (We recommend it in “101 Fabulous Freebies,” on page 81.)

SeaMonkey's Navigator has standard browser features such as tabbed browsing, pop-up blocking, and cookie controls, but it lacks many extensions available for Internet Explorer and Firefox. Some useful Mozilla extensions work with Navigator, such as



SEAMONKEY'S FREE INTERNET suite has tabbed browsing and includes useful extensions like this one for blocking JavaScripts.

the NoScript program for blocking JavaScripts and the Googlebar toolbar, which is similar to the Google Toolbar.

In my informal tests, browsing with SeaMonkey was the same as using IE or Firefox, except the Back button was bullet-fast. Several bugs re-

main, however: When I specified my own font style and size, for example, some pages rendered incorrectly, jumping images with text.

E-MAIL, CHAT, AND HTML

THE SEAMONKEY Messenger e-mail and newsgroups program looks like its Mozilla and Netscape Messenger predecessors, but adds modern features such as a phishing-detection tool and the ability to view and access mail from several different accounts in a single inbox. Mozilla says that you should be able to import mail and address books from other Messenger clients as well as from Eudora, Outlook, and Outlook Express. While this held true for my Outlook Express mail and folders, I was unable to import mail or addresses from Outlook in my three attempts.

To access Internet Relay Chat in either Messenger or Navigator, you open ChatZilla, an open-source IRC instant-messaging program.

For anyone accustomed to AIM, MSN Messenger, or Yahoo Messenger client software, the switch to ChatZilla will be jarring. Instead of a tool enabled by colorful buttons (and laden with advertisements), ChatZilla is less friendly; for example, you join chats by entering Web server addresses manually (links to several popular IRC networks, such as Mozneta and Quakenet, are provided). ChatZilla is clearly designed for Web pros rather than for average, everyday users of chat.

As for the SeaMonkey Composer HTML editor (the old Netscape Composer), think of it as a light version of Microsoft FrontPage. It looks much like a word processor with big buttons for such operations as Publish, Link, Table, and Image, and it lets you work with a page's HTML code.

Despite SeaMonkey's rough edges, its bundling of a browser, an e-mail utility, and an HTML editor in one package is appealing. Though the suite isn't likely to convert many Firefox or Internet Explorer users, it will probably find a home with Web developers and others who pine for the Netscape era or who simply like having all their Web tools in a single wrapper.

—Dennis O'Reilly

SeaMonkey

Mozilla.org

PCW Rating **80** Very Good

A browser, an e-mail client, and other useful Web tools combine nicely in this alternative to Internet Explorer and Firefox.

Free

find.pcworld.com/52254

TECH TREND

Big Storage, Small Cards



THINK THE MEMORY card in your camera or MP3 player is small? Well, you ain't seen nothin' yet. At only 15mm by 11mm, and a mere 1mm thick, SanDisk's fingernail-size microSD removable flash memory cards are unbelievably tiny. Originally designed for Motorola for use in the company's line of multi-

media cell phones, microSD Cards should appear this year in several new multimedia-enhanced phones.

By the end of March, SanDisk says, it will sell 1GB versions of the microSD for about \$75, which is roughly the price you'd pay for the same capacity in a much-larger CompactFlash or standard SD Card. The card will come with an adapter that lets it fit into a standard SD Card slot, so you can plug it into a more conventional reader or into a PDA or music player that has only an SD Card slot.

—Andrew Brandt



Name: Bob Davis

Age: 36

Occupation: City Planner

Phobia: Gridlock

Passion: My ScanSnap™

It's a Snap.

SCAN

My ScanSnap™ scanner turns paper into profits. With the touch of a button double-sided documents become searchable PDFs, business cards become contacts. It's easy to install, comes loaded with the software you'll need and fits perfectly where my inbox used to be. Instead of managing paper, I'm managing my business. **\$50 rebate** available for a limited time.

For more information, visit Fujitsu at www.fcpa.fujitsu.com/83A5 or call 800-831-8049 ext. 83A5.

FUJITSU

THE POSSIBILITIES ARE INFINITE

Bundled software included in purchase (\$895 value)

Adobe Acrobat 7.0 Standard

ABBYY FineReader

CardMinder 3.0™

ScanSnap Organizer 3.0

CDW

Insight

TigerDirect.com

PCNation

PCConnection

PC Mall

MAINSTREAM GRAPHICS BOARDS

6800 GS–Based Cards Fastest in Midrange

THIS MONTH WE tested five new mainstream graphics boards priced between \$150 and \$299, including three models based on ATI's mid-range Radeon X1600 chip set. Of these, only PowerColor's fourth-place X1600 XT Bravo Edition (\$169) earned a spot on our chart; new boards from Asus and Diamond Multimedia fell short of the Top 5.

Of the three Radeon X1600 boards we evaluated, the Asus EAX1600XT Silent was the most noteworthy, thanks to a unique design that replaces the standard fan with a large but silent heat sink. Despite the appeal of this clever arrangement, the model's high price (\$209) and middling

performance prevented it from making the chart.

Cards based on nVidia's GeForce 6800 GS chip nabbed the first and third positions on the chart, due in large part to their class-leading performance. A welcome \$25 price drop helped EVGA's returning e-GeForce 6800 GS (\$175) retain the top spot it captured in the February issue's chart (see find.pcworld.com/52250), while the newly tested and slightly pricier (\$200) XFX GeForce 6800 GS placed third.

The XFX board amassed some of the best performance numbers of the group, notching wins in the Battlefield 2, Quake 4, and Doom 3 games. For example, in our Battlefield



THE XFX GEFORCE 6800 GS offers top-notch performance and a full copy of the game Far Cry.

2 test, which we ran at 1600 by 1200 resolution with antialiasing turned off, the XFX 6800 GS managed 47 frames per second, beating out the EVGA card's mark of 42 fps. Results from the same test with antialiasing turned on brought the two cards a little closer, but the XFX unit still achieved the better score—35 fps versus the EVGA's 32 fps.

Two cards based on ATI's aging Radeon X800 GTO chip round out the Top 5. PowerColor's overclocked Radeon X800GT016 (\$184) makes its inaugural appearance on the mainstream graphics boards chart, finishing a strong second, and Diamond's Multimedia Viper Radeon X800 GTO (\$180) takes the fifth spot.

In addition to the Asus card described above, another notable card that failed to make our chart was ATI's new \$199 All-in-Wonder 2006 Edition 256MB PCI. It replaces the discontinued X800XL All-in-Wonder, which held second place in our February chart. Although the new board has extras such as built-in TV/FM radio tuning capabilities—and ships with dedicated video input and output breakout cables—its Radeon X1300-based graphics chip struggled in our performance tests.

—Danny Allen

ONLINE

FOR ADDITIONAL INFORMATION about the graphics boards reviewed in this chart, including testing details, go to find.pcworld.com/52252.

MAINSTREAM GRAPHICS BOARD		PCW Rating	Performance	Features and specifications
1	EVGA e-GeForce 6800 GS Best BUY \$175 find.pcworld.com/50622	85 Very Good	<ul style="list-style-type: none"> • Battlefield 2: 42 fps • Half Life 2: 57 fps • Quake 4: 42 fps 	<ul style="list-style-type: none"> • 256MB nVidia GeForce 6800 GS • DVI-out, 15-pin VGA-out, S-Video-in/out, composite-in/out, component-out
▶ Bottom line: Built around the most powerful of nVidia's mainstream Series 6 GPUs, this card works well for its price.				
2	PowerColor Radeon X800GT016 \$184 find.pcworld.com/51536	83 Very Good	<ul style="list-style-type: none"> • Battlefield 2: 40 fps • Half Life 2: 73 fps • Quake 4: 39 fps 	<ul style="list-style-type: none"> • 256MB ATI Radeon X800 GTO • Two DVI-out, S-Video-out, composite-out, component-out
▶ Bottom line: Outstanding board comes with a solid software bundle, a snazzy fan, and good documentation. Highly recommended.				
3	XFX GeForce 6800 GS \$200 find.pcworld.com/52542	79 Good	<ul style="list-style-type: none"> • Battlefield 2: 47 fps • Half Life 2: 64 fps • Quake 4: 47 fps 	<ul style="list-style-type: none"> • 256MB nVidia GeForce 6800 GS • DVI-out, 15-pin VGA-out, S-Video-out
▶ Bottom line: This card delivered superior performance; it includes an overclocking tool and a full copy of Far Cry.				
4	PowerColor Radeon X1600 XT Bravo Edition \$169 find.pcworld.com/52124	78 Good	<ul style="list-style-type: none"> • Battlefield 2: 34 fps • Half Life 2: 46 fps • Quake 4: 24 fps 	<ul style="list-style-type: none"> • 256MB ATI Radeon X1600 XT • Two DVI-out, S-Video-in/out, composite-in/out, component-out
▶ Bottom line: Though it wasn't a top scorer on our tests, this board features dual DVI-outputs and is well priced.				
5	Diamond Multimedia Viper Radeon X800 GTO \$180 find.pcworld.com/50854	74 Good	<ul style="list-style-type: none"> • Battlefield 2: 33 fps • Half Life 2: 60 fps • Quake 4: 34 fps 	<ul style="list-style-type: none"> • 256MB ATI Radeon X800 GTO • DVI-out, 15-pin VGA-out, S-Video-out, component-out
▶ Bottom line: Despite lackluster performance results out of the box, it ships with user-managed overclocking software.				

CHART NOTES: Prices and ratings are as of 2/21/06. All game performance times are in frames per second; higher numbers are better.

Give your people the systems to be more
productive, and they will.
(It may sound crazy, but it's true.)



INCLUDES
DUAL-CORE
PROCESSING

Acer® TravelMate 4202WLMi

- Intel® Centrino® Duo Mobile Technology
- Intel® Core™ Duo Processor T2300 (1.66GHz)
- Intel® PRO/Wireless 3945 Network Connection (802.11a/b/g)
- Memory: 1GB
- Integrated DVD-dual drive (DVD±RW)
- 15.4" WXGA active-matrix display

acer

\$1299 NOTEBOOK
CDW 913995



-200 TRADE-IN
\$1099



acer



Acer® PD100

- 2000 ANSI lumens SVGA projector
- Lamp life: up to 2000 hours, 3000 hours in economy mode
- 1-year limited parts and labor warranty

\$679.95 CDW 870665



INCLUDES
DUAL-CORE
PROCESSING

Sony® VAIO® S2120

- Intel® Centrino® Duo Mobile Technology
- Intel® Core™ Duo Processor T2400 (1.83GHz)
- Intel® PRO/Wireless 3945 Network Connection (802.11a/b/g)
- Memory: 1GB DDR2
- Weight: 3.72 lbs
- 13.3" WXGA active-matrix display with XBRITE-ECO™

VAIO
PROFESSIONAL

\$2099 NOTEBOOK
CDW 920869



-200 TRADE-IN
\$1899



SONY

Sony® Cyber-shot DSC-N1

- 8.1 megapixel digital camera
- Stores up to 500 VGA images
- 3" LCD monitor

\$499.95 CDW 866955

The Technology You Need When You Need It.

Upgrading your systems means upgrading your productivity. At CDW, we have the top-name technology to do just that. Our account managers provide fast answers to your questions, and can find systems that can improve your productivity and performance. With access to the industry's largest in-stock inventories, you're sure to get what you need, when you need it. So get new systems today, and start benefiting tomorrow.



The Right Technology. Right Away.™

CDW.com • 800.399.4CDW

In Canada, call 888.898.CDW • CDW.ca

Eligible processors include Intel Pentium II, III or Intel Celeron Processor; AMD processors do not qualify; trade-in values are estimates only; actual trade-in values may vary from \$100 to \$500; all products must be in good working condition and have a fair market value; call your CDW account manager for details; offer ends 6/30/06. Offer subject to CDW's standard terms and conditions of sale, available at CDW.com. © 2006 CDW Corporation

OrgPlus 6: The Organizational Charting Expert

BUSINESS SOFTWARE

HUMANCONCEPTS' **OrgPlus 6 Professional** is a well-trained one-trick pony. And it does that one trick—creating organizational charts—very well, once you take the time to get familiar with the program.

A graphics package with spreadsheet capabilities, OrgPlus is geared toward presenting employee data. You could chart other things—ideas or workflow—using its ample drawing, alignment, and formatting tools, but you would not be taking full advantage of the app. I tested a prerelease version of the \$295 OrgPlus 6 Professional, designed to chart 100 to 1000 employees.

You can loosely break up the program's new features into formatting, data manipulation, and distribution tools.

ASK OUR EXPERTS

Portable Drives

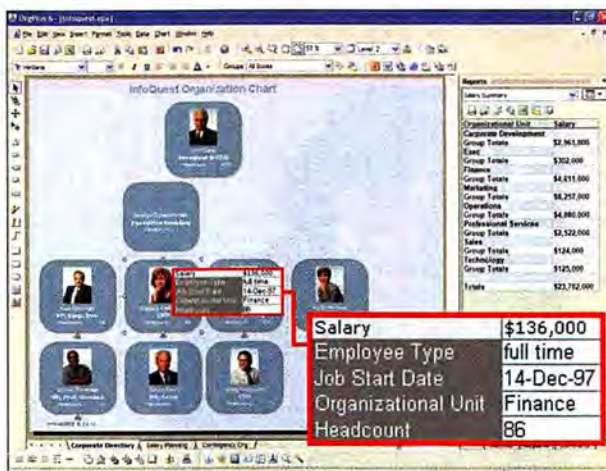
I NEED A backup drive for my desktop and portability for my laptop. The sea of external portable hard drives is making me crazy. What do you recommend?

Stella Rogers, Winnetka, California



Senior Associate Editor Melissa J. Perenson responds: If you plan to share the drive between your notebook and your desktop PC, I recommend buying a model whose capacity will give you enough room to back up the files you want from both systems, as well as give you extra room to grow. Rather than buying just the smallest, cheapest drive you can find, look for the models with something more. Some drives feature shock mounting, which protects the device while it bounces around in your bag; others can even sense if you drop the unit, and can lock the drive's heads midflight to minimize damage on impact.

NEED INFORMATION OR advice about a buying decision?
Drop us a line at askourexperts@pcworld.com.



ORGPLUS 6'S HOTSPOTS give you a way of adding a layer of information to an already crowded organizational chart.

Formatting enhancements include a free-form tool for putting a box anywhere on the page. This tool matches a corresponding one in Microsoft Visio, OrgPlus's main competitor. You can collapse mul-

tipl boxes into a single box to save screen space, and you can add pictures to boxes.

HOTSPOTS AND MORE

HOTSPOTS LET YOU add data to a chart without cluttering it up. After you include specific employee information in the hotspot, you can then assign the hotspot to an area of one or more chart boxes. When you mouse over the designated box area (and wait a few seconds), this information appears in a rollover graphic.

You can import data easily from Excel and ODBC databases using the Import Data wizard. Once in OrgPlus, the data populates the fields, and the app creates a hierarchical chart. In the window's right pane, you can then manipulate how you view and work with different subsets of data.

New to OrgPlus 6 is the ability to use Boolean-like parameters to search through fields to create custom reports; unfortunately, you can't save the parameters of a search. The new version has improved

its Excel-style formulas and added context-sensitive chart legends, too. A legend could note, for example, that the box for any employee who makes over \$100,000 is highlighted in red. OrgPlus also lets you combine multiple division charts into one large chart.

I found OrgPlus easy to use once I read the Help menu tutorials and waded through the 412-page PDF manual (boxed copies have a printed manual). These aids helped me overcome the software's penchant for burying features deep in menus and behind unintuitive toolbar button icons. The interface is functional but not pretty; ditto for the templates and graphic formatting. Though I tested the program on a fairly robust desktop PC, the software was sluggish when I handled large charts, and I encountered a few screen refresh snafus. HumanConcepts says it has no other reported instances of these issues and suspects a software conflict on my PC.

OrgPlus 6 Professional is a solid package. If org charts are your thing, get it. If you use OrgPlus 5 Professional and have to massage and present large data sets aggregated from multiple divisions, version 6 is a worthy upgrade.

—Narasu Rebbapragada

OrgPlus 6 Professional

HumanConcepts

PCW Rating **79** Good

This niche program isn't glamorous, but it does what it does—massive organizational charts—very well.

List: \$295

find.pcworld.com/52476

CAN YOU DELIVER THE EASE OF SSL-VPN ACCESS NO MATTER WHERE USERS GO?



© 2006 SonicWall, Inc. SonicWall and the SonicWall logo are registered trademarks of SonicWall, Inc.

TAKE A DEEPER LOOK.

With SonicWALL® SSL-VPN you get all the protection without the fat. It's a clientless, secure remote access solution that integrates alongside almost any existing firewall and requires no per-seat license. Your users can access your network from anywhere in the world using a standard Web browser. So there are no fat clients to preinstall and maintain. When deployed with a SonicWALL Network Security Appliance—featuring deep packet inspection and the Gateway Anti-Virus, Anti-Spyware and Intrusion Prevention service—no SSL-VPN solution is more secure. The HTTPS connection is decrypted, and viruses, Trojans, spyware, phishing attacks, and other emerging threats are eliminated. Find out why SonicWALL SSL-VPN makes life easier for you and your users. Go to www.sonicwall.com/globe or call 1.888.557.6642 today.



NETWORK
SECURITY



SECURE
REMOTE ACCESS



CONTENT
SECURITY



CONTINUOUS
DATA PROTECTION



POLICY &
MANAGEMENT

SONICWALL

PROTECTION AT THE SPEED OF BUSINESS

Small Business Pro: Cheap but Hard to Use

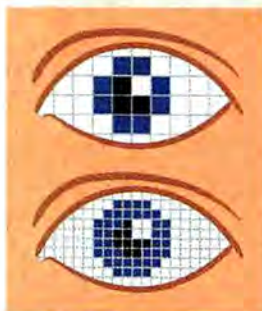
BUSINESS SOFTWARE

PRICED AT \$90, Avanquest's **Small Business Pro 2006** is a cheap, quirky, and ultimately unsatisfying grab-bag of disparate business tools. At first glance, its long feature list seems to offer great value, but compared with other accounting programs, it's too expensive and far too unpolished.

The shipping package of this single-user application includes tools for accounting, financial forecasting, and business plan creation. A payroll feature, the one obvious omission, will arrive with the 2007 version. Small Business Pro's licensing features are unusually customizable. You can buy additional user licenses for each individual accounting module. This is useful if, for example, you have more sales

GOTCHA!

Where's My HD Picture?



FINALLY, YOU'LL BE able to buy high-definition movies on disc—and the devices that play them—at your local store. As observers had expected, HD DVD (the format backed by Toshiba and Microsoft) will arrive first, with players—the least expensive being Toshiba's \$499 HD-A1—and movies expected for sale by late March.

Before buying one of these players, though, you'd better check your TV's inputs. If you don't use a High Definition Content Protocol-enabled, HDMI connection, you may not get full, high-definition-resolution output from the player. HD DVD can't guarantee high-def output over analog component connections, or even over non-HDCP digital connections. Ultimately the content creators—the movie studios—control what you'll see. Industry insiders say that the studios don't plan to lower the resolution of images in their early titles, but that could change over time.

—Melissa J. Perenson



SMALL BUSINESS PRO is inexpensive, but it has a nonstandard interface, inconsistent wording (as circled above), and speed issues.

people (who need access to customer information) than accountants (who work in the general accounting module). Unfortunately, the multiple-license scenario requires an IP-based network, and the

client and server software can't run on the same machine, which makes Small Business Pro less flexible than small-business accounting programs that can run client software on the data server.

The small-business accounting functions are adequate though largely unimpressive. Unfortunately, an ugly, non-intuitive user interface makes them exceedingly hard to use. Rather than using Windows-style drop-down menus, most Small Business Pro modules depend on clickable Web-style icons, which you have to mouse over for help in figuring out what they do.

The app's menus aren't its only awkward feature. Unlike QuickBooks, which uses easy-to-understand language, Small Business Pro has its own wacky take on accounting jargon. The software is laden with typos ("Wokspace," for example, evidently means Workspace), shows a shaky grasp of accounting terms (using the term "bank synchronization" for bank reconciliation), and

mislabels some features (clicking on the Income Tax Preparation icon does not prepare income tax). A clue to the language issues is the logo "Powered by Inventime," a French accounting program.

The application ran like a slug on my 2.4-GHz Pentium 4 PC with 768MB of RAM. Avanquest says that it's correcting the typos and terminology with a pending service patch release. It's also working on the performance issues.

Small Business Pro comes with Design and Print Business Edition (a desktop publisher) and Web Easy Professional 6 (a Web site creator), both of which have relatively conventional and understandable Windows user interfaces. Design and Print is basic but usable, though an included clip art CD offers dated 1998-era graphics. The Web Easy app is better suited to creating personal and hobbyist sites than a small-business site.

Overall, Small Business Pro is no match for either Intuit QuickBooks or Microsoft Office Small Business Accounting. If you don't want to pay a couple hundred bucks for these programs, the \$50 you'd spend on Simply Accounting Basic from Sage Software is a better investment than this funky French import.

—Richard Morochove

Small Business Pro 2006

Avanquest Publishing USA

PCW Rating **59 Poor**

A low price and long feature list can't redeem a shoddy interface and slow performance.

List: \$90

find.pcworld.com/52534



MEMORY MYSTERY SOLVED, CASE CLOSED.



THE CRUCIAL SYSTEM SCANNER
REVEALS THE EXACT
UPGRADES FOR YOUR SYSTEM
www.crucial.com/pcworld

Scan My System



Finding a memory upgrade for your computer doesn't have to involve a lot of detective work. With just one click, the Crucial System Scanner takes the mystery out of finding the right RAM.

You know that you're ready for better performance by upgrading your system memory, but you're not sure WHICH memory is right for your computer. You might not even know your computer's manufacturer and model, much less anything about the mind-boggling mix of memory shapes, sizes, speeds, and capacities.

So how are you supposed to know which upgrade to buy? Don't spend hours tracking down the right memory — let the Crucial System Scanner take the guesswork out of upgrading! In just one click, our System Scanner tool analyzes your PC's configuration, then automatically recommends the exact upgrades for your system.

CLUELESS ABOUT MEMORY UPGRADES?

Just click the Scan My System button at Crucial.com, then sit back and get your report on the upgrade that's right for you!

- Limited lifetime warranty
 - Free technical support
 - Free shipping on qualified orders
- For a limited time, on orders of \$40 or more shipped within the contiguous U.S.

crucial
TECHNOLOGY
A Division of Micron

The Memory Experts™

TOP 10 17-INCH LCD MONITORS

New Displays Offer Convenient Designs

TEST OUR CHART HOSTS
Center a new Best Buy this month, the Dell UltraSharp 1707FP. The affordably priced model offers smooth adjustments and excellent features such as multiple USB ports and easy-to-use controls. The number two monitor, NEC's MultiSync 70GX2, earned top honors in our image quality tests, with fine text and great colors. Its NaviKey button offers incredibly intuitive control over screen adjustments.



DELL ULTRASHARP 1707FP

Other noteworthy newcomers on the chart include the ViewSonic VP720b, the IBM ThinkVision L171P, the Asus PM17TU, and the Samsung SyncMaster 740BF.

The pricey \$549 AG Neovo P-17 failed to make our chart, but it offers S-Video and component connectors.

—Kalpana Ettenson

ONLINE

FOR ADDITIONAL information about the LCD monitors reviewed in this chart, including testing details, go to find.pcworld.com/52490.

	17-INCH LCD	PCW Rating	Performance	Features and specifications
1	Dell UltraSharp 1707FP Best Buy \$299 find.pcworld.com/52036 ▶ Bottom line: This thoughtfully designed display with easy swivel and pivot mechanisms also has convenient USB 2.0 ports on its side.	82 Very Good	<ul style="list-style-type: none"> Graphics quality: 66.4 Text quality: 67.9 DVD motion quality: Average 	<ul style="list-style-type: none"> Inputs: analog and digital Adjustments: multiple adjustments 8ms response time Response type: rise-and-fall
2	NEC MultiSync 70GX2 \$399 find.pcworld.com/52062 ▶ Bottom line: Despite its high price, this monitor's sharp text, bright graphics, and clean design make it a standout.	80 Very Good	<ul style="list-style-type: none"> Graphics quality: 73.4 Text quality: 75.4 DVD motion quality: Average 	<ul style="list-style-type: none"> Inputs: analog and digital Adjustments: tilt and swivel adjustments 4ms response time Response type: gray-to-gray
3	ViewSonic VP720b \$369 find.pcworld.com/52064 ▶ Bottom line: With plenty of ergonomic adjustments and strong scores in our graphics tests, this display would suit graphics professionals.	76 Good	<ul style="list-style-type: none"> Graphics quality: 70.4 Text quality: 66.9 DVD motion quality: Average 	<ul style="list-style-type: none"> Inputs: analog and digital Adjustments: multiple adjustments 4ms response time Response type: gray-to-gray
4	IBM ThinkVision L171P \$329 find.pcworld.com/52070 ▶ Bottom line: Though this monitor made a poor showing in our image quality tests, its easy adjustability impressed us.	76 Good	<ul style="list-style-type: none"> Graphics quality: 63.2 Text quality: 66.5 DVD motion quality: Average 	<ul style="list-style-type: none"> Inputs: analog and digital Adjustments: multiple adjustments 8ms response time Response type: gray-to-gray
5	Asus PM17TU \$279 find.pcworld.com/52056 ▶ Bottom line: This worthy performer displays fine text and pretty graphics, but its design is dull and it offers few extras.	75 Good	<ul style="list-style-type: none"> Graphics quality: 72.0 Text quality: 75.4 DVD motion quality: Average 	<ul style="list-style-type: none"> Inputs: analog and digital Adjustments: tilt adjustment only 3ms response time Response type: gray-to-gray
6	Samsung SyncMaster 740BF \$339 find.pcworld.com/52068 ▶ Bottom line: This display performed well in our tests, showing clean text. Included MagicTune software makes screen adjustments a breeze.	73 Good	<ul style="list-style-type: none"> Graphics quality: 69.1 Text quality: 74.1 DVD motion quality: Average 	<ul style="list-style-type: none"> Inputs: analog and digital Adjustments: tilt adjustment only 2ms response time Response type: gray-to-gray
7	Eizo FlexScan L568 \$549 find.pcworld.com/46180 ▶ Bottom line: Professional model delivers excellent image quality, especially for graphics. Extensive controls are great for demanding apps.	72 Good	<ul style="list-style-type: none"> Graphics quality: 72.9 Text quality: 71.6 DVD motion quality: Average 	<ul style="list-style-type: none"> Inputs: analog and digital Adjustments: multiple adjustments 25ms response time Response type: gray-to-gray
8	Philips 170P6EB \$370 find.pcworld.com/48524 ▶ Bottom line: A four-port USB 2.0 hub is the high point of this monitor; mediocre image quality is the low point.	69 Fair	<ul style="list-style-type: none"> Graphics quality: 57.2 Text quality: 63.3 DVD motion quality: Average 	<ul style="list-style-type: none"> Inputs: analog and digital Adjustments: multiple adjustments 8ms response time Response type: gray-to-gray
9	LG Electronics Flatron L17810 \$499 find.pcworld.com/48522 ▶ Bottom line: This smaller version of the World Class-winning Flatron L19810 is the only 17-inch with automatic screen pivot and mirroring.	68 Fair	<ul style="list-style-type: none"> Graphics quality: 59.5 Text quality: 66.6 DVD motion quality: Average 	<ul style="list-style-type: none"> Inputs: analog and digital Adjustments: multiple adjustments 8ms response time Response type: gray-to-gray
10	Envision EN7410 \$250 find.pcworld.com/46186 ▶ Bottom line: A low price and surprisingly good image quality draw attention to this analog-only unit—but so does its flimsy feel.	67 Fair	<ul style="list-style-type: none"> Graphics quality: 69.7 Text quality: 71.2 DVD motion quality: Average 	<ul style="list-style-type: none"> Inputs: analog only Adjustments: tilt adjustment only 16ms response time Response type: gray-to-gray

CHART NOTE: Prices and ratings are as of 2/16/06.

Sound like a Rock Star*

* editing with Nero 7 required

The software for your Rock Star dreams

Nero 7 Ultra Edition – The Ultimate Audio, Video, Photo, Data and TV Solution meets all of your digital media needs as you capture, create, edit, author, burn, backup and share, while providing the complete home entertainment experience.

Whether you want to create audio playlists of your MP3s or entertaining slide-shows of your photos, edit your home videos, burn a backup of your DVDs*, convert your audio & video into state-of-the-art MPEG-4 (Nero Digital™) files, share your content on your consumer electronic devices or manage your media files with a click of your remote control, Nero 7 Ultra Edition is truly the only partner you need for today's digital home.



CREATE



EDIT



BURN



SHARE



ENJOY

Available at participating
retailers, including:



COMPUSA
where America buys technology



Office
DEPOT

amazon.com

* Does not copy DVD with copy protection

Go to find.pcworld.com/52308

Canon's Inexpensive ZR500 Shoots Good Video

VIDEO CAMERA

IN THE VIDEO world, *cheap* used to be a dirty word, but no more. Canon's **ZR500** shows how \$300 can get you a high-quality—albeit bare-bones—miniDV camcorder. I looked at a shipping version.

The svelte ZR500 fit nicely in my hand. The 2.7-inch LCD screen was easy to view in all conditions but direct sunlight. The ZR500 shoots both stan-



CANON'S ZR500 TAKES great pictures for a \$300 camcorder.

ZR500

Canon

PCW Rating **80** Very Good

The ZR500 is a low-cost, simple, high-quality camcorder that lacks some features but takes good-looking video.

Street: \$300

find.pcworld.com/52232

dard 4:3 and wide-screen 16:9 video onto miniDV tapes.

In my informal tests, the 25X zoom lens and single CCD took sharp video with strong color. Picture quality gets a little grainy and dull in low light, but the quality is superior to what you would

get from similarly priced camcorders. The built-in microphone captured reasonably good sound, and you can use the included microphone input to add a better one.

The ZR500 comes with two shooting modes: Easy and P (for program). The former dis-

ables most shooting options. You hit *Record* and the camcorder does the rest. The latter offers more control, with features like white balancing and shooting modes. The camera also has cheesy-looking wipes and special effects.

Like most budget products, the ZR500 lacks features such as still-image capture, support for flash memory, and manual controls. There's no USB connection or analog video input either, but you do get a standard FireWire port.

It won't replace a high-end camcorder, but the ZR500 is a pretty good choice for shooting simple videos—and the price is low enough to make it almost an impulse purchase.

—Richard Baguley

Apple's Sleek Intel-Based Laptop

L A P T O P

EQUIPPED WITH A 2-GHz Intel Core Duo Processor, Apple's **MacBook Pro** looks great, runs great, and has some fine new capabilities. But it lacks several features, and it has the same performance issues as the Intel-Based iMac.

The MacBook Pro is a joy to use. At 1440 by 900 pixels, the screen is sharp and bright. It comes with a built-in Web-

cam, Front Row media-playing software, and an infrared remote control. The unit handles basic productivity tasks with aplomb, and Apple applications run very fast.

That said, our \$2499 shipping unit lacks standard PC notebook options such as an S-Video port, a modem, and a PC Card slot (its ExpressCard slot isn't PC Card-compatible). Its DVD write speed is only 4X, and it can't yet burn double-layer media. The laptop also lacks a FireWire 800 port.

In benchmark tests conducted by our sibling publication *Macworld*, the MacBook Pro underperformed the 2-GHz iMac Core Duo in some tests and outperformed the G4-based 15-inch PowerBook



APPLE'S MACBOOK PRO is slim, sleek, and generally quite speedy.

MacBook Pro

Apple

PCW Rating **79** Good

Apple's stylish laptop is fast enough for most uses but performs best with Apple's own Intel-optimized software.

Street: \$2499

find.pcworld.com/52458

in most tests; notable exceptions were tests of Microsoft Word and Adobe Photoshop. The next versions of these apps will be Intel-optimized, but for now they run through the Rosetta translation software. *Macworld* found that a single battery charge lasted

for more than 3.5 hours with normal use. For additional details on *Macworld's* tests, go to find.pcworld.com/52462.

This laptop runs very well, but it lacks a few features and will benefit as more software is optimized for Intel.

—Narasu Rebbapragada

SMB? Meet EMC.

EMC[®] Insignia — made for Small and Medium Businesses



EMC brings its leadership in storage and information management to businesses with 20 to 200 employees. EMC Insignia software and hardware products allow you to confidently store, manage, protect, and share your vital business information.

Storage Hardware

Install trusted storage. Move up to an **EMC CLARiiON[®] AX** disk array.

Exchange Storage Management

Spend less time managing Exchange with **EMC Storage Administrator[™] for Exchange SMB Edition** — migrate, get failover, and allocate storage.

Storage Management

Get a clear view into how storage is being used and manage your storage for greater efficiency with **EMC VisualSRM[™] SMB Edition**.

Backup & Recovery

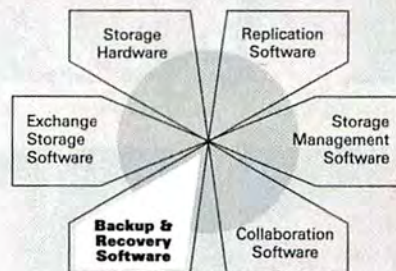
Data recovery matters when bad things happen. **EMC Retrospect[®]**: self-adjusting backup operations, AES encrypted backups.

Replication

Every minute counts. **EMC RepliStor[®] SMB Edition** ensures no data is lost when a server goes down.

Collaboration

A winning team works together. **EMC eRoom[™] SMB Edition** creates secure web-accessible workspaces.



New! Retrospect 7.5

Faster performance, less management. Users can now recover their own files. Upgrade today at www.emcinsignia.com/upgrade

EMC Insignia. The right products when your information matters.

To learn more about EMC Insignia products and solutions, visit www.emcinsignia.com

EMC² insignia

Products for Small and Medium Business



Hilary Arteaga
Missing Since 8/17/03

Ernesto Villarreal
Missing Since 7/23/03

Melissa Delgado
Missing Since 1/7/04

Taylor White
Missing Since 7/12/02

Chaderia Mitchell
Missing Since 5/28/01

Aisha Degree
Missing Since 2/14/00

Maimoona Carroll
Missing Since 1/9/04



Julianna Ali
Missing Since 6/30/02

Ta'Niyah Leonard
Missing Since 10/19/02

Canon 4 Kids



Diamond Bradley
Missing Since 7/6/01

Nathan Doyle
Missing Since 8/4/04



Emil Emanuel
Missing Since 10/2/01

Natasha Carter
Missing Since 8/8/00

Michael Delamora
Missing Since 2/8/05

Jaylan Simmons
Missing Since 7/26/05

Brody Shelton
Missing Since 3/19/04

Samantha Kibalo
Missing Since 2/3/01

Iumila Vasquez
Missing Since 12/19/03



Craig Frear
Missing Since 8/26/04

Kevin Anderson
Missing Since 3/31/04

Piah Diamond
Missing Since 5/27/01

Lydia Perkins
Missing Since 10/26/97

Adrianna Wix
Missing Since 3/25/04

Hope Brazil
Missing Since 7/16/04

David Bertrand
Missing Since 10/2/02



Julian Hernandez
Missing Since 8/28/02

Karla Rodriguez
Missing Since 10/20/99

Reya Lunetta
Missing Since 6/28/02

Shawn White
Missing Since 12/8/02

Rilya Wilson
Missing Since 1/18/01

Jacqueline Vasquez
Missing Since 5/6/01

Kenny Magno
Missing Since 8/27/01

If you've seen any of these children, please call the NCMEC hotline at 1-800-THE-LOST.

Every day, more than 2,000 children are reported missing in America. Working closely with law enforcement across the country, the National Center for Missing & Exploited Children (NCMEC) has achieved substantial success in finding our children. Canon U.S.A. is proud to join this effort by donating digital cameras, printers and scanners to help authorities quickly disseminate photos and information about missing children. Look at these children. If you recognize any of them, please call the NCMEC hotline. We urge you to then take photos of your children just in case of an emergency. Recent photos are the best way to help find missing children. For more information about what you can do, visit NCMEC at www.missingkids.com.



An updated picture is your most important tool when searching for a missing child, and Canon U.S.A. is disseminating photos of missing children across the country as part of its Canon4Kids effort to help find them. To help in this effort, you can download, print and distribute this page by going to www.usa.canon.com/Canon4Kids.

Canon
image*ANYWARE*

SoHoNo?

Small Office. Home Office. No Office.

*"... as sophisticated as
a large company's (phone system)
- but it's all virtual and a lot cheaper."*

-PC Magazine

STARTING at
\$9.95 / mo.



GOTVMAIL

The Professional Sound of Today's Small Business.

Sound Professional with GotVMail

Take control of incoming calls. Access voicemail through email. Simplify the way callers connect with your business.

GotVMail is the outsourced phone system designed for small business. It can be used from anywhere, with any phone, and can be instantly administered online. Customizable for 1 to 10 employees, GotVMail requires no additional equipment or software and no long-term contracts to sign. Get the functionality of a corporate phone system today starting at \$9.95 a month.

Take a Flash Tour and Sign Up Today at www.GotVMail.com

Virtual Toll Free/Local Number
Custom Main Greeting
Multiple Extensions
Live Call Forwarding
Music-on-Hold
Dial-by-Name Directory
Voicemails Emailed as MP3's
Online Vanity Search
And More...

TOP 10 DIGITAL CAMERAS

High-Quality Photos on Even a Meager Budget

YOU DON'T HAVE to drop a load of money for a camera to get great-looking photos. Of the three new models that made this month's chart, the least expensive camera delivered the best image quality.

The \$230 Olympus FE-120 took very impressive shots. The trade-off is that it lacks some of the exposure controls that many other models offer; also, it lasted only 203 shots in our battery tests. In contrast, the ultraslim Casio Exilim EX-S600 took 415 shots.



THE 9-MEGAPIXEL FUJIFILM FinePix E900 camera takes extremely sharp pictures.

The pricey Fujifilm FinePix E900 also earned high marks for its image quality. In particular, it received the best score for image sharpness.

Three Wi-Fi-enabled cameras missed our chart due in part to their steep prices and subpar battery life: the \$500 Canon PowerShot SD430, the \$500 Nikon Coolpix P1, and the \$400 Nikon Coolpix P2.

—Eric Butterfield

ONLINE

FOR MORE ABOUT the cameras reviewed in this chart, including testing details, go to find.pcworld.com/50968.

	POINT-AND-SHOOT CAMERA	PCW Rating	Performance	Features and specifications
1	HP Photosmart R717 Best \$270 find.pcworld.com/47128	83 Very Good	<ul style="list-style-type: none"> Image quality: Good Battery life: Good Overall design: Very Good 	<ul style="list-style-type: none"> 6.2 megapixels 39mm to 117mm zoom 9 scene modes 5.8 ounces
	► Bottom line: This feature-rich model comes with in-camera image advice and red-eye reduction, as well as extensive help menus.			
2	Canon PowerShot A520 \$200 find.pcworld.com/48083	82 Very Good	<ul style="list-style-type: none"> Image quality: Fair Battery life: Fair Overall design: Good 	<ul style="list-style-type: none"> 4.0 megapixels 35mm to 140mm zoom 14 scene modes 6.4 ounces
	► Bottom line: The A520 offers many features and manual controls for a very low price, but its battery life is limited.			
3	Casio Exilim EX-Z750 \$380 find.pcworld.com/49024	81 Very Good	<ul style="list-style-type: none"> Image quality: Good Battery life: Superior Overall design: Very Good 	<ul style="list-style-type: none"> 7.2 megapixels 38mm to 114mm zoom 30 scene modes 5.8 ounces
	► Bottom line: Slim model has very quick startup, a fine selection of manual controls, a 2.5-inch LCD, and an optical viewfinder.			
4	Fujifilm FinePix F10 \$329 find.pcworld.com/48085	78 Good	<ul style="list-style-type: none"> Image quality: Very Good Battery life: Superior Overall design: Very Good 	<ul style="list-style-type: none"> 6.3 megapixels 36mm to 108mm zoom 5 scene modes 7.2 ounces
	► Bottom line: The F10 has strong image quality, easy storage, and a high ISO setting, but images had significant noise even at lower ISOs.			
5	Fujifilm FinePix E900 \$410 find.pcworld.com/52092	78 Good	<ul style="list-style-type: none"> Image quality: Very Good Battery life: Very Good Overall design: Good 	<ul style="list-style-type: none"> 9.0 megapixels 32mm to 128mm zoom 4 scene modes 9.2 ounces
	► Bottom line: Pricey model delivers high image quality and many controls. However, the image editing software is limited.			
6	Olympus FE-120 \$230 find.pcworld.com/52052	77 Good	<ul style="list-style-type: none"> Image quality: Very Good Battery life: Fair Overall design: Good 	<ul style="list-style-type: none"> 6.0 megapixels 38mm to 114mm zoom 16 scene modes 6.7 ounces
	► Bottom line: Low-cost camera has high image quality yet few manual controls. Battery life is limited, and the LCD is only 1.8 inches.			
7	Sony Cyber-shot DSC-H1 \$400 find.pcworld.com/49033	77 Good	<ul style="list-style-type: none"> Image quality: Fair Battery life: Very Good Overall design: Very Good 	<ul style="list-style-type: none"> 5.1 megapixels 36mm to 432mm zoom 7 scene modes 21 ounces
	► Bottom line: This bulky model features a 12X optical zoom with optical image stabilization, but overall image quality is mediocre.			
8	HP Photosmart R817 \$299 find.pcworld.com/49030	77 Good	<ul style="list-style-type: none"> Image quality: Good Battery life: Poor Overall design: Good 	<ul style="list-style-type: none"> 5.1 megapixels 36mm to 180mm zoom 9 scene modes 6.7 ounces
	► Bottom line: The R817 has in-camera red-eye reduction like the similar R717, plus a powerful zoom, but image quality is less impressive.			
9	Casio Exilim EX-S600 \$350 find.pcworld.com/52042	76 Good	<ul style="list-style-type: none"> Image quality: Good Battery life: Superior Overall design: Good 	<ul style="list-style-type: none"> 6.0 megapixels 38mm to 114mm zoom 30 scene modes 4.6 ounces
	► Bottom line: Ultrathin model boasts long battery life and high ISOs; it lacks a control dial, though, so you have to push too many buttons.			
10	Casio Exilim EX-Z57 \$250 find.pcworld.com/48086	75 Good	<ul style="list-style-type: none"> Image quality: Fair Battery life: Superior Overall design: Fair 	<ul style="list-style-type: none"> 5.0 megapixels 35mm to 105mm zoom 23 scene modes 4.6 ounces
	► Bottom line: The small, attractive EX-Z57 offers lots of scene modes, very long battery life, and a 2.7-inch LCD, but few manual controls.			

CHART NOTES: Prices and ratings are as of 2/6/06. Zoom range (focal length) is identified as 35mm equivalent; weights include batteries.

Wi-Fi Router Shares Cellular Broadband

WIRELESS

NEW EVDO NETWORKS from Verizon and Sprint support broadband-speed Internet access in ever-expanding locations, but service plans don't come cheap. And if your travel partners need Net access, too, the expenses for multiple plans can mount quickly.

Kyocera's \$299 **KR1 Mobile Router** offers a clever alterna-

KR1 Mobile Router

Kyocera

PCW Rating **82 Very Good**

A money-saving way for a team of mobile workers to share a single EVDO broadband account. Street: \$299

find.pcworld.com/52248

tive. Developed in partnership with D-Link, the KR1 is a Wi-Fi router that allows multiple Wi-Fi-enabled devices to share broadband access provided by a single EVDO PC Card.

I popped a Kyocera EVDO PC Card for Verizon Wireless's BroadbandAccess service into a slot on the back of a shipping router, ran the supplied ethernet cable between the router and a laptop, and completed a browser-based setup wizard. After that, I could easily connect a Wi-Fi-enabled notebook to the KR1 network—but only if I hadn't used the wizard to add encryption, since its arcane settings required changing a Windows



KYOCERA'S KR1 MOBILE Router lets you save money by sharing one cell-phone broadband connection among multiple Wi-Fi devices.

default for Wi-Fi adapter security. Fortunately, you can adjust the router's encryption settings through the Web browser interface. Net access via the KR1 network felt like DSL and was similar to working with the EVDO card con-

nected directly to the laptop.

One caveat: The product has a USB port for use with an EVDO phone, but this function requires carrier support that neither Sprint nor Verizon as yet provides.

—Yardena Arar



case LOGIC

NOTEBOOK TOTES FOR HER



ADDITIONAL STYLES AND COLORS AVAILABLE AT CASELOGIC.COM
Designed & manufactured by Worldwide Dreams LLC 800.221.8828 under license from Case Logic, Inc.

Go to find.pcworld.com/52306

Creative's Impressive-Sounding Zen VisionM

MP3 PLAYER

DESPITE A FEW shortcomings, Creative's **Zen VisionM** is a great Apple iPod alternative. I tested a 30GB shipping model of the video-ready music device, which possesses the finest color screen I've ever seen on a portable player.

The \$330 VisionM sounded great, too, though audio codec support is a bit weak—with support for MP3, WMA, and WAV, but not for AAC, FLAC, or Ogg Vorbis formats. Still, the player works nicely with PlaysForSure subscription services such as Napster. In addition, it carries an FM tuner/recorder and a voice recorder.

The VisionM does more

than play music. It supplies a raft of options for photo and video viewing on the unit's



CREATIVE'S ZEN VISIONM audio player shows and tells.

beautiful 320-by-240-pixel screen. The device supports enough video codecs to keep video enthusiasts happy, and an included dongle lets you link the player to a TV.

I had no trouble navigating files on the VisionM, thanks to the player's touchpad interface. With the touchpad at the default sensitivity setting, a few quick flicks of my thumb allowed me to move through lengthy lists of artists and albums, though landing on a specific selection was sometimes challenging.

Unfortunately, the VisionM has a few drawbacks when compared to the 30GB video-ready iPod. For starters, it's

about 1.5 times as thick, and you need a dongle to charge the player and sync files to it. Also, its MediaSource application needs work, especially when matched against Apple's slick iTunes. If you can look beyond these flaws, however, you'll find a capable portable media player with useful features and a stellar screen.

—Eric Dahl

Zen VisionM

Creative Technology

PCW Rating **84** Very Good

This iPod alternative offers good sound and a beautiful screen for viewing photos and video.

Street: \$330

find.pcworld.com/52236

PHOTOGRAPH: MARC SIMON

FREE* Check and Office Printer

Introducing

Versajette™

Versajette M300
Color Inkjet Printer



\$50 Value
BONUS
VersaCheck
Express Suite
Easily create checks
and business cards!

The Printers That Can Save You 75% On Ink

- Designed for precise text, brilliant photos and guaranteed bank-compliant checks
- Equipped with UltraSaver™ ink flow manager for up to 75% ink savings
- With Versalnk-nano™ SuperYield cartridges – print up to 2,500 pages per cartridge!

Versajette M400
Color All-in-One



To order your FREE printer today:

1-800-303-2620 • versajette.com

COMPLETE CHECK PRINTING SOLUTION

VersaCheck software and check paper, Versalnk MICR inks and more

*With purchase of ink, software and supplies – details at versajette.com



G7 Productivity Systems

Record Everything Your Employees Do On The Internet.

With Spector CNE on your network, you will easily prevent or eliminate problems associated with Internet and PC abuse.

Spector CNE provides an immediate and accurate record of every employee's:



Emails Sent & Received



Chats/Instant Messages



Keystrokes Typed



Web Sites Visited



Programs Launched



VCR-like Snapshot Recording

To learn more about Spector CNE and receive a **FREE** cost savings analysis for your business call **1-888-598-2788** or visit **www.SpectorCNE.com**

A few minutes a day of personal surfing, online shopping and chatting may seem harmless, but consider this...

A recent study concluded that employees spend an average of 75 minutes per day using office computers for non-business related activity (surfing porn, gambling, shopping or even searching for sex online). That translates into an annual loss of \$6250 per employee or more than \$300,000 per year down the drain for a company of just 50 employees.

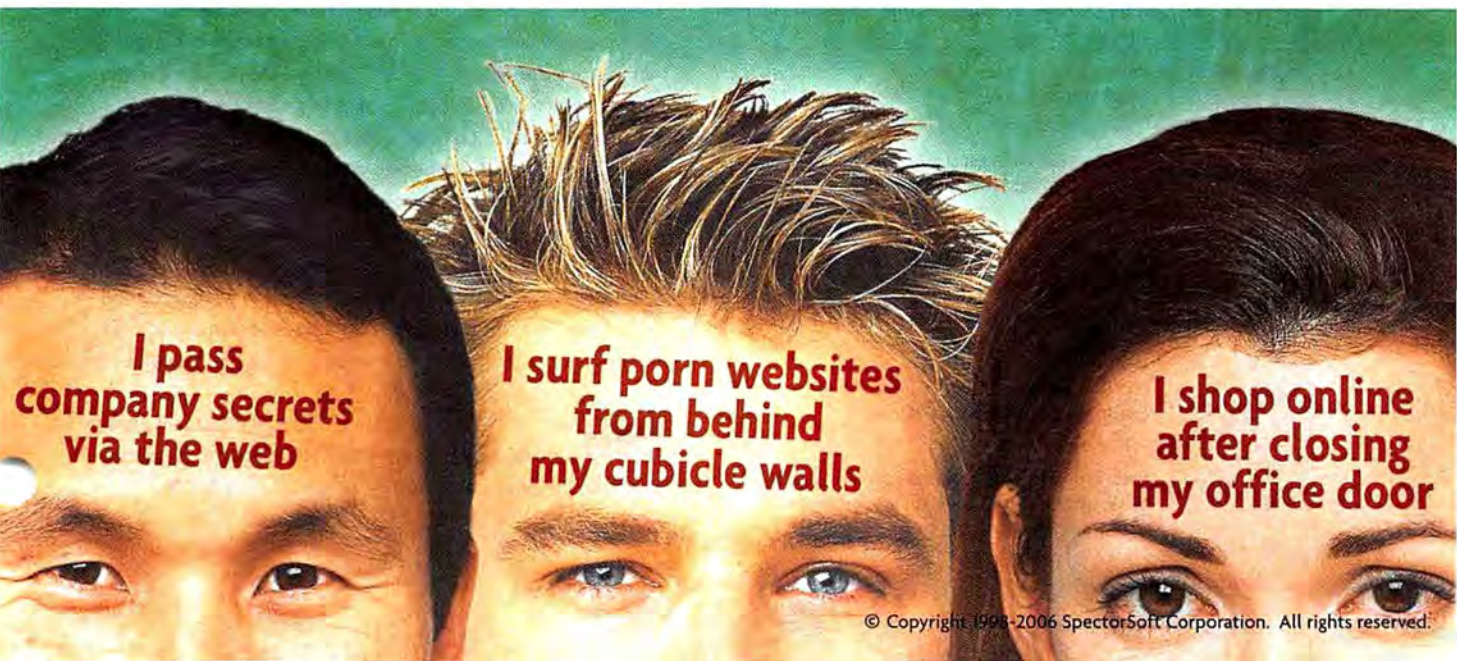
So how do you catch guilty employees who won't admit they are stealing company time?

Introducing Spector CNE – Corporate Network Edition

At the touch of a button, you can monitor any employee, any time, anywhere on the network. Spector CNE secretly records and archives chat conversations, instant messages (AOL, MSN and Yahoo), emails (including Outlook, Exchange, AOL and web-based mail like Hotmail), web sites visited, keystrokes typed, files downloaded, programs run and more.

And unlike many filtering and blocking tools, Spector CNE records everything they do in exact visual detail. So, you have absolute proof that goes way beyond just knowing they visited porn.com.

Take control of employee PC and Internet abuse with Spector CNE. It'll be the best software investment you make this year.



I pass
company secrets
via the web

I surf porn websites
from behind
my cubicle walls

I shop online
after closing
my office door

More Reviews at PCWorld.com

SHORT LIST: VIDEO

Shoot, Edit, and Share Video



MAKE THE MOVE to making your own movies with a minimal investment: an inexpensive camcorder, low-cost video-editing software, and a free video-sharing application.

—Alan Stafford, Senior Writer



CAMCORDER
Canon Elura 100, \$399 street
find.pcworld.com/52032

The Elura 100 is a big step up from Canon's ZR series; though it includes 16-by-9 aspect ratio, it is still very affordable.



VIDEO EDITOR
Adobe Premiere Elements 2, \$100 street
find.pcworld.com/49876

One of the best \$100 applications you can buy, with tons of controls and ample instructions on how to use them.



VIDEO-SHARING APP
Grouper, free
find.pcworld.com/52034

This neat application lets you share movies on your hard drive with the world or with your own little group.

SHORT LIST: COMMUNICATIONS

Keeping in Touch

TECHNOLOGY GIVES US many ways to stay connected. Here are three interesting variations: free Internet video calls, a cell phone with keyboard, and better instant messaging.

—Anne B. McDonald, Senior Associate Editor



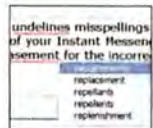
VIDEO VOIP
Skype Version 2, free
find.pcworld.com/52214

Make Web-based video calls at no cost, using this new version of the popular Internet telephony software and a Webcam.



CELL PHONE
LG F9200, \$150 with Cingular service contract
find.pcworld.com/52212

The keyboard-enabled F9200 handles e-mail, offers instant messaging, and takes photos—all at a reasonable price.



INSTANT MESSAGING
InteractiveGT IMSpellchecker XP, free
find.pcworld.com/52234

Most instant messenger software doesn't have a spelling checker, but this program alerts you to suspect words.

ONLINE EXTRAS

Web Services and More

POINT YOUR BROWSER toward PC World's Web site for the latest reviews, including looks at these notable products.

Office Live

Free

find.pcworld.com/52244

Microsoft's software and services bundle includes a free, basic Web site for your company. You can pay for monthly subscriptions to a block of 20 Web-based "applications," many of which are templates.



Google Toolbar 4

Free

find.pcworld.com/51988

This is the toolbar you'll keep; it's simple, elegant, and useful. New features include type-ahead help in the search text box.



Canon PowerShot SD430

Street: \$500

find.pcworld.com/52040

Wi-Fi camera offers strong image quality but costs more than most point-and-shoot cameras.



BEHIND THE RATINGS

99 **Superior** **ONLINE REVIEWS REINVENTED:** Our online product reviews now feature dynamic PCW Ratings that reflect technology changes, features, and price updates. If a product is still under consideration for review, its rating and ranking may move up or down. We've also added deeper Test Reports and powerful new tools that allow you to customize our charts to your tastes. And try out our newest feature: Complete Product Listings. Unlike our Ranked Charts, which are a snapshot of today's best products, our Complete Product Listings contain all the products we've recently reviewed. Even better, you can now use robust sorting and filtering tools to create the chart you want. Check out our revamped reviews at find.pcworld.com/50858.

Best Buy **BEST BUY AWARDS** go to hardware, software, and services in our ranked charts and other product comparisons that deliver outstanding quality and value.

TEST Center **THE PC WORLD Test Center** formally tests all products designated with this icon. For more on how we test specific products, visit find.pcworld.com/49974.

IT ALERT:

80% of IT directors buy more storage as a quick fix.[†]

Ready for
a long-term
solution?

Insight
IT For The Way You Work™

YOU CAN MAKE IT HAPPEN WITH INSIGHT

Certified Systems Engineers ▾ Leading Technology ▾ Leasing Programs



**Upgrade now to the new SYMANTEC™
Backup Exec™ 10d for Windows® Server!**
E180498

- Eliminate backup windows
- Improve reliability
- Industry's first web-based file retrieval with continuous disk-based data protection



SUN Fire X2100 X64 Server

A75-BFB1-H-2GB-FA8

- AMD Opteron Dual-Core 175 2.2GHz
- Operating system runs Solaris, Linux® and Windows®
- Ideal for Web services, including cache, security and proxy servers
- Binary compatibility across Sun's X64 product line



APPLE Xserve® RAID Hard Drive Array

MA208LL/A

- Dual 2GB Fibre Channel connectivity
- Hardware RAID levels 0, 1, 3, 5, 0+1
- Certified by Microsoft®, Novell®, Cisco®, Red Hat®, Terra Soft Solutions®, Brocade®, Veritas® and more
- 1-year warranty

insight.com/pcworld ▾ 800.998.8054

Tune in, get smart, buy wise.

PC World's Digital Duo...

the hot, hip and utterly irreverent review of all things tech offers informative, trustworthy technology advice from industry experts.



With fairness and flair, the **Duo** delivers real-world scenarios and real comparisons — everything you need to know to make the right buy in today's high-speed digital marketplace.

Click Here



Cohosts **Stephen Manes**, esteemed *PC World* and *Forbes* columnist, and veteran tech editor and product diva **Angela Gunn** of *USAToday.com*, evaluate, explore and — when necessary — deplore the world of digital technology. In association with *PC World*, the Duo's product reviews are backed by a wealth of test and survey data, and a powerful online presence at PCWorld.com.



Tune in to PC World's Digital Duo every week on public TV!

Go to www.pcworld.com/digitalduo to learn more about the show, view a clip, ask a question and find out how to see it in your area.

PC World's Digital Duo is made possible with the support of:

BenQ

BenQ is an industry leader in networking lifestyle devices with an expertise that encompasses display, storage, imaging, input, wireless and broadband markets. Visit www.BenQ.us for more information.

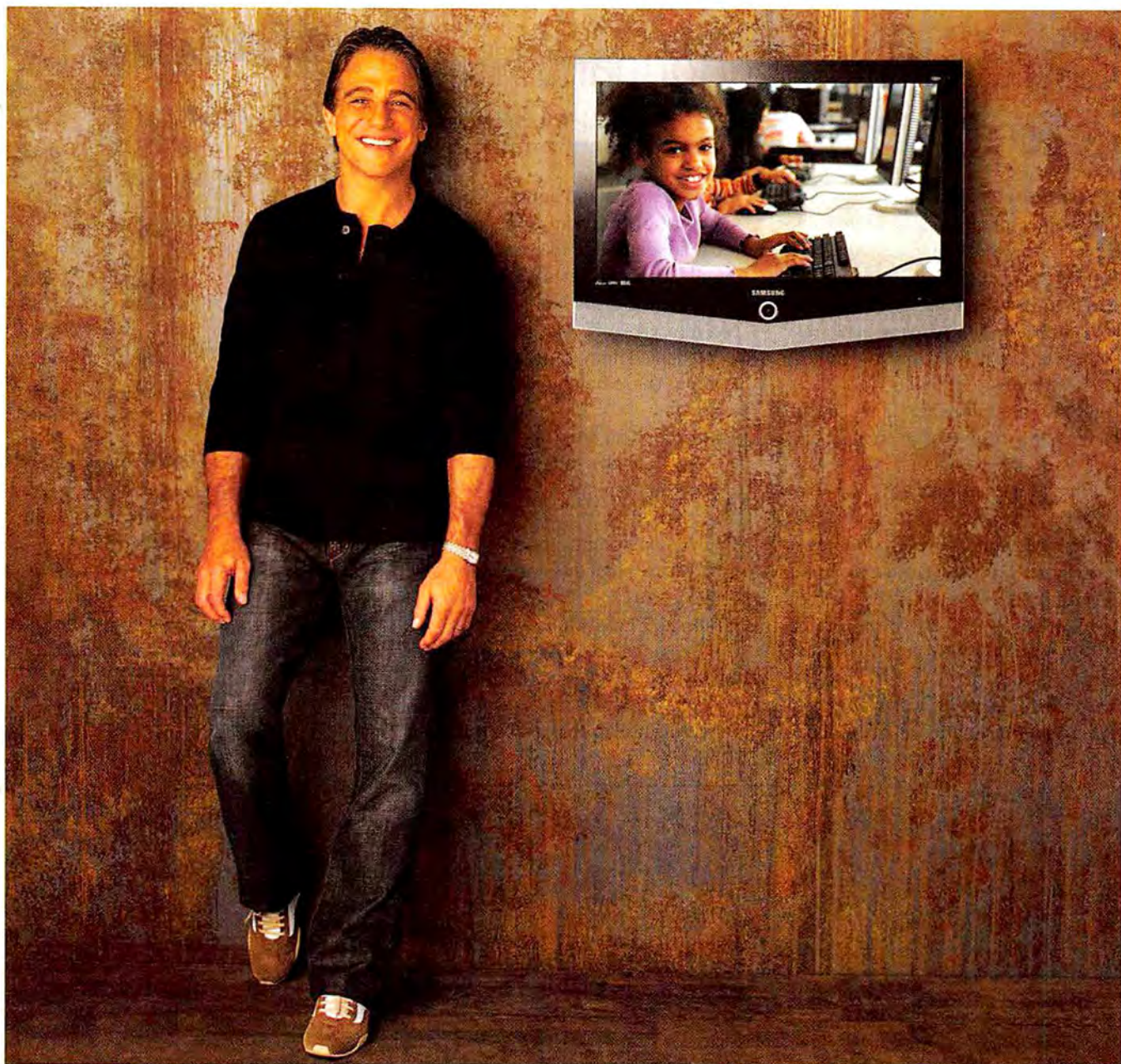


CDW® is a leading provider of technology products and services for business, government and education. CDW offers top name brands such as Cisco, HP, IBM, Microsoft, Symantec, Sony and more. www.cdw.com

Go to find.pcworld.com/52292

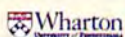


DLP™ Technology is a digital imaging device from Texas Instruments which enables projectors and TVs to create sharp, clear images. Make sure your projector or TV includes DLP™ Technology. www.dlp.com



Join Tony Danza, Samsung and Microsoft® in giving students a fighting chance.

Write an essay and you could win the school of your choice over \$1 million in Samsung technology and Microsoft software. Samsung believes that the finest education begins with the finest educational tools. Which is why our Hope for Education program, with help from Microsoft and Tony Danza, has donated over \$3 million in technology and software to the nation's neediest schools through an annual online essay contest. Please visit www.hopeforeducation.com to find out more about Samsung's Hope for Education. Because a little hope can make a big difference.



Microsoft



Low-Cost, High-Performance Peace of Mind

Grisoft's AVG Anti-Virus solution delivers what users want

Whether it is a small business or an enterprise-class organization, customers want the same things from their anti-virus solution. With damage due to viruses, worms, and other pests topping \$50 billion per year by some estimates, users want the solution to work with lethal precision. And they want the solution to be easy to install, easy to update, and easy on the wallet.

Customers in business of all sizes get that and more with AVG Anti-Virus from Grisoft (www.grisoft.com). "I get a lot of infected emails, but this software has caught it all," says David Inman, Technology Committee, AARP Tax-Aide. "No viruses have gotten through since I've been using AVG Anti-Virus. I really like it."

AVG Anti-Virus is available in versions tailored to support personal computers, SOHO environments of up to

five computers, and networks of any size; the network edition includes a tool for central administration. But no matter what version is needed, all users get the same value-laden package of benefits with AVG Anti-Virus, which has received numerous independent awards. These benefits and features include:

- Small update file size
- Little drain on system resources so you don't sacrifice performance for protection
- Highly competitive pricing, as low as \$109 to protect five computers for two years
- Free 24/7/365 technical support
- An extended two-year license instead of the usual one-year deal
- Industry-leading rapid response to new viruses to stay a step ahead of the villains



The AVG Anti-Virus product line supports all major operating systems and platforms.

- The peace of mind knowing your anti-virus solution has been developed by a company that has been a leader in PC security for 15 years
- To learn more about AVG Anti-Virus as well as the company's other security solutions, or to discover how to become an AVG reseller, go to www.grisoft.com.

SPONSORED BY:

Grisoft, Inc.

www.grisoft.com

Go to find.pcworld.com/52314

SUPERCHARGE YOUR SEARCH: USE PC WORLD'S FIND-IT SERVICE

Find quality information quickly and browse more efficiently with *PC World's* innovative Find-It service.

HOW IT WORKS

Enter a Find-IT URL (for example, find.pcworld.com/46300) in your browser or click the **USE FIND.PCWORD.COM** button on any PCWorld.com page and enter the five-digit Find-It number.

PRODUCT INFORMATION

Find-It URLs are also specific to each ad, for a fast and easy way to get to the product information you want.

PCWORLD
TECHNOLOGY ADVICE YOU CAN TRUST™

Don't waste your valuable time searching for the information you want. Use *PC World's* Find-It service.

perfect little addition to yo

The new Maxtor Shared Storage Drive is simply the easiest way to share music and work files across your small office or home network. Our easy-to-use software automates setup and lets you keep folders private. And our exclusive Drag and Sort™ tech...

Meet the ideal playmate for your small...

Go to find.pcworld.com/46843

Available at Best Buy, CompUSA, Fry's, Microcenter, OfficeMax, and Staples. Online at www.maxtor.com, www.pcworld.com, and www.dragandsort.com.

ADVANCED CAMERA		PCW Rating	Performance
1	Canon PowerShot G6 Retail \$579 find.pcworld.com/44872	86 Very Good	<ul style="list-style-type: none"> Image quality: Very Good Battery life: Superior Overall design: Superior
Bottom line: The G6 was best in show by performing well in our image quality tests and providing...			
2	Olympus C-7070 Wide Zoom Retail \$450 find.pcworld.com/44879	86 Very Good	<ul style="list-style-type: none"> Image quality: Superior Battery life: Superior Overall design: Good
Bottom line: The C-7070 has been around a while, but it has winning image quality and a bargain price...			
3	Canon PowerShot Pro Retail \$699 find.pcworld.com/43144	81 Very Good	<ul style="list-style-type: none"> Image quality: Very Good Battery life: Good Overall design: Good
Bottom line: Pro's compact case makes it a pleasant camera to take. Its battery life could be bet...			
	Canon PowerShot S2IS Retail \$499	79	<ul style="list-style-type: none"> Image quality: Very Good Battery life: Fair

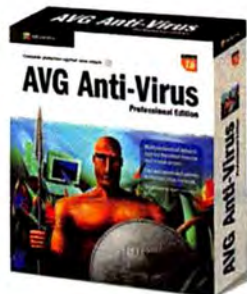
**2 year
License**

The best testimonial from 30 million users: They barely realize they use us!

With more than 30 million loyal users world-wide, Grisoft is the best choice for people and companies seeking maximum virus protection. With its easy and intuitive interface, Grisoft AVG Anti-Virus software doesn't bog down system resources; instead, it works quickly and seamlessly. Our singular focus on your protection lets YOU work - not worry. Our new product, AVG Anti-Virus plus Firewall, offers the best protection of your privacy against hackers.

Stop worrying and start downloading your
FREE 30-DAY TRIAL...

www.grisoft.com/doc/pcworld



**NOW also
available
plus Firewall**

Another great NEW product from GRISOFT

AVG Anti-Virus plus Firewall delivers comprehensive anti-virus protection and prevents unauthorized access to your computer from internal and external networks.



Tough on viruses, easy on users.

Go to find.pcworld.com/52270

THERE'S NEVER
BEEN a better time
to be a cheapskate. Free
utilities? We've got 'em. Want
a full-fledged image editor? A
few gigabytes of mail storage?
How about an entire office
software suite? We can top
that, easy. Take the whole
earth and solar sys-
tem. Free! ▶

fabulous freebies

- | | | | |
|-------------------------|------------------------------------|-----------------------------|------------------|
| 78 Utilities and tools | 79 Collaboration and remote access | 81 Communications | 85 RSS readers |
| 78 Search and reference | 80 Blogging | 82 Calendars and organizers | 86 Security |
| 79 Web-based e-mail | 81 Office applications | 82 Sharing and storage | 86 Entertainment |
| | | | 88 Video sharing |

The best things in life aren't just free—they're indispensable. Case in point: these outrageously useful downloads, sites, and services.

BY DYLAN TWENEY • ILLUSTRATIONS BY EDWIN FOTHERINGHAM



NADA
FREE
ZIP

NEWS

Mr. J. H. Thompson

IN THE FOLLOWING pages, we uncover the best free software and services you can find. These are the real deal—no hobbled half-products or demos that time out after 30 days. To launch straight into this sweet stuff, check out our online directory (find.pcworld.com/52516), which links you to all the downloads, services, and Web sites. Read on, and load up.

tune up

Utilities and system tools

Foxit Reader For viewing PDF files, Foxit Reader beats Adobe Reader hands-down. This program requires no installation—just run the executable—and it launches in about 1 second. Plus, it includes some desirable tools Adobe lacks, such as a “typewriter” that lets you edit any text in the PDF, not just in form fields.



CCLEANER SCRUBS YOUR system to remove undeleted files, unwanted cookies, and other computer-clogging ephemera.

System Information for Windows Run the executable, and in a few seconds this little utility will tell you more than you could imagine about your computer's hardware, operating system, installed programs, and so on. What you do with that information is up to you—the tool doesn't offer diagnoses or advice.

PDF Creator This printer driver lets you create Adobe Acrobat files from any application, just by selecting Print from within that app and choosing PDF Creator as your printer. It offers a multitude of options for controlling the output, including the ability to password-protect

PDF files to limit users' ability to print, copy, or modify the documents.

CCleaner Over time, your PC gets gunked up with old browser cache files, cookies, and other bits and pieces. CCleaner finds this digital detritus and zaps it.

Microsoft Tweak UI Control scores of hidden Windows XP settings, from determining what appears on your Start menu to specifying how users log on to your PC.

7-Zip It's just plain rude to send huge, uncompressed files. 7-Zip is a free utility that creates .zip compressed archives.

PuTTY If you need to connect to your Web server for maintenance, an SSH (Secure Shell) connection is safer than old-school Telnet, because the connection—including the part where you type your password—is encrypted. This SSH client will do the trick very neatly.

OmniFormat Want to convert BMPs to JPEGs? GIFs to PDFs? Word docs to TIF image files? As fast as you can copy files into a specified target folder, OmniFormat will turn them into the precise kind of file you want. Note: In order to

use OmniFormat, you must install an ad-supported PDF creation utility, PDF995.

find it

Online search and reference services

Google Desktop Harness the power of the Internet's most popular search engine on your own PC. Google Desktop indexes nearly every document on your hard drive and then includes those files in your Google searches. A sidebar displays information modules that you select, such as current news, updated items from recently visited sites, and local weather.



COPERNIC DESKTOP SEARCH adds a search field to the Windows taskbar.

MSN Search Toolbar With Windows Desktop Search This search tool indexes your hard drive and then delivers search results through a Windows application rather than relying on a Web browser. Also, it searches the Web via MSN Search, and can index your Outlook and Outlook Express e-mail.

Copernic Desktop Search Like Google Desktop and the MSN Search Toolbar, Copernic lets you search local files as well as Outlook and Outlook Express e-mail. But it gives you more control over your searches—for instance, letting you specify messages from a certain sender.

Free Download Manager If you're continually downloading files, this Internet Explorer companion can help. It speeds up single-file downloads, resumes interrupted downloads, manages your bandwidth usage, and schedules multiple file downloads for specific times. You can even use it to grab every page from a Web site.

FlashGot For Firefox users, this browser plug-in simplifies downloading, allowing you to download multiple files efficiently. It requires a download manager, and integrates that program's features into right-click menus in Firefox.

Project Gutenberg Like to read? Project Gutenberg has been creating electronic versions of the classics for three decades, and its library currently contains the full text of more than 17,000 volumes. Read them online, or get your own free CD or DVD containing thousands of titles.

Wikipedia Anyone can contribute to this online encyclopedia, so take its articles with a grain of salt. But Wikipedia is a clearinghouse for general info on almost anything. And you can access it from a PDA via **Wapedia** (www.en.wapedia.org).

Bartleby Like a reference library, Bartleby is home to several sources, including a dictionary, an encyclopedia, and various books of quotations. It offers audio pronunciations of words, a feature you have to pay for at other dictionary sites.

WordWeb This handy utility provides a dictionary and a thesaurus that work in

any application on your computer. Simply highlight a word and press **Ctrl-Alt-W** (or click the taskbar icon) to get a definition, synonyms, and other information.

podAmigo podAmigo works with Podomatic, a Web service that helps you organize and download podcasts from all over the Web. You tell it what podcasts you want, and it creates daily "radio shows" for you—optionally mixing them with selections from your own music library.

Hyperwords This Firefox browser plug-in renders any text—on any Web page—clickable. Highlight a word or phrase,

and a pop-up menu lets you submit the highlighted text to search engines, reference sites, online merchants, and more.

roam free

Collaboration and remote-access tools

LogMeIn LogMeIn simplifies checking your home PC from the road: Leave your home PC connected to the Web, sign on to a Web page, and the remote-access service shows your PC's screen in the browser. Then you control your PC from afar. ▶

For links, see find.pcworld.com/52516.

WEB MAIL



THE NEW FACES OF WEB-BASED E-MAIL

A FEW YEARS ago, you'd have found little to differentiate one Web-based e-mail service from another. How times change. These days you'll see big contrasts.

The best of today's services, **Gmail**, behaves more like a Windows application than like a Web mail service. What's more, Gmail

can be a huge time-saver. Instead of making you sift through your sent messages and your inbox to reconstruct an e-mail exchange, Gmail's interface presents every message in a thread—the ones you wrote on a given topic as well as those you received—in a single stack.

Gmail permits you to export and import contacts, and it allows you to set the reply-to address to something other than your gmail.com address—features that most free Web mail providers don't have. It also gives you POP3 access (so you can download messages to a Windows mail program), another rarity. And Gmail's 2.5GB of mail storage far outstrips other services' limits. These items make Gmail a fine replacement for your ISP's mail server: Use its Web interface when you're on the road, and a desktop program at home.

The traditional, forms-based Web interface of **Yahoo Mail** is quick and easy to use, and the service provides 1GB of mail storage. Yahoo's synchronization utility lets you sync your Yahoo

Mail address book with Outlook, Outlook Express, or a Palm device. We also tested a beta of Yahoo Mail's upcoming Ajax-based interface. This promising three-pane approach includes browser-like tabbed windows, an RSS reader, and the ability to search through attachments as well as through messages.

MSN Hotmail offers a respectable 250MB of storage to United States residents (others get 25MB). It has a Windows-like look, but the tiny buttons make the interface awkward, and the address book is limited to 650 entries. Its successor, Microsoft's Ajax-based **Windows Live Mail** (now in beta) is an Outlook-like application—or an Outlook Express-like one, if you select that view—offering drag-and-drop convenience.



**Best
BET**

GMAIL'S "STACKED" view of message threads saves time spent dredging through mailboxes. Just click each heading to open or close the message.

AIM Mail supplies 2GB of storage and integration with AOL Instant Messenger, so it can be good for IM addicts who want a generous Web mail account. But its large, animated ads are distracting—and screens can be slow to load. **Netscape Web-mail**, with 250MB of storage, features large, easy-to-click buttons. On the downside, its address book lacks the capability to import contacts, and its help files aren't searchable.

GetByMail The free version of LogMeIn won't allow you to transfer files. For that, use GetByMail. Once you've installed the utility, you can use your e-mail account to send and receive files.

Backpack With this easy-to-use Web application, you or your group can create shared Web pages. Pages may include to-do lists, notes, pictures, and more.

FreeConference.com Interested in hosting a 3-hour conference call with up to a hundred participants? You can set up calls via this Web site, and people join by calling a

number that FreeConference.com specifies. These calls are rarely local, so use your cell phone (if it offers free long distance) to keep this service truly free.

PBwiki Wondering about wikis? PBwiki is a great introduction to these collaboratively created Web sites. You can launch a new, password-protected wiki in just moments. The free version has ads, and gives you only 10MB of storage.

iTeamwork This Web service helps groups keep track of complicated projects. After creating a project, you can add and assign

tasks, and mark them complete. iTeamwork enables you to see at a glance what still needs to be done and by whom.

WriteBoard For collaborative editing, you can't beat WriteBoard. It lets you create, edit, and share documents with others—directly in your browser. You can even compare versions to see changes.

Groove Virtual Office Groove simplifies collaboration by letting you create shared workspaces where you and others can work on documents together, discuss plans, and more. After 60 days, the trial

BLOGS

BLOGGING TOOLS FOR EVERYONE

BLOGGING HAS COME a long way since the medium burst on the scene in 1999. Weblogs aren't merely vehicles for personal expression; many of them frequently break news, shape public opinion, and serve as lively channels for discussion.

You don't need to shell out money to start a blog when such outstanding free options abound. These free blog services can get you started, usually in less than 10 minutes.

Our favorite service is **Blogger**. The first major free blogging tool (launched in 1999), Blogger stays ahead of the game by remaining incredibly convenient to use and by offering a rich complement of features. If you have a Web server, you can use Blogger to publish your Weblog via FTP. But we like the easy way: hosting the blog on Blogspot. In about 5 minutes, we were able to create a blog, pick an appealing design, and start posting. Uploading images is a simple process, and the service supplies a generous 300MB of photo storage.

Blogger is especially friendly to mobile bloggers. Can't get access to a computer easily? Send a picture or a text message from your phone to a special SMS address, and up it goes. Blogger's Audioblogger service even offers voice blogging: Just call a special number, enter a code, and say your piece. Blogger converts the sound of your voice (up to 5 minutes' worth) into an audio file and posts it for all to hear.

Another excellent choice is **WordPress.com**, a hosted service built on popular open-source blogging tool WordPress.

WordPress.com doesn't support remote blogging, but it does have a clean, responsive interface that makes creating and editing posts easy, and it lets you upload 25MB of images. The site offers an appealing array of preformatted templates; but unlike Blogger, Wordpress.com won't let you edit the template code—you're stuck with its options.

The three other blogging services we reviewed are better suited for personal blogs than for professional ones. Aimed at a young audience, **LiveJournal**, **MySpace**, and **Xanga Classic**



BLOGGER'S TOOLS FOR formatting posts are simple, but its ease of use is unmatched.

include features for easily creating lists of friends and then seeing those friends' posts. LiveJournal has plenty of customizable options, and it carries no advertising. MySpace, on the other hand, is rife with ads—but it lets you store an unlimited number of small images, and uploading music and image files is easy. Finally, Xanga Classic has lots of (often garish) blog-formatting templates, but it has advertisements, too, albeit more muted ones than on MySpace. Xanga offers 200MB of image storage and can be a good way to stay in touch with friends—but the smaller community means your friends are more likely to be on LiveJournal or MySpace.

version of Groove loses some features, such as file synchronization—but its core collaboration features remain usable.

Netomat This social networking service permits you to share information via a PC or cell phone. Create a “hub” based on an RSS feed or your own content, and invite some friends; whenever the hub receives new photos or other content, the update gets beamed to every member of the group via SMS or via the Netomat Hub application, which runs on their computers or compatible cell phones.

get to work

Business and productivity tools

Firefox Still using Internet Explorer? It's time you started using Firefox for most of your Web browsing—it's a faster, more secure, and more flexible Web browser.

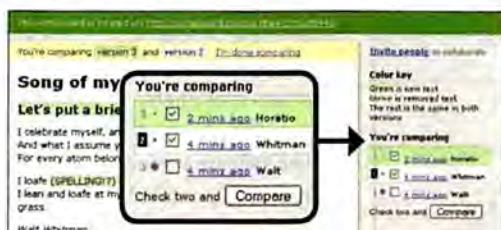
OpenOffice.org Though it's a full-fledged, Microsoft Office-compatible word processor, spreadsheet, presentation package, and database, OpenOffice.org won't cost you one thin dime. It's solid enough (and sufficiently compatible with Office documents) that you may never have to invest in an office suite again.

ThinkFree Online Beta This office software, which runs in your browser, lets you edit Microsoft Office-compatible documents, spreadsheets, and presentations from any Internet-connected system. The programs are slow to load but work beautifully once they're running.

AbiWord If all you need is a word processor, try AbiWord, a lightweight and full-featured word processor that is compatible with Microsoft Word documents. It looks and feels a lot like Word, too.

Pegasus Mail A longtime favorite among e-mail power users, Pegasus takes a little

getting used to—due to its many options and unconventional interface—but it provides a huge amount of control over your mail, including mail merges and a greater range of flexible filtering options than any other free e-mail client offers.



WRITEBOARD OFFERS COLLABORATIVE editing, allowing a group to create, edit, and share documents.

Thunderbird You may not care for Thunderbird's simple look, but its tight security and robust stability make it the top choice for managing e-mail on your PC.

Steganos LockNote Need to keep a secret? LockNote is a simple notepad with strong encryption. You set a password, and once you close the file, you won't be able to see the text (which is stored inside the LockNote executable file) without entering the password. And neither will anyone else.

Alleycode Here's a simple HTML editor for people who are comfortable with code but want some support for creating Cascading Style Sheets (CSS). Alleycode is not for novices, but it's efficient if you know your way around a Web page and need to do some quick editing.



COMPLICATED BUT POWERFUL, Pegasus has a sophisticated set of mail filtering tools.

Nvu Don't know much about HTML? Try Nvu, a sophisticated Web page editor that doesn't require any understanding of the underlying tags. What you see in Nvu is close to what you'll see in a browser.

SeaMonkey Mozilla.org's e-mail and browser programs have found new life in this suite of Internet tools, which includes a chat client and a capable HTML editor, and lets you sync your address book to a Palm device (see review, page 60).

keep in touch

Communications tools and services

Trillian Basic If you use AIM, ICQ, IRC, MSN Messenger, and/or Yahoo Messenger, ditch your proprietary clients and get Trillian Basic instead. Its clean, ad-free interface is a breath of fresh air.

eFax If you don't mind having your fax number in an area code other than your own, eFax is a big improvement on the fax machine that sits on your desk turning perfectly good paper into printed junk mail. You can send and receive faxes free of charge, viewing or printing them via the service's eFax Messenger software.

QNext This universal instant messenger service includes robust music-sharing and photo-sharing features. It's overkill for just chatting on AIM—but for sharing tunes and snaps, QNext is a kick.

SightSpeed For live video calls, it's hard to beat SightSpeed, which is simple to set up, neatly synchronizes lip movements and audio, and provides easy in-call controls. The free version permits unlimited one-to-one video calling.

Skype People who like to gab on the phone may like Skype, which has been offering free PC-to-PC voice calls ▶

For links, see find.pcworld.com/52516.

(with text chat and file transfer capabilities) since 2003. It's easy to set up and has a huge user community. The current version makes video chat available. But Skype-to-telephone or telephone-to-Skype calls cost you money.

Festoon Beta This clever add-on for Skype and Google Talk lets users of these two services call each other. It gives video chat capabilities to Google Talk. And it includes a number of trippy visual effects for spicing up your video calls—by placing your face in the middle of a daisy, for instance.



WITH SKYPE, you can chat (via video, voice, or text) with millions.

markably well done calendar and address book application for Windows. Even if you don't own a PDA, you might like using this organizer anyway, to help keep your life in order. It's free for anyone, not just for Palm customers.

Yahoo Widgets Formerly known as Konfabulator, this application puts "widgets" on your desktop that provide information such as stock

tickers, weather reports, and photos; alternatively, they can provide services, like running search engine queries or storing notes. Choose from thousands of widgets, or as many as your desktop can bear.

SyncNotes This is a sticky-note application that runs on your computer—and it features an online account that you can use to view and edit your notes from any Web or WAP browser.

FreeMind Psychologists say that an effective way to take notes is to put them in a "mind map"—a free-form tree structure that mimics the way your brain works. FreeMind does exactly that. It acts like an outliner—except that, instead of working with headings and subheadings, you create nodes and subnodes that branch from a central point. Each node can contain text, pictures, special icons, or colorful formatting. FreeMind is useful for taking notes in class, outlining books, or even planning a route to world domination.

Furl Like Del.icio.us, Furl lets you save your favorite Web pages in an online ac-

nail it down

Calendars and organizers

Yahoo Calendar If you don't object to an occasional ad appearing next to your appointment book, Yahoo's calendar is one of the best available online. Its Time Guides let you easily insert holidays, local weather reports, and events from Yahoo Groups into your calendar; and optional software syncs your calendar with Outlook, Outlook Express, and Palm PDAs.

Ta-Da List This straightforward to-do list manager lets you create lists, reorder items, and check them off when completed—from the comfort of your browser.

Palm Desktop Designed to sync with the company's PDAs, Palm Desktop is a re-

Del.icio.us Forget browser bookmarks—Del.icio.us can keep track of your favorite sites much more easily, and from any PC online. When you post an item to Del.icio.us, you add keywords; afterward, you can search for items that you or other users have tagged with these words, making this site a handy search tool, too.

EssentialPIM Free EssentialPIM combines a calendar, a contact manager, a to-do list, and a notes manager. Its EPIM Today view displays your day at a glance, and import and export tools enable you to share information with other organizers.



YAHOO WIDGETS INCLUDE attractive tools for searching Yahoo, displaying images, showing weather info, and more.

count that you can access from any computer. However, Furl lets you save the entire page—so even if the site becomes inaccessible later, you still have a copy.

share it

File sharing and storage services

FolderSync USB keys are great for shuttling files around, but how do you ensure that you have the most recent versions of your files? Easy: You use FolderSync to sync files between any two folders. ▶

For links, see find.pcworld.com/52516.

SECURITY CHECK

A WORD TO THE 'WARE'-WARY

MALWARE IS MALICIOUS software—often installed secretly along with seemingly legit programs—that can slow your PC and spy on you. All software in this round-up has been scanned by *PC World* and found malware-free. For more definitions, see "Software Lexicon: Know Which Ware Is What" (find.pcworld.com/52518).

Lenovo recommends Windows® XP Professional



EVERY FAMILY NEEDS A BLACK SHEEP.

It looks like a revolutionary. But don't let the titanium cover fool you. Underneath, it's all ThinkPad. The Lenovo ThinkPad Z60 titanium with Intel® Centrino® Mobile Technology (select models).

New Thinking. New Thinkpad.™

lenovo™

Lenovo recommends Windows® XP Professional

WELCOME TO THE LENOVO LINE OF PCs.

It takes all kinds to make up a family. Well, here are some members of ours. Serious machines for serious business. Lenovo ThinkPad® notebooks and ThinkCentre® desktops for the creative, practical, ambitious, nomadic, thrifty and even clumsy members of your family. Each featuring the kind of world-class technology that continues to make ThinkPad and ThinkCentre the envy of the industry. Just part of a whole line of Lenovo PCs.



ThinkPad R51e

distinctive innovations

ThinkPad Productivity Center – ThinkPad help at your fingertips

system features

Intel® Celeron® M 380 (1.6GHz)

Microsoft® Windows® XP Home®

ThinkPad BG WiFi Wireless

14" XGA (1024x768)

256MB DDR2 memory at 533MHz

40GB Hard Drive, CD-RW/DVD Drive

think express model

\$879

PN 1844DUU

Option

ThinkPad Leather Carrying Case®

\$99 PN 10K0209

ThinkPad T60

distinctive innovations

ThinkVantage™ Client Security™ – Strong security as a standard feature

system features

Intel® Centrino® Duo Mobile Technology

Intel® Core™ Processor T2300

Intel® Pro/Wireless 2915ABG

Microsoft® Windows® XP Professional

14" XGA TFT (1024x768)

512MB DDR2 memory at 667MHz

60GB Serial ATA Hard Drive, CD-RW/DVD Drive

think express model

\$1499

PN 1953D6U

Option

ThinkPad T60/Z60m 9 Cell Li-Ion Battery

\$179 PN 40Y6797



ThinkPad Z60 notebook available with Intel® Centrino® Mobile Technology

ThinkPad Z60m

distinctive innovations

ThinkPad Productivity Center – ThinkPad help at your fingertips

system features

Intel® Centrino® Mobile Technology

Intel® Pentium® M Processor 740 (1.73GHz)

Intel® Pro/Wireless 2915ABG

Microsoft® Windows® XP Home

15.4" SXGA Widescreen (1280x800)

512MB DDR2 memory at 533MHz

40GB Serial ATA Hard Drive, CD-RW/DVD Drive

think express model

\$1149

PN 2529-03U

Option

ThinkPad 90W AC/DC Combo Power Adapter

\$119 PN 40Y7630

ThinkPad Z60t

distinctive innovations

ThinkPad Productivity Center – ThinkPad help at your fingertips

system features

Intel® Pentium® M Processor 740 (1.73GHz)

Microsoft® Windows® XP Professional

ThinkPad ABG WiFi Wireless

Integrated BT and Verizon WWAN®

14.1" XGA Widescreen (1280x768)

512MB DDR2 memory at 533MHz

80GB Serial ATA Hard Drive, DVD Recordable Drive

think express model

\$1799

PN 2511-FEU

Option

ThinkPad Advanced Mini Dock

\$219 PN 250410U

ThinkCentre A52 Tower

distinctive innovations

Rescue and Recovery™ – One-button recovery and restore solution

system features

Intel® Celeron® D Processor 331 (2.66GHz)

Microsoft® Windows® XP Professional

256MB memory

40 GB Hard Drive, CD-ROM

6 USB 2.0 ports (2 Frontside)

think express model

\$479

PN 8288A2U

Option

17" ThinkVision® L171 Flat Panel Monitor

\$299 PN 9417AB1

ThinkCentre A52 Tower

distinctive innovations

Rescue and Recovery™ – One-button recovery and restore solution

system features

Intel® Pentium® 4 Processor 521 (2.80GHz)

Microsoft® Windows® XP Professional

512MB memory

80GB Hard Drive, CD-RW/DVD Drive

6 USB 2.0 Ports (2 Frontside)

think express model

\$649

PN 828841U

Option

Lexmark X7170 All-In-One Printer with USB cable

\$149 PN 40Y8260

To shop or locate
your local reseller

Call 1 866 426-6646

Go to lenovo.com/newthinkpad/m540

lenovo

Availability: All offers subject to availability. Lenovo reserves the right to alter product offerings and specifications at any time, without notice. Lenovo is not responsible for photographic or typographic errors. **Pricing:** Prices do not include tax or shipping and handling or recycling fees and are subject to change without notice. Reseller prices may vary. **Warranty:** For a copy of applicable product warranties, write to: Warranty Information, P.O. Box 12195, RTP, NC 27709, Attn: Dept ZPVA/B676. Lenovo makes no representation or warranty regarding third-party products or services. **Footnotes: (1) Mobile Processors:** Power management reduces processor speed when in battery mode. **(2) Included software:** may differ from its retail version (if available), and may not include user manuals or all program functionality. License agreements may apply. **(3) Memory:** For PCs without a separate video card, memory supports both system and video. Accessible system memory is up to 64MB less than the amount stated, depending on video mode. **(4) Hard drive:** GB = billion bytes. Accessible capacity is less; up to 4GB is service partition. **(5) Certain IBM and ThinkPad logo products:** are not manufactured, warranted or supported by IBM or Lenovo. IBM and Lenovo logos and trademarks used under license. Contact Lenovo for details. **(6) Client Security Solution:** preloaded on select models; requires software download. **(7) Wireless:** based on IEEE 802.11a, 802.11b and 802.11g respectively. An adapter with 11a/b, 11b/g or 11a/b/g can communicate on any/any of these listed formats respectively; the actual connection will be based on the access point to which it connects. **(8) Activating Verizon Wireless Service:** Lenovo customers will be contacted after purchase to activate service; requires separate agreement with Verizon Wireless and is subject to the Customer Agreement, Calling Plan and credit approval. Service and airtime charges will apply; \$175 early termination fee. Verizon Wireless, not Lenovo, is solely responsible for service. Service not available in all areas; purchaser is responsible for verifying that service is available for the intended location before purchasing a computer equipped with WAN card. Network details, coverage limitations and maps at: <http://www.verizonwireless.com/b2c/mobileoptions/broadband/serviceavailability.jsp?opener=b2b>. **Trademarks:** The following are trademarks of Lenovo: ThinkPad, ThinkCentre, UltraConnect, Access Connections, Rescue and Recovery, ThinkPad Part Replicator II, Active Protection System, ThinkPad dock, ThinkVantage and ThinkVision. IBM and the IBM logo are registered trademarks of IBM and are used under license. Microsoft and Windows are registered trademarks of Microsoft Corporation. Celeron, Celeron Inside, Centrino, Core Inside, Intel, Intel Core, Intel Inside, Intel SpeedStep, Intel Viiu, Intel Xeon, Itanium, Itanium Inside, Pentium, Pentium Inside, the Centrino logo, the Intel logo and the Intel Inside logo are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. Other company, product and service names may be trademarks or service marks of other companies. ©2006 Lenovo. All rights reserved. Visit www.lenovo.com/safecomputing periodically for the latest information on safe and effective computing.

BeInSync If carrying a USB key is too much trouble, use BeInSync to ensure that you always have access to your most critical files. It keeps folders, IE favorites, and Outlook e-mail and contacts automatically (and virtually instantly) synchronized between up to five PCs. You can share files with other people, too.

FolderShare Like BeInSync, FolderShare keeps data files synchronized between multiple computers. It won't sync Outlook data, but it does have an OS X version, so you can use it to sync between PCs and Macs. Note: Microsoft has acquired FolderShare's maker (also called FolderShare). A Microsoft representative says that the program will remain free.

Flickr This popular photo-sharing service makes uploading pics, sharing them with others, or posting them to your Weblog a breeze. If you upload full-size images, though, you'll quickly burn through the paltry 20MB monthly upload limit.

Kodak EasyShare Gallery Sure, Kodak wants you to upload photos so you'll be tempted to buy prints from its site. (And it'll delete your galleries if you don't order anything for a year.) But this site's usability, mobile-phone access options, and lack of upload restrictions make it our top pick for photo sharing. The photo prints look attractive, too. Tip: A 15-cent order—okay, \$1.65 with tax and shipping—is all it takes to keep your galleries alive.

Yahoo Briefcase Its interface is almost starkly simple—which is why we like Yahoo Briefcase. It's one of the easiest ways we know of to store and share files (up to 30MB of them) online.

BitTorrent You may have heard that some folks use BitTorrent to trade copyrighted music and movies. But it's useful for downloading legitimate content quickly or for sharing your own (though creating "torrents," or files you want to share, is quite a bit trickier than downloading them).

Avvenu Like many file sharing services, this one lets you access your files in a ▶

For links, see find.pcworld.com/52516.

RSS READERS



DELIVERED: THE NEWS YOU WANT

IF YOU STILL take a hunter/gatherer approach to finding news—visiting one Web site after another—it's time to join the modern world. RSS news-feed readers are a far faster and easier way to stay abreast of the news you care about. An RSS reader downloads specially formatted XML files from

the Web sites you're interested in and then displays all their news to you in one place—no more browsing from site to site.

Software-based news readers are generally the fastest, and it's hard to beat **Abilon**. This powerful, speedy reader offers you a choice of views: You can opt for a three-pane view with feeds on the left, headlines in the middle, and articles on the right; or you can switch to a two-column view. It has a built-in tabbed browser, too. One tool lets you quickly and easily post items to your Blogger, LiveJournal, or Movable Type blog. And finally, Abilon speedily imports and exports OPML (Outline Processor Markup Language) files, which are crucial for transferring your list of subscriptions to another news reader. Caveat: As of press time, Abilon's parent site (www.abilon.org) was down; this handy piece of freeware may be an orphan.

Other fine choices in PC-based news readers include **Rss-Reader** and **Feedreader**. While not as elegant as Abilon, both display your feeds simply and cleanly. With RssReader, you have the advantage of viewing all the stories from a feed or

group of feeds in a single, tall, scrolling window; Feedreader, by contrast, displays the content from only one story at a time. However, Feedreader's keyboard shortcuts are more flexible. Both programs import large OPML files slowly.

If you use more than one PC, a Web-based feed reader may be a better selection. By far the best choice in this category is **Bloglines**. This site uses frames, so you see a list of your subscribed feeds on the left pane while you read the latest articles from each feed on the right. Shortcut keys help you speed through the news, article by article or feed by feed. Bloglines also supports the import and export of OPML files.



**Best
BET**

WITH ABILON YOU can choose between this three-pane view and a more traditional two-pane display.

Another popular Web-based reader is **NewsGator**, which shows feeds in a clean, readable display. Unlike Bloglines, it doesn't use frames, so as you scroll down the list of articles, you lose the navigation controls that let you skip from feed to feed—pretty annoying. Also, NewsGator can import OPML files but it won't export them, so you can't transfer your feeds to another reader if you decide NewsGator's not your pet.

Web browser. What's unique about Avve-nu is that it lets you browse files and view thumbnails of images from a cell phone or PDA, too. No need to upload files to a server—the files stay on your desktop.

lock it up

Security and antivirus tools

Spybot Search & Destroy Spyware: It can slow your system, monitor where you surf, and even make your browser malfunction. Though no tool is a cure-all, Spybot is a powerful antidote to many ills. In addition to finding and deleting spyware, Spybot can continuously monitor your system for changes, giving you an opportunity to permit or disallow critical Registry modifications before they happen.

Lavasoft Ad-Aware SE Personal Another reliable tool, Ad-Aware scans your PC for spyware, uncovering digital snoops that lurk in memory or on your hard drive. The free version performs on-demand scans only, not continuous monitoring. But Ad-Aware catches some programs that Spybot misses (and vice versa).



SPYBOT SEARCH & DESTROY'S simple interface makes it an excellent starting point in your quest to defeat spyware.

Microsoft Windows Defender Yes, you do need another antispyspyware app. Though this beta software (formerly known as Microsoft Windows AntiSpyware) expires on December 31, 2006, it's worth downloading. Microsoft's tool catches spyware that other programs don't—including the dangerous rootkit carried by some Sony music CDs that were released last year.



All-in-One Secretmaker If you must use Internet Explorer, the least you can do is plug its security holes. All-in-One Secretmaker can help. It blocks banner ads and pop-ups, filters spam, and offers a collection of utilities for cleaning up and securing your system.

ALL-IN-ONE SECRETMAKER offers a vast array of options for ousting ads, cookies, spyware, and more.

ZoneAlarm This firewall keeps watch over inbound and outbound Internet connections, helping avert attacks by hackers and spyware programs. It offers greater control and is easier to use than Windows XP's built-in firewall. Make sure that you download the basic firewall, which is free for personal and nonprofit use, instead of the trial version of ZoneAlarm Pro.

Anonymizer This company hosts a free anonymous browsing service at its home page (www.anonymizer.com). Enter a URL, and Anonymizer displays the page you want—without revealing your IP address, your cookies, or any other information to the sites you surf.

GRC Shields Up Think your PC is secure? Visit programming guru Steve Gibson's site to be sure. Shields Up is a convenient browser-based tool that checks for common vulnerabilities, such as open ports and hackable file-sharing services.

Trend Micro Housecall If installing antivirus software isn't an option, do yourself a favor and visit this site regularly. Trend Micro's software runs in your browser to scan for and eliminate viruses on your computer.

AirDefense Personal Lite You should never lose sight of the security risks involved in using Wi-Fi. This simple pro-

gram alerts you whenever you connect to an insecure wireless network or to a hot-spot that you haven't designated as safe.

Avast Home Edition This easy-to-use anti-virus scanner is free for noncommercial or home use. Unlike online scanners, it can perform a boot-time virus scan (the most effective way to catch viruses) and will continually monitor your system for threats. Avast is free, but you must register at the company's Web site to use the program beyond its 90-day trial period.

kick back

Entertainment software and services

Google Picasa Forget the clunky image gallery software you got with your digital camera. There's no easier way to organize, touch up, and share photos than Picasa.

Irfanview For basic image editing, file format conversions, and the like, simple-to-use Irfanview is your best bet. It installs quickly, doesn't take up much room on your hard disk, and supports a huge variety of image file formats.

The GIMP If you can't afford to spend hundreds of dollars on Photoshop but still need sophisticated image-editing software, consider the GNU Image Manipulation Program, aka the GIMP. It features an arsenal of image tools for retouching, layer-based composition, and more. ▶

For links, see find.pcworld.com/52516.



Available at participating
retailers, including:

COMPUSA
We got it. We get it.

BEST BUY
BestBuy.com

Electronics
City of Fry's



Lights, camera, MAGIX

MAGIX Movie Edit Pro 11 is your all-round video solution: Award winner of 32 tests*, it offers amazing cuts, special effects, 3D transitions, and brilliant surround sound.

It's never been easier to turn your video recordings into movie classics. Experience your movies in top quality on your TV with Double Layer DVD and HD support, and animated menus. Access to the free **MAGIX Online Photo & Video Album** makes watching and sharing your movies online a reality. **MAGIX** transforms every PC into a complete film studio. All you have to do is find the stars.

Videomaker Videomaker,
July 2005

"No video editing software has ever offered so many features for so little money period." "This product will do almost everything a hobbyist video editor would ever want to do."
This award refers to the previous version MAGIX Movie Edit Pro 10.

www.magix.com



the multimedia company

Pandora Don't play the same song until you're sick of it. Enter the name of an artist or song you like, and Pandora will create a custom "radio station" for you that plays similar music, right in your browser. This service makes surprisingly good choices, and it uses your feedback to refine them further. And if you get tired of one station, you can just create a new one.

iTunes We don't call iTunes a slick music player just because it works with our beloved iPods. Its user-friendliness redefined the market, and it's still the easiest-to-use audio player and CD ripper going.

Kristal Audio Engine Need to record a demo tape of your garage band? Kristal is your mixing deck. But you'll need some audio engineering expertise to make the most of this sophisticated audio mixing and sequencing platform.

Audacity This simple sound-file editor can import audio files in a variety of formats and can export them as .wav, MP3, or Ogg Vorbis files. It's a snap to use.

Google Earth Turn the globe into your plaything. Like some cybernetic angel, you spin the Earth, tilt it, turn it upside

down, or zoom in to take a closer look at almost anything: New York City, the Grand Canyon, or your own house.

Celestia When the world seems too small after all, launch Celestia. You can zoom through the solar system—and beyond—for real-time or accelerated views of planets, moons, comets, stars, and even the Hubble space telescope. Heavenly. ■

Dylan Tweney is a freelance writer and editor in San Mateo, California.

For links, see find.pcworld.com/52516.

VIDEO SHARING

A VIRTUAL HOME FOR EVERY FILM

YOU PUT A lot of effort into your home movies: recording them, and then editing them down to tight, 1-minute shows. To share these movies, you could burn them onto DVDs and mail them to your friends—but there's an easier way. Several hosting services let you upload your videos and then share them—with your friends or with the entire world—via the Web.

One of our favorites is **Revver**, a relative newcomer. Like the other services here, Revver sells ads that appear next to your videos—but unlike the others, Revver shares 50 percent of the ad revenue with you. To facilitate this, you have to enter a bit more information than on other sites. An optional utility, Revver Uploader, simplifies uploading files over 10MB. Revver does not limit the size or quantity of files you can upload.

The service's playback interface is simple and reliable. Even if you didn't set up your videos as streaming files, Revver streams the video on playback. To protect ad revenue, the site captures the video so it can't be viewed outside Revver—frustrating if you want friends to be able to download your video files.

Comparatively basic, **Put-file** doesn't automatically stream video (you may have to download a whole file before you can view it), but it works reliably and well. You can upload as many video or audio files as you like under 25MB (2MB for still images). A handy drop-

down box lets you select the size of the video. Put-file doesn't support keyword tagging, so videos can be hard to find later.

Vimeo may be the easiest service to use. You can upload 20MB of video files per week. Videos are not streamed on playback, but a link lets you save files locally.

Want to share lots of big files in addition to videos? Try **Streamload Mediamax**, a storage site that gives you 25GB of free online storage and permits file uploads up to 25MB. (You're limited to 500MB of downloads per month.) The browser-based upload tool is simple and elegant.

For watching videos, Mediamax has a promising-looking frame-by-frame view that enables you to look at selected stills. However, many of the frames looked black in our tests, and the service's in-browser playback didn't function either. Fortunately, Mediamax lets you download

the original video files so you can play them back locally.

The lengthy approval process of **Google Video** may not appeal to amateurs, but the service reaches a large audience.



REVVVER DISPLAYS VIDEOS in the browser, and tacks ads on to each one. But it shares the ad revenue with you.

**No contract. No overages.
No monthly bills.**

No problem – just free!*



USR9601



USR9610



USR9620

Free
Internet
calling that
just works

The whole world
can talk for free.
Skype.com

skype™

**MAKING FREE CALLS OVER THE INTERNET JUST GOT EASIER!
IT'S AS SIMPLE AS 1-2-3!**

1. Load Skype software.
2. Install either the USR9601 USB Internet Phone, the USR9610 USB Internet Speakerphone or the USR9620 USB Telephone Adapter (which allows you to use your regular phone for making free Skype phone calls).
3. Dial and talk as long as you want anywhere in the world for free!

Find out how we do it at www.usr.com/talk

*No fees are required for making Skype to Skype phone calls. Phone/adaptor must be purchased.
Free Skype to Skype phone calling requires a PC with high-speed Internet access.
Skype is a registered trademark of Skype.

USRobotics®

Go to find.pcworld.com/52264



MICROTEK
4" x 5" Film Holder

Legal-size scan bed

4800 x 9600 dpi optical

Removes dust and scratches

4.0 max. optical density **DIGITAL ICE**

Includes EZ-Lock™ Film Templates for scanning 35mm slides and strips, medium format and 4 x 5 film.

KEEPS FILM FLAT.

ScanMaker® i800 Takes film scanning to the next level.

The i800 scanner from Microtek offers a lot of great features that make it a class leader, but what really makes it stand out from the pack is its new EZ-Lock™ film carriers featuring spring-actuated tension grips. This carrier design keeps your film flat, for scans that are sharp from edge to edge. A full set of bundled software combining Automatic Color Restoration with Digital ICE technology for photos and film makes the i800 hard to overlook.



ScanMaker i800 Includes EZ-Lock™ Film Templates



4 x 5



35 mm strip



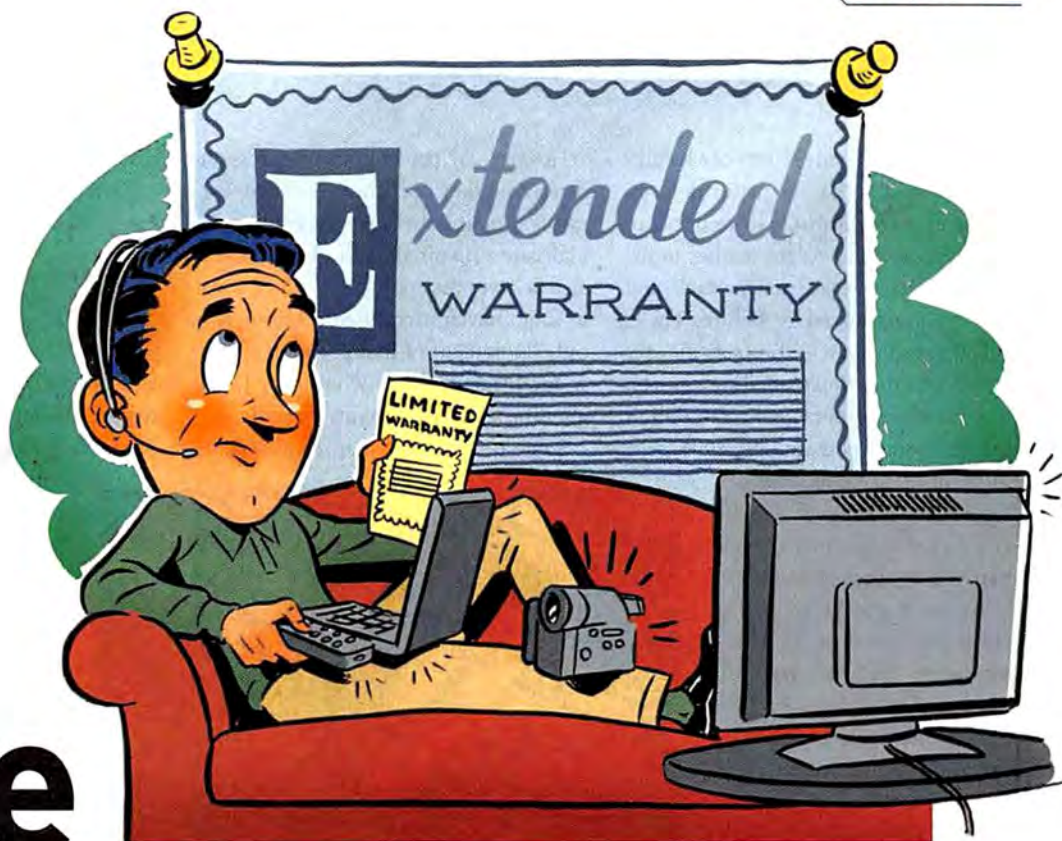
35 mm slide



6 cm x 22 cm

MICROTEK
www.microtekusa.com

Go to find.pcworld.com/52338



Are EXTENDED WARRANTIES Worth It?

With standard warranties dwindling, you need to decide whether to pay for coverage you used to get for free. Our survey of 2000 readers reveals some surprising data about extended plans.

WHEN I BUY SOMETHING, I want it to last. But if it fails prematurely, I want the company I bought it from to replace or fix it. Unfortunately, that's not always the way things work.

Vendors have severely cut the length of standard warranties for numerous products. Dell, for example, used to offer a three-year standard warranty for many products, but has cut some down to one year and a few to just three months. If buyers ►

BY ALAN STAFFORD ♦ ILLUSTRATIONS BY JONATHAN CARLSON

want the comfort and security of a lengthier warranty, they have to pay extra for it. Furthermore, products have become more complex and so are costlier to fix; also, many devices are now portable and thus are more at risk of failure. These and other factors are feeding a significant growth in sales of extended warranties, for which consumers spent \$16 billion last year—up 7 percent over 2004, says Eric Arnum, editor of Warranty Week (www.warrantyweek.com), a site aimed at warranty management professionals.

But are these plans really worth your money? *PC World* decided to find out. We surveyed readers to discover how many of them purchased such warranties and how satisfied they were with the service they received. Of our 2031 respondents, 63 percent said they had bought extended warranties; 90 percent of those who used the warranty said their request had been honored with either service or a replacement product. And 80 percent of those who received help said they were satisfied with the outcome.

"I couldn't be more happy," says Loren Bergstedt of the service he got with Dell's extended warranties. Bergstedt, a retired civil engineer from Esko, Minnesota, always buys extended warranties on his laptops. When his two-and-a-half-year-old Inspiron notebook died, Dell had a technician there the same day; the next morning he had a replacement (a refurbished model). When the backlight on another laptop went out, a Dell tech came and replaced the screen while he waited.

ONLINE EXTRA

More Results

TO FIND OUT how satisfied users were with extended warranty service for different product categories, go to find.pcworld.com/52538.

However, 37 percent of survey respondents said they don't buy extended warranties, mainly because they think the plans are a rip-off, though a large portion also believes they're just too pricey. Most of them haven't regretted skipping it—only 23 percent of that group said they wished they had one when gear failed after the standard warranty expired.

Some people think that if a product is



MICHAEL BILLY, a computer design draftsman from Rochester, New York, got a good deal from Sears, which replaced his Kodak camera multiple times under a \$25 extended warranty plan he bought.

going to fail, it will do so soon after purchase, so the likelihood that you'll need coverage beyond the standard term is low. This has some truth for certain products. "There is a spike in front," says Jim Kahler, director of consumer support for HP's North American PC products line. "You pick up any flaws in manufacturing in the first 90 days; it flattens out [soon thereafter], then rises, especially with a mobile product," he adds.

In our October 2005 issue's "20 Things They Don't Want You to Know," we said that extended warranties are rarely a good deal, and we still think that's true for many products. Whether you should buy one depends on the product you're purchasing, who makes it, the store you're buying it from, and a raft of other factors. We examine these factors here and also boil them down to a cheat sheet of the top

things you should think about when considering extra coverage (see page 95, "10 Extended Warranty Pointers").

HERE COMES THE PITCH

IF YOU BUY anything more complicated than a candy bar at a big-box electronics store, you'll almost certainly get pitched to purchase an extended warranty. Many product manufacturers will hit you up for one, as well. That's because these plans have become big business for both groups.

For example, according to Joe Barkai, program director for Manufacturing Insights, an IDC market research firm, in 2004 Dell took in \$1.36 billion in sales of extended warranties, and spent only \$1.18 billion in servicing both standard and extended warranty claims—a profit of \$180 million. Warranties have become more important to the company's bottom line, too: 24 percent of Dell's net income in the first quarter of 2003 came from extended warranty sales; in the fourth quarter of 2005, that had grown to 37 percent, Barkai says.

Warranty Week's Arnum says Gateway also is one of the more successful PC makers in the warranty business, taking in three dollars in sales of extended warranties for every dollar spent to handle all of its warranty claims. That's partly because not all customers take advantage of extended warranty services. Dell and Gateway declined to discuss their profit margins on extended warranties.

Though coverage plans are profitable for stores and vendors, those providers vary on how hard they push the warranty and what products they will cover.

Steve Gusa, director of Best Buy's service contract business group, says Best Buy's salespeople are supposed to offer an extended warranty on anything that might carry a manufacturer's warranty. That includes items costing \$20 or less.

But in Wal-Mart stores, extended war-

warranties are available only on TVs priced \$300 or higher, or on computers. You can, however, add a warranty on products that cost as little as \$50 on its Web site.

Best Buy says it doesn't give its salespeople any financial incentives to sell extended warranties. Tom Miller, a former Best Buy salesperson from Myrtle Beach, South Carolina, confirms that, but says his store managers would eavesdrop on his conversations with customers, "and if you didn't push [an extended warranty], you'd be spoken to." On my visit to a San Carlos, California, Best Buy, I didn't get the hard sell—but then, I was only looking, not buying. I asked about warranties on TVs, and the rep seemed knowledgeable and willing to help. He was up-front about the limitations of the coverage, telling me that the plan—like most—doesn't cover image burn-in for TVs. The store's plans also do not cover accidental damage (most warranties don't, and those that do cost more).

Former Staples employee Chris Hankes says Staples doesn't pay commissions, but if a sales team met a monthly goal—for example, a percentage of sales with an extended warranty attached—team members would receive a small bonus, on the order of 15 cents per hour, which Staples confirms. That wasn't enough to get Hankes to sell them, but the bonus motivated other reps. Pushing a warranty is a common theme in posts by salespeople

at RetailWorker.com. Salespeople posting to the site's forums joke about code names for extended warranties—a good sale is a "hot dog," but a good sale with a warranty is a "chili dog with cheese."

A FINE-PRINT POLICY

EXTENDED WARRANTY CONTRACTS can be serviced by the brand-name manufacturer, the retailer (if it's a large outfit), or a third-party administrator. For example, N.E.W. Customer Service Companies administers extended warranties for Am-

azon, OfficeMax, and Wal-Mart, among other companies. N.E.W. says it has 2200 call center employees, who handle more than 8 million calls per year. Knowing who actually administers the warranty could help steer you to worthwhile plans if a provider that has proven to be helpful also covers you at another store.

In our survey, the percentage of people who were glad they bought extended warranties from Dell, the only manufacturer to receive enough responses to rate, was substantially higher than that of people

who bought them from retail stores. In theory, a manufacturer should know its products better and repair more of them than a store or service company. But you can't count on that to get better service. Jack White, a retired civil engineer from Mesa, Arizona, says he bought a \$450 HP Pavilion desktop PC from Circuit City, and then purchased a warranty extension from HP at the end of the standard term. He paid a pricey (given his system's cost) \$210 for three extra years of coverage. When the PC started acting

up, he called HP, which made him buy a set of restore discs (for around \$30). The discs didn't fix his PC, so HP sent him a box to ship the system to a repair facility. Seven weeks and many calls later, he got the PC back—and it didn't work. He ended up taking it to a local store, which fixed it in a day. "The warranty is still in effect until 2008," says White, "but I doubt that I'd go back to them again."

Many retailers sell three-year warranties that add only two years of coverage to the manufacturer's standard one-year ▶



Most warranties DO NOT COVER accidental damage and ones that do COST MORE.

SURVEY RESULTS

Most Buyers Glad They Bought EXTENDED WARRANTIES

OF THE PEOPLE we surveyed who have purchased extended warranties, most are happy with them. The stores cited in the survey repaired devices at a comparable rate—38 percent on average. Best Buy was likelier to replace faulty devices with new ones.

COMPANY	If device replaced, received new/refurbished unit	Problem was resolved in less than 1 day	Average time to resolve a problem	Extremely satisfied with extended warranty service	Glad to have purchased an extended warranty
Best Buy	47%/3%	22%	13.4 days	24%	74%
Circuit City	34%/15%	22%	10.4 days	26%	77%
Dell	38%/9%	10%	6.4 days	33%	87%
Average ¹	43%/7%	17%	9.7 days	31%	71%

CHART NOTES: Green denotes best score; red denotes worst score. Source: Survey of 2031 PC World readers from January 17, 2006, to January 29, 2006. FOOTNOTE: ¹Averages include responses for all stores cited, not just the ones listed here.

warranty. These companies can market their warranty plans as three-year deals because they provide service during the first year; you can call either the store or the manufacturer. Wal-Mart, which only recently began offering extended warranties in stores, is an exception: Its terms explicitly state that service plan coverage begins immediately after the expiration of the manufacturer's labor warranty, so you're not paying for dual coverage.

Another gotcha: With many plans, if your product is replaced under an extended warranty after the original has expired, the extra coverage is no longer valid. So if you buy a four-year plan on a TV, and it goes kaput and can't be fixed 13 months after you buy it, you'll get a new TV—but if that one goes bad, it's on you. Usually you'll find this under "exclusions" or in the details of the plan's "lemons" policy.

Some plans offer additional services beyond just repair, making coverage more worthwhile. For example, some plans from Best Buy and Circuit City cover one annual cleaning or preventive maintenance for VCRs, camcorders, and TV/VCR combinations (you must take the product into a store). Both retailers cover one lamp replacement for projectors and projection TVs. Certain plans



You may automatically get EXTRA WARRANTY COVERAGE, thanks to your credit card.

provide technical support, too—after all, it's often difficult to know when tech support ends and service work begins.

Tip: You may have an extended warranty and not know it. Some credit cards extend the manufacturer's warranty, usually doubling the term. If the product has a problem, you call a number to find an approved service location; you usually have to pay for repairs up front and then get reimbursed, and you won't get extra benefits like technical support. See [find.](#)

COST COMPARISON

SHOP AROUND for Extended Warranties

SERVICE PLAN COSTS vary—and you need to be aware of coverage overlap. For example, warranties from Best Buy, Circuit City, and CompUSA/Good Guys overlap a manufacturer's warranty period, meaning you're paying for double coverage.

COMPANY	\$2500, 42-inch plasma HDTV	\$400 digital camera	\$125 inkjet photo printer	\$40 DVD player
Best Buy	\$400/3 years	\$60/3 years	\$30/2 years	\$40/3 years
Circuit City	\$500/2 years	\$80/3 years	\$30/1 year	\$10/1 year
CompUSA	\$600/3 years	\$50/2 years	\$25/1 year	\$20/1 year
Dell	\$549/4 years ¹	\$59/2 years	\$37/2 years ²	n/a
Wal-Mart ³	\$388/3 years	\$44/3 years	\$19/2 years	n/a

CHART NOTES: Prices given are for comparable products; not all stores carry the same brands. Warranty periods listed are in addition to the manufacturer's coverage. n/a = not applicable. **FOOTNOTES:** ¹Total warranty length; it is a Dell product. ²A two-year warranty on a Dell printer is \$29. ³Minimum product cost for warranty eligibility is \$50 on the Web site and \$300 in stores.

[pcworld.com/52078](#) for information on Visa's extended warranty program, [find.](#) [pcworld.com/52080](#) for details on MasterCard's, and [find.pcworld.com/52152](#) for American Express's. Check your issuing bank's terms to see if you're covered.

ARE YOU BEING SERVED?

WE'VE HEARD HORROR stories about extended warranties, so we were surprised to learn that most of the readers surveyed were happy with the service

trouble on that score. Ohio and Wisconsin have suits pending against Best Buy in which they allege that the retailer, among other things, has misrepresented the attributes and benefits of its service plans, and that in many cases it has failed to honor its service plans. Best Buy settled a similar suit brought by New Jersey in 2004. The company would not comment on the pending suits.

Some companies fulfill the terms of service and then some. Michael Billy, a computer design draftsman from Rochester, New York, bought a Kodak DX3700 digital camera for \$199 from Sears and paid \$25 for an extended warranty. When the camera's media-card door wouldn't close a month later, Sears replaced the camera with a newer Kodak unit. Then it replaced the replacement when it broke. Billy went through two more Kodak models before asking for—and receiving—a comparably priced Nikon model as a replacement. He says, "When it comes to warranties, I listen to the pitch, price, and time limit, and what I like to hear is, 'We will replace the defective unit with another one of the same value or upgrade to the next model when possible.'"

Often, getting a replacement product is a relief, but in some cases it may work against you. Michael Baraz, an IT consultant from Chicago, purchased two ▶



Fast. Mobile. Drop Dead Cool.

Alienware recommends
Microsoft® Windows® XP.

AREA-51® m5700

Microsoft® Windows® XP Media Center Edition 2005
Intel® Pentium® M 750 (1.86 GHz, 2 MB Cache, 533 MHz)
NVIDIA® GeForce™ Go 6800 PCI Express 256 MB Graphics Card
512 MB Dual Channel DDR2 SO-DIMM at 533 MHz
120 GB (60 GB x 2) 5400 RPM Hard Drive
17" Wide Screen LCD with ClearView® Technology
24x10x24 CD-RW / 8x DVD Combo Optical Drive

Affordably Priced less than **\$1,849**



AREA-51 m7700

AREA-51 m5700

AREA-51 m5500

SENTIA m3400

SENTIA m3200

SENTIA™ m3400

Microsoft® Windows® XP Media Center Edition 2005
Intel® Pentium® M 740 (1.73 GHz, 2 MB Cache, 533 MHz)
Intel® Graphics Media Accelerator (900)
512 MB Dual Channel DDR2 SO-DIMM at 533 MHz
60 GB 5400 RPM Hard Drive
14" Wide Screen LCD with ClearView® Technology
24x10x24 CD-RW / 8x DVD Combo Optical Drive

Affordably Priced less than **\$1,299**

ALIENWARE
HIGH-PERFORMANCE SYSTEMS

Latest PC World promotion available at:
www.alienware.com/pcworld

(254-3692)

1.800.ALIENWARE

Intel, Intel Inside, Intel Inside logo, Intel Centrino and Intel Centrino logo are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. Alienware, Alien head logo, Alienware High Performance logo, Area-51, Sentia, are trademarks, and/or registered trademarks of Alienware Corporation. All other trademarks are property of their respective owners. Alienware can not be held responsible for errors in photography or typography. Prices, configurations, and availability may change without notice. Taxes and shipping charges not shown. Promotions and rebates are subject to end without notice.



Ericsson cell phones, one from Best Buy, the other from Circuit City, and paid for extended warranties for both. When the phones malfunctioned, the stores wanted to replace them with newer models, not fix them. Baraz had spent hundreds of dollars on accessories for the phones, so he didn't want new ones. He eventually paid Ericsson \$100 to fix both phones, and doesn't know why the retailers couldn't have done the same thing.

The situation that Baraz encountered is usually addressed in extended warranty contracts: The companies, not you, get to choose how they'll handle your problem. In our survey, 43 percent of the respondents had their faulty devices replaced with new ones, while 38 percent had their devices repaired. Overall, 7 percent of respondents got refurbished units; Circuit

City was far likelier to use refurbs (it used them in 15 percent of cases), while Best Buy had a refurb low of 3 percent.

FIGHT FOR YOUR RIGHTS

REGARDLESS OF THE result of service, you may encounter roadblocks on the way. Larry Fritz, a Billings, Montana, psychotherapist, bought an Xbox at a local Best Buy, and an extended warranty. The console's drive mechanism failed. Rather than simply replacing his Xbox with a new one, the store rep told Fritz he would have to pay for a game the store bundled with its new Xboxes even though the game didn't appeal to him. When he complained, the rep agreed to remove the game, but then said she wouldn't give him the new controllers that were packaged with the Xbox. The old controllers

worked fine; Fritz just objected to the rep's combative attitude. "I don't appreciate having to fight about it," he says.

You shouldn't have to battle to get good service with an extended warranty, and our survey indicates that in many cases you won't. But any warranty is, at heart, insurance against the unknown. If you end up needing it, it was a good buy; otherwise, you could feel ripped off. For some products—ones that use complex, unproven technologies, such as projection TVs, or those more susceptible to damage, like cell phones—buying extra coverage probably makes sense. You should still weigh reliability and cost, and whether you can tolerate an unexpected repair bill, when making a decision. ■

Alan Stafford is PC World's senior writer.

TIPS

10 Extended Warranty POINTERS

WHETHER AN EXTENDED warranty is a wise purchase depends on estimates—or guesses—on your part. These tips can help you make up your mind.

1 Read the terms before you buy: Nearly half of the people in our survey didn't read the terms of the extended warranty beforehand. You don't have to read the warranty in the checkout line—take it home. You can usually buy it later.

2 Determine the coverage term: Look for the word *inclusive*, which means the store's warranty overlaps with the manufacturer's—so a four-year extended warranty really gives you only three additional years on top of a standard one-year warranty.

3 Beware shipping charges: If the product needs to be sent in for service, you could get stuck with the tab.

4 Consider accidental damage coverage: Most policies do not cover products that are damaged from falls, spilled coffee, or getting run over by the family truck. You'll pay more to protect against the oops factor, but it may be worthwhile for mobile products.

5 Know the cancellation terms: If you feel buyer's remorse, you can usually get a full refund if you act quickly, or a prorated refund down the road, provided you haven't used the warranty.

6 Look for extras: Many extended warranties cover replaceable items, such as projection TV bulbs, which can cost \$300 or more. But note how much TV you watch, and compare it against the expected lifespan of the bulb.

7 Investigate the product's reliability: CRT televisions, for example, hold up much better than sets with newer technologies. You can also predict device reliability by examining a manufacturer's record on this score. Find that data in PC World's annual Reliability and Service survey (see find.pcworld.com/52008) and Consumer Reports' reliability ratings.

8 Weigh plan cost vs. product cost: For example, Best Buy charges \$60 for a four-year plan on a \$200 CRT television (30 percent of cost) and \$400 for



a four-year plan on a \$4000 projection TV (10 percent). CRTs break down less often, so paying the higher percentage doesn't make sense.

9 Shop around: A four-year plan for a Sony rear-projection TV set costs \$400 at Best Buy, \$525 at Circuit City, and \$600 at CompUSA.

10 Check your credit card terms: Some cards extend the manufacturer's warranty. But if you need something fixed, you may have to pay up front and be reimbursed.

Acer recommends Windows® XP Professional.

acer

Ferrari 4000

TECHNOLOGY DRIVER

April/May 2006



Acer®, like Ferrari, is the technology driver of tomorrow. Both produce desirable, eye-catching and devastatingly fast products that embody the passion, spirit and experience of years leading the competition. The magnificent carbon fiber casing of the **Ferrari 4000** conceals the very latest 64Bit technology, full wireless connectivity and widescreen monitor. Powerful, dark and purposeful, the **Ferrari 4000** has the presence of a true champion.

- AMD Turion™ 64 Mobile Technology ML-40
 - AMD PowerNow!™ Technology
 - HyperTransport™ Technology
 - Enhanced Virus Protection Technology¹
- Genuine Windows® XP Professional x64 Edition
- 1GB DDR333 SDRAM
- 120GB² hard drive
- Integrated DVD-Super Multi double-layer drive
- 5-in-1 card reader for optional MultiMediaCard™, Secure Digital card, Memory Stick™, Memory Stick PRO™ or xD-Picture Card™
- 15.4" WSXGA+ (1680 x 1050) TFT display
- ATI® MOBILITY™ RADEON® X700 graphics, 128MB DDR
- 802.11b/g WLAN, Bluetooth®, gigabit LAN, V.92 modem
- One-year limited warranty³

Ferrari 4006WLMi

\$2,199

(LX.FR40M.027)

Ferrari

OFFICIAL LICENSED PRODUCT

Produced under license of Ferrari Spa. FERRARI, the PRANCING HORSE device, all associated logos and distinctive designs are trademarks of Ferrari Spa.

acer

For the name of a reseller near you or further information, please call Acer or visit our Web site: **800-571-2237 | www.acer.com/us**

www.pleasing.it - ADV

Prices may vary.

acer

F-20"

- 20" wide-screen TFT LCD, Acer CrystalBrite Technology
- 1680 x 1050 native resolution
- 800:1 contrast ratio
- 176° horizontal viewing angle
- 176° vertical viewing angle
- Two 5.0W integrated speakers
- VGA, DVI-D signal connectors
- 300 cd/m² brightness
- 8ms gray-to-gray response time
- External power adapter
- Gloss black/red color

F-20"
\$539

(ET.L380B.063)

Ferrari

OFFICIAL LICENSED PRODUCT

Produced under license of Ferrari Spa. FERRARI, the PRANCING HORSE device, all associated logos and distinctive designs are trademarks of Ferrari Spa.



Acer® Flat Panels: Displaying Quality & Value



24" WIDE-SCREEN

Acer AL2416Wd

- 24" wide-screen TFT LCD
- 1920 x 1200 native resolution
- 1000:1 contrast ratio
- 178° horizontal viewing angle
- 178° vertical viewing angle
- VGA, DVI-D signal connectors
- 500 cd/m² brightness
- 6ms gray-to-gray response time
- Internal power adapter
- Silver color

Acer AL2416Wd

\$919

(ET.L6102.018)



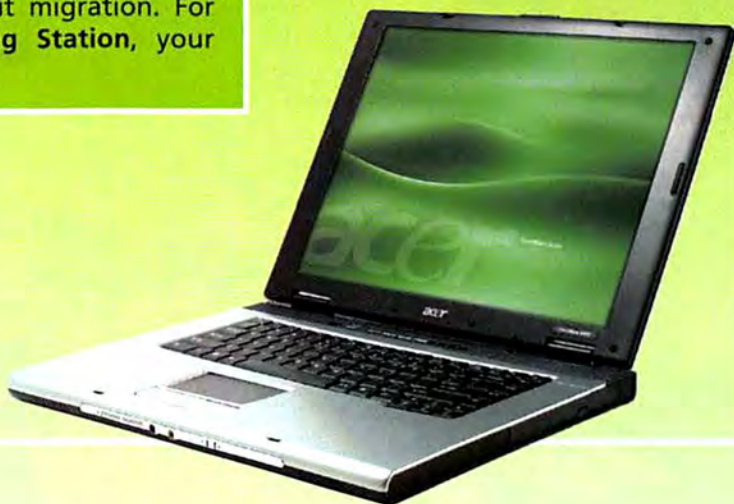
Acer® TravelMate™ 4400

Powerful Business Asset



The Acer TravelMate 4400 features everything you need to perform at your best in today's business environment, including advanced graphics capabilities, wide-screen display and wireless connectivity. Moreover, because this notebook is powered by AMD Turion™ 64 Mobile Technology, you'll experience leading-edge 32-bit performance and seamless 32- to 64-bit migration. For added convenience get the ezDock Docking Station, your one-step connection to desktop peripherals.

15.4" WIDE-SCREEN



- AMD Turion™ 64 Mobile Technology ML-34
 - AMD PowerNow!™ Technology
 - HyperTransport™ Technology
 - Enhanced Virus Protection Technology¹
- Genuine Windows® XP Professional
- 1GB DDR333 SDRAM
- 120GB² hard drive
- Integrated DVD-Super Multi double-layer drive
- 6-in-1 card reader for optional SmartMedia™ card, MultiMediaCard™, Secure Digital card, Memory Stick®, Memory Stick PRO™ or xD Picture Card™
- 15.4" WXGA (1280 x 800) TFT display
- ATI® MOBILITY™ RADEON® X700 graphics, 64MB DDR
- 802.11b/g WLAN, gigabit LAN, V.92 modem
- One-year limited warranty³

Acer TravelMate 4404WLMi

\$1,199

AMD Turion™ 64 Mobile Technology ML-34
Genuine Windows® XP Professional
(LX.T7806.091)

Prices shown are estimated street prices and do not include tax or shipping. Retailer or reseller prices may vary.

Acer® ezDock

Manage and organize peripheral connections with ease. Add or remove devices instantly, without turning off your notebook. The one-plug Acer ezDock features 21 interface ports and two card slots for desktop-like expansion possibilities, as well as PCI Express™ technology and a Kensington® lock slot.



Acer ezDock Docking Station

\$299

(LC.D0103.004)

Compatible with the TravelMate 8200, 8100,
4670, 4650, 4400, 3010, 3000, C310, C200;
Ferrari 4000

acer

acer

Compare LCD Prices/Features & You'll Choose Acer®



Acer AL2032W A

\$489

(ET.L380B.065)

Acer AL2032W A

- 20" wide-screen TFT LCD
- 1680 x 1050 native resolution
- 800:1 contrast ratio
- 176° horizontal viewing angle
- 176° vertical viewing angle
- Two 5.0W integrated speakers
- VGA, DVI-D signal connectors
- 300 cd/m² brightness
- 8ms response time
- External power adapter
- Gloss-black color

\$50 PRICE CUT!



Acer AL1951C

\$359

(ET.L4108.068)

Acer AL1951C

- 19" TFT LCD
- 1280 x 1024 native resolution
- 700:1 contrast ratio
- 150° horizontal viewing angle
- 135° vertical viewing angle
- Two 1.5W integrated speakers
- VGA, DVI-D signal connectors
- 400 cd/m² brightness
- 4ms response time
- External power adapter
- Silver/black color

4MS RESPONSE TIME



Acer AL1916W

\$279

(ET.L5209.005)

Acer AL1916W

- 19" wide-screen TFT LCD
- 1440 x 900 native resolution
- 500:1 contrast ratio
- 150° horizontal viewing angle
- 130° vertical viewing angle
- VGA signal connector
- 300 cd/m² brightness
- 8ms response time
- Internal power adapter
- Black color

19" WIDE-SCREEN



Acer AL1717 Abm

\$219

(ET.1717B.M08)

Acer AL1717 Abm

- 17" TFT LCD
- 1280 x 1024 native resolution
- 500:1 contrast ratio
- 150° horizontal viewing angle
- 135° vertical viewing angle
- Two 1.0W speakers
- VGA signal connector
- 300 cd/m² brightness
- 8ms response time
- Internal power adapter
- Black color

\$20 PRICE CUT!



Acer AL1717 Bbmd

\$239

(ET.1717B.MD8)

Acer AL1717 Bbmd

- 17" TFT LCD
- 1280 x 1024 native resolution
- 700:1 contrast ratio
- 150° horizontal viewing angle
- 135° vertical viewing angle
- Two 1.0W integrated speakers
- VGA, DVI-D signal connectors
- 300 cd/m² brightness
- 8ms response time
- Internal power adapter
- Black color

\$10 PRICE CUT!



Acer AL1716 b

\$205

(ET.1716B.012)

Acer AL1716 b

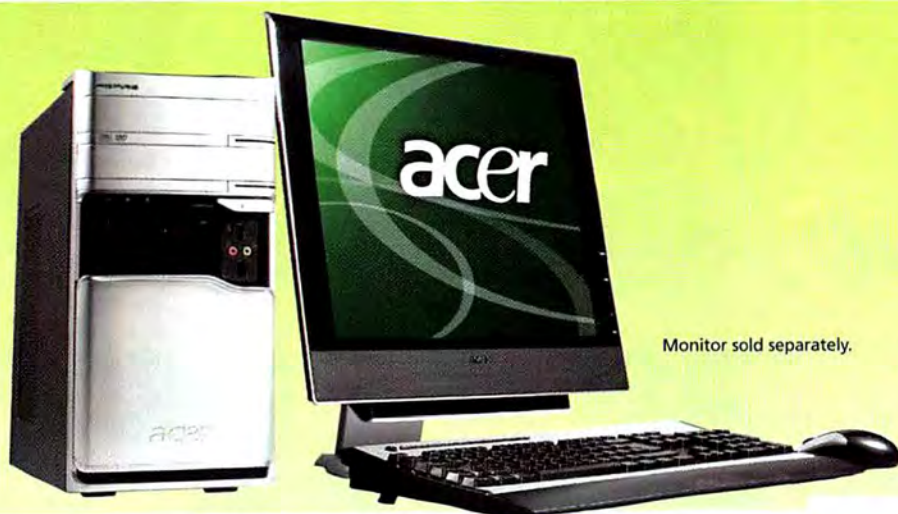
- 17" TFT LCD
- 1280 x 1024 native resolution
- 500:1 contrast ratio
- 150° horizontal viewing angle
- 135° vertical viewing angle
- VGA signal connector
- 300 cd/m² brightness
- 12ms response time
- Internal power adapter
- Black color

\$14 PRICE CUT!

Acer® Aspire™ E360

Multitasking at a New Level

Multitasking takes on a whole new meaning with the **AcerPower E360**, just one of the new Acer desktops to feature AMD processors. You'll experience a performance boost of up to 80 percent thanks to the AMD Athlon™ 64 X2 Dual-Core Processor, even when running power-hungry digital media on the **AcerPower E360**. This is because dual-core technology is like having two processors, each one handling different applications. Moreover, this processor features simultaneous 32- and 64-bit computing capabilities, allowing you to get the most from your 32-bit applications and make a seamless transition to 64-bit software.



Monitor sold separately.



9-IN-1 CARD READER

- AMD Athlon™ 64 X2 Dual-Core Processor
 - AMD64 Technology
 - Enhanced Virus Protection¹
 - Cool'n'Quiet™ Technology
 - HyperTransport™ Technology
- Genuine Windows® XP Media Center Edition
- 1GB DDR SDRAM
- 250GB² SATA hard drive
- DVD-Dual drive (DVD+/-RW) and DVD-ROM drive
- 9-in-1 card reader for optional MultiMediaCard™, Secure Digital card, SmartMedia™ card, Memory Stick®, Memory Stick PRO™, CompactFlash® I/II card, Microdrive® or xD-Picture Card™
- ATI® Radeon® X550 graphics
- Gigabit LAN, V.92 modem
- One-year limited warranty³



Acer Aspire E360-U-D3801

\$799

AMD Athlon™ 64 X2 Dual-Core Processor 3800+
Genuine Windows® XP Media Center Edition



Prices shown are estimated street prices and do not include tax or shipping. Retailer or reseller prices may vary.

acer

acer

Acer® Projectors with DLP™ Technology

Digital Light Processing™ from Texas Instruments is an all-digital display technology for projectors and other products that delivers the best picture in terms of clarity, brilliance and color.



\$100 PRICE CUT!

- 2000 ANSI lumens
- XGA (1024 x 768) native resolution
- 2000:1 contrast ratio
- 16.7 million displayable colors
- PC and Mac compatible



Acer PD120D

\$899

PD120D

(EYJ2201.012)

\$110 PRICE CUT!

- 2000 ANSI lumens
- SVGA (800 x 600) native resolution
- 2000:1 contrast ratio
- 16.7 million displayable colors
- PC and Mac compatible



Acer PD100

\$669

PD100

(EYJ2101.006)

Projector Accessories

Acer projectors come with these accessories: remote control (batteries included) with laser pointer; carrying case; lens cap; CD-ROM user's guide; quick-start instructions; AC power cord; VGA (D-sub) to component/HDTV adapter; VGA (15-pin D-sub), composite video (RCA), S-video, USB and audio (mini-to-mini phone jack) cables.

For permanent placement of a projector in a conference room or classroom, you'll want an easy-to-install Ceiling Mount. Also, consider keeping a Replacement Lamp on hand for your Acer projector.

Replacement Lamp

\$199

(ECJ2101.001)

- Expected life in hours: 2,000 standard mode, 3,000 economy mode
- Designed for Acer PD120D and PD100

Ceiling Mount

\$79

(EZ.PCM03.007)

- 6.6 pounds
- Designed for Acer PD525, PD120D, PD116P and PD100

Acer® Aspire™ 5000

Power for Productivity

For your home or for your office the full-featured **Acer Aspire 5000** notebook provides the must-have computing features, including a versatile DVD-Dual drive (DVD+/-RW) and wireless connectivity. You can also expect desktop-caliber performance from this multimedia powerhouse thanks to AMD Turion™ 64 Mobile Technology.

- AMD Turion™ 64 Mobile Technology
 - AMD PowerNow!™ Technology
 - HyperTransport™ Technology
 - Enhanced Virus Protection Technology¹
- Genuine Windows® XP Professional
- 512MB DDR333 SDRAM
- 80GB² hard drive
- Integrated DVD-Dual drive (DVD+/-RW)
- 15.4" WXGA (1280 x 800) TFT display, Acer CrystalBrite Technology
- SiSM760GX chipset with integrated Mirage™2 graphics
- 802.11b/g WLAN, 10/100 LAN, V.92 modem
- One-year limited warranty³



Made for mobility with
AMD64 performance

Acer Aspire 5003WLMi

\$899

AMD Turion™ 64 Mobile Technology ML-32
Genuine Windows® XP Professional
(LX.A5106.020)

15.4" WIDE-SCREEN

Acer Notebook Service Upgrades Protect Your Valuable Investment

Quality is built into every notebook Acer makes, and each comes with a one-year standard limited warranty.¹ It includes hardware technical support via toll-free phone plus a concurrent International Traveler's Warranty for travel outside the U.S. and Canada. Extra protection is available with one of these upgrades:

2-Year Extension of Limited Warranty (146.AB820.EX2)

\$99

Prepays freight to and from Acer repair depot.
Excludes extension of International Traveler's Warranty.

It's a tough world out there, and accidents do happen—sticky spills, dangerous drops, nasty knocks—which is why you should consider the Total Protection Upgrade. It runs concurrently with the limited warranty¹ and limited warranty extension and covers the cost of a replacement unit if your covered notebook cannot be repaired.

2-Year Extension of Limited Warranty + 3-Year Total Protection Upgrade (146.AD077.002)

\$199

Prepays freight to and from Acer repair depot.
Excludes extension of International Traveler's Warranty.

Prices shown are estimated street prices and do not include tax or shipping.
Retailer or reseller prices may vary.

acer

acer

Acer® Aspire™ 3000

Entertainment Starts Here



- Mobile AMD Sempron™ Processor 3300+
 - AMD PowerNow!™ Technology
 - HyperTransport™ Technology
 - Enhanced Virus Protection Technology¹
- Genuine Windows® XP Professional
- 512MB DDR333 SDRAM
- 80GB² hard drive
- Integrated CD-RW/DVD-ROM combo drive
- 15.4" WXGA (1280 x 800) TFT display, Acer CrystalBrite Technology
- SiSM760GX chipset with integrated Mirage™ 2 graphics
- 802.11b/g WLAN, 10/100 LAN, V.92 modem
- One-year limited warranty³



COMBO DRIVE

Acer Aspire 3005WLCi

\$799

Mobile AMD Sempron™ Processor 3300+
Genuine Windows® XP Professional
(LX.A5506.028)

Prices shown are estimated street prices and do not include tax or shipping. Retailer or reseller prices may vary.

¹ Enhanced Virus Protection (EVP) is enabled by Microsoft® Windows® XP Service Pack 2. By default, EVP will protect the user's Windows operating system only. Users must enable the protection of their applications and associated files to be protected from memory buffer overrun attacks. AMD and Microsoft strongly recommend that users use third-party anti-virus software as part of their security strategy.

² When referring to storage capacity, GB stands for one billion bytes and MB stands for one million bytes. Some utilities may indicate varying storage capacities. Total user-accessible capacity may vary depending on operating environments.

³ For a free copy of the standard limited warranty end-users should see a reseller where Acer products are sold or write to Acer America Corporation, Warranty Department, P.O. Box 6137, Temple, TX 76503.

© 2006 Acer America Corporation. Information and prices are subject to change without notice. Pricing is effective from April 1, 2006 through May 15, 2006. Product images are representations of some of the models available and may vary from the model you purchase. Acer, the Acer logo and TravelMate are registered trademarks of Acer Inc. Aspire is a trademark of Acer America Corporation. Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. AMD, the AMD Arrow logo, AMD Athlon, AMD Athlon Logo, AMD PowerNow!, AMD Sempron, AMD Sempron Logo, HyperTransport, and combinations thereof, are trademarks of Advanced Micro Devices, Inc. The DLP logo and DLP medallion are trademarks of Texas Instruments.

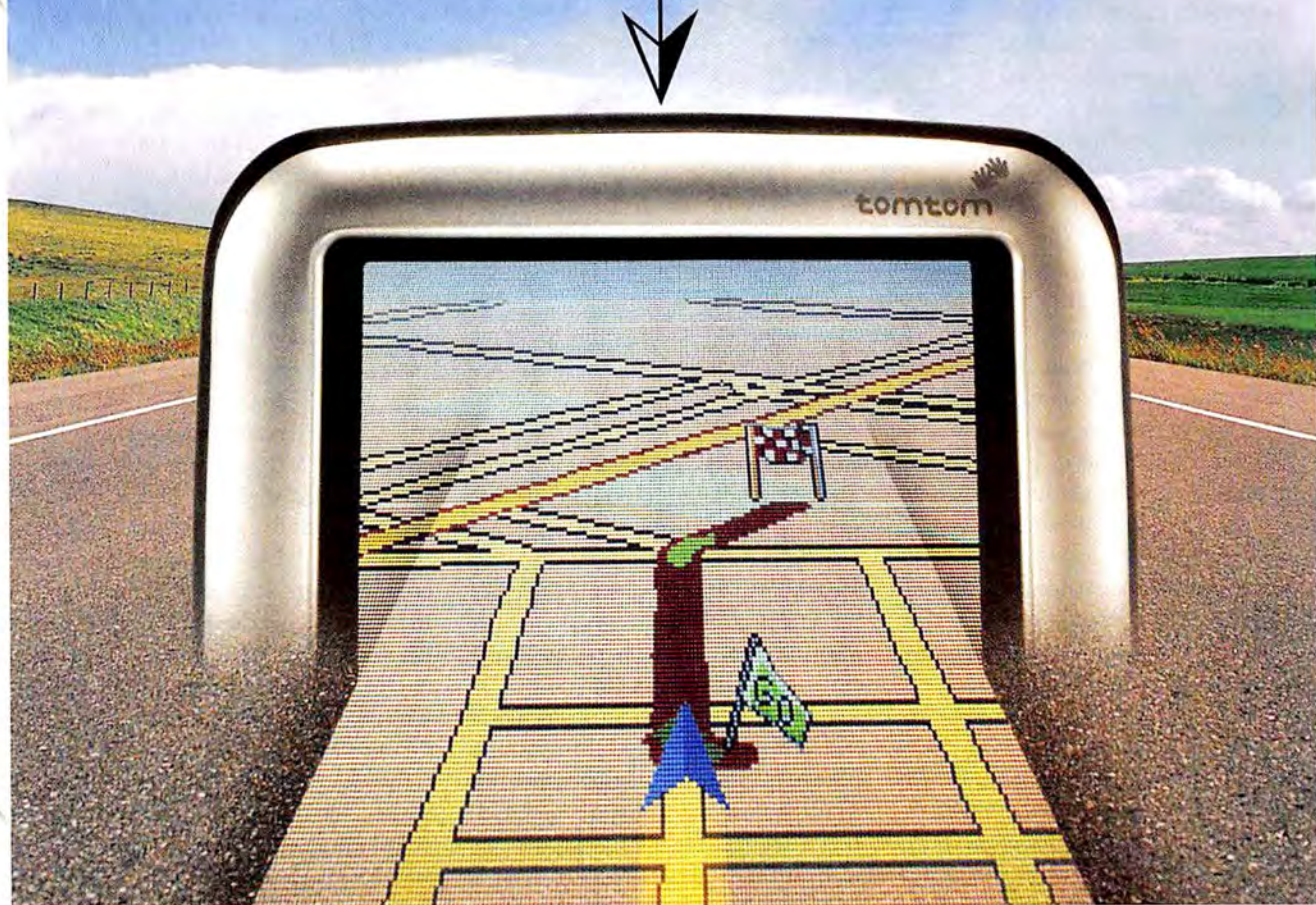
acer

NEVER Ask for Directions AGAIN

Sick of dead ends? We tested free mapping sites and in-car GPS gadgets to pinpoint the ones that won't steer you wrong.

BY TRACEY CAPEN

TWO HUNDRED YEARS ago, when Meriwether Lewis and William Clark began their famed expedition, maps labeled much of the western United States as *terra incognita*—unknown territory. For today's traveler, *terra incognita* can be the next state, the next town, even the ►



next neighborhood. But unlike Lewis and Clark, we have a wealth of tools not only to help us get where we're going but also to find services—fuel, shelter, and the all-important latte—along the way.

For this review, I looked at four free Web-based mapping tools and five portable GPS navigation devices costing \$460 to \$600, all of which provide descriptive and graphical guidance in real time. These nine services and products may not always reflect the most recent road changes, but hey—your old paper maps will never update themselves.

Mapping Web Sites

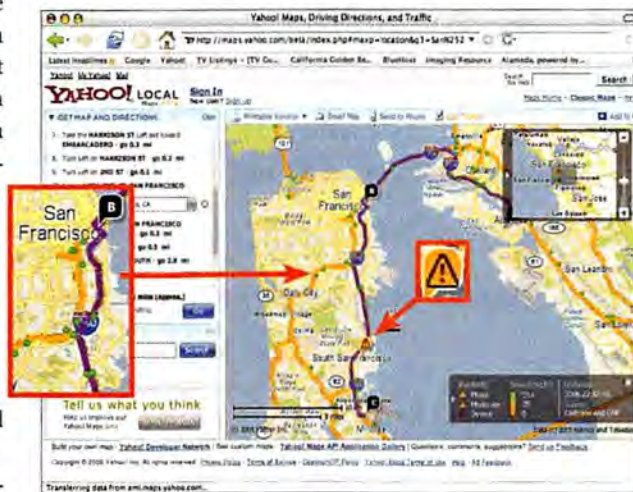
THE FOUR ONLINE mapping sites I tried—Google Local, MapQuest, Windows Live Local, and Yahoo Local Maps—work in fundamentally the same way: You type in starting and ending addresses, and receive a map and written turn-by-turn directions. Every site except MapQuest lets you turn a searched location into a start or end point for directions, via a menu that pops up when you roll your pointer over the location's map marker. The coolest new feature, offered by Google Local and Windows Live Local, is dazzlingly detailed (albeit dated) satellite imagery of the U.S. landscape; using it, I zoomed in on my neighborhood and easily picked out my house.

I tested the sites by evaluating the ease of finding and getting directions to a location, and the accuracy of the directions. I also looked up two recently opened businesses in my neighborhood (Starbucks and Peet's Coffee), a good test of whether each site's points-of-interest database was up-to-date.

MICROSOFT'S EYE IN THE SKY

WINDOWS LIVE LOCAL (currently in a beta version at local.live.com) impresses on several counts. As with Google Local, a single mouse click lets you switch be-

tween a conventional map and a stunning satellite photo with your route superimposed. However, Live Local adds a third option that no other site offers: bird's-eye views. These crisp, low-altitude images taken by plane are available mostly for



YAHOO LOCAL MAPS depicts road congestion with icons: a yellow triangle for a traffic problem, green dots for smooth sailing.

metropolitan areas. Type in *PC World's* San Francisco address, for example, and you can see the cars driving by our building when the photograph was taken.

Other Live Local innovations include a cookie-based scratch pad for retaining locations so you can easily get to them on return visits to the site, and a click-and-drag approach to defining a map area for enlargement. You can also add pushpins

ONLINE

Maps for Your PC

FOR OUR review of two Windows mapping programs that you can purchase bundled with USB-connected GPS receivers, see find.pcworld.com/52540.

to a map by right-clicking on a location, after which you can add a note or get driving directions to (or from) a pin.

The site still needs some work on accuracy, however (not surprising in a beta product). Its mapping software placed a Starbucks at the address of a private home on a residential street. In my test for directions, it chose the faster route—by freeway—to get from point A to point B, but then it routed me through congested city streets on the reverse course.

Bottom line: The data needs refreshing, but Windows Live Local's innovative features set a new standard in online mapping.

A NEW YAHOO GUIDE

I EVALUATED THE new beta of Yahoo Local Maps (maps.yahoo.com/beta), which uses Adobe's Flash technology. It definitely improves on the original version, with a friendlier interface and better organization. The new site also lets you create routes with multiple stops, a feature that none of its competitors offer.

A 'View traffic on map' option uses colored dots to represent current traffic speeds on major roads and highways,

but the feature was not always accurate. In my tests, it indicated that traffic at the toll plaza of the San Francisco-Oakland Bay Bridge was light at a time of day when Web-connected traffic cameras clearly showed a long, slow backup.

The site accurately found specific addresses, but in my test for directions, it pulled the same two-route trick as Windows Live Local did. And while the site's

Flash underpinnings support some new tricks (for example, as you mouse over text directions, the corresponding portions of the route are highlighted on the map), they preclude the sort of right-click features found in Windows Live Local.

Points-of-interest listings were up-to-date and nicely organized by distance from the current location. Registered Yahoo users can save favorite locations.

Bottom line: Yahoo's site earns the most-improved trophy; it's the best choice for point-to-point-to-point directions.

GOOGLE: MAPS, TOO

WITH GOOGLE LOCAL (maps.google.com), the ever-expanding company adds mapping to its array of no-cost services. A map of North America and Google's usual search field appear on the home page. To find a particular location, you simply type in the address.

Getting directions is easy: You can either enter addresses in the start and end search bars or select a previously searched location as the start point ("From here") or destination ("To here") from the location's pop-up bubble. Most of my test routes worked well; but like the Microsoft and

Yahoo sites, it routed me though slow city streets on the return leg of my test course.

Google Local's Satellite and Hybrid (with satellite imagery and superimposed routing graphics) views are its primary attractions. They don't really help with navigation, but they look great.

The business data seemed fairly current:

Google Local found relatively new Starbucks and Peet's Coffee shops in my town. Results of my search for "airports near New York," however, were disappointing, producing a collection of travel-related businesses in downtown Manhattan.

Google Local is thin on extras. For instance, it provides no means of directly sending maps to a cell phone (although some Java-enabled handsets and BlackBerry devices can access the service via the beta of a downloadable Google Local for Mobile application), and you can save only one address, a default starting point.



GOOGLE LOCAL LETS you click between maps, satellite images, and (shown) routing graphics superimposed on satellite photos.

But the outer-space views are pretty cool.

Bottom line: Google has fun satellite maps, but otherwise the pickings are slim if you want more than basic mapping.

MAPQUEST: WEB PIONEER

FOR A NUMBER of years, MapQuest (www.mapquest.com) virtually owned Web mapping. It's so popular that it has verb status, as in "I mapquested it."

The site has the cold competence of a bank clerk. No maps grace the opening screen; instead, it presents you with one simple text box for finding a place or service, and another for entering the start and end addresses for directions.

In my tests, MapQuest found all the local Starbucks locations but not Peet's Coffee. Still, it has more search options—including search-area radius, cities, and categories—than does Google Local. MapQuest also lets you send maps and directions to your mobile phone, following a fairly painless initial setup; this service costs \$4 per month, but that's cheap insurance when you're on the road.

MapQuest did the best job of the four sites when I searched for airports around New York, though the results were more scattershot than I would have liked, including businesses as well as airports. In my local streets and highways test, it selected the correct route. The site uses a browser cookie to save recent searches.

Bottom line: It lacks its rivals' fancy features, but MapQuest delivers the goods in terms of basic mapping and directions. ▶

MAPPING SITES

Free Services Improve Graphics, Features

SITES SUCH AS Windows Live Local and Yahoo Local Maps are establishing new standards for online mapping, which overall remains a terrific Internet resource.

SITES	PCW Rating	Features	Bottom line
1 Windows Live Local local.live.com	90 Superior	<ul style="list-style-type: none"> Satellite, graphical, hybrid, and bird's-eye views Click-and-drag zooming E-mail and blog (MSN Spaces) support 	Beta site. Handsome design and features such as bird's-eye views and easy zoom-in capability earned it top marks despite data glitches.
2 Yahoo Local Maps maps.yahoo.com/beta	87 Very Good	<ul style="list-style-type: none"> Routes through multiple destinations Graphical display of traffic jams Maps by e-mail and cell phone 	Beta site. Flash graphics, multiple-destination support, and visual depiction of traffic jams almost lift Yahoo's site to Windows Live's level.
3 Google Local local.google.com	86 Very Good	<ul style="list-style-type: none"> Satellite and hybrid satellite/graphical views Maps by e-mail; some cell phones supported via downloadable software 	Though the ability to superimpose route data over satellite images is cool, in other respects Google Local is pretty thin on extras.
4 MapQuest www.mapquest.com	82 Very Good	<ul style="list-style-type: none"> Maps by e-mail, plus links; cell phone support by subscription Maps on PDAs via AvantGo 	The granddaddy of mapping sites is accurate and covers the basics capably, but it's starting to fall behind on technology.

GPS for Your Dash

PORTABLE GPS DEVICES are addictive: The ability to quickly find gas stations and other services is a great time-saver.

Like the mapping sites, these devices don't always pick the fastest paths. But they almost always get you there—and if you miss a turn, they quickly calculate a new route. Most of the GPS models I tested store maps on external memory cards, so searches may take longer than they would with the usually pricier hard-drive-based devices. All have touch screens for data entry, speakers for voice directions, and suction-cup windshield mounts.

The Garmin, Lowrance, and TomTom products have built-in rechargeable batteries, so they don't shut down when you turn off the car engine, such as when stopping for fuel. (Units without batteries may have to recalculate routing when you get back on the road and restart them.) You can also connect a battery-powered GPS device to your PC to preload addresses, or use it when away from power—for example, while hiking.

TOMTOM'S MIGHTY GO 300

OUR TOP PICK, TomTom's Go 300, is an impressive package, from its extensive features to its smooth and streamlined maps and menus. At around \$600, it's also pricey for an SD Card-based unit—though its built-in

Bluetooth may account for part of the higher cost. With a Bluetooth-equipped GSM/GPRS cell phone for connecting to the Internet, the Go 300 can download traffic and weather reports and other data (including comic voices for directions). These TomTom Plus services are free now, but they'll be offered by subscription beginning in 2007, the company says.

TomTom's maps are cleanly designed, the menu system is easy to use, and the unit is replete with extras such as the ability to tie speaker volume to your car's speed. Other pluses are a robust, flexible mounting bracket and a built-in help system.

One annoyance involved searching for points of interest: I couldn't look up a local Home Depot by simply typing in the business name. I had to input the category and go through a long and frustrating search. Fortunately, as you choose a category or address field (such as city or street), the Go 300's dynamic menus display recent entries or selections for that field, which can speed things up.

As a real-time navigator, the Go 300 is capable but not perfect. It delivered turn-



TOMTOM'S GO 300

blends strong design with the ability to get traffic and other data.

by-turn prompts clearly and quickly, but also routed me along a slow path through town in my streets-and-highway test.

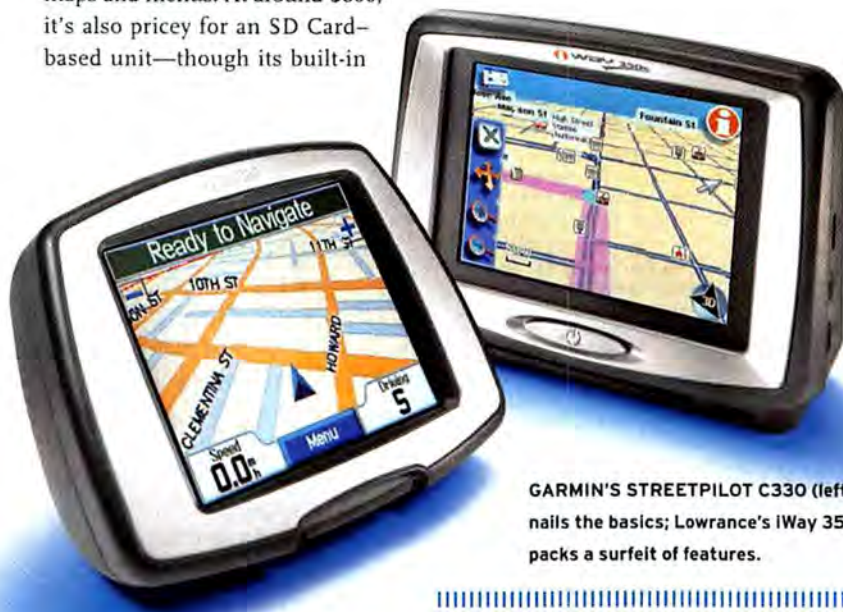
Bottom line: Slick design and good performance make the Go 300 a slam dunk, especially if you have a Bluetooth phone and are willing to pay for up-to-date traffic and other information—but local business lookups can be irritating.

GARMIN'S SOLID STREETPILOT

THE \$460 GARMIN StreetPilot c330 excels at the basics. Its 3.5-inch color touch screen is big enough for quick and easy reading, but the unit isn't so large that it takes over your dashboard; I wouldn't think twice about stowing it in a suitcase or overnight bag for use during a cross-country trip. Its built-in maps cover the United States, Canada, and Puerto Rico, and (like the maps of other units) they are said by the vendor to include several million points of interest.

On startup, the screen confronts you with two big buttons: 'Where to?' drops you into a screen that has six categories, such as Address, Food, Fuel, and Lodging; 'View Map' shows your present location on a digital map, with good accuracy. All of the buttons, including the alphanumeric keys, are of a nice size for quick and accurate touch-screen data entry.

The graphics looked great, and turn-by-turn directions were clear and precise. The product gives you multiple language and voice options; I favored the female ▶



GARMIN'S STREETPILOT C330 (left) nails the basics; Lowrance's iWay 350c packs a surfeit of features.

NEW!

INTRODUCING

Noteables™ BY TRIPP LITE.

The full line of accessories for those whose lifestyle centers around their notebook computer!

- Cases, backpacks • Keyboards, mice, keypads • Cameras, lights, locks, alarms, stands
- Hubs, adapters, cables • Portable power sources, power protection

Tripp Lite's new NOTEABLES are essential accessories for today's notebook computer user! Perfect for business professionals and students, NOTEABLES will power, protect, connect and transport your notebook, maximizing its functionality and increasing productivity.

Every product in this line offers handsome, contemporary styling. Rugged construction and compact size provide easy portability. Best of all, NOTEABLES' superior features and premium performance ensure you get the most out of your notebook computer!

Win a New NOTEABLES Product!

Go to www.tripplite.com/pcworld for a chance to be one of two winners of a notebook peripheral kit (network cable, mouse and hub)!

Tripp Lite NOTEABLES, along with a full line of UPS systems, surge suppressors, KVM switches, cables and connectivity products, are available through your favorite computer source. See Tripp Lite's website for complete product information.



TRIPP·LITE



ISO 9001
CERTIFIED QUALITY SYSTEMS

voice with the alluring British accent.

The Garmin's screen could be brighter, but a reflective coating makes it readable in bright sun. Address searches proceeded relatively swiftly, but some points-of-interest searches were painfully slow.

Bottom line: The c330 is a great choice for delivering affordable, no-frills navigation.

iWAY: FEATURE RICH

LOWRANCE MADE A valiant attempt to pack every possible option into its \$500 iWay 350c. It's the only device here that has a built-in hard drive (a feature usually found only in more expensive devices), making points-of-interest searches and other data access faster than with flash media-based devices. Other features include an optional QWERTY layout on the alphanumeric entry pad; a trip calculator; and the ability to zoom in on the map by drawing a box with your finger on the 3.5-inch screen. A built-in FM transmitter lets you listen to directions while playing music stored on an SD Card.

Unfortunately, the iWay has a couple of difficult-to-ignore flaws. In my Mazda Mi-

THE FINEDRIVE 400 (left) lacks finesse, while the RoadMate 360's buttons add bulk.

ata, with its stiff suspension, the iWay's gooseneck windshield mount jiggled so badly that map reading was impossible most of the time. (This was not a problem in my softer-riding Toyota pickup.) Also, while the deeply layered menus are fairly well organized, entering street and business names took longer and felt more complicated than with other units.

The iWay generally provided accurate directions, although on one trip the map showed one thing and the voice prompt described another. Resetting to factory

defaults seemed to correct the problem.

Bottom line: With a more robust mounting bracket and a better-organized menu system, the iWay would be a great buy.

ROADMATE PUSHES BUTTONS

MAGELLAN'S \$600 ROADMATE 360 is unique in a couple of ways. Most obviously, it has an array of hardware buttons, which might appeal to some people. The buttons add bulk, however, and they didn't perform significantly better than the well-designed touch-screen controls on devices such as the Garmin and TomTom.

I found the RoadMate's screen bright and easy to read in any light. It's the only model I tried that stores custom settings for three different users—ideal for shared use by family members. And it has my favorite data-entry system: As you begin selecting letters to fill in a data field—for the street name or city, for example—the RoadMate grays out the ones that would form an entry not found in its database. This helps minimize mistyped names and speeds up data entry.

The RoadMate's points-of-interest database was sensibly organized, though not completely up-to-date: It identified a local Starbucks quickly, but no Peet's Coffee.

The accuracy of the product's real-time navigation was about average for the units I looked at, as it got me from point to point efficiently in most cases. In one instance, however, it made me go around the block to get onto the San Francisco-Oakland Bay Bridge, when a simple left turn would have sufficed. The device ►



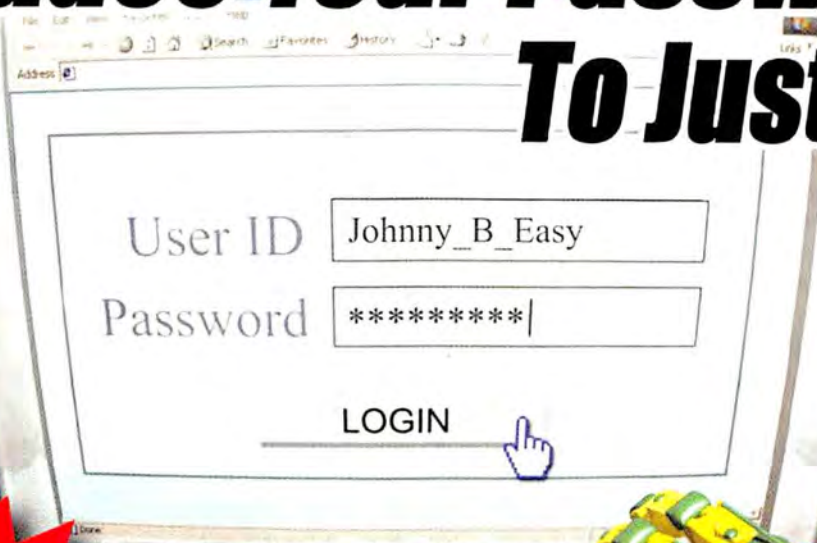
PORTABLE GPS

GPS Systems: More than Just Maps

TOMTOM'S GO 300 leads the pack, but Garmin's StreetPilot c330 is a good deal.

	PRODUCT	PCW Rating	Features	Bottom line
1	TomTom Go 300 \$600 find.pcworld.com/52466	83 Very Good	<ul style="list-style-type: none"> • 3.5-inch touch screen • Internal battery; AC adapter • Bluetooth for traffic and other subscription downloads 	Top-notch industrial design, slick maps, fast lookups, and optional data services justify the Go 300's high price.
2	Garmin StreetPilot c330 \$490 find.pcworld.com/52468	80 Very Good	<ul style="list-style-type: none"> • 3.5-inch touch screen • Internal battery; no AC adapter 	The simple, easy-to-use interface and reasonable price make for a good value if you don't need extras.
3	Lowrance iWay 350c \$500 find.pcworld.com/52470	79 Good	<ul style="list-style-type: none"> • 3.5-inch screen • Internal battery; no AC adapter • MP3 player, 4GB hard drive 	Its jiggly mount, complicated interface, and occasional accuracy glitch undercut this affordable, feature-rich model.
4	Magellan RoadMate 360 \$600 find.pcworld.com/52474	73 Good	<ul style="list-style-type: none"> • 3.5-inch touch screen • No internal battery; AC adapter • Extra hardware controls 	Capable navigation and well-designed search but no 3D view (a serious drawback); hardware buttons add bulk.
5	Fine Digital FineDrive 400 \$500 find.pcworld.com/52472	70 Good	<ul style="list-style-type: none"> • 4-inch touch screen • No internal battery; AC adapter optional • MP3 player 	MP3 player doesn't work while navigation system is on; no internal battery or AC adapter. Screen is handsome.

Reduce Your Passwords To Just One



**CNET's
Software of
the Year**

You Remember One Password, RoboForm Remembers the Rest - It's That Easy

- **Memorizes** your passwords and **Logs You In** automatically.
- **Fills** long registration and checkout forms with one click.
- **Encrypts** your passwords to achieve complete security.
- **Stores** your passwords on your computer, not on a server.
- **Backs up** your passwords, **Copies** them between computers.
- **Syncs** your passwords to Pocket PC, SmartPhone, and Palm.

"My favourite password manager... Easy to use, does not pop up ads in my face or grab information from me. Most importantly, it simply works well."

Financial Times

"Easy to use and without any hidden spyware... Innovative, lean, useful product."

Wall Street Journal

Over 8 Million Downloads



WWW.ROBOFORM.COM/PCW

Download it for **FREE** today!



also seemed a little slow to calculate new directions when I drifted off track.

This was the only unit in the group that lacked a 3D map view showing what the route ahead looks like from a hundred feet or so off the ground. Many drivers prefer the 3D perspective for navigating.

Finally, like the iWay, the RoadMate has a gooseneck mount that caused the device to jiggle on rough pavement.

Bottom line: A capable navigator and one of the better units for searching points of interest, but hardware buttons make the RoadMate larger than it needs to be.

FINE DRIVE: MAPS AND MUSIC

I'VE OWNED HALF a dozen MP3 players over the past few years, so the built-in digital music player in Fine Digital's \$500 (street) FineDrive 400 GPS device caught my attention immediately.

My verdict after using this product: Its digital music capability is not a good reason to buy it. Unlike the Lowrance iWay, the FineDrive can't simultaneously play

music and provide voice directions. And while the product works well enough as a navigation aide, some design shortcomings limit its usefulness.

Looking up addresses and services was relatively easy, but even on the 4-inch display (the largest in this group), the on-screen alphanumeric keys were too small to permit accurate typing with my largish fingers. That might be why the device comes with a small plastic stylus; unfortunately, there's nowhere to store it.

With visual cues and a speaker for loud, clear voice prompts, the FineDrive's turn-by-turn navigation got me everywhere I wanted to go, though one of the routes it directed me on was a much slower path than I'd normally take. Also, my position on the digital map seemed a bit behind my true location, a lag that was especially noticeable when I passed through intersections. Finally, the map graphics, while perfectly readable, seemed a bit cruder than those of competing devices.

The FineDrive 400 comes with an SD

Card preloaded with maps of the 48 contiguous states and Canada, including millions of points of interest, a windshield suction-cup mount, and a power cable that plugs into your car's cigarette lighter. The unit's color LCD touch screen is bright and easy to read.

Bottom line: The FineDrive 400 provides workable, if not particularly elegant, GPS navigation. But it's pointless as a digital music player for the road. ■

Tracey Capen is a freelance writer and car-penter in the San Francisco Bay Area.



PALM'S GPS NAVIGATOR kit turns a Treo 650 into a great travel assistant.

HANDHELDS

Using GPS With What You've Got

WITH CELL PHONES, personal digital assistants, and digital music players already cluttering your pockets or purse, adding a portable GPS may seem like inviting device overload. But you might not need a new gadget.

If you own a Windows Mobile- or Palm-based handheld (or a PDA-phone hybrid such as a Treo), you can buy kits such as Delorme's Earthmate GPS Blue Logger, Palm's GPS Navigator, Pharos's Pocket GPS Navigator, or TomTom's Navigator S, which include mapping software and a Bluetooth GPS receiver, for \$150 to \$300. A cheaper option for Windows Mobile PDAs with a CompactFlash slot is Pharos's \$140 Pocket GPS Receiver.

Garmin, Hewlett-Packard, and Pharos also have PDAs with built-in GPS that generally go for \$425 to \$600 (less for models without mapping software—but then you'll want to buy your own). Gar-

min's iQue line includes Windows Mobile and Palm OS models; HP and Pharos offer only Windows Mobile-based PDAs.

MAP 'N' PHONE

GIVEN HOW MANY cell phones have integrated music players and cameras, you'd think that more of them would come with built-in GPS receivers. If you own one of the few that have GPS, you typically must pay a subscription fee to access mapping data from a server, and frequent map and direction downloads could eat into your airtime minutes.

Verizon, for example, charges \$10 a month for its VS Navigator application-and-phone (Motorola V325) combo.

For outdoorsy people, Nextel's GPS-equipped BlackBerry (7520 or 7100i) and Trimble Navigation's Trimble Outdoors service (find.pcworld.com/52256) provide street maps and topographical

charts. (Trimble's site lists other GPS-equipped phones the service supports.)

Sprint customers with selected Sanyo phones and Garmin's free Mobile Manager application can pay \$10 a month to download turn-by-turn voice directions (text costs less). Cingular supports iPaq models hw6510 and hw6515, Windows Mobile PDA-phone hybrids with integrated GPS receivers; however, you must buy mapping software separately.

1&1 BEATS THE COMPETITION!



1&1

The Award-Winning Web Host

1&1 – THE CLEAR WINNER



Award-Winning Web Hosting

When you're the best at what you do, people notice. That's why 1&1 was named Best Web Hosting Company of 2005 by Hostreview.com, a leading independent web hosting research firm. And it's not just the industry experts who are sold on 1&1. With 5 million customers and counting, many of our best recommendations still come by word-of-mouth.

Follow the Leader

As the world's #1 web host, 1&1 continues to raise the standard for reliable hosting even as we maintain our low prices. 1&1 has taken the guesswork out of web hosting by offering all-inclusive plans starting at \$2.99/month, with no hidden costs or fine print. The industry has responded as the competition rushes to match 1&1's features, but there can be only one leader.



call **1.877.GO1AND1**

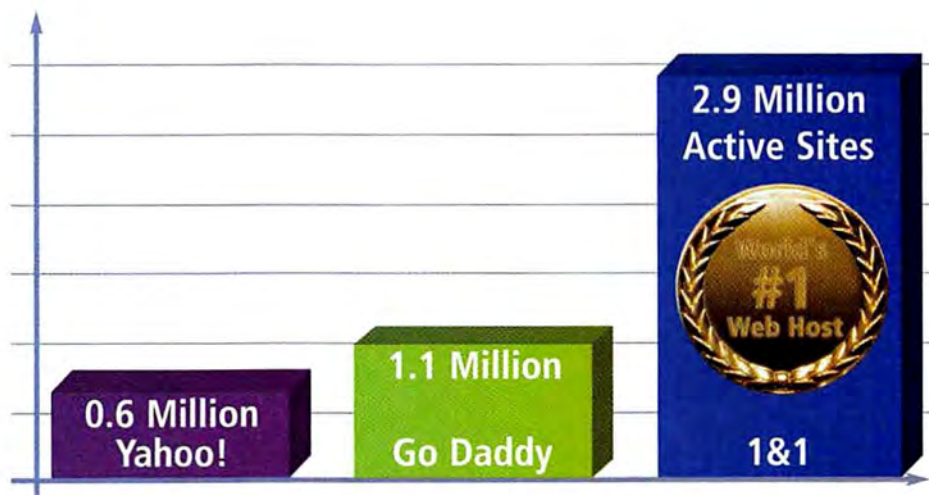
LEADER IN WEB HOSTING



World's Largest Web Host

With 2.9 million active sites worldwide, 1&1 is a global leader in volume and web hosting power.

- ✓ Providing hosting services since 1995
- ✓ Innovative web applications
- ✓ 150 in-house programmers
- ✓ One-stop shop for all your website needs
- ✓ Prices are all-inclusive with no hidden charges
- ✓ 90-day Money Back Guarantee



Source: Netcraft Ltd - www.netcraft.com March 1, 2006
Go Daddy is a registered trademark of Go Daddy Software, Inc.;
Yahoo! is a registered trademark of Yahoo! Inc.

or visit us now

1and1.com

1&1

1&1 – THE BEST IN DO

1&1 is the leader in domain prices and the original home of low-cost domains. We're proud to offer feature-packed domains at consistently low prices – without conditions or hidden costs.

When it comes to domain registration, no one offers you more than 1&1. Compare for yourself!



DO YOU ONLY NEED A DOMAIN?

Limited Time Offer!
FREE .info Domain
No Purchase Required.

	1&1	Go Daddy	Yahoo!
.com .net .org	\$5.99	From \$7.95	\$9.95
Private Domain Registration (Optional)	Included	\$1.95	\$9.00
ICANN Fee	Included	\$0.25	Included
E-mail Account	FREE 1,000 MB Mailbox Size	FREE 25 MB Mailbox Size	NO Mailbox Included
Total Annual Cost	\$5⁹⁹	\$10¹⁵ From	\$18⁹⁵

VALUE

1&1 delivers the best value for your money!

FREE WITH EVERY 1&1 DOMAIN ACCOUNT:

- | | |
|--|--|
| <input checked="" type="checkbox"/> STARTER WEBSITE
Choose your template and create a five page website in minutes – always ad free! | <input checked="" type="checkbox"/> SEARCH ENGINE TOOLS
Easily get your site listed on the leading search engines. |
| <input checked="" type="checkbox"/> 1 GB E-MAIL ACCOUNT | <input checked="" type="checkbox"/> DNS MANAGEMENT |
| <input checked="" type="checkbox"/> 24/7 SUPPORT | <input checked="" type="checkbox"/> DOMAIN FORWARDING |

**.com
.org**

**FREE PRIVATE
DOMAIN
REGISTRATION
WITH ALL
DOMAINS!**

call **1.877.GO1AND1**

MAIN OFFERS



.net
.info

When you register your domain with 1&1, your contact information will be confidential and hidden from spammers. And unlike other registrars who charge up to \$9 per year for this important feature, 1&1 includes it FREE with all domains!



DO YOU NEED HOSTING TOO?

	1&1	Go Daddy	Yahoo!
.com .net .org .info	Up to 5 FREE!	\$1.99	1 Free
ICANN Fee	Included	\$0.25	Included

VALUE 1&1 delivers the best value for your money!

FREE DOMAINS INCLUDED IN ALL 1&1 SHARED HOSTING PLANS!

When you sign up for any shared hosting plan from 1&1, up to 5 FREE domains are included! These domains are free for as long as you keep your shared hosting package with us and you can use your included domains however you'd like – register new domains or transfer existing ones to 1&1.

© 2006 1&1 Internet, Inc. All rights reserved. All quoted prices are based on standard pricing as of 3/2/06 for one-year registration of a single domain. Product and program specifications, availability, and pricing subject to change without notice. Visit 1and1.com for details. Go Daddy is a registered trademark of Go Daddy Software, Inc.; Yahoo! is a registered trademark of Yahoo! Inc.

or visit us now

1and1.com

1&1

BEST BEGINNER PACK



The 1&1 Beginner Package is our most affordable shared hosting solution and provides the quickest and easiest way to establish your first web presence.

1&1 FEATURE SPOTLIGHT:



Domain Included FREE Private Domain Registration!

The 1&1 Beginner Package includes a free domain name. Register the .com, .net, .org or .info domain of your choice and 1&1 will pay for your domain for as long as you keep your shared hosting package with us!



1&1 WebsiteBuilder Easily build your own website!

Included with all shared hosting plans, 1&1 WebsiteBuilder lets you design a professional-looking website with no HTML knowledge! Using simple point-and-click prompts and a built-in text editor, your site can be online in minutes. Creating your website has never been easier.



call **1.877.GO1AND1**

AGE



**FREE
DOMAIN
INCLUDED**
.com, .net, .org, .info

1&1

BEGINNER

\$2⁹⁹

1

Go Daddy

ECONOMY

\$3⁹⁵

Price per month		
Included Domains	1	\$1.99/year with purchase
Web Space	5,000 MB	5,000 MB
Monthly Transfer Volume	250 GB	250 GB
E-mail Accounts	500 IMAP or POP3	500 POP3
Mailbox Size	2,000 MB	10 MB
Website Builder	8 pages	Freeware
Photo Gallery	✓	✓
Database	10 MySQL (Linux)	10 MySQL (Linux)
Search Engine Tools	✓	\$29.95/year additional
PHP Support (Linux)	✓	✓
90-day Money Back Guarantee	✓	—
Support	24/7 Toll-free Phone, E-mail	24/7 Phone, E-mail

VALUE

**1&1 delivers
the best value
for your money!**

No setup fee

© 2006 1&1 Internet Inc. All rights reserved. Prices based on a comparison of regular prices effective 3/2/06. Product and program specifications, availability, and pricing subject to change without notice. Visit 1and1.com for details. Go Daddy is a registered trademark of Go Daddy Software, Inc.; Yahoo! is a registered trademark of Yahoo! Inc.

or visit us now **1and1.com**

1&1

BEST PERSONAL PACK

The 1&1 Home Package offers an exceptional value for your money. Showcase your family, hobbies or anything else you'd like to share with the world.

1&1 FEATURE SPOTLIGHT:



FREE Software Productivity Suite A \$600 value!

1&1's Software Productivity Suite gives you everything you need to create, publish, promote and optimize a successful online presence. The exclusive bundle features NetObjects Fusion 8, PhotoImpact XL SE, search engine placement tools and many more tools for maximizing your website.

\$6.99 shipping & processing fee applies.



1&1 Photo Gallery Create an online photo album!

Add an online photo album to your website, quickly and with no programming skills! Choose from several eye-catching styles, select your favorite color scheme and layout, then import and organize your photos. Create slideshows with fade-in/fade-out transitions, background music and other professional effects.



call **1.877.GO1AND1**

AGE



**FREE
DOMAINS
INCLUDED**
.com, .net, .org, .info

1&1

HOME

\$4⁹⁹

Price per month	
Included Domains	2
Web Space	50,000 MB
Monthly Transfer Volume	500 GB
E-mail Accounts	1,000 IMAP or POP3
Mailbox Size	2,000 MB
Website Builder	12 pages
Photo Gallery	✓
Dynamic Web Content	✓
Web Statistics	✓
Chat Channels	✓
Database	25 MySQL (Linux)
Search Engine Tools	✓
PHP Support (Linux)	✓
Perl Support (Linux)	✓
Software suite (\$600 value)	✓
90-day Money Back Guarantee	✓
Support	24/7 Toll-free Phone, E-mail

YAHOO!

STARTER

\$11⁹⁵

1
5,000 MB
200 GB
200 POP3
2,000 MB
✓
✓
✓
—
MySQL support
Extra charge applies
✓
✓
—
—
24/7 Toll-free Phone, E-mail

Go Daddy

DELUXE

\$6⁹⁵

<u>\$1.99/year with purchase</u>
50,000 MB
500 GB
1,000 POP3
10 MB
Freeware
✓
—
✓
✓
25 MySQL (Linux)
<u>\$29.95/year additional</u>
✓
✓
—
—
24/7 Phone, E-mail

VALUE

**1&1 delivers
the best value
for your money!**

No setup fee

© 2006 1&1 Internet Inc. All rights reserved. Prices based on a comparison of regular prices effective 3/2/06. Product and program specifications, availability, and pricing subject to change without notice. Visit 1and1.com for details. Go Daddy is a registered trademark of Go Daddy Software, Inc.; Yahoo! is a registered trademark of Yahoo! Inc.

or visit us now **1and1.com**

1&1

BEST BUSINESS PACKA



If you run a small-to medium-sized business and are looking to easily build a professional, interactive website, the 1&1 Business Package is your solution!



1&1 FEATURE SPOTLIGHT:



1&1 Dynamic Content Catalog

Add real-time web content!

Enrich your site with real-time news and fresh web content from a wide range of topics such as news headlines, business reports, sports highlights, travel destinations, online games, weather forecasts and more. Integration is easy, no HTML knowledge is required, and thanks to automatic updates, your content is always current and completely maintenance-free!



1&1 WebStatistics

Analyze your website's performance!

Easy-to-use menus let you track visits, hits, referring websites, error pages and much more for a detailed analysis of how your website is performing. Display the information in the format you choose – pie charts, bar graphs or simple numeric output – and use the data to maximize the success of your website.



In2site Live Dialogue

Make your site truly interactive!

Chat with your visitors while they are using your website – live and in real time! This innovative type of quick and easy communication makes In2site Live Dialogue an ideal tool for sales, support and consulting professionals.

call **1.877.GO1AND1**

GE



**FREE
DOMAINS
INCLUDED**
.com, .net, .org, .info

1&1

BUSINESS

\$9⁹⁹

YAHOO!

STANDARD

\$19⁹⁵

Go Daddy

PREMIUM

\$14⁹⁵

Price per month			
Included Domains	3	1	<u>\$1.99/year with purchase</u>
Web Space	100,000 MB	10,000 MB	100,000 MB
Monthly Transfer Volume	1,000 GB	400 GB	1,000 GB
E-mail Accounts	2,000 IMAP or POP3	500 POP3	2,000 POP3
Mailbox Size	2,000 MB	2,000 MB	10 MB
Website Builder	18 pages	✓	Freeware
Photo Gallery	✓	✓	✓
Dynamic Web Content	✓	✓	—
Web Statistics	✓	✓	✓
E-mail Newsletter Tool	✓	<u>\$10/month</u>	<u>\$9.95/year</u>
In2site Live Dialogue	✓	—	—
Chat Channels	✓	—	✓
Form Builder	✓	✓	—
Database	50 MySQL (Linux)	MySQL support	50 MySQL (Linux)
Search Engine Tools	✓	Extra charge applies	<u>\$29.95/year additional</u>
PHP Support (Linux)	✓	✓	✓
Perl Support (Linux)	✓	✓	✓
Software suite (\$600 value)	✓	—	—
90-day Money Back Guarantee	✓	—	—
Support	24/7 Toll-free Phone, E-mail	24/7 Toll-free Phone, E-mail	24/7 Phone, E-mail

VALUE

**1&1 delivers
the best value
for your money!**

No setup fee

© 2006 1&1 Internet Inc. All rights reserved. Prices based on a comparison of regular prices effective 3/2/06. Product and program specifications, availability, and pricing subject to change without notice. Visit 1and1.com for details. Go Daddy is a registered trademark of Go Daddy Software, Inc.; Yahoo! is a registered trademark of Yahoo! Inc.

or visit us now

1and1.com

1&1

BEST DEVELOPER PAC



With maximum web space, bandwidth and advanced developer capabilities, the 1&1 Developer Package was built for those who demand powerful Internet technologies.



1&1 FEATURE SPOTLIGHT:



GeoTrust Dedicated SSL Certificate

Secure your website!

This first line of defense against online intruders ensures a safe exchange of information over the Internet. The lock icon shows your site visitors that their personal data is secure. One certificate is included with all 1&1 Developer Packages.



1&1 FormBuilder

Create feedback forms – easily!

Generate leads and gain valuable feedback with template-driven contact forms, online polls, event registrations and more. Adapt the templates to fit your site or easily build your own forms. The information entered is saved in its own database so you can view the results at any time.



1&1 WebDatabase

Easily organize large amounts of data!

It's never been easier to gather, organize and display large amounts of information. Simply select a template in the database building kit, define the individual fields you'd like to include, then create a search or entry form that easily integrates into your website.

call **1.877.GO1AND1**

KAGE



**FREE
DOMAINS
INCLUDED**
.com, .net, .org, .info

1&1

DEVELOPER

\$19⁹⁹

YAHOO!

PROFESSIONAL

\$39⁹⁵

Price per month		
Included Domains	5	1
Web Space	150,000 MB	20,000 MB
Monthly Transfer Volume	1,500 GB	500 GB
E-mail Accounts	3,000 IMAP or POP3	1,000 POP3
Mailbox Size	2,000 MB	2,000 MB
Website Builder	25 pages	✓
Photo Gallery	✓	✓
Dynamic Web Content	✓	✓
Web Statistics	✓	✓
E-mail Newsletter Tool	✓	\$10/month
In2site Live Dialogue	✓	—
Chat Channels	✓	—
Form Builder	✓	✓
Database	100 MySQL (Linux)	MySQL support
Search Engine Tools	✓	Extra charge applies
PHP Support (Linux)	✓	✓
Perl Support (Linux)	✓	✓
Dedicated SSL Certificate	✓	—
Software suite (\$600 value)	✓	—
90-day Money Back Guarantee	✓	—
Support	24/7 Toll-free Phone, E-mail	24/7 Toll-free Phone, E-mail

VALUE

**1&1 delivers
the best value
for your money!**

No setup fee

© 2006 1&1 Internet Inc. All rights reserved. Prices based on a comparison of regular prices effective 3/2/06. Product and program specifications, availability, and pricing subject to change without notice. Visit 1and1.com for details. Go Daddy is a registered trademark of Go Daddy Software, Inc.; Yahoo! is a registered trademark of Yahoo! Inc.

or visit us now

1and1.com

1&1

1&1 – THE WORLD'S #1

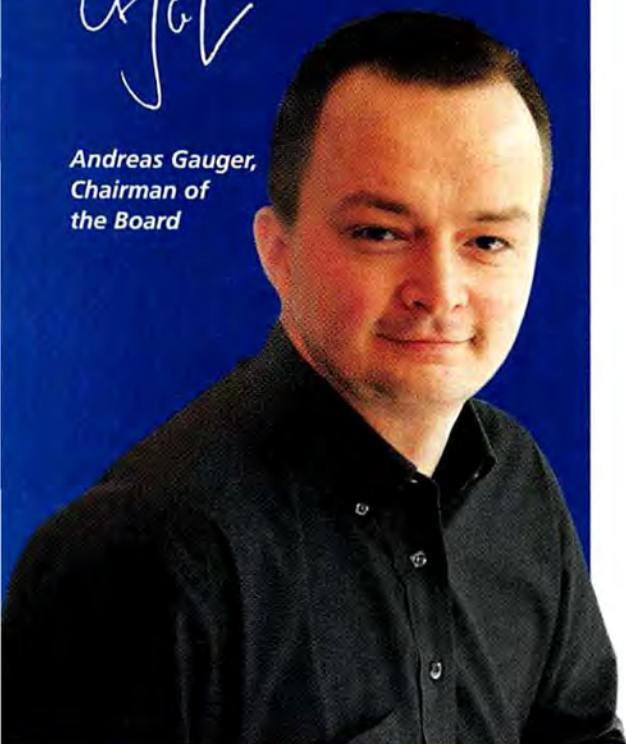
"You'll get more for your money with 1&1."

1&1 is the only name you need to know in affordable web hosting. Our 5 million customers worldwide can tell you what makes us the world's #1 web host: VALUE.

1&1 offers all-inclusive hosting plans for every budget and every need, with no hidden fees and no gimmicks. The bottom line? Look to 1&1 for powerful, reliable web products at consistently low prices.



**Andreas Gauger,
Chairman of
the Board**



Not many Internet companies can say they've been in business for nearly 15 years. Thanks to solid products, reliable services and a commitment to providing the most feature-rich web hosting packages at some of the most competitive prices available, 1&1 Internet has steadily developed into the world's biggest and best web host.

From home offices to corporate centers, 1&1's name has become synonymous with quality.



1&1 began offering its accessible and affordable hosting packages to a small – but loyal – European customer base nearly 10 years ago. The company's reputation for reliability, integrity and value allowed it to quickly expand throughout Europe, the U.K., and the U.S.

Today some 5 million people around the world rely on 1&1 for web hosting, domain registration and various other services.

call **1.877.GO1AND1**

1 WEB HOST



**24/7 Free
Express
Support
for total
peace of
mind**



**High-tech
Data Center
with more
than 28,000
servers**

In fact, you can even find 1&1 on the high seas as the main sponsor of United Internet Team Germany, a contender for the coveted America's Cup yachting trophy.



company has evolved into a major player in the global web hosting market, it remains even more committed to the basic principles that have contributed so much to its success: great products at low

prices, with none of the too-good-to-be-true pricing gimmicks or small print "catches" you'll find elsewhere. As we move forward, we believe this ongoing commitment

Thanks to its size, strength and longstanding reputation for quality and dependability, 1&1 is more focused than ever on offering the absolute best value for your money. While the

to helping customers succeed will bring us further growth and, subsequently, the ability to provide customers with a whole new dimension of online possibilities.



**90-Day
Money Back
Guarantee**



**99.9% Server
Uptime**

or visit us now

1and1.com

1&1

FREE .info DOMAIN FOR ONE YEAR

**LIMITED
TIME
OFFER!**

NO PURCHASE REQUIRED

Web users seeking to get that ideal domain name but frustrated by the lack of available .com extensions now have a free alternative. For a limited time, 1&1 is offering .info domains at no charge for one year. Visit 1and1.com for more details.

1&1 HAS EVEN MORE TO OFFER:

1&1 MAIL



POWERFUL E-MAIL FOR YOUR HOME OR BUSINESS

1&1 Instant Mail is ideal for private users and allows you to send and receive personalized mail using your own domain name. 1&1 Microsoft Exchange Hosting gives you or your entire business reliable, affordable, up-to-date access to your critical information – any time, anywhere.

- ✓ Anytime web access
- ✓ Virus & Spam protection
- ✓ Powerful online communications

1&1 INSTANT MAIL

\$0⁹⁹

No setup fee PER MONTH

1&1 EXCHANGE HOSTING

\$6⁹⁹

No setup fee PER MONTH

1&1 eSHOP



EASY, YET SOPHISTICATED E-COMMERCE SOLUTIONS

1&1 eShops are as powerful as any major online retailer, but with no software or hardware to install and no programming skills needed. Let the online wizard help you get started! Choose your design template then add your personal touches to achieve the exact look you want.

- ✓ More than 30 design templates
- ✓ Webspace, bandwidth and e-mail included
- ✓ Powerful marketing tools included

FROM

\$9⁹⁹

No setup fee PER MONTH

1&1 DEDICATED SERVERS



POWERFUL SOLUTIONS FOR MAXIMUM PERFORMANCE

Take your web presence to the next level! 1&1 Root Servers and 1&1 Windows Server 2003 put you in the driver's seat with total control. Or sign up for a 1&1 Managed Server and let 1&1 handle all the server maintenance and administration.

- ✓ Includes one GeoTrust Dedicated SSL Certificate
- ✓ Advanced security for your data
- ✓ 24/7 hardware monitoring

FROM

\$99

PER MONTH

1&1

© 2006 1&1 Internet Inc. All rights reserved. Product and program specifications, availability, and pricing subject to change without notice. Visit 1and1.com for details.

Member of
**united
internet**

visit us now

1and1.com



MOTHERBOARD MANIA!

DFI'S
LANPARTY
UT RDX200
motherboard
(above).

GIGABYTE'S
GA-G1975X
motherboard
for Intel CPUs
(below).

BY RICHARD BAGULEY • TESTING BY WILLIAM WANG

With support for dual-core CPUs and the latest graphics, motherboards pack more power than ever. The PC World Test Center's evaluations of 14 AMD and Intel models will help you find the best motherboard for your next computer. ▶

WANT TO BUILD THE PERFECT PC? The first thing you'll need is a motherboard.

If the processor is the brains of your computer, the motherboard is its nervous system: It provides the pathways that allow the processor to talk to the other components. Finding the perfect motherboard means navigating a minefield of technical jargon and marketing buzzwords,

and it can be tricky for even the savviest PC enthusiasts. But with a bit of inside knowledge, you can determine which board is right for you.

Some of the best boards aren't even that expensive. Though our two top picks—Asus's \$215 A8N32-SLI Deluxe for AMD chips and its \$200 P5N32-SLI Deluxe for Intel CPUs—cost a significant chunk of change, other highly rated models come in at around the \$100 mark. Both Asus products provide a great selection of features, one of which is an external SATA port. In addition, they support nVidia's SLI dual-graphics card technology, another performance-friendly feature. But even some less-expensive motherboards, like Gigabyte's \$105 GA-K8N Pro-SLI, support dual graphics boards and advanced RAID features.

We rounded up 14 motherboards and then set the PC World Test Center loose on them, using similarly priced Intel and AMD dual-core processors (a \$450 3.2-GHz Pentium D 940 and a \$460 2.2-GHz Athlon 64 X2 4400+) and fast memory (2GB of Corsair DDR2-667 RAM for the Intel boards and 2GB of DDR400 RAM for the AMD models). Other components of the systems were identical. The Test Center ran our WorldBench 5 test suite and several of the gaming tests we use to assess graphics boards; however, it found few performance differences that we could attribute to the motherboards themselves. The seven boards designed for AMD processors were an insignificant three points

apart on WorldBench 5. The \$120 Abit AN8 Ultra tied for the highest score, 123, but missed our chart due to poor ratings for design and features. DFI's \$169 Lan-Party UT RDX200 CF-DR wasn't very far behind with a score of 120. On the Intel side, the Test Center saw a slightly broader array of WorldBench 5 scores, ranging from 107 for the

performance isn't a compelling factor in choosing among the motherboards in a given category. Instead, you should look for a well-designed board capable of supporting the processor you want while also offering the features and specs you need.

FIRST, CHOOSE A CPU

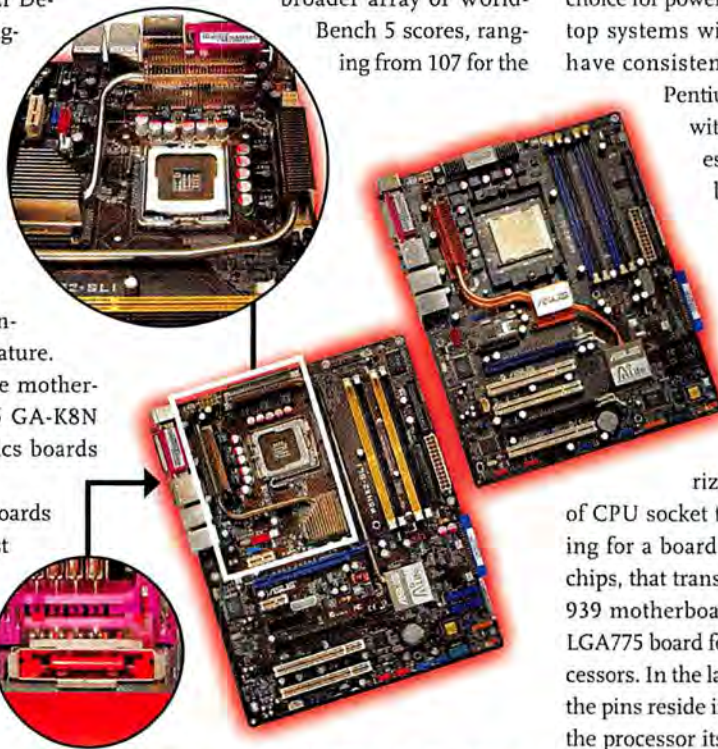
NOW THAT MAINSTREAM dual-core processors are available from both AMD and Intel (AMD's least-expensive dual-core chip cost around \$300 at press time, while Intel offered a \$150 dual-core CPU), there are few reasons not to spring for one. But which should you get? At the moment, AMD's Athlon 64 X2 chips are the better choice for power users: In our tests, desktop systems with Athlon 64 X2 CPUs have consistently outperformed Intel

Pentium D-based counterparts with similar specs and prices. Our motherboard tests bear this out: The AMD-based systems turned in an average WorldBench 5 score of 122, compared with an average of 110 for the Intel systems.

Motherboards are often categorized according to the type of CPU socket they have. If you're looking for a board that supports dual-core chips, that translates into either a Socket 939 motherboard for AMD chips or an LGA775 board for Intel's Pentium D processors. In the latter (introduced in 2004), the pins reside in the socket instead of on the processor itself. Motherboards using older socket styles (such as the Socket 754 and Socket 478) can be decent choices for extremely low-cost systems.

A WORD ON CHIP SETS

ONCE YOU'VE DECIDED ON A CPU, you'll want to look at the different chip sets that support that type of processor. The chip set provides the core logic and manages the motherboard's functions. Several companies (including ATI, Intel, and nVidia) make motherboard chip sets,



Best Buy ASUS'S A8N32-SLI DELUXE and P5N32-SLI Deluxe earned our Best

Buy awards with useful features such as heat-pipe cooling (top) and eSATA ports (left).

Intel D975XBX motherboard to 113 for the Gigabyte GA-G1975X board. In tests of 3D game performance, we saw differences of only a few frames per second between systems with the same CPU.

These negligible differences in our performance tests convinced us that perfor-

most of which offer the same basic features. The variants of nVidia's nForce4 chip set were the most widely used on the boards we looked at, though Intel's 975X Express has become increasingly popular for Intel-based motherboards.

If you want an Intel board that can run two ATI graphics cards, for instance, you might go for one that uses the ATI Radeon Xpress 200 CrossFire chip set (such as the Asus A8R-MVP), which supports ATI's CrossFire technology. If you'd like to build

a system that uses nVidia's SLI (Scalable Link Interface) multiple-graphics-card technology, you'll need a board with one of nVidia's nForce4 SLI chip sets.

Your CPU and chip set will determine which type of memory your system ▶

FEATURES COMPARISON

TEST Center MOTHERBOARDS FOR ALL BUDGETS

LOADED ASUS BOARDS take top honors on our chart, but low-cost models like Gigabyte's GA-K8N Pro-SLI perform just as well.

AMD-BASED MOTHERBOARD		PCW Rating	Performance ¹	Features and specifications	Bottom line
1	Asus A8N32-SLI Deluxe Best BUY \$215 find.pcworld.com/52168	83 Very Good	<ul style="list-style-type: none"> WorldBench 5 score: 121 Overall specs: Superior Overall design: Very Good 	<ul style="list-style-type: none"> nVidia nForce4 SLI X16 chip set SLI dual-graphics support (16X) 4 SATA-300 ports, 2 SATA-150 ports, 2 PATA ports RAID 0, 1, 0+1, 5 support 	The A8N32-SLI Deluxe packs pretty much every feature you could ever want into one place, with plenty of options for overclocking. But it ain't cheap.
2	Asus A8R-MVP \$99 find.pcworld.com/52166	83 Very Good	<ul style="list-style-type: none"> WorldBench 5 score: 122 Overall specs: Very Good Overall design: Good 	<ul style="list-style-type: none"> ATI Radeon Xpress 200 CrossFire chip set CrossFire dual-graphics support (8X) 4 SATA-300 ports, 2 SATA-150 ports, 2 PATA ports RAID 0, 1, 0+1, 5 support 	The A8R-MVP is a very solid motherboard for building a basic system. Though it lacks some of the features of other boards, it's also significantly cheaper.
3	Gigabyte GA-K8N Pro-SLI \$105 find.pcworld.com/52178	81 Very Good	<ul style="list-style-type: none"> WorldBench 5 score: 122 Overall specs: Very Good Overall design: Good 	<ul style="list-style-type: none"> nVidia nForce4 SLI chip set SLI dual-graphics support (8X) 4 SATA-300 ports, 2 PATA ports RAID 0, 1, 0+1, 5 support 	This full-featured model has a few quirks (such as poorly placed SATA sockets), but it makes life easier if you like to tweak your system for maximum performance.
4	DFI LanParty UT RDX200 CF-DR \$169 find.pcworld.com/52176	79 Good	<ul style="list-style-type: none"> WorldBench 5 score: 120 Overall specs: Good Overall design: Very Good 	<ul style="list-style-type: none"> ATI Radeon Xpress 200 CrossFire chip set CrossFire dual-graphics support (8X) 8 SATA-150 ports, 2 PATA ports RAID 0, 1, 0+1, 5 support 	This funky motherboard has some nice touches that could form the core of a cool gaming system, but it lacks a few important features such as SATA-300 support.
5	EVGA nForce4 SLI-AMD \$129 find.pcworld.com/52174	79 Good	<ul style="list-style-type: none"> WorldBench 5 score: 123 Overall specs: Very Good Overall design: Good 	<ul style="list-style-type: none"> nVidia nForce4 SLI chip set SLI dual-graphics support (8X) 4 SATA-300 ports, 2 PATA ports RAID 0, 1, 0+1, 5 support 	The nForce4 SLI-AMD is a solid, reasonably priced motherboard, though it omits some features (such as FireWire and digital audio) found standard on others.
INTEL-BASED MOTHERBOARD		PCW Rating	Performance ²	Features and specifications	Bottom line
1	Asus P5N32-SLI Deluxe Best BUY \$200 find.pcworld.com/52186	83 Very Good	<ul style="list-style-type: none"> WorldBench 5 score: 111 Overall specs: Very Good Overall design: Good 	<ul style="list-style-type: none"> nVidia nForce4 SLI X16 chip set SLI dual-graphics support (16X) 4 SATA-300 ports, 2 SATA-150 ports, 2 PATA ports RAID 0, 1, 0+1, 5 support 	This loaded model uses an innovative heat-pipe cooling system. The placement of the SATA ports right behind the second graphics card slot may be a problem in some setups.
2	Gigabyte GA-G1975X \$229 find.pcworld.com/52202	81 Very Good	<ul style="list-style-type: none"> WorldBench 5 score: 113 Overall specs: Very Good Overall design: Good 	<ul style="list-style-type: none"> Intel 975X Express chip set CrossFire dual-graphics support (8X) 4 SATA-300 ports, 2 PATA ports RAID 0, 1, 0+1, 5, 10 support 	The unusual, four-fan cooling system draws heat away from the motherboard, but it's a tad noisy, and the bright blue LEDs that illuminate it may not appeal to all.
3	Abit AW8-Max \$230 find.pcworld.com/52206	80 Very Good	<ul style="list-style-type: none"> WorldBench 5 score: 111 Overall specs: Good Overall design: Very Good 	<ul style="list-style-type: none"> Intel 955X Express chip set No dual-graphics support 6 SATA-300 ports, 1 PATA port RAID 0, 1, 0+1, 5, 10 support 	The AW8-Max has a multitude of features, and the Guru software and optional Guru Clock track what's going on inside the case. All those features cost plenty, however.
4	Intel D975XBX \$250 find.pcworld.com/52200	80 Very Good	<ul style="list-style-type: none"> WorldBench 5 score: 107 Overall specs: Very Good Overall design: Very Good 	<ul style="list-style-type: none"> Intel 975X Express chip set CrossFire dual-graphics support (8X) 4 SATA-300 ports, 1 PATA port RAID 0, 1, 5, 10 support 	Intel's motherboard is clean and easy to configure. But this model had slightly lower performance scores than did others that used an identical CPU and memory.
5	Foxconn 955XTAA \$179 find.pcworld.com/52204	79 Good	<ul style="list-style-type: none"> WorldBench 5 score: 111 Overall specs: Good Overall design: Good 	<ul style="list-style-type: none"> Intel 955X Express chip set No dual-graphics support 4 SATA-300 ports, 4 SATA-150 ports, 3 PATA ports RAID 0, 1, 0+1, 5, 10 support 	The three PCI and PCI Express x1 slots, dual gigabit ethernet adapters, and three RAID controllers make this a good choice for the basis of a server or video-editing PC.

CHART NOTE: All boards were tested with a 256MB EVGA GeForce 7800GT graphics board and two 250GB Western Digital WD2500KS hard drives configured in a striped RAID array, in a system equipped with a 550-watt Antec TruePower 2.0 TP2-550 power supply. For more extensive test results, see find.pcworld.com/52560. **FOOTNOTES:** ¹Athlon boards were tested with a 2.2-GHz Athlon 64 X2 4400+ CPU and 2GB of Corsair DDR-400 RAM. ²Intel boards were tested with a 3.2-GHz Pentium D 940 CPU and 2GB of Corsair DDR2-667 RAM.

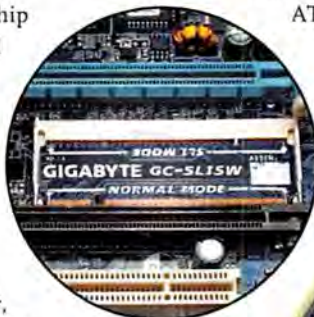
needs. Although both AMD and Intel boards support dual-channel memory (where pairs of DIMMs are used to boost memory bandwidth), the Intel boards support newer, faster DDR2 memory. We recommend buying the fastest memory your motherboard will accept. That means pairs of DDR400 DIMMs on the AMD boards we tested. The fastest memory the Intel boards support is DDR2-667, though they also take slower DDR2-533.

GRAPHICS AND STORAGE

MOST OF THE motherboards we tested offer dual-graphics capability, a gaming-focused feature that lets you run two graphics cards in tandem for maximum speed. Our tests have shown that this approach can seriously boost gaming performance (see find.pcworld.com/52136). Both ATI and nVidia offer graphics cards that support dual graphics. Two motherboard chip sets, ATI's own Radeon Xpress 200 and Intel's 975X Express, support ATI's CrossFire technology. nVidia's SLI technology necessitates using one of nVidia's nForce4 SLI chip sets.

All of the dual-graphics chip sets support a pair of PCI Express x16 slots, but nVidia's nForce4 SLI X16 was the first to dedicate a full 16 PCI Express lanes to each slot, increasing the bandwidth available to each card. Both of our Best Buys employ this chip set; however, whether the additional bandwidth will improve performance with today's graphics boards and games is debatable.

Fortunately, even less-expensive boards like the \$105 Gigabyte GA-K8N Pro-SLI have dual-graphics-card support. Just be aware that the two PCI Express x16 slots can limit your other expansion options. The trade-off is worthwhile if you want the option of running a pair of graphics cards, but Asus's P5N32-SLI Deluxe, for instance, leaves little space for PCI add-in cards as a result: The board houses only one PCI Express x1 slot and two standard PCI slots along with the two x16 slots.



GIGABYTE'S GA-K8N PRO-SLI was one of many SLI-equipped boards we tested.

and optical drives than the average system needs; even basic motherboards like the Asus A8R-MVP provide four SATA ports and two parallel ATA channels. This

FUTURE-PROOFING

WILL YOU BE ABLE TO UPGRADE?

YOU MAY HAVE a shiny new PC now, but what if you want a speed boost a couple months down the road? If you're hoping to upgrade your processor, you should pay attention to how long AMD and Intel plan to stick with their current CPU sockets.

Intel introduced the LGA775 socket in 2004, and the company's subsequent processors have all used it. According to spokesperson Dan Snyder, Intel's next-generation CPU will continue to use LGA775. But it's unclear whether you'll be able to upgrade to this processor (code-named Conroe) with current motherboards: Snyder could not say whether Conroe will work with existing chip sets.

Meanwhile, AMD plans to introduce new processors later this year to support the faster DDR2 memory that now works only with Intel-based motherboards. Those new chips will require a new socket called AM2 that's incompatible with today's Socket 939. AMD spokesperson Damon Muzony claims that the company will continue to support Socket 939 "for as long as there is a customer demand," though whether the company will introduce any new Socket 939 chips is uncertain.

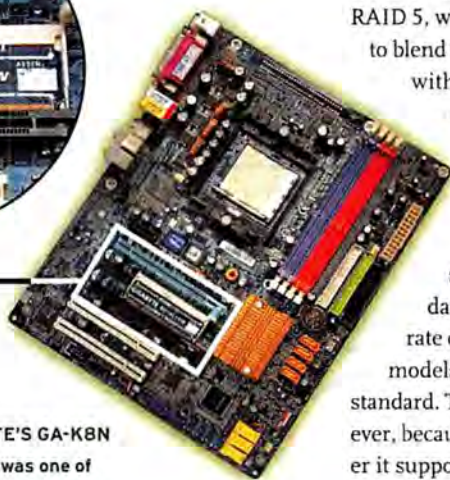
Whichever motherboard you choose, storage connections are unlikely to be a problem, even if you're building a system for space-grabbing tasks like editing video or storing music and movies. Every motherboard that we looked at supplies enough parallel ATA and Serial ATA (SATA) connectors to attach more hard drives

should be plenty unless you're planning to use a sophisticated three- or four-drive RAID setup on your machine.

Every motherboard we saw supports RAID 0 (which combines two or more hard drives for speed), RAID 1 (where two drives mirror data so it's preserved if one drive fails), and RAID 0+1 (a composite of both approaches that requires twice as many disks). Most also support RAID 5, which uses three or more drives to blend speed and reliability. For users with vast storage needs, the Foxconn 955X7AA board includes

three separate RAID controllers, good for attaching scads of 500GB drives.

But not all of the boards support the latest SATA standard, with its maximum transfer rate of 300 MBps; the Intel and DFI models support the older SATA-150 standard. That's not a critical factor, however, because no hard drive today (whether it supports SATA-300 or not) can max out the SATA-150 interface's bandwidth. So think of motherboards that provide SATA-300 connectors as offering a hedge against obsolescence. Two of the Asus boards and both ECS motherboards (the latter missed our chart) have an eSATA port, a new type of connector that lets ▶



Big business power, small business price tag.

Run your business on the Processor many of the world's largest companies choose. Robust ZT X9000 series systems powered by the Intel® Xeon® Processor meet your needs today and grow with you into the future.



ZT 2U Server X9557

Intel® Xeon® Processor 3 GHz
(2MB L2 Cache, 800MHz FSB)

- Intel® E7320 Chipset Server Board
- 1GB DDR2 400MHz ECC/ Reg. SDRAM
- 4 x 250GB SATA 16MB Cache Enterprise Hard Drive (RAID 5)
- 6 x 1" Hot-swap SATA Drive Bays
- Slim DVD-ROM and Floppy Drive
- 4 Channel SATA RAID Controller
- Dual Intel® 82541GI Gigabit Ethernet Controllers
- 2U Rackmount Chassis w/ 550W Power Supply
- SuperDoctor III Server Management Software
- 3-Year Limited Warranty

\$1,999



ZT 4U/Tower Server X9558

Dual Intel® Xeon® Processors 3 GHz
(2MB L2 Cache, 800MHz FSB)

- Intel® E7320 Chipset Server Board
- 1GB DDR2 400MHz ECC/ Reg. SDRAM (Up to 12GB)
- 2 x 80GB SATA 8MB Cache Hard Drive (RAID 1 for O/S)
- 6 x 400GB SATA 16MB Cache Enterprise Hard Drive (RAID 5 for DATA)
- 8 x 1" Hot-swap SATA Drive Bays
- DVD-RW and Floppy Drive
- 64bit High Performance SATA RAID Controller
- Dual Intel® 82541GI Gigabit Ethernet Controllers
- 4U Rackmount/Tower Chassis w/ 650W Redundant-Cooling Power Supply
- SuperDoctor III Server Management Software
- 3-Year Limited Warranty

\$3,899



ZT SMB System DC X6010

Intel® Pentium® D Processor 950
(2 x 2MB L2 Cache, 3.40 GHz, 800MHz)

- Microsoft® Windows® Small Business Server 2003 Standard Edition w/ 5 CAL
- Intel® D945GPM Chipset Mainboard
- 1GB DDR2 667MHz Dual Channel
- 4 x 250GB SATA 16MB Cache Enterprise Hard Drive (Extendable to 8 HDD)
- 4 Channel SATA RAID Controller (RAID 0, 1, 5, 10 Supports)
- 16x DVD-RW and Floppy Drive
- Intel® Gigabit Ethernet / IEEE1394
- SuperSilent Tower Chassis w/ 500Watt Power Supply
- Logitech® Keyboard & Optical Mouse
- 1 Year Limited Warranty

\$1,899

**Go to
Call**

ztgroup.com/go/pcworld

866-ZTGROUP (866-984-7687)

Promote code: PW0506



Purchaser is responsible for all freight costs on all returns of merchandise. Full credit will not be given for incomplete or damaged returns. Absolutely no refunds for merchandise returned after 30 days. All prices and configurations are subject to change without notice and obligation. Opened software is non-refundable. All returns have to be accompanied with an RMA number and must be in re-sellable condition including all original packaging. System's picture may include some equipments and/or accessories, which are not standard features. Not responsible for errors in typography and/or photography. All rights reserved. All brands and product names, trademarks or registered trademarks are property of their respective companies. Celeron, Celeron Inside, Centrino, Centrino Logo, Core Inside, Intel, Intel Logo, Intel Core, Intel Inside, Intel Inside Logo, Intel SpeedStep, Intel Vivix, Itanium, Itanium Inside, Pentium, Pentium Inside, Xeon and Xeon Inside are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Go to find.pcworld.com/52286

you add an external SATA drive more easily. With a port multiplier, this single port can accommodate up to five drives.

WORKING WITH THE BOARDS

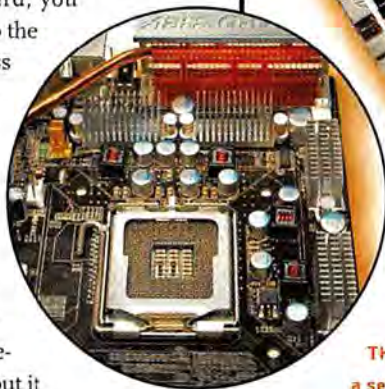
EVEN THE MOST full-featured motherboard won't do you any good if it's a pain to set up and work with. Most of the boards we looked at offer clean design and easy access to their ports and sockets. But the more feature-packed models can get a bit crowded. For example, on the Asus P5N32-SLI and the nonranking ECS PA1-MVP, some of the SATA ports are right behind one of the PCI Express x16 slots. If you install a large graphics card, it may obstruct one or more of those drive connections. On the Asus, that becomes a problem only if you plan to use two graphics cards (if you're using a single graphics card, you should insert it into the primary PCI Express x16 slot, at a distance away from the SATA ports); but on the ECS, the primary PCI Express x16 slot lines up with the SATA ports. Two other SATA ports remain unimpeded, but it is still an uninspired design.

In another odd layout decision, ECS put one of the PA1-MVP's chip-set components onto a large daughterboard that plugs into a proprietary slot that's nearly as wide as the motherboard. The card is large enough to impede airflow over the motherboard and leaves space for just one PCI Express x1 and two PCI slots—significantly fewer than on many boards.

Carefully consider layout and design concerns like these when you shop (most vendors and online stores like NewEgg offer detailed images of the products).

And since a properly cooled system is a stable system, you should pay attention to cooling as well. Many of the boards add a

fan to cool the chip set, but some take different approaches. The Asus and Abit motherboards use heat pipes—metal tubes filled with liquid that conduct the heat away. The Abit boards go a step further and put the heat sink in the back panel. That type of cooling helps you build a quiet PC, but it doesn't obviate the need for fans completely. Placing these heat sinks near the processor does mean that they can make use of the flow of air over the CPU, however.



THE ABIT AW8-MAX features a serious heat-pipe assembly for silent cooling (left) and the optional Guru Clock (top) that tracks system temps.

The Gigabyte GA-G9175X mounts four small but noisy fans in plastic ducts to direct hot air from the processor and the chip set out of the case. The ECS PA1-MVP uses a similar design, with a small fan and a plastic duct directing air out the back panel. It's quieter than the Gigabyte's fans, but still adds some noise.

If your system has cooling to spare, you can try overclocking the CPU to gain a little extra speed. All of the boards we tested offer overclocking features. Most reside in the PC Setup program, which you can enter before the OS boots, and

several motherboards (from Abit, Asus, and ECS) include screens in Setup that supply easy access to all of these settings at once. The ECS boards also let you create four alternative settings that you can select with a press of a key at boot—very useful if you have different configurations for different tasks. The Abit boards provide the easiest overall overclocking experience: Their Guru software can even overclock the processor automatically, increasing the speed gradually to determine how far it can safely go.

Each motherboard we tried has at least four USB 2.0 ports on its back panel; but for connecting lots of devices, the Abit AW8-Max is a good bet. It has six USB 2.0 ports on the back, plus another two on an included PCI slot cover.

The motherboards all supply "headers" that can connect to USB or FireWire ports built into your PC case.

All of the boards also come with gigabit ethernet adapters, for connecting to a network and to the Internet. And the Abit, Asus, DFI, ECS, and Foxconn motherboards all include a second ethernet adapter, which can be useful for running two separate networks (one for transferring files and another for Internet connections, say).

The trick to selecting a motherboard is to decide which features you want. Asus's A8R-MVP is a smart pick for a simple AMD system: It's inexpensive and its features will satisfy most users' needs. For a basic Intel PC, the EVGA nForce 4-SLI Intel (not on the chart) is a good choice, though it lacks a FireWire connection and other extras. Our Best Buys, Asus's A8N32-SLI Deluxe and P5N32-SLI Deluxe, are great for AMD and Intel power users. Both offer plenty of expansion and overclocking options that make building a high-performance system easy. ■

Richard Baguley is a freelance writer based in the San Francisco Bay Area.

CASH REGISTER EXPRESS™

More Profit! • More Sales! • More Customers!

Save Time, Reduce Theft, Speed Checkout, Increase Accuracy,
Reduce Costs, Make Better Business Decisions by Computerizing your Retail Store

The World's Fastest Cash Register

• RATED #1

- Single or Multi-User
- One Store or Multiple Store
- Credit Card Authorization in 2-3 Seconds
- Gift Cards & Loyalty Cards
- Track Your Inventory and Customers
- Detailed Sales Reports
- FAST and EASY Checkout
- Convenience Stores & Grocery Stores
- Gift Shops
- Apparel / Clothing
- Liquor & Tobacco Stores
- Cellular & Electronics
- Restaurants, Delis
- Any Store Requiring a Cash Register



Cash Drawers \$189
MMF, Indiana, APG, Logic Controls



Pole Displays \$289
Logic Controls



Touch Screen Monitors \$499
ELO Flat Panel, CRT



Cash Register Express software for Windows \$495

Replace your Cash Register with Cash Register Express in any type of retail store. With over 1,000 of the most desired point of sale features, Cash Register Express will help you compete in a difficult retail environment by controlling your costs, reducing errors, increasing efficiency, increasing your profits and increasing your sales.

Specializing in Point of Sale since 1985



Bar Code Scanners \$295
Metrologic, Symbol, HHP, PSC



Receipt Printers \$299
Epson, Star, Ithaca, Citizen



**Portable Invoicing,
Inventory/Asset Tracking &
Data collecton - \$499**
Symbol, HP Palm



Bar Code Printers \$499
Cognitive Solutions, Fixed & Portable



Credit & Debit Card Processing \$349

PC Charge

Credit Card Readers, Pin Pads, Signature Pads \$179

Unitech, MagTek, Verifone, Topaz, HHP

**SYSTEMS
START AT
\$495**

DEALERS WANTED!

Join our dealer program. It's FREE.
It's the fastest way to make
money...AND we make it EASY.

For More Info Call Toll Free!
1-800-722-6374

FREE DEMO!!

1-800-PC-AMERICA
WWW.PCAMERICA.COM



CALL TOLL FREE: 1-800-722-6374 • PH: 845-920-0800 • FX: 845-920-0880
PC AMERICA, 1 Blue Hill Plaza, Second Floor, Box 1546, Pearl River, NY 10965

IRISPen™ You Scan. It Types!

Enter text and numbers into any application with the IRISPen!
Compatible with Word, Excel, Emails and accounting software, etc.



The IRISPen Express \$129

Ideal for students, professionals and anyone dealing with paper documents.

The IRISPen Executive \$199

All the IRISPen Express features + Text-to-speech in 1 of 10 languages available, bad pixels removal, brightness adjustments, multi-lines, hand written numbers, barcoding, etc!

The IRISPen Translator Executive \$229

All the IRISPen Executive features + translation capabilities.



The IRISPen is a pen sized scanner that allows you to immediately enter text and number into ANY application. The efficient USB connection enables you to capture characters from the largest variety of media at the fastest speed. **This new version is the lightest and the most compact ever!**

Fast & accurate

Over 1,000 characters per second with up to 100% accuracy.

Portable and versatile

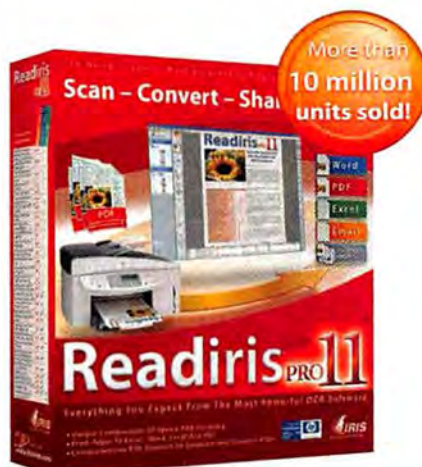
Small, light and portable, use it with your laptop or desktop wherever you go!



"This is really a great tool. I scan so many things from so many sources. I use it wherever I go, when I work at a friend's place, a library or at the office. Great Stuff! Isabel, Atlanta"

Readiris PRO 11

Scan - Convert - Share



Everything you expect from the most powerful OCR software!

Save an incredible amount of time when converting any paper, PDF and image documents into digital files you can edit, share and save!

Readiris Pro offers an unmatched combination of speed and accuracy.

Readiris Pro 11 \$129



IRISCard™

It's the business you want, not the cards!
The IRISCard is a state-of-the-art business card management solution to create and update your electronic address book. Both scanners are small and light, allowing you to scan your business cards wherever you are.

Opportunities are just a scan away!

IRISCard Pro \$199

600 dpi full color and full features business card solution powered by IRIS's award-winning OCR technology.

IRISCard mini \$129

A robust and affordable business card scanning solution for less demanding contact management needs.



Now available at www.irisusa.com/PCW and other fine retailers



amazon.com



COMPLUSA



Buy.com

Polywell High Performance Silent PC With Terrific Warranty and Services

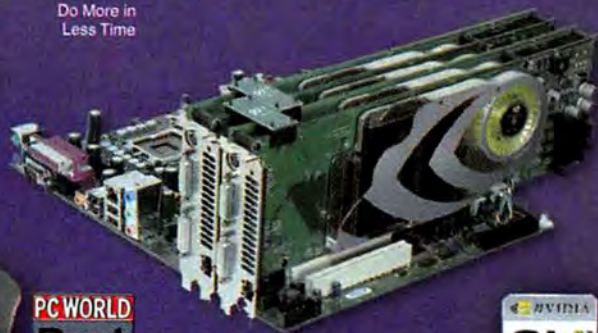


Optimize for
Gaming



Do More in
Less Time

AMD Dual-Core Processor
is Designed for sophisticated
power users who run
multiple processor-intensive
applications simultaneously



Poly 939N4SL2-FX60
April, 2006



Nvidia Quad SLI Solution

The AMD Athlon™ 64 X2 dual-core processor lets you run the software you need to connect your gadgets quickly, seamlessly, and simultaneously - without compromising performance.

Super High-End Quad SLI™ Poly 939SLI™4 FX-60

- AMD Athlon™ 64 FX-60 Dual-Core Processor
- NVIDIA nForce™ 4 SLI™ MCP Chipset
- 2GB Dual Channel 433MHz Patriot CL2 Memory
- 2 x GeForce™ Dual-GPU 7900GX2-1GB Graphics
- 2 x 10K RPM 74GB RAID-0 + 300GB Hard Drives
- 2 x Sony 16X Dual Layer DVD-RW Drive, 3.5" Floppy
- 2 x Gigabit LAN, 7-in-1 Media Reader, 1394 Firewire
- 7.1 Audio with Creative 7.1 Subwoofer Speakers
- 2 x 24" Dual LCD Panel for High Res. 3840x1200
- Logitech Keyboard and Cordless Optical Mouse
- Windows XP Professional CD and License
- Silent Tower with 650W High Efficiency PFC P/S

FX60 Dual-Core, 2x24" 3840x1200 LCD \$5999
Same Configuration without 2xDisplay \$3999

Mainstream SLI Dual Graphics Poly 939N4-SLI™ FX-60

- AMD Athlon™ 64 FX-60 Dual-Core Processor
- NVIDIA nForce™ 4 SLI™ Chipset
- 1GB Dual Channel 400MHz Memory
- 2 x NVIDIA GeForce™ 7900GT 256M Graphics
- 300GB SATA-II Hard Drives, Floppy Drive
- Sony 16X Dual Layer DVD-RW Drive
- 7-in-1 Media Reader, 1394 Firewire, 2xGigabit LAN
- 7.1 Audio with Creative 7.1 Subwoofer Speakers
- 19" DVI/VGA Dual Port LCD Panel
- Logitech Keyboard and Cordless Optical Mouse
- Windows XP Home, Game bundled
- SilverTower or Monster Tower w/650W PFC P/S

FX60 Dual-Core, 2x7900GT-256, 600W \$2999
3800 Dual-Core, 2x7600GS-256, 400W \$1750

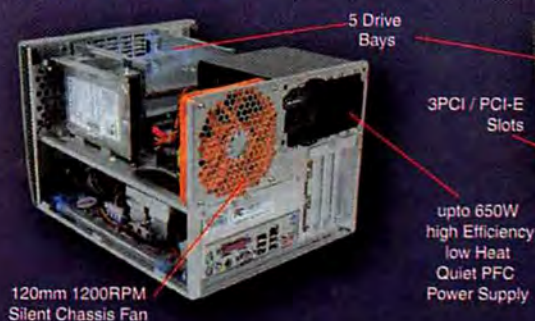
LAN Party Portable Silent PC MiniBox 939NP Dual-Core

- AMD Athlon™ 64 FX-60 Dual-Core Processor
- NVIDIA nForce™ 430 Chipset
- Cool'n'Quiet™, HyperTransport™ Technology
- Enhanced Virus Protection™, AMD64 Technology
- NVIDIA GeForce™ 7900GT 256M Graphics
- 1GB 400MHz DDR, 300GB SATA-II HD
- Sony 16X Dual Layer DVD-RW Drive
- 7-in-1 Media Reader+ Floppy, Gigabit LAN
- 5.1 Audio with Logitech 5.1 Subwoofer Speakers
- 19" DVI/VGA Dual Port LCD Panel
- Logitech Keyboard and Cordless Optical Mouse
- Windows XP Home, Game bundled

FX60 Dual-Core, 7900GT-256, 600W \$2499
3800 Dual-Core, 7600GS-256, 400W \$1550

AMD64 FX-60 is Catering to the extreme
gamer and enthusiast

AMD64 X2 is Ideal for digital content creation and entertainment consumptions



120mm 1200RPM
Silent Chassis Fan



Front USB, 1394
Audio Ports

Polywell MiniBox PCs New Standard for MicroATX PC Small, Quiet, Expandable

Sony 16X Dual Layer
DVD-RW Drive

7-in-1 Card Reader
Floppy Drive

CPU & System LED
Temperature Indicators

Easy Carry
Handle

upto 650W
high Efficiency
low Heat
Quiet PFC
Power Supply

3PCI / PCI-E
Slots

5 Drive
Bays

20 Years of Customer Satisfaction
5-Year Warranty, Industry's Longest
First Class Customer Service

800.789.8027

www.Polywell.com/us/pc

Polywell Computers, Inc 1461 San Mateo Avenue South San Francisco CA 94080 650 583 7222 Fax: 650 583 1974

Turion and ATHLON are trademarks of Advanced Micro Devices, Inc., SLI, nForce and GeForce is trademark of NVIDIA Corporation. All other brands, names are trademarks of their respective companies. *Enhanced Virus Protection is only enabled by certain operating systems including Windows and Linux. The model number indicates relative software performance among this AMD processor family.



HERE'S HOW

EDITED BY ERIC DAHL AND DENNIS O'REILLY



HARDWARE TIPS

KIRK STEERS

Improve Your Image: 13 Simple Graphics Tweaks

THINK ABOUT THIS: You spend almost as much time in front of a computer monitor as you do sleeping. Shouldn't you do everything you can to make your viewing as comfortable and trouble-free as possible? If you've recently upgraded to an LCD monitor, you should know that tuning one of these devices is not the same as tweaking a CRT display's settings. Although the following tips focus primarily on LCDs, many of the settings and steps apply equally to CRTs.

(For more information on adjusting CRT monitors, visit find.pcworld.com/51538 to read my column from June 2003.)

GET THE LATEST DRIVER

NO MATTER WHAT type of monitor you're using, much of the quality of the image it shows depends on your computer's graphics card or chip set. Start by making sure you have the latest version of the driver for your graphics adapter; this is one of the easiest and most effective

ways to optimize your graphics and avoid hardware hassles. In Windows XP, right-click *My Computer*, select *Properties*, click *Hardware•Device Manager*, and then double-click the entry for your adapter under 'Display adapters'; lastly, select *Update Driver* under the Driver tab (see **FIGURE 1**). Note that driver updates often require a PC restart to take effect.

For instructions on updating your drivers in previous versions of Windows, browse to find.pcworld.com/51540 and scroll down to "Update Your Drivers" in Lincoln Spector's "Windows Rejuvenated" feature from March 2005.

Stay away from beta versions of drivers that may be listed on your graphics card manufacturer's Web site. These are works in progress that are an invitation to troublesome PC behavior.

You configure your graphics card or chip set through Windows' Display Properties: Right-click the desktop and choose *Properties* to open this dialog box. The settings that you'll see vary from system to system and are determined by the installed driver, but all graphics adapters offer several important settings:

Screen resolution: On CRT monitors, the screen resolution—the number of dots, or pixels, that run vertically and horizontally across your screen—is scalable; you can raise or lower resolution settings without affecting image quality, so you can pick any supported resolution that pleases you. The same isn't true for LCDs, however, as they have a fixed number of pixels that define the display's *native* resolution. You'll see the monitor's best-looking, full-screen images only when it is set to that resolution.

Most 15-inch LCDs have a native resolution of 1024 by 768 pixels, while 17- and

134 HARDWARE TIPS

Keep your monitor looking its best by adjusting the device's own controls, as well as its Windows settings.

138 WINDOWS TIPS

Windows' Event Viewer lets you track your computing activities; a freebie offers more tracking options.

140 INTERNET TIPS

Stay safe on and off the Web by keeping your firewall, antivirus software, and spyware hunter up-to-date.

142 ANSWER LINE

Prevent new program installations from causing trouble; play all your audio file types at the same volume.

143 OFFICE TIPS

Get patches for your apps—and maybe some cool free add-ons—at Microsoft's Office Update site; brand your PowerPoint slides automatically.



140



FIGURE 1: INSTALLING THE latest graphics driver can improve speed and avoid trouble.

19-inch LCDs usually are 1280 by 1024. Any setting lower than the native resolution results either in letterboxing, which maintains image quality by shrinking the image to a compatible size, or interpolation, which keeps a full-screen image but adjusts for missing pixels, often sacrificing image quality as a result. The exception is when the lower resolution is half the native resolution, such as 800 by 600 pixels for a native resolution of 1600 by 1200; in this case, the resulting image is neither letterboxed nor interpolated.

Even though some LCDs have scaling algorithms that do a good job of smoothing images displayed at nonnative resolutions, you should always set the monitor to its native resolution. To do so, click the **Settings** tab in the Display Properties dialog box and adjust the slider under 'Screen resolution' (see **FIGURE 2**). Assuming Windows has properly detected your monitor, the native resolution will be the highest resolution available to you.

Color quality: The more colors your monitor shows, the more realistic its images. Most PCs have the power required to

support the highest setting, usually labeled 32-bit. But if you're experiencing sluggish graphics performance (especially if your PC uses system RAM for both graphics and standard computing duties, as many low-cost machines do), reduce the color setting to speed things up.

Refresh rate: The annoying screen flicker of many CRTs is due to a refresh rate that's set too low. (Images on a CRT are constantly redrawn, or "refreshed," by an electron beam that zigzags across the screen.) Conventional wisdom says a CRT needs to be refreshed more than 72 times per second, or 72 Hz, to avoid causing eyestrain. Experiment to determine the setting that works best for you and your eyes; this may not be the highest setting the monitor supports.

With LCDs, screen flicker isn't an issue because the devices don't refresh the entire screen, just the pixels that change. A refresh rate of 40 to 60 Hz should be fine for an LCD, unless its manufacturer says otherwise. What may be an issue to some LCD users, and especially gamers, is the pixel response time of the display, which is the time a single pixel requires to change from black to white and then back to black. Older LCDs have pixel response times slower than 20 milliseconds, which leads to ghosting of rapidly moving images. Most LCDs sold today are said to be faster, but before you buy an LCD for gaming, read Laura Blackwell's "LCD Specs: Not So Swift" at find.pcworld.com/51542.

MONITOR MAKEOVER

WHETHER YOUR MONITOR'S an LCD or a CRT, don't be afraid to experiment with its controls. The right settings are the ones that look best to you, not the vendor's (or anybody else's) recommendation. You'll usually access the settings via buttons or knobs on the monitor bezel.

LCDs tend to be easier to tune than CRTs. You rarely need to adjust an LCD screen up, down, left, or right to fit its edge to edge, as you often must with a CRT. Also, many LCDs have a single button or setting that automatically tunes and positions the on-screen image. And finally, LCD monitors usually require few color or contrast adjustments when they're set at their native resolution.

Here are the settings you'll find on most LCDs, and how to adjust them. Note that the names of settings vary from one make and model to another.

Brightness and contrast: The bright- ▶

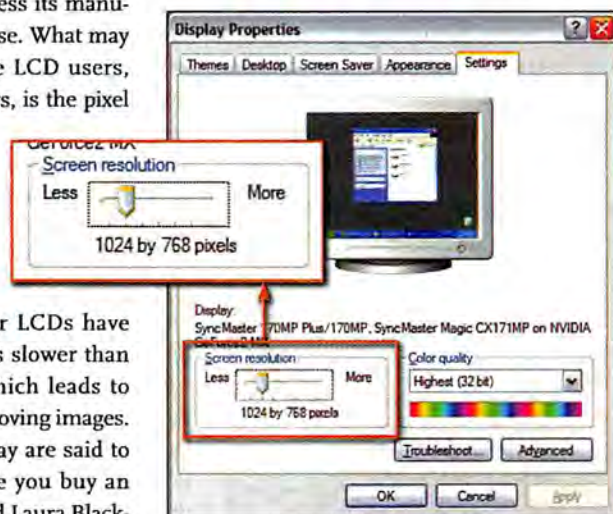


FIGURE 2: SET YOUR LCD TO ITS native resolution by adjusting this setting in Display Properties.

ness setting controls the intensity of the backlights on the display. LCDs tend to be much brighter than CRTs, so increasing the brightness may not be necessary or desirable. Adjust the contrast using a grayscale chart such as the one in the free

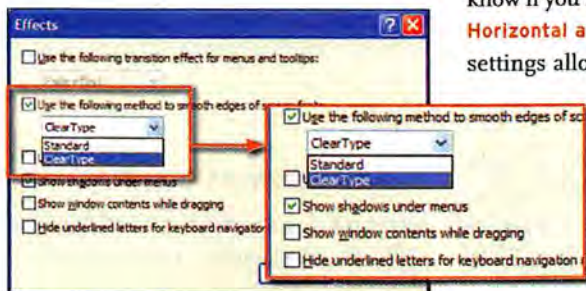


FIGURE 3: ENABLE CLARITY fonts in Windows XP to improve the legibility of text.

DisplayMate program (find.pcworld.com/51554) to maximize the number of viewable shades of gray. LCDs often lose detail at the dark end of the scale.

Color tone or color temperature: Different light sources emit slightly different tints of "white" light, from a cool bluish-white to a warm reddish-white. Most monitors offer at least three tones, or temperatures, to accommodate various lighting conditions. These settings may be labeled Mode 1, Mode 2, and Mode 3, or High, Medium, and Low. They may also use scientific labels that refer to the temperature in degrees Kelvin (K) at which superheated objects emit that color of white light. Common settings include a bluish 9300 K, a more neutral 6500 K, and a reddish 5000 K. Many monitors let you manually select the balance of red, blue, and green in your white light. Tweak the settings to see what temperature suits you.

Information: This setting is included on some LCDs to tell you the current screen resolution, as well as the number of hours the display has been in operation and the number of hours that the backlight has been burning—nice statistics to know if you're buying a used LCD.

Horizontal and vertical positions: These settings allow you to center the screen image manually; however, most LCDs come with either an auto-tune button or other automatic position adjustments that should obviate using these manual controls.

Pixel clock and phase clock: These two settings appear under a number of names (including "coarse"/"fine-tune"), but they're usually listed with the image or picture controls. If you're stuck with an analog VGA connection that's acting up, tweak these settings manually rather than relying on the auto-conversion to correct so-called swimming pixels.

A few last points: Windows XP's ClearType font-smoothing technology will sharpen the text on an LCD. Click the *Appearance* tab in the Display Properties dialog box, select *Effects*, check *Use the following method to smooth screen fonts*, and click *ClearType* from the drop-down menu (see **FIGURE 3**). For more ClearType controls, try Microsoft's ClearType Tuner PowerToy (find.pcworld.com/52002).

DirectX is a Windows technology that enhances graphics and sound. Learn whether you have the latest version (currently 9.0c) via the DirectX Diagnostic Tool. Click *Start+Run*, type *dxdiag*, press **<Enter>**, and look under the System tab for the version (see **FIGURE 4**). Browse to find.pcworld.com/51546 to download the latest DirectX version from Microsoft.

If possible, use DVI to connect your LCD to your computer. Such digital connections produce better images than a CRT's analog VGA link. If your LCD supports DVI but your PC's graphics adapter has only VGA ports, consider an upgrade; DVI-equipped graphics cards cost less than \$50 online. If your images are too dark even at your monitor's highest brightness, experiment with the gamma

TROUBLESHOOTING

First Aid for Your LCD

LCDs ARE EASIER to maintain than CRTs, but they still break on occasion. Here are two common problems related to LCDs, and how to fix them.

Blank screen: If the Power On light is illuminated but there's no picture, check the connection between the device and your PC to make sure it's receiving a video signal. If the cable is snug at both ends, connect a different monitor to your PC to ensure that both the cable and the PC's graphics card are good. If the second monitor shows an image, the backlight in your LCD may be dead (this is the most common cause of failure). A local computer shop can replace your backlight—or, if you're savvy, you can replace it yourself, although finding the right backlight and doing the actual replacement can be difficult. Before you go this route, research prices to determine whether buying a new display wouldn't be more cost effective.

Permanently pesky pixels: Most LCD manufacturers expect some bad pixels in their products and require a certain number of bad pixels—typically between three and ten—before they even consider the display defective. Check your LCD for bad pixels immediately after you connect the display for the first time. If you don't like what you see, try to exchange the monitor for a new one—in some cases, though, you may not be able to do so. Point your browser to find.pcworld.com/51998 to read about LCD vendors' dead-pixel return policy in Eric Dahl's "20 Things They Don't Want You to Know" feature from last October.

setting in Windows' Display Properties. (Check the ATI or nVidia tab under *Display Properties>Settings>Advanced*.) ■

Go to find.pcworld.com/31511 for past Hardware Tips columns. Send your tips and questions to kirk_steers@pcworld.com. We pay \$50 for published items. Kirk Steers is a PC World contributing editor and the author of PC Upgrading and Troubleshooting QuickSteps from McGraw-Hill/Osborne Press.



FIGURE 4: CHECK THE INSTALLED version of DirectX with the Direct X Diagnostic Tool.

It just gets better.



How do you improve on perfection? The new, high speed, high resolution, Smart Label Printer® from Seiko Instruments does just that.

Simply plug the SLP 450 into your PC, via the built-in USB or Serial port, and you're ready to print labels quickly, easily, one at a time. Just like you want them, when you want them. As fast as 1 label per second, at full 300 dpi. And best of all there is no ink, toner, or complicated software to mess with. So stop wasting time feeding label sheets to your standard printer. Choose one of three great SLP models and you'll have everything you need.

See all the Smart Label Printers at www.siibusinessproducts.com or at our authorized resellers. The sooner the better!

Buy.com • CDW • CompUSA • Fry's Electronics • Micro Center



Seiko Instruments USA Inc.

WINDOWS TIPS

SCOTT DUNN

MAKE SENSE OF WINDOWS' LOGS

VIEW PAST DISK-CHECK RESULTS

**GET MORE EVENT
INFO FOR FREE**

Spot PC Trouble Early With Windows' Event Viewer

EVERY TIME WINDOWS XP or 2000 starts, it begins keeping a record of events that happen on your system. Not general events like "This user has started Solitaire ten times today," but highly specific details of Windows' startup, your log-in, the services that start and stop in the course of a session, system crashes, and much more. Windows even carries its own tool, called Event Viewer, for perusing that log. This program is handy for diagnosing Windows problems, but it's also useful for learning about what's going on under the operating system's hood. In fact, it's one of the first places you should look for clues if an unexplained problem with your PC crops up.

Get your logs rolling: To start Event Viewer (depending on how your system is configured), select either *Start-All Pro-*

taskbar and choose *Properties*. In XP, click the *Start Menu* tab and select *Customize* next to the type of Start menu that you have (regular XP style or Classic). In either version, click the *Advanced* tab (if one is present). Check the option in the resulting window that will display the Administrative Tools or System Administrative Tools, and click *OK* as many times as needed. (Alternatively, you can find this utility in the Administrative Tools folder, which is located in Control Panel.)

Event Viewer's left pane lists separate folders for the three types of events that Windows logs: Application, Security, and System (in Windows 2000 the word *Log* appears with each type). The System event log can be particularly useful for uncovering problems with hardware devices or

with Windows itself. Click a folder to display the events for that type in the right pane (see **FIGURE 1**). You can sort the events by type, date, or other column heading, just as you can in Windows Explorer's Details view. The event icons in the right pane indicate their severity: Information.

Warning, or Error. When you want more information about a particular event, double-click its entry in the left pane to see its Properties and to get a description of the problem. Regrettably, the description is rarely much help; you often have to “look elsewhere for answers” below the event. For more informative event resource, see the next section.

Most of the logged entries can be ignored. For example, if you click the *System* icon on the left, the Event column on the right should include an entry numbered '6005' for every time you have started your PC. Each such entry signifies the beginning of the logging service when Windows loads. Similarly, a '6006' entry should appear for each time you shut down your system, indicating that you exited Windows properly and that event logging stopped. If there's no 6006 entry to correspond to a given day's 6005 entry, your computer probably stopped without using Windows' normal shutdown process, which can cause problems.

Ask Microsoft for more info: Some event logs can help you diagnose and solve problems. If the event's Properties dialog

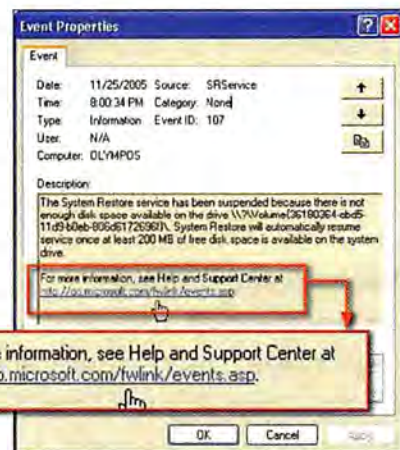


FIGURE 2: FIND OUT ABOUT cryptic entries via Event Properties' Help and Support link.

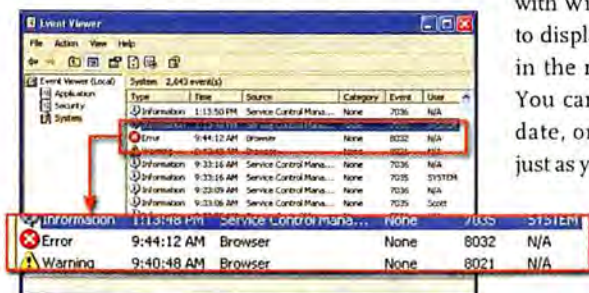


FIGURE 1: WHAT'S HAPPENING UNDER the hood?
Event Viewer lets you read Windows' hidden log files.

grams (Programs in Windows 2000)•Administrative Tools•Event Viewer or Start•Administrative Tools•Event Viewer. If you don't see an Administrative Tools option on either of these menus, right-click the

box doesn't say enough, scroll to and click the link just below 'Help and Support Center' in the Description box (see **FIGURE 2**). You'll be prompted to send Microsoft some information about the event so it can look up the related topic. Click *Yes* if you consent. For example, I asked Microsoft about an error message telling me that System Restore had encountered a problem when it tried to back up a file. The Help and Support Center explained that, in these cases, System Restore stops creating restore points and stops monitoring changed files until another restore point is established. It also explained that I could get System Restore going again by creating a restore point manually.

Look elsewhere for answers: In many cases, unfortunately, the service reports that no Help topic is available, or the information it gives is too vague to be useful. If Microsoft has no help to offer, try EventID.Net, a site hosted by Altair Technologies that maintains a community collection of comments on many of the sys-

Spector related in last July's *Answer Line* column (find.pcworld.com/51520; scroll to "Scan and defrag your hard drive").

Disk checks often occur after you start your computer but before you log in to

Error code: 0xC0000040 - This issue may occur under a rare set of circumstances -- specifically, when a program or programs try to simultaneously access and modify the same file in a way that creates a conflict with the functions of the System Restore

tem events that Windows logs.

The service uses information that appears in the columns in Event Viewer's right pane: Note the text in the Source column and the number in the Event column. Then browse to find.pcworld.com/51518, enter the event ID number and source info, and click *Search*. The site will open a summary of the event. Click the link next to Details to get the skinny from other users who have experience with the same issue (see **FIGURE 3**). Or enter the event ID or other unique snippet of text from the event in your favorite search engine to find more information about it.

Check chkdsk: Event Viewer is useful for more than just troubleshooting, however. For example, when Windows scans for and fixes disk errors (right-click the drive icon in Explorer, choose *Properties*, and click *Check Now* under the Tools tab), the OS records the results in Event Viewer. You can use the `chkdsk /f` command to automate your disk scans, as Lincoln

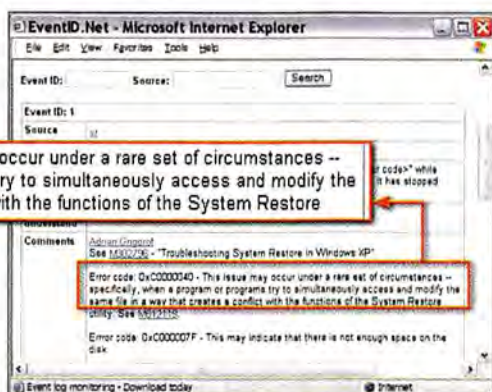


FIGURE 3: DECIPHER OBSCURE INFO in the entries by searching EventID.Net's database of user comments.

Windows. In such cases, though you may be able to see the scan results on screen, you may have no option (and no time) to save or print them. Not to worry: Event Viewer's log has it covered. Click the *Application* icon in Event Viewer's left pane (*Application Log* in Windows 2000). To find a particular event more easily, choose *View>Filter*. Under the Filter tab in the Application Properties dialog box, choose *Winlogon* in the 'Event source' drop-down menu, and click *OK*. To see the results in the Events Properties dialog box, locate and double-click the icon corresponding to the date of your error-checking chore (see **FIGURE 4**). To save or print the information, click the *Copy* icon in the top-right corner under the up and down arrows, and then paste it into the word processor or text editor of your choice.

When you're done, reset the filter to show all log entries by choosing *View>All Records*. If you forget to do this, Event Viewer will switch back to showing all log entries the next time you start it.

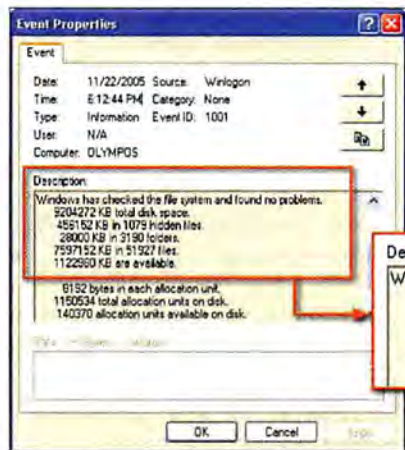


FIGURE 4: EVENT VIEWER CAN show you the result of your disk-checking chores.

WINDOWS TOOLBOX

Event Log Explorer: Another Way to Examine Log Files

IF YOU FIND Windows XP's own Event Viewer helpful, you might like Event Log Explorer. This handy free utility duplicates the Windows event logs but adds several new features, including event descriptions that are viewable without your having to open a separate dialog box, log archives, and the ability to search events by date. The program also lets you save and load search settings, print log entries, and export them to multiple formats. Browse to find.pcworld.com/51526 for your copy.



Beef up your logs: By default, the information in Windows' event logs gets overwritten after just a week, and the log itself is limited to 512KB. To keep the data around longer, right-click one of the three logs in the left pane and select *Properties*. Under the General tab, adjust the 'Maximum log size' to something larger—for example, setting it to 2048 KB will quadruple the number of entries the log can hold. You can also adjust the overwrite options listed below this setting to maintain log entries for longer than seven days. If you think your maximum log size is big enough, you needn't specify a number of days to retain entries; simply select *Overwrite events as needed* to keep adding events to the log until it reaches maximum size and starts deleting entries. When you're finished, click *OK*.

Send Windows-related questions and tips to scott_dunn@pcworld.com. We pay \$50 for published items. Visit find.pcworld.com/31607 for more Windows Tips. Scott Dunn is a contributing editor for PC World.

INTERNET TIPS

SCOTT SPANBAUER

Bolster Your Defenses Against New Net Threats

ZOMBIE-PC ARMIES, ROOTKITS, browser exploits, and other Internet pests are more prevalent than ever. By taking a few minutes to strengthen your system's protective shields, you can stay free of the viruses, backdoor programs, and spyware currently prowling for victims. Here are my Internet safety kit recommendations for 2006 (see "101 Fabulous Freebies" on page 76 for more great downloads).

SAFER BROWSERS AHEAD

MICROSOFT IS HARD at work crafting a more secure successor to Internet Explorer 6 (visit find.pcworld.com/51994 to read Editor in Chief Harry McCracken's impression of the IE 7 beta). If you're careful, you can use IE 6 to browse the Web without getting burned by drive-by

downloads, especially if you keep the program patched via automatic Windows updates (go to find.pcworld.com/51626 for instructions on setting Windows to update automatically). Still, one wrong click in an ActiveX-control pop-up, and your machine could be hosed. Firefox 1.5 and Opera 8.5 shield you from ActiveX exploits simply because they don't run the sometimes-malicious scripts that are frequently embedded in Web pages. Like IE 6 with Windows XP's Service Pack 2, the two browsers block pop-ups; but unlike IE (without the MSN Search Toolbar), they feature tabbed browsing that lets you move between open Web pages more easily. The good thing about browsers is that you don't have to limit yourself to using just one; all three will coexist happily on your system.

Windows XP comes with its own firewall, enabled by default in Service Pack 2 (if you don't have Service Pack 2, browse to www.windowsupdate.com using IE, ASAP). But the Windows Firewall blocks only incoming traffic, and it doesn't prevent nasty software that may already be running on your computer or in your browser from communicating back out to its author's server. I still recommend Zone Labs' free ZoneAlarm firewall for its easy-to-understand interface and warnings. Agnitum's Outpost Firewall Free is another excellent firewall. (See "Internet Tool Kit 2006" at left to download the programs in this story.)

After you install a bidirectional firewall, you'll need to disable the Windows Firewall by launching Control Panel's Securi-

ty Center. Click the *Windows Firewall* link at the bottom of the window, select *Off (not recommended)* in the resulting dialog box, and then click OK (see **FIGURE 1**).

Grisoft's free AVG Anti-Virus remains my top pick for antivirus protection, but I also use Alwil's Avast 4 Home Edition.



FIGURE 1: TURN OFF THE FIREWALL in XP and replace it with one that monitors both outbound and inbound traffic.

SPURN SPYWARE

WEBROOT'S \$30 SPY SWEEPER was our favorite antispyware tool in the roundup of 11 such products that we tested for November's "Best Defenders" feature (find.pcworld.com/51628), but three free products performed nearly as well as the fee-based programs did. For better results than we got testing them individually, use both Lavasoft's Ad-Aware SE Personal Edition and Safer Networking's Spybot Search & Destroy. When used in conjunction with your updated browser, firewall, and antivirus applications, these spyware detectors will greatly reduce your risk of being victimized—at least until something even more dangerous comes along. And whatever security tools you use, be sure they're set to update automatically and to scan your system on a regular schedule. ■

Send your questions and tips to nettips@spanbauer.com. We pay \$50 for published items. Go to find.pcworld.com/31523 for more Internet Tips. Scott Spanbauer is a contributing editor for PC World.

INTERNET TOOL KIT 2006

MAKE SURE YOU have the most recent versions of these programs.

Firefox 1.5: Mozilla Foundation (free), find.pcworld.com/51630

Opera 8.5: Opera Software (free), find.pcworld.com/51632

Outpost Firewall Free: Agnitum (free), find.pcworld.com/51634

ZoneAlarm 6: Zone Labs (free for personal use), find.pcworld.com/51638

Avast 4 Home Edition: Alwil (free), find.pcworld.com/51640

AVG Anti-Virus: Grisoft (free), find.pcworld.com/51642

Ad-Aware SE Personal: Lavasoft (free), find.pcworld.com/51644

Spybot Search & Destroy 1.4: Safer Networking (free; donations requested), find.pcworld.com/51646

LINKSYS®

A Division of Cisco Systems, Inc.

The Link to Your Digital Life



NSLU2
Network Storage Link

COMING SOON:
Wireless-G Storage
Link Broadband Router!

Create a media library for your digital pictures, music, and videos that everyone on your network can share! Simply purchase an affordable external USB disk drive, plug it into the Linksys Network Storage Link, and connect it to your network. It's the easiest, fastest, and most economical way to add gigabytes of storage for your digital life!

- New firmware fully compatible with Microsoft® Windows® FAT32 and NTFS file systems
- Connects up to two USB 1.1 or 2.0 disk drives
- Integrated file server - configure the Storage Link so you can access your files from the Internet

Linksys. Nobody makes networking easier!

Visit www.linksys.com today for product details, or call our Advice Line at:
1-800-737-7201

COMPUSA
Where America Buys Technology

OfficeMax

Office DEPOT

STAPLES
that's with edge™

Linksys is a registered trademark or trademark of Cisco Systems, Inc. and/or its affiliates in the U.S. and certain other countries. Copyright © 2006 Cisco Systems, Inc. All rights reserved.

CISCO SYSTEMS


ANSWER LINE

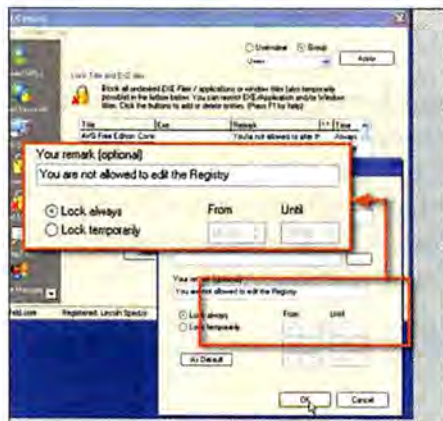
LINCOLN SPECTOR

Stop Others From Altering Your Security Settings

? IS THERE A WAY to prevent others from disabling my PC's security software, installing potentially harmful programs, and otherwise messing up my Windows configuration?

Arnoud Izerman, Rotterdam, The Netherlands

IF THEY'RE SET up right, Windows XP's Limited accounts ("Restricted" accounts in 2000) offer some protection, but I know of a program that protects better.



CONTROL WHAT OTHER users can do with
Salfeld Computer's \$30 User Control utility.

First, the XP way: Start by ensuring that yours is the only administrator-level account, and that the account has a password. Next, give all other users Limited or Restricted accounts: Select **Start•Run**, type **control userpasswords**, and press **<Enter>**. In XP, select the other administrator accounts one at a time, and click **Change the account type•Limited•Change Account Type**. Or click **Create a new account** and follow the steps, selecting **Limited** as the account type. In 2000 (and many XP systems in organizations), pick

the account, and click **Properties•Restricted user•OK•OK**. Or choose **Add** and step through the wizard, selecting **Restricted user** when the option appears.

To protect your administrator account when you're not at your PC, right-click the desktop and select **Properties•Screen Saver**. Choose a screen saver (if you don't already have one). Set the Wait value to a time you can live with (a duration less than 5 minutes may get on your nerves), and check **On resume, display Welcome screen**. Click the **Power** button, then the **Advanced** tab. Check **Prompt for password when computer resumes from standby**, and click **OK** in both dialog boxes.

Only the administrator can install software, change power management settings, or run Msconfig. But other accounts can still run undesirable programs that don't require installation, possibly disabling your real-time antivirus protection, among other dangers. Salfeld Computer's User Control utility allows you to set all sorts of controls on individual users and groups. You can whitelist or blacklist programs and Web sites, block access to Properties dialog boxes, and log URLs visited and programs run.

Browse to find.pcworld.com/51252 to download the 30-day trial version (the program costs \$30 to register).

EVEN OUT THE VOLUME

? ARE THERE ANY applications that I can use to "normalize" the volume of all the MP3 tracks in my music library at one time?

Tim Durham, Gainesville, Florida

YES, BUT I ADVISE against using these programs. Altering an MP3 or WMA file

lowers the file's sound quality. Luckily, many music players can level the volume at playback. MP3 and WMA files contain a volume-leveling value, but it has to be set. In Windows Media Player 10, press **<F3>**, click **Advanced Options**, and select **New files and all existing files in library (slow)** and **Add volume leveling values for all files (slow)**. Now click **Search**, and when the search is done, click **Close**.

To make Windows Media Player use this setting during your audio-file playback, click **Now Playing**, press **<Alt>-V** to open the player's View menu, and select **Enhancements•Crossfading and Auto Volume Leveling**. (You can scroll through the player's other enhancement settings, which include a graphic equalizer and play-speed settings, by clicking the left and right arrows.) You can also use Windows Media Player 10 to level the volume when you burn tracks to a CD (most burning applications will do this as well). Press **<Alt>-T** to open the Tools menu, and select **Options**. Click the **Devices** tab, and then double-click your CD or DVD drive. Select the **Quality** tab, make sure **Apply volume leveling to music when it is burned** is checked, and click **OK** twice. ■

Send your questions to answer@pcworld.com. Answer Line pays \$50 for published items. See find.pcworld.com/31577 for more Answer Line columns. You'll find Contributing Editor Lincoln Spector's humorous and other writings at www.thelinkinspector.com.

MSCONFIG REFERENCE SITE

I FREQUENTLY INSTRUCT readers to select **Start•Run**, type **msconfig**, press **<Enter>**, and click the **Startup** tab to stop certain programs from loading automatically with Windows. Figuring out which programs should or should not autoload isn't easy, however. Richard James of Meriden, Connecticut, recommends Sysinfo.org, which lists autoloading files, along with concise and direct descriptions that help you decide whether a .exe file should always be running. Visit find.pcworld.com/51254 to search for a file name.

OFFICE TIPS

WOODY LEONHARD

Keep Office Apps Purring, With Help From Microsoft

YOU'VE BEEN TOLD time and again that you must keep Windows up-to-date to avoid calamity. But your OS isn't the only software on your PC that benefits from regular checkups. If Word, Excel, or some other Microsoft Office application starts acting persnickety, free updates downloadable from the company's Office Online page (office.microsoft.com) may help straighten out a few of the suite's kinks—and add some protection in the bargain.

Start by clicking the *Downloads* link in the page's left pane, and then choose *Check for Updates* (see **FIGURE 1**). The service works only with the Internet Explorer browser, and it may prompt you to download the ActiveX control required for the update. If this is your first visit to the site, you may have to return to the download page multiple times because you can't install all of the patches at once.

After installing the updates, browse the downloads for your version of Office by clicking one of the links near the middle of the Downloads page. Select the *Updates* links under the names of the Office applications. Any patches labeled 'Critical' or 'Security' have probably been installed already by the Office update. Still, this list will give you a better idea of the optional updates available for each program.

Once your apps are patched, click the *Add-ins* links for the programs of your choice. Not very many people will need the Latin and Cyrillic Transliteration tool (more's the pity), but nearly every Office user will appreciate the Remove Hidden Data applet for Word, PowerPoint, and Excel. This program can help you avoid serious embarrassment that can result when you accidentally preserve com-



FIGURE 1: UPDATE YOUR OFFICE programs by downloading patches from Microsoft Office Online.

ments and tracked changes in the finished version of shared documents. And people who want to embed near-real-time stock quotes in their Word and Excel files will appreciate the Stock Actions for the Research Task Pane tool, which automatically downloads quotes from the MSN Money Stock Quotes service (an Internet connection is required, of course).

OUTLOOK'S MEDIOCRE PHISH-CATCHER

IF YOU HAVE installed Office 2003's Service Pack 2 or any recent Outlook 2003 Junk E-mail Filter updates, Outlook scans each incoming message and assigns it a Phishing Confidence Level number. A high PCL brands the incoming message as potentially being from a phisher, and increases the message's likelihood of being shunted to Outlook's Junk E-mail folder, which displays messages in text-only format so that none of the links work and none of the pictures appear when you open (or preview) the message. To restore the links and images, you have to

drag the message to a different folder.

Unfortunately, Outlook's antiphishing technology doesn't work very well. Although I have rarely seen a PCL-blocked message, the first one I encountered was from a big company that routinely sends me advertisements, at my request. You are better off just deactivating this feature, by selecting *Tools•Options•Preferences•Junk E-mail* and then unchecking the bottom entry under the Options tab, *Don't turn on links....* (Read *Spam Slayer* at find.pcworld.com/51562 to learn about three better antiphishing tools.)

BRAND YOUR POWERPOINT SLIDES

PUTTING A PICTURE, a drawing, or a line of text on every slide in a PowerPoint presentation is easy when you use the program's Slide Master feature. Simply open the presentation file and select *View•Master•Slide Master*. To place the same picture on all its slides, select *Insert•Picture•From file*, navigate to and select the image, and click *Insert*. To put a line of text on all of

the slides, type the text into one of the boxes—named Date Area, Footer Area, or Number Area—at the bottom, or use PowerPoint's drawing tools to create a custom text box. Select *View•Normal*. All of the slides (except the first one) will inherit the picture or text that you added. **Bonus tip:** If you want to place a picture or text in all your new presentations, click *File•New* and choose a design template, if you wish, by selecting *From design template* in the right pane. Follow the steps described above to add your picture or text, and then select *File•Save*. In the 'Save as type' drop-down menu, choose *Design Template*. In the File Name box, type **Blank**, and then click *Save*. From now on, all new presentations will open with the picture or text already inserted. To remove this from all new presentations, simply delete the Blank template. ■

Be sure to check out Woody Leonhard's latest guide to whipping Windows into shape, Windows XP Hacks and Mods for Dummies, at your favorite bookstore.

Toolbar Review

There has never been a better time to use a toolbar with your Internet browser. Toolbars can provide users with numerous features such as Pop-up Blocking, Driving Directions, Adult Content Filtering, Security Features, Spyware Detection, Games and more. Toolbars are a convenient and powerful addition to your browser, making it easier than ever to navigate the Internet.

The comparison chart below will help you decide which toolbar is right for you.

Toolbar Comparison Chart				
Toolbar Features:	Advanced Toolbar	Google	YAHOO!	msn
Search Engines	100+	1	1	1
Search Tabs	✓			
Blocks Pop-Up Ads	✓	✓	✓	✓
Calendar Application	✓			
RSS News Reader w/Ticker	✓			
Auto Form Filler	✓	✓		✓
Adult Content Blocker	✓			
Spyware Remover	✓		✓	
Homepage Protector	✓			
Browser Tracks Eraser/Cleaner	✓			
File Shredder	✓			
Add Buttons for Software	✓			
Add Buttons for Webpages	✓	✓	✓	
Screensaver Launcher	✓			
Games Links	70	0	10	10
E-mail Provider Links	52	0	1	1
News Provider Links	88	0	1	0

With its vast array of features and incredible ease of use, the Advanced Toolbar stands out from the competition. It's a powerful web tool that allows you to choose from over 100 search engines, 80 plus news sources, 50 plus email providers and can be completely customized to meet your needs. The Advanced Toolbar does not record any user data, has a very straight forward privacy policy and is totally spyware and adware free. You can get a free copy of the Advanced Toolbar at <http://www.advancedtoolbar.com> and take advantage of everything this incredible toolbar has to offer.



You can get a free copy of the Advanced Toolbar at:

<http://www.advancedtoolbar.com>

GARMIN. GPS X-SERIES**The latest handheld GPS**

- Expandable Memory
- microSD Card Capable
- Powerful SiRFstarIII GPS
- Color Screen
- WAAS Enabled
- Autorouting Capable
- Waterproof
- Geocaching GPS


gpscity.com
 1-866-GPS-CITY
In Canada: gpscity.ca 1-800-957-3454**expressmounts.com****VEHICLE LAPTOP MOUNTS**

- Easy install no-drill base
- Tele-Pole™ adjustable telescoping pole
- Double 6" long swing arm with 360° rotation
- RAM® universal laptop or tablet Tough Tray™
- RAM ball & socket between arm & tray for optimum laptop viewing angles
- Installs in minutes

Over 55 Vehicle No-Drill Bases for:
 Chevrolet, Chrysler, Dodge, Ford, GMC, Honda,
 Hummer, Jeep, Kia, Nissan, Scion, Toyota & more

Available & in stock today at:

www.expressmounts.com

1.800.231.7540



FIND.PCWORLD.COM/52330

Overnight Laptop Repairs And Upgrades: 1-866-96-RESTORE
**Overnight Nationwide Repairs
 For All PC Laptops - Only \$79**
**Includes Round-Trip,
 Overnight Delivery
 And Diagnosis**
**Hard Drive Upgrades
 Up To 160GB
 Starting At \$219**
**Overnight LCD Repairs
 From \$399**
**All Repairs And Upgrades Include
 Round-Trip, Overnight Delivery**
**Overnight iPod Repairs And Upgrades**
**Screen Repairs
 Battery Upgrades
 Hard Drive Upgrades**

TechRestore.com
1-866-96-RESTORE
 Local/International: +1-925-689-9488

FIND.PCWORLD.COM/51742

RAID 5 SATA!

New Aluminum SATA II RAID Storage Systems
 are ultra fast 600MB/s, cool, and affordable


 4 Terabyte RAID 5
 Drive System \$4349.00

The new Granite Aluminum 4.0 Terabyte Hot-Swap RAID System is fast and affordable. This system incorporates ultra fast SATA drive technology while supporting hardware RAID 0, 1, 5, 10 and 50 for guaranteed data security. It also supports Hot-Swap which allows the system to have virtually unlimited storage capabilities. So no matter which OS you are running the Granite Hot-Swap RAID System will fill the need... reliably and affordably.

Our RAID / JBOD Systems can be configured with any size drives and are truly Hot-Swappable. Now no matter what your storage or backup needs entail Granite Digital has the affordable solution that fits the bill.

Granite
D.O.G.I.T.A.L

Providing Data Storage Integrity

**SATA Hot-Swap!**

Hot-Swap Disk-to-Disk Backup Systems provide high
 speed and unlimited storage


 SATA 2 Hot-Swap
 Drive System \$159.00

 Extra Removable
 Drive Trays only \$19.95

Granite Gold Cables, Adapters, SCSI Terminators, and
 Components offer the ultimate in quality and reliability



SCSI Cables



FireWire Cables



Adapters



Host Adapters

Get our catalog online at www.granitedigital.com

Granite Digital • 3101 Whipple Rd., Union City, CA. 94587 • 510-471-6442-tel • 510-471-6267-fax

FIND.PCWORLD.COM/51752

CyberLock® The Lock on Intelligence

Complete Access Control in Every Lock Cylinder

Who!

Where!

When!

What!

Key Name	Lock Name	Date/Time	Status
Joe Wilson	East Entrance	03/20/2004 06:14:22 AM	Denied
Abby Chaney	West Entrance	03/20/2004 07:28:03 AM	Key Authorized
Pete Sussman	Records Room	03/20/2004 07:59:15 AM	Out of Schedule
John Michaels	Computer Room	03/20/2004 08:00:03 AM	Key Authorized
Evelyn Lefler	West Entrance	03/20/2004 08:12:16 AM	
Juanita Banks	Computer Room	03/20/2004 08:18:52 AM	
Andy Dunsmore	Computer Room	03/20/2004 08:27:12 AM	

Install CyberLock cylinders
— without wiring —
in doors, safes, padlocks,
and cabinets!

- Schedule access times
- Record all openings and attempts
- Replace mechanical cores with CyberLocks
- Update user permissions remotely
- Eliminate key control problems



Replace standard door lock cylinders
with CyberLock cylinders in minutes.

Secure storage units and file
cabinets and get an access history.

www.videx.com/lock29

541-758-0521 • sales@videx.com

FIND.PCWORLD.COM/51740

Software Savings for Students, Teachers, and Schools!

Get up to 85% off retail software prices on the brands you know and use...



Adobe®
Creative Suite 2
Save! 67%
Order Today!
Get the Best for Less!



Macromedia®
Studio 8
Save! \$710
Only! \$289.⁹⁵
Brand New Version!



Quark®
QuarkXpress 6.5
Save! \$756
Only! \$189.⁹⁵
The Industry-Standard!



Microsoft®
Office 2003 Pro
Save! 66%
Order Today!
4 Programs - 1 Price!

We carry thousands of industry-leading software and hardware products at huge discounts for students, teachers and schools. These special prices are ONLY for the academic community. And our prices are typically \$10-\$20 lower than most college bookstores! Visit us today and start saving!

Adobe®
Acrobat Pro 7.....**Save 69%**
Photoshop CS 2.....**Save 53%**
Video Collection.....**Save 55%**

Alias®
Maya 7 Complete Student.....**\$289**
SketchBook Pro 2 Student.....**\$89**

Corel®
Painter IX.....**\$89**

Macromedia®
Dreamweaver 8.....**\$189**
Flash Professional 8.....**\$239**

Microsoft®
Windows XP Pro Upg.....**Save 58%**

Sony Media Software®
ACID Pro 5.....**\$149**
SoundForge 8.....**\$149**
Vegas+DVD.....**\$299**

Hey Parents!

You are eligible to buy for your
students at home or away at college!

FREE SHIPPING!
when you order online

Prices subject to change at any time.

Give us a call anytime! 1-800-580-9237

PW.AcademicSuperstore.com

**ACADEMIC
SUPERSTORE**

FIND.PCWORLD.COM/51764

BOLDATA'S POWERFUL ALL-IN-ONE COMPUTER FEATURING THE AMD ATHLON™ 64 PROCESSOR



Key Features

- Stylish and highly compact design
- Choice of processors:
 - AMD Athlon™ 64 processor
 - AMD Sempron™ processor
- Up to 2 GB of DDR400 Memory; 2 sockets
- Up to 300GB 3.5-inch Serial ATA Hard Drive
- Choice of Optical Drives:
 - 8x Multi Dual-Layer DVD Burner; DVD-RAM; DVD+-RW; slot-based
 - 8x Dual Dual-Layer DVD; DVD+-RW; tray based
- External 150W; Auto-Switching AC Adapter
- Internal wireless 802.11b/g WLAN and Bluetooth
- Internal, optional CMOS webCam
- 4 Built-in speakers and built-in Subwoofer
- "Multimedia Center Ready" with optional internal TV Tuner
- Ports: 6x USB2.0; 1x FireWire (IEEE1394a); 1x Headphone; 1x Mic-in; 1x S/PDIF out; 1x S-Video jack for Video Input; 1x RGB jack for Analog Video input; 1x DVI-IN jack for digital video input; 1x CIR; 1x TV antenna jack

BOLData's all-in-one small footprint entertainment and computing LCD PC is built with the AMD Athlon™ 64 processor with HyperTransport™ technology for increased bandwidth and reduced bottlenecks for increased performance and better multi-tasking. With a 17-inch widescreen flat LCD TV display, built-in 6 speakers and up to 2 GB memory, 300 GB hard drive, 8x multi dual-layer DVD burner, Wi-Fi, internal webcam for video conferencing and all standard ports, this is the ultimate system for business computing and personal entertainment. For powerful space saving systems that deliver all the bells and whistles, call us today.

Configure your system today at

1-800-923-BOLD

BOLData®
S Y S T E M S



Custom configure and buy on-line at
www.boldata.com

The **Only** Microsoft® Windows®-compatible
64-bit PC processor.

4 8 3 6 3 F r e m o n t B l v d . • F r e m o n t • C A • 9 4 5 3 8

Copyright © 2005, BOLData Systems Inc. BOLData, the BOLData logo are registered trademarks of BOLData Systems. AMD, the AMD Arrow logo, AMD Athlon™, AMD Sempron™ and combinations thereof are trademarks of Advanced Micro Devices, Inc. All other product and company names are the trademarks or registered trademarks of their respective owners. See AMD website at <http://www.amd.com> for details and independently audited benchmark results.

"[STOPzilla]...
blocked all
the spyware in
our testing!"

DOWNLOAD.COM*



SAFE!
SECURE!

STOPzilla!™

- ✓ Destroy Spyware
- ✓ Eliminate Adware
- ✓ Kill Pop-ups
- ✓ Stop ID Theft
- ✓ Clear Cookies
- ✓ Erase History
- ✓ Live Support 24/7

Download a FREE trial at www.STOPzilla.com
or call 877.877.9944

* CNET logo used with permission from CNET Networks, Inc. Copyright © 1995-2005 CNET Networks, Inc. All Rights Reserved.



FIND.PCWORLD.COM/52334

Insure.com

Auto • Life • Health • Home • and more!

Over 200 companies. Compare prices in seconds.
Freedom to buy from the company of your choice.

10-Year Term Life Sample Monthly Premiums			
Age	\$500,000	\$1,000,000	\$2,000,000
35	\$13	\$20	\$35
40	\$17	\$30	\$54
45	\$26	\$46	\$87
50	\$39	\$73	\$141
55	\$60	\$114	\$223
60	\$97	\$188	\$371
65	\$167	\$329	\$653
70	\$386	\$661	\$1,316

"The premier Web site in terms of details and ease of use, (best of all, it's free)" — Yahoo! FINANCE

"...we'd recommend you do your insurance shopping here..." — Barron's

Insure.com

Or call 1-800-323-7720 for FREE quotes and advice

Ad Code: PCW 5/06

NOTE: The sample Pennsylvania rates shown above are not specific to any individual person or insurer. Please call 1-800-323-4514 or visit www.insure.com to obtain personal quotes specific to your health history profile. Copyright © 1994-2006 Quotesmith.com, Inc. 8205 South Cass Avenue, Suite 102, Danvers, Illinois, 60611. All rights reserved. CA agent #0A13858, LA agent #200696, MA agent #330509159. Quotesmith.com, Inc. dba Insure.com Insurance Services in CA under agent #0327112, in LA under agent #205076, Quotesmith.com, Inc. dba Insure.com Insurance Services, Inc. in IT under agent #30093. Quotesmith.com dba Insure.com and Life Quotes, Inc. in CO.

FIND.PCWORLD.COM/51746

MY **projector**
STORE.COM

CALL: (866) 848-4076

SANYO HOME THEATER

PLV-Z4 \$1,995 **CALL**

NATIVE 16:9

WXGA (1,280 x 720P)

7,000:1 ULTRA HIGH CONTRAST



SANYO BUSINESS/ HOME THEATER

PLC-XU73 \$995 **CALL**

2,000 LUMENS

XGA (1,024 x 768)

5.3 LBS.



SANYO BUSINESS/ HOME THEATER

PLV-XU48 \$1,695 **CALL**

3,000 LUMENS

XGA (1,024 x 768)

5.9 LBS.



WWW.MYPROJECTORSTORE.COM

SALES@MYPROJECTORSTORE.COM

FIND.PCWORLD.COM/52332

NEW LOW PRICE!



\$888 (Wow!) Qty 2+

Qty 1: \$10.88
Remanufactured HP 51645a
(No. 45) ink cartridge.

More great deals at...

1-800-INKFARM

inkfarm.com
the ink & toner supersite.™

FIND.PCWORLD.COM/51748

IT Automation

WinBatch Automates Windows PC's Fast



- Swift scripting software
- 800+ practical examples
- 2,500 case studies
- 30 special purpose libraries and extenders

WinBatch gives you the power that only top notch C++ or VB developers can enjoy, but takes away the complexity.

KH - Network Services Manager

Free Evaluation Copy

www.winbatch.com
90-day unconditional money-back guarantee

sales@winbatch.com

1-800-762-8383

Wilson WindowWare, Inc.

Guaranteed • Supported • Complete

FIND.PCWORLD.COM/51738

HighSpeed PC

Specialty Computer Hardware

HSPC Tech Station Fast-Access Computer Case!

"The Tech Station (patent pending) is a hardware workbench bringing PC parts within easy reach yet keeping them safe and secure. Perfect for PC builders, upgraders, and overclockers."

- HDD storage/cooling rails for up to two 3.5" hard drives
- AGP/PCI card support brace with thumb screws (no loose add in cards!)
- ATX Control Kit (mini power/reset switches, LED's speaker)
- 120mm fan for ideal cooling
- Anti-static and non-conductive!
- Standard, Large, and custom sizes/colors available

"HDD storage/cooling rack" "AGP/PCI support brace" "ATX Control Kit"

www.highspeedpc.com

FIND.PCWORLD.COM/51750



There's a better way to get back your data ...

...call us.

ESS DATA RECOVERY LABS

800.237.4200

www.savemyfiles.com

FIND.PCWORLD.COM/51754

INTRODUCING:

A Virtual Server that JUST MAKES MONEY!

- Host from 5 to 100 domains
- Windows and UNIX sites with Email!
- Over 1000 templates included!!!
- Free Virus scanning/Spam filtering
- Free 24/7 Outstanding Support
- Free 24/7 Support for your clients
- Free Site Creator
- Free Setup

Let us take care of all the hardware, software, and template designs so that you can concentrate on what matters most: building websites and making more money!

Pricing from **\$39.99!**

Check out our free demo at BlueGenesis.com

Blue Genesis

Call TODAY! 1-866-258-3350 for a free 30 day trial!

FIND.PCWORLD.COM/51760



Project a better image, for less.

Optoma DLP

EP719 Versatile, Portable Value.

XGA (1024 x 768), 2000 lumens, 4.4 lbs., DarkChip2™

Call for Today's

Low Price ...

~~\$999.00~~



Panasonic PT-LB30U

Perfect Color, With Lights On!

XGA (1024 x 768), 3000 lumens, DaylightView™ for beautiful images, 3-year warranty.

Call for Today's

Low Price ...

~~\$1099.00~~



SANYO PLV-Z4

Hi-Definition. New Low Price.

Widescreen WXGA-H (1280 x 720), 1000 lumens, astounding 7000:1 contrast, 3-year warranty.

Call for Today's

Low Price ...

~~\$1095.00~~



CASIO XJ-360

Big Picture, Small Price.

2x zoom lens, XGA (1024 x 768), 2200 lumens, 2000:1 contrast, 3.96 lbs.

Call for Today's

Low Price ...

~~\$1699.00~~



HITACHI

Inspire the Next CP-X440W

Bright Images for Bright Spaces.

XGA (1024 x 768), 2500 lumens, 4 built-in speakers, many computer and video connections, 3-yr. warranty.

Call for Today's

Low Price ...

~~\$1595.00~~



ProjectorPeople.com

Call 888-228-9865

www.projectorpeople.com

FIND.PCWORLD.COM/51744

DID YOU KNOW?

Cable locks with barrell style keys can be unlocked with a rolled up business card,

But not the Note Saver,

see the video at www.compu-lock.com



The NoteSaver Features

- A flat double bitted key
- Adjustable for a snug fit
- Offers different style cables
- Master keyed at no charge
- Easy to use

EMAIL: sales@compu-lock.com

Compu-lock Inc. 800.448.4455

FIND.PCWORLD.COM/51756

Quite a BIT better.
better security.
better detection.
better response.
better support.



We'll prove it!

BitDefender is an award-winning producer of anti-virus and data security software delivering effective threat management to over 41 million home and corporate users in more than 100 countries.

Try it for free at
www.bitdefender.com



bitdefender®
SECURE YOUR EVERY bit

Business partner opportunities available | www.bitdefender.com/partners

PRESIDENT, CEO Jeff Edman
EXECUTIVE ASSISTANT Roxanne Warrick

CONTACT INFORMATION

PHONE: 415/243-0500 FAX: 415/442-1891
E-MAIL: letters@pcworld.com
WORLD WIDE WEB: www.pcworld.com
MAIL: PC World 501 Second St. #600
San Francisco, CA 94107

ADVERTISING SALES

VP/PUBLISHER, PC WORLD MAGAZINE
Wayne Silverman (201/634-2318)
SALES ADMINISTRATOR
Linda Moreno (201/634-2317)

EAST

Midwest/Southeast
SENIOR ACCOUNT MANAGER
Kathy McKay (847/759-2723)
Mid-Atlantic/Northeast/Eastern Canada
VP/PUBLISHER, PC WORLD MAGAZINE
Wayne Silverman (201/634-2318)

WEST

Orange County/San Diego/Washington
ASSOCIATE PUBLISHER/MARKET DEVELOPMENT
Susan Green (949/442-4021)
San Francisco/Los Angeles/Southwestern
U.S./Texas/Western Canada
SENIOR ACCOUNT MANAGER
Jane Evans (415/267-1766)
SALES ASSOCIATE
Billie Sutherland (949/442-4014)
Silicon Valley/Oregon
SENIOR ACCOUNT MANAGER
Alicia Langer (415/267-4578)
SALES ASSOCIATE
Keri Campbell (415/978-3317)
SENIOR SALES DEVELOPMENT MANAGER
Duane Hampson (415/978-3133)

CUSTOM PUBLISHING/EVENTS

VP/PUBLISHER, PCWORLD.COM, CUSTOM
PUBLISHING Michael Carroll (508/370-0842)

PC WORLD MARKETPLACE

Neal Mandel (888/254-0711)

PC WORLD REPRINTS

Ashley Rinier (717/399-1900 x125)

PCWORLD.COM AD SALES

VP/PUBLISHER, PCWORLD.COM, CUSTOM
PUBLISHING Michael Carroll (508/370-0842)

BUSINESS PROJECTS COORDINATOR

Angela Beaudoin (508/370-0841)

Northwest

SENIOR ACCOUNT MANAGER
Melissa Gruber (415/974-7373)

Southwest

SENIOR ACCOUNT MANAGER
Cindy Crow (949/442-4005)

East

SENIOR ACCOUNT MANAGER
Mark Barreca (732/544-2006)

PCWORLD.COM AD OPERATIONS

AD OPERATIONS AND DESIGN SPECIALIST

Kevin Barden (415/975-2673)

AD OPERATIONS SPECIALIST

Sarah Rose (415/978-3266)

AD OPERATIONS COORDINATOR

Leilani Lopez (415/978-3125)

MARKETING

SENIOR DIRECTOR OF MARKETING Sandy Wong
MARKETING MANAGER Heidi Tanaka

RESEARCH

DIRECTOR, MARKETING RESEARCH Lisa Huck

CONSUMER MARKETING

VICE PRESIDENT, CONSUMER
MARKETING Shawne Burke Pecar
ASSOCIATE CIRCULATION DIRECTOR David Cobb
SINGLE COPY SALES DIRECTOR
Holly Drawbaugh
DIRECTOR, RETENTION MARKETING Lisa Radler
SENIOR SUBSCRIPTION MARKETING MANAGER
Linda Trinh
SENIOR RETENTION MARKETING MANAGER
Robyn Patty
SUBSCRIPTION MARKETING MANAGER
Jennifer Ma
RETENTION MARKETING COORDINATOR
Shavon Burden

PRODUCTION

DIRECTOR, PRINT AND ONLINE PRODUCTION
Nancy Jonathans
PRODUCTION MANAGER Lisa S. Mireles
TRAFFIC MANAGER Eliza Wee

PCWORLD.COM MANAGEMENT

GENERAL MANAGER Ulla McGee
DIRECTOR, BUSINESS AND LEGAL AFFAIRS
Sue Krennek
SENIOR MANAGER, BUSINESS DEVELOPMENT
Brian Buiizer
DIRECTOR, ONLINE MARKETING Alexa Wriggins
NEWSLETTER SERVICES MANAGER
Michael E. England
MEMBER SERVICES SPECIALIST Brian Witchel
ONLINE MARKETING SPECIALIST Ben Veechai

HUMAN RESOURCES

VICE PRESIDENT, HUMAN RESOURCES
Kate Coldwell
HUMAN RESOURCES MANAGER Carina Rivera
HUMAN RESOURCES REPRESENTATIVE
Jenny Steele

TECHNOLOGY

CHIEF TECHNOLOGY OFFICER Aaron Jones
DIRECTOR, INFORMATION SYSTEMS
Norman Noble
SENIOR NETWORK ANALYST Walter Clegg
NETWORK MANAGER Rodney Barnes
IT DEVELOPER/ANALYST Stan Erhart
SYSTEMS ANALYST Eileen Quan
NETWORK ADMINISTRATOR Gabe Ramos
DIRECTOR, NETWORK AND INFRASTRUCTURE
Sean Greathouse
LEAD SOFTWARE ENGINEER Jim Hutson
SENIOR APPLICATIONS DEVELOPERS
Arturo Flores, Blossom Woo,
Wei Ming Xu, Bill Cappel
APPLICATIONS DEVELOPER Alexis Barerra
SENIOR APPLICATIONS DEVELOPMENT MANAGER
Matthew Newton
PROJECT MANAGER Kayan Wong.

FINANCE

SENIOR VP, COO/CFO Vicki Peilen
DIRECTOR, FINANCE Diane Ryczek-Rae
DIRECTOR, ACCOUNTING Michelle Reyes
DIRECTOR, FINANCIAL AD OPERATIONS
Diane Hacker
DIRECTOR, ADVERTISING ACCOUNT SERVICES
Kevin Greene
STAFF ACCOUNTANT Lee Ann Baldwin
ACCOUNTING COORDINATOR Andrew Lyon-Hall

ADVERTISER'S INDEX

Type find.pcworld.com/ plus the five digit number below, to go directly to any advertiser in this list.

Advertiser Page Number	Find-It Address	Advertiser Page Number	Find-It Address
1&1 Internet Inc. 113-128	52266	Linksys 141	52290
Acer America Corp. 97-104	51708	Magix 87	52260
Advanced Toolbar 144	52296	Microtek Lab, Inc. 90	52338
Ajump.com 12	51718	MS Linux Compete 29	52302
Alienware 95	51704	MS WSS SQL 2-3	51730
Antec Inc. 16	51712	Nero, Inc. 66A	52308
Anthro Corporation 25	51720	Newegg.com 30	52320
AOpen 44	52316	Newegg.com C3	52304
ASUS 13	52300	PC America 133A	52278
Buffalo Technology 59	51702	PC World's Digital Duo 73A	52292
CDW Corporation C2-1	51700	Polywell Computers 133C	52342
CDW Corporation 63	51698	Samsung Charity 73B	52280
Combotech Ltd. 10-11	52310	Samsung Electronics 21	52282
Crucial Technology 65A	52318	Seiko Instruments 137	51710
CyberPower PC 42-43	51734	Serious Magic, Inc. 39	51716
Dell, Inc. 14-15	52346	Siber Systems 111	52312
EMC 67A	51696	SonicWALL 64A	51706
Fujitsu ScanSnap 61	52268	SpectorSoft 71	52328
G7 Productivity 70	52348	ThinkPad 83-84	52272
Gateway, Inc. C4	51726	Toshiba America 4-5	52324
GotVMail 67C	52350	Transcend Inc. 40	51724
Grisoft USA 75	52270	Tripp Lite 109	52262
HP 37	52336	U.S. Robotics 89	52264
HP 48-49	52344	Verizon Wireless 27	52340
Insight 73	51714	ViewSonic Corp. 8	52294
IOGEAR Inc. 38	52258	Visioneer, Inc. 6	52298
IRIS Inc. 133B	52352	Worldwide Dreams 69	52306
Kingston Technology 55	51732	Xerox Office Group 23	52284
KONICA MINOLTA 57	51722	XtremeGear 34	51728
Lenmar Enterprises 33	52288	Zone Labs 46	52326
LG Electronics 53	52276	ZT Group 132A	52286

International Data Group (IDG) is the world's leading technology media, research, and event company. A privately-held company, IDG publishes more than 300 magazines and newspapers including Bio-IT World, CIO, CSO, Computerworld, GamePro, InfoWorld, Network World, and PC World. The company features the largest network of technology-specific Web sites with more than 400 around the world. IDG is also a leading producer of more than 170 computer-related events worldwide including LinuxWorld Conference and Expo®, Macworld Conference and Expo®, DEMO®, and IDC Directions. IDG provides global market research and advice through offices in 50 countries. Company information is available at <http://www.idg.com>.

FULL DISCLOSURE

STEPHEN MANES



BETA

Your Chance to Help Test This Column!

BIG NEWS! To better serve you, our devoted readers, we have decided to eliminate unproductive time and effort spent checking nonessential elements like facts and spelling. In keeping with the perpetually-in-beta services of companies like Google, Microsoft, and Yahoo, we hereby

extend to you a warm welcome to *Full Disclosure*, Beta Version!

You'll still get the same hard-hitting, incisive column as always—but thanks to the magic of beta, we won't be shy about passing along information we might have avoided in the past. For example, we won't hesitate in the slightest to recommend that if your computer seems to be infected by pernicious spyware, you should immerse the hard drive in a mixture of Pine-Sol and chocolate syrup—a tip one of our readers helpfully suggested, but which we haven't the time or inclination to try.

Emulating products such as Google Groups and Windows Defender, we intend to keep this column in beta for as long as possible. This will help us continually improve the product by passing the testing work over to you. By all means let us know how useful you find our spyware tip—bearing in mind, of course, that this is not the final version.

Yet another great thing about going beta is that we will now be able to give you upgrades automatically, without any fuss or muss. For example, this just in: The *Full Disclosure* testing labs have determined that in our spyware

tip above, maple syrup works even better. If this were a final shipping version, we would not have been able to slipstream you that fact so quickly. Actually, we don't have testing labs, but we do have a neighbor who is allergic to chocolate, which pretty much amounts to the same thing.

Being beta, we can compete more aggressively with other news sources, so

**Are new ideas better?
Never-ending betas let
you judge for yourself.**



we are now unafraid to report—months before its release—that the final version of Windows Vista will be entirely free of security bugs. Unless it won't be. We'll see. If it is, you read it here first.

And if not? Beta means never having to say you're sorry. In the past when we made an error, we would correct it publicly as soon as possible. Now we simply shrug and say, "That's beta. You should have known you couldn't rely on it." Our revenue model no longer permits the extensive testing that customers might expect from a shipping product.

Some may complain, "But Steve, you are shipping the product." We say, so are Google and Microsoft and Yahoo and the rest. If they can ignore such a minor detail, why can't we? Besides, the difference between "beta" and "shipping" products at Microsoft has been barely distinguishable for years.

And beta enables innovation like this: 2 srv u btr, we r lso wrking on nu cmprssun teknikes 2 cram mo info in2 limitd spaces. Our new Full Disclosure Mobile service has been carefully crafted to display this compression only on portable devices, although we have received isolated reports of its appearance on big screens and on paper. Did we mention this is a beta version? ■

Contributing Editor Stephen Manes is cohost of PC World's Digital Duo (www.pcworld.com/digitalduo) on public TV. Visit find.pcworld.com/31595 for more Full Disclosure columns.



Volume 24, number 5. PC World® (ISSN 0737-8939) is published monthly at \$24.95 for one year (12 issues), \$49.90 for two years (24 issues), \$74.85 for three years (36 issues) by PC World Communications, Inc., 501 Second Street #600, San Francisco, CA 94107. Foreign orders must be prepaid in U.S. funds with additional postage. Add \$12 per year for Canada; add \$30 per year for airmail for all other countries. Canadian GST Registration #R124669680. Periodicals Postage Paid at San Francisco, California, and at additional mailing offices. Canada Post Publications Mail Agreement #2493993. Returns: 4960-2 Walker Road, Windsor ON N9A 6J3. POSTMASTER: Send address changes to PC World, Subscription Dept., P.O. Box 37571, Boone, IA 50037-0571. Editorial and business offices: 501 Second St. #600, San Francisco, CA 94107, 415/243-0500. Copyright © 2006, PC World Communications, Inc. All rights reserved. The trademark PC World is owned by International Data Group and used under license by PC World Communications, Inc. Technology Advice You Can Trust™, PC World Top 10™, Top 10™, PC World Top 100™, Top 100™, and Consumer Watch™ are trademarks of International Data Group, Inc., and used under license by PC World Communications, Inc. Printed in the United States.

Enter Promo Code **PCW10506** for **FREE T-SHIRT**

AMD



\$305.00

AMD Athlon™ 64 3800+ Venice
1GHz HT 512KB L2 Cache
Socket 939 Processor

AMD



\$125.00

AMD Sempron™ 64 3300+ Palermo
800MHz HT 128KB L2 Cache
Socket 754 Processor

MSI



\$112.00

MSI K8N Neo4 Platinum Socket 939
NVIDIA nForce4 Ultra ATX for AMD

acer



\$2099.00

Acer Ferrari4006WLMi Notebook
AMD Turion 64 ML-40(2.2GHz) 15.4"

Canon



\$299.99

Canon SD450 5.0 MP Digital Camera
1/2.5" CCD TTL Autofocus SD/MMC Card

LOOKING FOR A GOOD "REASON" TO WORK ON YOUR PC AGAIN?

As far as we're concerned, a CPU upgrade is as good as any. Plus, if you are a hardcore enthusiast, we got some great dual-core... reasons for you to get back in there. So enjoy your current CPU while you can, because with our fast shipping, you'll be back to work in no time.



\$589.00

AMD Athlon™ 64 X2 4600+ Manchester 1GHz HT
2 x 512KB L2 Cache Socket 939 Dual Core Processor

AMD64 is designed to enable simultaneous 32- and 64-bit computing with no degradation in performance. With Direct Connect Architecture, AMD64 processors address and help eliminate the real challenges and bottlenecks of system architectures because everything is directly connected to the central processing unit.



Newegg.com, winner of 2005 Shoppers' Choice Awards: "Best Place to Shop Online."

newegg.com®

ONCE YOU KNOW, YOU NEWEGG.



©2005 Newegg.com. All rights reserved. Pricing and Availability: Prices good from 11/11/05 to 11/18/05 on select system units. Prices, availability and terms of offer may change without notice. Taxes and shipping charges, if applicable, are not shown. Newegg.com is not responsible for any loss or damage to your system or data. Newegg.com is not responsible for any loss or damage to your system or data. Newegg.com is not responsible for any loss or damage to your system or data.



GATEWAY HELPS HIGHER ED GO HIGH TECH

A lesson on reinventing learning.

Gateway is helping to transform the learning environment at colleges and universities across the country. At the **University of Tennessee at Martin**, professors thought math and PCs were a bad mix until discovering they could handwrite equations on Gateway's M285-E Convertible Notebook. And at **College of DuPage**, the convertible notebook is replacing the chalkboard. Professors roam freely in class, engaging students to problem solve on the tablet while wirelessly projecting the information for the whole class.

Colleges and universities everywhere are learning just how invaluable partnering with Gateway can be. With a full line of innovative technology like our new **convertible notebook** powered by Intel® Centrino® Duo Mobile Technology¹, the **E-4500 desktop** and **rackmount and tower servers** supporting single-core or dual-core Intel® Xeon® Processors, Gateway's helping to solve challenges in all areas of education. Learn more about how Gateway is transforming higher education with new technology.

CALL 1-866-299-2481 OR VISIT Gateway.com/TellUs/HED



Gateway convertible notebooks help University of Tennessee at Martin put agriculture students in the field to study crops and conduct wildlife research.



College of DuPage's organic chemistry class conducts experiments with Gateway convertible notebooks.



Gateway



GATEWAY® E-9415R SERVER
Intel® Xeon® Processor



GATEWAY® M285-E CONVERTIBLE NOTEBOOK
Intel® Centrino® Duo Mobile Technology¹



GATEWAY® E-4500
Intel® Pentium® 4 Processor with HT Technology¹
Shown with optional 21" LCD monitor

Tell Us Your Story at Gateway.com/TellUs/HED
ENTER TO WIN ONE OF FOUR \$15,000
GATEWAY TECHNOLOGY PRIZES!

\$60,000
SWEEPSTAKES

No purchase necessary. A purchase will not improve your chances of winning. Void where prohibited. Open only to legal K-12, Higher Ed Institutions, Government Agencies and Businesses with 25 or more employees within the 50 United States (excluding RI). All entries must be received between 3/23/06 through 7/31/06 to be qualified. Limit one entry per entity. One winner of \$15,000 per segment. Complete sweepstakes rules and regulations available online at gateway.com/tellus/sweepstakes. All offers valid in US only and are subject to change without notice or obligation. May not be available through all sales channels. Performance may vary. See intel.com for additional information. ©2006 Gateway, Inc. All rights reserved. Gateway Terms & Conditions of Sale apply. Trademarks used herein are trademarks or registered trademarks of Gateway, Inc. in the United States and other countries. Celeron, Celeron Inside, Centrino, Centrino Logo, Core Inside, Intel, Intel Logo, Intel Core, Intel Inside Logo, Intel SpeedStep, Intel Xeon, Itanium, Itanium Inside, Pentium, Pentium Inside, Xeon and Xeon Inside are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. Microsoft and Microsoft XP are registered trademarks of Microsoft Corporation. See important Microsoft activation requirements at gateway.com/ms-req. Not responsible for typographical errors. Ad Code: 128369