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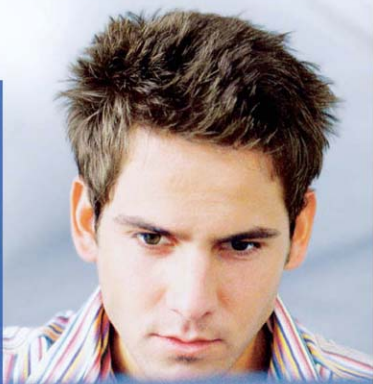
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PC contents

VOL. 27 NO. 7 JUNE 2008

COVER STORY

SOLUTIONS SUPERGUIDE

501 TIPS FOR BETTER COMPUTING

63 Your PC user manual has tons of information, but it's also hundreds of pages long. To become a real power user, you could read the entire thing and memorize the details on each page—or you could turn to *PC Magazine*. For our very special June issue, we boil down that manual's hundreds of pages into hundreds of tips—501 to be precise, carefully organized into nearly three dozen categories. This should take the hard work out of being an expert!

25 FIRST LOOKS



25 Hardware

Sony VAIO VGX-TP25E
Canon Selphy ES2
SanDisk Cruzer Contour
Microsoft Wireless Laser Desktop 7000

30 Business

Hitachi CP-A100
Dell SP2008WFP
Buffalo 320GB MiniStation TurboUSB
HearMe
WebEx MeetMeNow

36 Consumer Electronics

Nikon D300
Motorola Q9c
RIM BlackBerry Pearl 8120 (AT&T)
Sierra Wireless USBConnect 881
SanDisk Sansa Fuze
Logitech Squeezebox Duet
Cowon A3
Sharp Aquos LC-32GP3U-R

48 Software

Norton 360 Version 2.0
iGoogle
Scrivener
Genie Backup Manager Pro 8.0

54 The Best Stuff

14 FEEDBACK

Letters from our readers.

FRONT SIDE

17 News

Will Internet cable sabotage hit the U.S.; the truth about cell-phone and gadget viruses; a new text search engine.

18 At a Glance

The worst product names; Intel's energy-saving microchip; a Wi-Fi radio; the prevalence of rootkits.

19 Q&A

Tom Wheeler, on the digital TV switchover.

20 Connected Traveler

High-tech camping gear.

OPINIONS

9 First Word: Lance Ulanoff

Phones are the new laptops.

56 John C. Dvorak

Why we need electronics standards.

57 Inside Track: John C. Dvorak

58 Jim Louderback

Apple TV gets a makeover.

60 Dan Costa

TiVo is poised for a comeback.

61 Sascha Segan

Microsoft better get with the mobile program.

122 BACKSPACE

Tips our big cover story missed.

SOLUTIONS

91 Manage Your Music

Helping iTunes and Windows Media Player handle your songs.

94 Project

We show you how to rip cassettes, records, and VHS tapes.

96 Ask Neil

98 Ask Loyd

100 Business

Setting up servers; is your CRM delivering ROI, or is it DOA?; pre-sort e-mail with Outlook's rules.

104 Security

Where's your identity most likely to be stolen from?

106 Linux

Command-line tips and tricks.

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FIRST WORD LANCE ULANOFF

So Long Desktop, Hello iPhone

My generation's concept of what it means to compute is so quaint and firmly rooted in the 20th century. Young people and teens using computers 10 or 20 years from now will look back and laugh at people like me—and their own parents and grandparents—who sat down at desks and did their work using 20-pound boxes.

The decline of the deskbound PC has been under way for years, but recent events convince me that the transition to desktopless computing is accelerating at a breakneck pace. And mainstream laptops could someday meet the same fate.

What precipitated these changes? The arrival of the Apple iPhone, of course. It's an okay phone and an excellent multimedia device. But now, with the promise the Apple software development kit (SDK) holds and the introduction of the Exchange ActiveSync software, the iPhone is about to become much, much more.

I know I railed against the iPhone's lack of physical keys and nearly impossible-to-use virtual keyboard. My shortsighted evaluation, however, failed to take into account that Apple could care less whether I can use the keyboard. Its target market (young, hip 20-somethings) adopted the iPhone immediately and figured out how best to use the virtual keyboard to message, text, and search in the Safari browser. So what if I couldn't figure it out?

The addition of business-class tools, such as synchronized e-mail and contacts, and the potential for a whole new world of applications will transform this product from a really smart phone to a pocket-size PC. Sure, countless smartphones and ultraportable laptops (and even midsize UMPCs) are out there, but the iPhone is special.

One of the reasons Apple's iPhone stands to be a game changer is that people lust after it. Young people buy it because it's a passport to coolness, acceptance, and good times among their friends. Businesspeople who like to appear hip want it, too,

but many have held off. Without synchronized e-mail, they'd still have to carry their BlackBerrys. The BlackBerry Pearl is sexy, but it doesn't have the iPhone's cachet.

Psychographics aside, the iPhone is the most important product of the still-young 21st century. Excellent interface software and hardware innovations, including the multitouch screen and internal accelerometer, present possibilities for computing experiences that no deskbound PC can match. Laptops, even ultraportables, will pale in comparison.

The iPhone is the most important product of the still-young 21st century and holds possibilities that no deskbound PC can match. Laptops, even ultraportables, will pale in comparison.

Some people will always want the raw horsepower of a desktop PC. Photo editors, videographers, musicians, and those working on very complex documents will, at the very least, need the power of a mainstream desktop. And PC gamers will demand the power of a desktop or supercharged laptop. These niches will still exist, but the vast majority of consumers and businesspeople only need to handle e-mails, browse the Web, instant-message, make phone calls, do word processing, and manage videos and photos. If they can get all of this from something that fits into their pocket, then why have a PC at all?

That said, there will be the occasional need for bigger screens and faster input than you can get from the iPhone. So expect to see a new class of iPhone docks that provide access to a full-size QWERTY keyboard and the widescreen display of your choice. The dock will also connect the iPhone to gigabytes of storage that could be local or a NAS in your home or on the office

network. All business documents will live in the central server, and you'll carry just a subset on your iPhone. You will be able to pull down a file whenever you need it via Wi-Fi (through a VPN, of course) or over the high-speed cell network.

The iPhone's size and motion capabilities lend themselves to consumer and business applications we never imagined. How about an application that stores notes with a shake or acts like an Etch A Sketch, erasing scribbles with a jiggle of the phone? What if you could pass notes between iPhones by

shaking them in the direction of a recipient, or play "catch" by gently tossing a virtual ball from one iPhone screen to another? Or imagine adding effects to video simply by making the motion you want the moving image to make. Instant messaging will take on a new flavor as you tickle the screen to create a smile on the other end of the conversation or give the phone a hard shake to send an angry face to your chatting companion. You'll push slides in presentations by shaking the phone left or right, play Concentration by rocking the phone back and forth, and store ten on-screen files in one folder by tilting the phone and "pouring" them all in.

The possibilities are endless—as they should be for whatever succeeds desktop computing.

TALK TO THE CHIEF You can contact Lance at Lance_Ulanoff@ziffdavis.com. For more of his columns, go to go.pcmag.com/ulanoff.

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AUTHORITIES OF CREATORS



Speed up Your Systems in Real Time

The 8 Essential Benefits of Automatic Defragmentation

Fragmentation is unavoidable. It wreaks havoc on hard disks, causing crashes, hangs and complete system failures.

Diskeeper 2008 eliminates fragmentation—automatically. It's the real-time solution to your performance and reliability problems. Diskeeper is absolutely indispensable. It speeds up boot times, makes applications launch faster and improves the efficiency of backups and anti-virus scans. Diskeeper's benefits have proven time and time again to be a vital part of system administration.

We asked 254 of our customers what were the essential benefits of using Diskeeper. This is what they had to say:

1. Pushes System Performance to Its Peak

"We had one machine that had a failing drive in a RAID 5 array and when we replaced that drive, performance improved by 300%. And then when I ran Diskeeper for a week, again it improved over 300%. A disk intensive process that was taking 1.5 hours is now taking 15 minutes."

2. Reliability Restored

"We use Microsoft® SQL Server®. We were receiving hundreds of messages per day in the log like this one: SQL Server has encountered 21 occurrence(s) of I/O requests taking longer than 15 seconds to complete on file [E:\mssql\data\...]

"We researched this error and found that it is usually caused by badly fragmented hard drives. While our drives are part of a large SAN solution, we were not totally convinced that this should be causing the problem. We downloaded a trial version of Diskeeper and after running it, all of these errors disappeared! We have purchased 5 copies of Diskeeper and we are installing them on all of our production databases with the expectation to never see this error again!"

3. Transparent Defrag Runs Unnoticed

"The server automatically defragments only when there are idle resources. No more worrying about when I can schedule defragmentation, no more worrying about if the defragmentation will cause performance issues. InvisiTasking™ has worked great for us on everything from file and print servers to SQL servers."

4. Defends Critical System Files from Fragmentation

"I have been using Diskeeper at my office on the 63 workstations and 4 servers over the last year. The addition of Frag Shield™ 2.0 eliminates the task of manually changing the MFT. In the past most of my MFTs needed adjustment. Now that

The 8 Essential Benefits that Diskeeper® Provides As chosen by 254 Diskeeper Customers

Transparent Defrag Runs Unnoticed	78%
Reliability Restored	77%
Pushes System Performance to Its Peak	71%
Saves Money and Time	71%
Eliminate Costly Hardware Upgrades	71%
Extreme Condition Defragmentation	62%
Defends Critical System Files from Fragmentation	61%
Speed Up Virus Scans and Boot Ups	35%

Thanks to all our customers who participated.

this function is automatic, I don't have to manually check it."

5. Saves Money and Time

"Prior to installing Diskeeper, we were manually defragmenting. Some of the drives would take hours to defrag and within a few days we would need to defrag again. Installing Diskeeper basically paid for itself within a month by reducing off-hour salaries. Also the defragmented drives perform better and last longer. It's a no-brainer for production machines."

6. Speed Up Virus Scans and Boot Ups

"Diskeeper saves time in doing virus scans, backing up, indexing and searching the files. There are also faster download times for users because of the lower load on the defragmented RAID."

7. Extreme Condition Defragmentation

"One day our SQL Server came to a halt. I did everything: ran

spyware software, deleted numerous .TMP files, ran Windows® update, etc. But nothing got the server to run. Then I installed and ran Diskeeper; I found that the hard drive was horribly fragmented. But after Diskeeper finished defragmenting the system, the server came up."

8. Eliminate Costly Hardware Upgrades

"We were looking at having to replace or upgrade some of the servers because they were so slow. Since the Diskeeper install, they are performing well enough that we are no longer looking at the upgrades and replacements."

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FeedBack

A Grandmother Strikes Back

In my quest to rid tech writing of “granny” references, I have turned over a new leaf. Instead of striking back (which was my first impulse), I am writing back.

Frankly, the term as it was used in your online review of Norton 360 version 2.0 (“But when you go to set up Granny’s computer, choose Norton 360 Version 2.0.”) was both ageist and sexist, I am, in case you have not guessed, a granny.

In the tech landscape, I am less advanced than some and more advanced than many others. For example, when it comes to cell phones, I have a Motorola RAZR for my CDMA calls, and a BlackBerry Curve for data. For my European work, my go-to phone is my older-version Nokia N95, which I can set up for VoIP when I get tired of French Orange charges.

I know my way around the wires and buttons, and in my age and gender group, I am certainly not alone. A good number of us “grannies” learned our way around our first computers when they used punch cards and were the size of a small Volkswagen bus (something else we learned our way around—but that’s not for your young ears). We learned to navigate our computers before there was a Windows interface.

So why on earth do writers (inevitably male) keep taking those cheap “granny” shots? There must be better ways to use your writing skills, and more sophisticated, clear ways to describe the user-friendliness of a product without leaning on the trite and inaccurate “g” word. Would you use race to describe the computer usage of a group? Of course not! So let’s leave sex and age out of it, too.—Cynthia B.

Cynthia, you have a good point. (And you are not the only reader who has commented on this.) For the print version of this review see (page 48), we have taken both age and gender out of the equation. Nonetheless, shame on you, Neil. Please accept our apologies, and we will make sure she is punished. How about one week with no Internet access and taking away the keys to his Volkswagen bus?—Erik Rhey

Disagreeing About Green

Lance Ulanoff’s First Word column “Can We Stay Green?” (April, page 7) conflates two issues that really are separate: global warming and environmental pollution.

A good number of us “grannies” learned our way around our first computers when they used punch cards and were the size of a small Volkswagen bus—before there was a Windows interface.

The article tries to convince readers that because environmental pollution is caused by man, it is reasonable to assume that man is the cause of global warming. This is dishonest.

No one would dispute that measures must be taken to “clean” (not “green”) the world we live in. We have environmental standards for many problems, such as a charge on the purchase of new tires to subsidize their recycling, pollution controls on coal steam generation, and so on.

However, the jury is still out on anthropogenic global warming, and the scientific case against it is growing. To take ill-advised measures to address a problem that is beyond our ability to fix would be a foolish waste of resources. We can’t change the cycles of the sun, the pull of the moon, or the flow of cosmic winds. We’ll probably have to learn to cope with the forces of the universe in which we live rather than following every fad that some group of “scientists” whips up to get grant money so they won’t have to get real jobs.—Edward Day

I am surprised at how many people regarded my column as a treatise on global warming. Actually, my intention was to highlight the obvious friction between two conflicting desires: owning and using technology and keeping our planet clean and green.

The use of technology and the energy every gadget consumes naturally leads to increased energy creation and consumption. Moreover, the rapid industrialization of the world’s most populous country—China—means that our current gadget-energy usage could increase tenfold in the next decade.

Will all this lead to more global warming? I have no idea. There are, however, daily indications that whatever climate cycles this world saw over the past two millennia are now accelerating. Perhaps you noticed the news item about a Connecticut-size piece of Antarctica’s ice shelf breaking off?

My goal is not only for us to continue to love and use technology, but also for my children’s children to be able to do so.
—Lance Ulanoff

Faulty Freeware?

Generally, I rely on PC Magazine to keep me informed about the latest and greatest in technology. I enjoyed the March issue and sampled several of the apps in “The Best Free Software” (page 78). However, I downloaded CCleaner, one of the programs you mentioned, and Zone Alarm informed me that CCleaner had installed the Trojan Win32.Backdoor.Delfcir, making my system vulnerable to all sorts of nasty things. I searched for information on this Trojan, and the earliest reference is dated March 17. I’ve had CCleaner installed for a few weeks, so it seems the Trojan just activated in the past couple days. Is this a false positive, or is CCleaner compromised, and now thousands of your readers could be infected?—Jeff Reuter

I’m a user and fan of CCleaner, but I don’t have Zone Alarm currently installed, so I haven’t seen the result you encountered. Still, I checked out the problem you described on the forums of Piriform, the company that makes CCleaner. I posted a comment on the forum and received this reply:

“We’re aware of this false positive and we’ve already added a post about this on www.ccleaner.com. We’ve contacted Zone Alarm and they are looking into it.” So this in fact appears to be a false positive, which happens even in antivirus software from time to time. I’m happy to see Piriform working to fix the issue.—Eric Griffith

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Dell recommends Windows Vista® Ultimate.



OWN 1 – PWN ALL

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What's New from the World of Tech

FrontSide



Will Internet Sabotage Hit Home?

After an underwater network cable was damaged in South Asia, many are left wondering whether it was deliberate—and whether it could happen here.

Internet service in India and the Middle East faltered as two major submarine cables, FLAG and SEA-ME-WE4, were damaged in January. Media coverage focused on the scramble Internet operators made to reroute traffic effectively and put businesses back online. But when two more major cables were cut in the Mediterranean, conspiracy theories and rumors of sabotage began to circulate. After all,

cable warfare is nothing new; the British disrupted the flow of German intelligence during World War I by attacking German oceanic telegraph cables. Could these undersea Internet cables become high-profile targets in an information war of the 21st century?

"That many cuts in such a small area in such a short time do seem to stretch the laws of probability a bit," says Colum-

bia University Professor Steve Bellovin, an expert on computer network security. Unfortunately, there's no clear motive for a malicious party to mount a systematic attack on these cables. "For example, putting a tap on a fiber is more easily done when the fiber is cut, but intelligence agencies don't like these high-profile, noisy activities," Bellovin notes. "They don't want to be noticed."

And damage to these fiber-optic cables, which usually results from dragging ship anchors, fishing operations, and seismic activity, rarely impacts Internet service significantly; providers can just reroute traffic through different cables. "With the vast majority of cable cuts, nobody will ever know about them," says Ihab Tarazi, Verizon's vice president of global network planning. "Only the cuts that happen to take out a significant portion of a specific network could isolate a country and stand to have a real impact [on Internet service]," he adds.

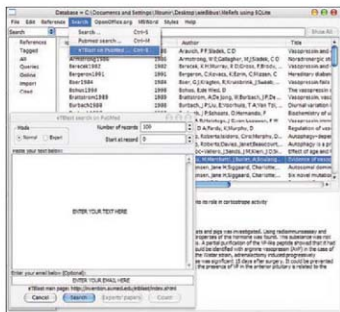
Many of the underwater cables are privately owned by Internet provider consortiums. These groups take safeguarding the cables quite seriously. Cables are usually replaced long before they reach the end of their 25-year life span; the oldest cable in the SEA-ME-WE4 system was put into service in December 2005. "Long story short, there's nothing about these cable systems that makes them old or vulnerable," says Tarazi. He points out that every cable is encased in a thick layer of steel to protect it, and some cables are even buried for further protection. In addition, each cable station has a network operations center to perform on-site maintenance and surveillance. David Coughlan, senior vice president of Tyco Telecommunications, notes that the companies that manage the undersea networks may even end up hiring a cable supplier's ship to watch over a single cable. "We get paid standby charges to have a ship with the necessary supplies stand ready to go out and repair cables as soon as possible after an outage," he says.

Even if the conspiracy theorists are right—that the damage to the cables were acts of sabotage—a major outage significantly affecting Internet service in the U.S. is extraordinarily improbable. More worrisome is what Belovino calls a "routing attack"—an Internet-based attack on the routing protocols in the DNS. As it stands, a physical attack on our networks would be highly ineffective. The U.S. has dozens of connections going through both the Atlantic and Pacific Oceans, giving our providers an enormous variety of rerouting options.

"We have the capacity, the diversity, the intelligence, and ability to immediately switch our routing patterns," says Tarazi. "We could stand to lose connections to all of London or all of New York City without its having an impact on business."—*Frank Washburn*

A New Take on Text Search

A new academic tool could revolutionize text searches.



ALL IN CONTEXT
The new eTBLAST text search engine looks for text similarity, instead of keywords, making it more effective for finding an identical match for large chunks of text.

Like the annoying student who spouts off a litany of facts when the teacher asks for a one-word answer, many search engines dredge up far more than users want. Now, researchers at the University of Texas Southwestern Medical Center say the days of keyword-based search results might be over—at least for academics.

Their eTBLAST search tool scans documents for text similarity, rather than matching key words, allowing users to input a full paragraph—say, an abstract or invention description—as a query. Based on word order, frequency, and proximity, eTBLAST turns out a list of documents and scores them by similarity. UT's Harold "Skip" Garner, who helped develop the code, says that the team is poised to release an updated version of eTBLAST, which would return results in a matter of seconds, down from several minutes.

Garner adds that eTBLAST can also catch cheaters. By searching an excerpt

from a scholarly paper or journal, the engine can look for an exact match. At least four plagiarism investigations have started as a result of suspiciously similar pages found through eTBLAST. The technology's limited scope, however, means that most universities will still use more road-tested tools, such as Turnitin or SafeAssignment, which compares a manuscript with data from a broader Internet archive.

For now, the engine searches only biomedical, physics, and U.S. patent databases, but Garner predicts further expansion into law, business, and other areas. And he's always looking for more databases. "Any free computer-science database the public knows of, just let us know, and we'd be happy to incorporate it," he says.—*Alison Lapp*

To try out eTBLAST for a text search, visit invention.swmed.edu/etblast/etblast.shtml.

THE WORST PRODUCT NAMES

Some brainstorm that should have stayed in the conference room.—*Jennifer DeLeo*

> Tonium	> email	> LappyMats	> Popuload	> Zecurion	> Emoze
> Packmaker	> Stripper	> Laptoq	> RSS reader	> Zlock 1.3	> Freeware
> Pocket-size	> Freeware	> screen	> for news	> Security software	> for push e-mail
> DJ system	> to clean e-mails	> protectors		> for Vista networks	

Q&A: TOM WHEELER

Navigating the Digital TV Switchover

Tom Wheeler, a former cable TV exec, talks about the switchover's impact on consumers.

Q: What is the biggest thing consumers need to know about the DTV transition in 2009?

A: They need to know that the change is going to affect their relationship with their TV sets. In years past, the TV just "existed." You turned it on and it worked—consumers had to do nothing proactively. That won't be the case anymore. The DTV conversion means that consumers will have to hook to cable or satellite, or buy a digital-to-analog converter, or buy a new digital TV.

Q: How will the software updates and bugs affect consumers?

A: DTVs are nothing more than computers, and we all know what happens to our computers: They get bugs, need updates, and require software fixes. Unlike the PC, however, the DTV isn't connected to a network capable of delivering Internet updates. Already one major manufacturer has discovered that 400,000 sets that had been shipped and sold had a software bug that kept them from being turned off after the set had been used for 1,200 hours. In other countries there are over-the-air updates (such as one offered by the BBC in the U.K.), and in the U.S. an update network



has been created to ride on the PBS signal. But so far, only Sony has signed up to use it.

Q: Is picture quality affected by a converter box?

A: A converter box simply converts a digital signal to analog so your existing TV can use it. The resolution that you get on your TV will be unchanged.

Q: What are some tools to help users with the transition?

A: Consumers should make sure that their sets are "future-proofed" for bugs as well as upgrades by purchasing only those sets that have the update client in

their software stack. In addition, since the updates don't always pass through a cable system (depending on the cable technology), consumers should spend a couple of dollars more to buy a small antenna that plugs into the TV so that it can receive the software updates coming over the PBS signal.

Q: Who will be the big winners and losers in the transition?

A: Ultimately the consumers will be the winners. The DTV image is better, and there are more programs that can be delivered over a broadcast signal. The growing pains will be worthwhile, but there will be growing pains. —Erik Rhey

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CONNECTED TRAVELER

The Call of the Wired

Tech out your next camping trip with fun and functional gear.



Heading for the great outdoors is an ideal way to escape your cubicle. But being in the wilderness doesn't mean that gadget geeks have to do without. Here are some high-tech products to make your excursion to the forest easy, safe, and fun.

To minimize extra gear, combo devices are key. A good example is the (1) **Life + Gear LifeLight** (\$69.95 direct, www.lifegearequipment.com). This handy lantern has 15 LED lights, an AM/FM radio, signaling flashers, a rescue siren, a night light, and external speakers for your MP3 player. Best of all, it runs via a hand crank—no batteries are needed.

Another battery-saving device is the (2) **FreeCharge 12V** (\$32 list), which is another hand-crank device that can charge a cell phone, MP3 player, or anything with a car-cigarette-lighter-type adapter. Three minutes of cranking gets you about 9 to 11 minutes of cell phone talk time, and you can use the (3) **Kensington Auto Power Adapter** (\$9.99 list) to charge via USB. So that everyone can listen to some campfire jams, check out the waterproof (4) **iHome iH13 iPod speaker/case** (\$50 street, www.ihomeaudio.com), which lets you protect and navigate your player.

To stay on the right path, make sure you have a ruggedized handheld GPS device, such as the (5) **Garmin Colorado 300** (\$533.32 list, www.garmin.com). It has a high-sensitivity GPS receiver to keep a fix on your position, as well as a worldwide basemap and electronic compass.

When packing up all these fun gadgets, don't forget about some essentials—like water. If you have to refill your canteen out in the woods, make sure that the water is potable by using the (6) **SteriPEN JourneyLCD** (\$129.95 list, www.steripen.com). Just give the pen a stir in your water; it uses UV light to remove harmful bacteria and parasites. And this new model has an easy-to-read LCD.

To get the best pictures in rough terrain, take along a (7) **Joby Gorillapod** flexible mini-tripod (\$21.95 to \$54.95, www.joby.com), which comes in different models for various camera types. And if you can't resist taking your laptop, at least keep your data protected with the ruggedized (8) **Corsair Flash Survivor** (\$249.99 list, www.corsair.com) USB flash drive, which comes in a waterproof aluminum case.—Erik Rhey

FUTURE WATCH

Low Power, Longer Life

To meet the power needs of portable electronics, improving battery efficiency is vital. Researchers from MIT and Texas Instruments are working on prolonging battery life through the development of a highly efficient microchip. The new approach reduces the required energy by up to ten times compared with current chips. The key is to build a chip with circuits that work at

much lower voltage levels than usual—about 0.3 volt instead of the standard 1 volt. MIT electrical engineering professor Anantha Chandrakasan, a lead collaborator, envisions implantable medical devices powered solely by body heat or movements. "Anything that's portable and battery-operated could use this technology to increase energy efficiency," he says.—Lisa Zyga

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Gadget Viruses Still an Empty Threat

The risk of malware attacking mobile devices has been largely exaggerated. But does that mean your cell phone is completely safe?

In the world of computing, being paranoid means being protected. But with viruses that attack cell phones and USB devices, the hype seems to have outmatched the threat. The cell-phone virus scare dates back about five years, when Spain's Telefonica virus made international news. And recently, gadget viruses hit the front page when CNN reported on an Associated Press story in March. The story warned of gadget viruses that originated in Chinese manufacturing facilities and plagued everything from iPods to digital photo frames.

With cell-phone viruses, the truth is that the vast majority of them are created in a lab instead of "in the wild," as Nokia spokesperson Dan Shugrue puts it. These viruses rarely make it to the outside world. And even if one did, the chances of infection would be slim, says Gartner Group security analyst John Girard. Wireless carriers scan networks for nefarious agents, businesses typically use code-signing



techniques to block viruses, and consumers typically must agree to any new installs. The simplicity of a cell phone also works in its favor.

"The less sophisticated the device, the less likely something will be pinned on it by surprise," says Girard.

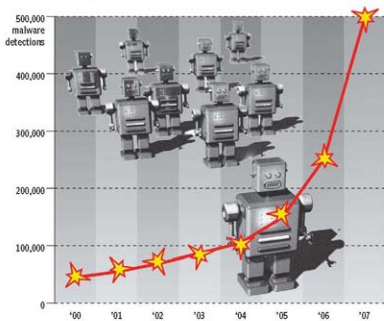
But just because such stories of mobile viruses are overblown doesn't mean there's no chance of a future occurrence. As smart-phones become more powerful and net-

works more pervasive, the probability of new threats, such as phishing scams, is becoming greater, according to consumer technanalyst Rob Enderle. And an even more likely conduit for a fast-spreading virus is Wi-Fi, now finding its way onto mobile phones and MP3 players. Enderle adds, though, that the risks are still minimal.

"Conditions are not perfect for an epidemic, but infection is a little more likely than before," he says.—*John Brandon*

MALWARE EVERYWHERE

Malicious software attacks, including Trojan horses, bots, and rootkits, are rising at the fastest rate ever. They doubled between 2006 and 2007, reaching the milestone of half a million.



Source: F-Secure, 2008.



GEARLOG

Radio 2.0

Although many people are still tied to terrestrial radio, a new era is on the horizon. Wi-Fi radio lets you listen to Internet stations on any Wi-Fi-enabled device—not just your laptop. Dedicated devices are just beginning to hit the market. For example, Com One's Phoenix Wi-Fi Radio (\$249 list) is an early entry into the field. Although it has some design flaws, the Phoenix could be a harbinger of a terrific technology to come. Being able to set my alarm to a podcast of *This American Life* or the live stream of KZSC—my all-time favorite radio station—has tremendous appeal, offering a good alternative to boring Top 40 or obnoxious morning talk shows.—*Brian Heater*



SyncMaster 53-Series
2253BW/LW, 2053BW & 953BW

give style to the word substance

The Samsung 53-Series is loaded with an outstanding 8000:1 dynamic contrast ratio, coupled with a fast 2ms (G to G) response time. But looks count too, so we wrapped all that technology up in an immaculate glossy finish and a minimalist bezel design to complement any home or office. It's all the style that substance could ever ask for. And vice-versa. For more information from the #1 selling monitor brand in the world,* call 1-800-SAMSUNG or visit www.samsung.com/monitor

8000:1 Dynamic Contrast Ratio
2ms GTG Response Time

Exclusive Magic Technologies
DVI with HDCP



Xezo is now offering the Air Commando limited-edition watch at the below-retail introductory price of \$584.00 USD for a limited time. Free shipping to U.S. customers. To order, visit the manufacturer's Web site at www.Xezo.com or call (800) 779-0102 within the U.S.

200M/660FT WATER-RESISTANT • 2 ROTATING BEZELS • LIMITED EDITION OF 500 PIECES



SAPPHIRE CRYSTAL GLASS FRONT & BACK

SILVER FACE:
LUMINOUS HANDS & MARKERS

BLACK FACE:
LUMINOUS HANDS, NUMERALS & MARKERS

The Swiss-made, automatic Air Commando by Xezo is built to last



First Looks

OUR RATINGS KEY: ●●●●● EXCELLENT | ●●●●○ VERY GOOD | ●●●○○ GOOD | ●●○○○ FAIR | ●○○○○ POOR

SONY VAIO VGX-TP25E

A Stylish Home-Theater PC

Looking for a home-theater PC to go with that HDTV? The Sony VAIO VGX-TP25E should be on your short list. It has a unique hockey-puck-like design and measures about 16 inches wide and 5 inches tall. It's a good living-room system for consumers who crave HD entertainment but may also want to use their TV's large screen to do some photo or video editing.

This Digital Entertainment System is so HDTV-oriented that it lacks a DVI port—HDMI and VGA being the only video outputs. In case your digital TV lacks an HDMI port, Sony includes a DVI-to-HDMI adapter. Since the TP25E supports HDCP, make sure your monitor or TV does, too, or you won't get the full 1080p resolution out of your Blu-ray movies. The Blu-ray burner is tricky, as you have to lift your discs on and off a spindle in the pop-out tray, running the risk of scratching them. An upside is that it accepts weird-shaped CDs (hearts, ovals, and others) in addition to circular ones.

The TP25E is a good multimedia performer. It completed our Photoshop CS3 test in 36 seconds and our Windows Media Encoder test in 1 minute 24 seconds. The system's dual-core Penryn processor and 4GB of memory are responsible for its fast performance. It is speedy enough to use for photo editing on your HDTV (jobs like cropping and red-eye removal), as well as more advanced photo tasks like retouching and running portions of pictures through filters, and it certainly will be able to transcode videos from one format to another (like downloaded DivX or transcoding recorded TV for use on a Zune or other device). Its GeForce 8400M GT graphics card is enough for Vista's Aero effects, though you'll probably want to run Crysis on a PC optimized for 3D gaming. The TP25E gets the HD-consumption job done.



Sony VAIO VGX-TP25E

\$3,000 direct
●●●●○



PROS Compact. Energy efficient. Penryn. Nice looks. 4GB of memory. Full-size desktop hard drive. Wireless everything. Touchpad on keyboard. Dual cable tuners included.

CONS Pricey. Cable tuners are external. Blu-ray drive is tray-loading type. Only four USB ports, two used by digital tuners. No internal expansion.

For more: go.pcmag.com/tp25e

INSIDE

- 25 Hardware
- 30 Business
- 36 Consumer Electronics
- 48 Software
- 54 The Best Stuff

The TP25E comes with two ATI Wonder CableCARD-compatible digital cable tuners, which should enable you to view premium cable channels on your TV without requiring a set-top box. We didn't test these particular tuners, but based on past experience with tuners in similar systems, their functionality is a crap shoot, and getting them to work can be tricky. At this point we recommend them to early adopters only. These external tuners are also a distraction to the system's otherwise clean lines.

The TP25E is energy efficient, using only 33 watts while idling, 2W when sleeping, and around 50W when the processor is fully taxed. Standard multimedia desktop PCs tend to idle at over 100W, so the Sony will save you a pretty penny over time. The TP25E also goes to sleep fairly quickly when you leave it idle.

Overall, the powerful and compact TP25E has the style and the features (especially around HD video) to earn our Editors' Choice.

—Joel Santo Domingo

Specs: 2.1-GHz Intel Core 2 Duo T8100 processor, 4GB 667-MHz DDR2 SDRAM, 500GB 7200-rpm SATA hard drive, 256MB nVidia GeForce 8400M GT graphics card, Blu-ray drive, Windows Vista Home Premium



PERFORMANCE TESTS

▲ High scores are best.
▼ Low scores are best.
Bold type denotes first place.

Sony VAIO VGX-TP25E

2,429

9,314

Gateway FX 7020*

6,713

1,201 x 1,014

4,301

124

0:36

1:07

0:53

*Reported for comparison.

RED denotes Editors' Choice.

MULTIMEDIA TESTS

3D TEST ▲

CINEBENCH R10 ▲

WINDOWS MEDIA ENCODER ▼

PHOTOSHOP CS3 ACTION SET ▼

3-inch color LCD for previewing photos

Canon Selphy ES2

\$199.99 direct

●●●●○

PROS Print pack holds both dye roll and paper. Highly water-resistant. Reasonably low cost per page.

CONS Bigger than most small-format thermal dye printers. Diagonal lines (like spokes of a wheel) print with jagged edges.

For more:
go.pcmag.com/canonese2



CANON SELPHY ES2

Grab-and-Go Photo Printer

Portability is desirable in a photo printer, but the more components a unit has, the harder lugging it can be. The Canon Selphy ES2 reduces the hassle by combining dye roll and paper in a single pack.

At 0.5 by 8.4 by 5.2 inches (HWD) and 4.3 pounds, the ES2 is large for a thermal dye printer that prints up to only 4 by 6 inches, but its mass accommodates the printer's unique paper handling. When you print, the sheet slides out through a slot in the bottom front in landscape orientation, and then rotates to portrait mode for printing.

According to Canon, the battery is good for 100 photos per charge. The ES2 can also print from PictBridge cameras, most memory cards, and via an infrared port (but notably not from USB keys).

Generally, the ES2's output qualifies as true photo quality, though diagonal lines print with jagged edges at some resolutions. Photos also proved to be water- and scratch-resistant. Print speed averaged an acceptable 1 minute 18 seconds per 4-by-6 photo, and the cost is a reasonable 28 cents per print.

The ES2 doesn't take first place in any area, but it offers an attractive balance of speed, quality, price, cost per print, and features.—M. David Stone

ALTERNATIVE THINKING ABOUT SERVER MANAGEMENT:

You don't have to be in your server room to manage your servers.

The HP ProLiant DL385 G5 Server, featuring efficient Quad-Core AMD Opteron™ processors, lets you manage it from your office in San Diego while it sits in Boston. Remote Management (iLO2) lets you control, reboot and troubleshoot from practically anywhere, even when the server is off.

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- Supports small form factor, high-performance SAS or low-cost SATA hard drives
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- Integrated Lights-Out (iLO2), Systems Insight Manager, SmartStart

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Smart Buy A44 2 GB additional memory (PN: 408851-521) \$159



HP StorageWorks Ultrium
448 Tape Drive SAS Bundle
\$1649

Lease for as low as \$41/mo* for 48 months
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2.8 in by 0.7 in by 0.4 in

**SanDisk Cruzer****Contour**

\$69.99 list



PROS Retractable USB plug with cover. Padded storage pouch. Fast. Lifetime warranty.

CONS Big for a USB flash drive.

For more:
go.pcmag.com/cruzer

SANDISK CRUZER CONTOUR**A Flashy Favorite**

Long gone are the days when USB flash drives were only for file storage. Nowadays, USB keys offer more gigabytes than ever, plus a wide variety of compatible applications and support for Windows Vista with ReadyBoost. The Cruzer Contour from SanDisk is the best of the new breed.

The stylish Contour is a bit heavy for a flash drive, but that's because it's housed in a protective stainless-steel shell. The slider for extending or hiding the plug behind a flip-up metal shield can be a bit

tricky to operate—enough so that SanDisk included extra printed directions in the packaging (thankfully not a blister pack). The Contour's gloss-black top is a fingerprint magnet, so expect to do occasional wipe-downs.

SanDisk certainly didn't scrimp on extras. The Contour comes with a padded carrying case and keychain clip, for starters. The drive itself works with the U3 platform and comes preloaded with a number of useful software applications, including a photo manager, an antivirus program, a utility to sync files between the Contour and your hard drive, and a password manager. (Unwanted programs are easy to delete and don't leave remnants in the Windows Registry.) More apps are available, mostly free, on U3 Software Central. U3 can also secure the drive if you wish, password protecting all contents.

Performance-wise, the Contour led the pack for sequential write times on our tests (16.9 megabytes per second) and posted decent read times (25.7 MBps). Its random read/write speeds are more than enough to support Vista ReadyBoost.

The combination of reasonable price, high speed, lifetime warranty, and worthwhile extras makes it a standout for Editors' Choice. —Eric Griffith

TURNING NUMBERS INTO A VET'S

FINANCIAL
MANAGEMENT

CUSTOMER
MANAGEMENT

PEOPLE
MANAGEMENT

Sage Software helps small businesses like Cumberland Valley Vet look at their finances from every possible angle. With Peachtree by Sage, now easier to use than ever, they can get their numbers right and make healthier business decisions. It's just one of our many software and service solutions for small and medium-sized businesses – from

MICROSOFT WIRELESS LASER DESKTOP 7000

Comfy Wireless Typing and Mousing

Why pay extra for a keyboard/mouse set when the one that came with your desktop PC probably works just fine? Well, such sets can add comfort and flair to your system, and even help prevent repetitive stress injuries. The Microsoft Wireless Laser Desktop 7000 is one of the pricier of these sets, but your hands and eyes will thank you for the investment.

The keyboard has a slim profile, with a sleek border of plastic and chrome trim. The plastic is translucent, to match Windows Vista's Aero interface. The mouse has a similarly sleek look, with matching chrome trim.

This combo is also designed for comfort. The keyboard has ergonomic features such as a curved profile, detachable risers, and a front wrist rest. The mouse is also somewhat ergonomic, molded to fit a wrist—if you're a righty. (Left-handers should look elsewhere.)

A small USB dongle pairs with both mouse and keyboard, which are powered by AAA batteries.



Ergonomically curved profile with wrist rest

There's a dock to recharge the mouse. Surprisingly, both mouse and keyboard exceeded their 30-foot wireless range. The keyboard has the standard assortment of hot keys, but with icons more usable than most. Between ease of use, performance, looks, and comfort, the Microsoft Wireless Laser Desktop 7000 is well worth the cost.—*Kyle Monson*

Microsoft Wireless Laser Desktop 7000

\$129.95 list



PROS Beautiful, thin profile and ergonomic design. Useful hot keys. Easy wireless pairing.

CONS Picks up smudges easily. Rather pricey.

For more:
go.pcmag.com/microsoft7000

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PAYMENT
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SOLUTIONS

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sage
software
Your business in mind.



Hitachi CP-A100
\$2,500 street



PC **IMAGE SOURCE CHOICE**
PROS Ultra-short throw, with 98-inch (diagonal) image at 15 inches from the screen. Bright image. Vibrant colors for presentations.

CONS Doesn't handle video as well as it handles computer input.

For more:
go.pcmag.com/cpa100

HITACHI CP-A100

A Projector That's Best in Show

In most business presentations, a run-of-the-mill projector will get the job done handily. But if you're projecting under unusual circumstances, say in a tiny room or onto the top of a table, you'll need an ultra-short-throw system. Generally speaking, this is a projector that, by using unusual optics, can project a large image from very near or even behind a surface. My favorite right now, and the Editors' Choice, is the Hitachi CP-A100.

Even in an elite field, the CP-A100 manages to stand out, thanks to its fantastic performance and surprisingly attractive design. The unit is compact, at 5.2 by 15.6 by 14 inches (HWD), and weighs 12.8 pounds. An LCD engine enables it to avoid the rainbow effect and achieve an impressive maximum recommended image size of 120 inches.

Besides our standard test suite (where the CP-A100 was able to project a 98-inch (diagonal) image when a mere 15 inches from the screen), I also tried out Hitachi's StarBoard—a 50-inch (diagonal) touch-screen whiteboard that accompanied the projector. In this case, I attached the included plastic feet and placed the projector vertically, with the front an

inch lower than the surface. Even from this awkward angle, the CP-A100 was able to project an image measuring a respectable 43 inches diagonally.

Setup is standard—just plug in the appropriate cables—but positioning the CP-A100 can be tricky, since even a slight variation will affect the image. After it's installed, you can control both zoom and focus from the remote. The CP-A100 comes with only a VGA cable, but it offers a number of connectors, including two VGA connectors, one pass-through monitor connector, RCA phono plug jacks, an S-Video connector, a USB port, audio input and output, and a LAN connector.

I measured the CP-A100 at a bright 2,135 lumens with a low contrast ratio of 100:1. Image quality for computer-based images was excellent, but video was far from impressive. Then again, built-in audio was respectable, with reasonably good quality and enough volume to fill a conference room. If you need an ultra-short-throw projector, the CP-A100 is one of the best choices overall, with a combination of image quality, image size, and features that easily earns it our Editors' Choice. —*M. David Stone*

“COCHLEA-OPENING EAR CANDY”

— WIRED.com 9 out of 10
(www.sleek-audioreviews.com)



FIND YOUR AUDIO FINGERPRINT™ with the SA6 Earphone

The Sleek Audio SA6 is the *first fully customizable earphone* that allows the bass and treble to be adjusted independently. We call this innovative feature the VQ System™ and it's designed to find your personal *audio fingerprint*.

We all hear differently and have unique tastes in music; finding your personal settings will help you to enjoy your audio experience.

- VQ System™ Interchangeable bass and treble ports for fine tuning.
- Multiple size ear tips to fit any ear canal.
- Removable cable that also swivels 360 degrees. Cable can be worn up and over the ear or hanging down as a traditional earphone.
- Compatible with Sleek Audio's independent wireless system to be released in late 2008.

SA
SLEEK™
AUDIO

Music in Tune with You™

2-megapixel webcam

**Dell SP2008WFP**

\$349 direct



PROS Good color and grayscale performance. Cool webcam software. Stylish design.

CONS So-so viewing-angle performance. Limited stand adjustment.

For more: go.pcmag.com/sp2008wfp

DELL SP2008WFP

Videoconferencing Wonder

As videoconferencing gains in popularity, built-in webcams are becoming increasingly popular in business monitors. Dell is ready with its SP2008WFP, one of the manufacturer's first to offer an embedded webcam and microphone.

Image quality with the integrated 2-megapixel webcam was ideal for video chats. Dell also throws in a webcam management utility disc to help with camera setup, and to apply audio and visual effects (you can sound like a robot, look like a monkey, or create a custom avatar!). One of my favorite features is motion detection, which lets you keep an eye on things while you're away: A motion sensor activates the camera, which begins recording video and sends you an e-mail alert.

The monitor provides four USB ports, an HDCP-compliant DVI input, an analog (VGA) port, an upstream USB connector, and a DC power connector for use with a Dell Sound Bar.

The SP2008WFP performed admirably on the DisplayMate LCD tests (www.displaymate.com), producing sharp colors with little reflection, thanks to Dell's TrueLife anti-glare coating. With its speedy, 2-millisecond pixel response rate (gray to gray), the monitor easily displays fast-moving images. Vertical viewing angles, however, fell far short of the advertised 160-degree mark.

If you're shopping for a widescreen display but don't have the budget or desk space for a 24-inch model, the Dell SP2008WFP monitor should be on your short list.—*John R. Delaney*

BUFFALO 320GB MINISTATION TURBOUSB

Turbocharge Your Data Transfer

Although all PC users know the importance of backing up, slow data transfer and less-than-portable drives can make the process far from convenient. The petite Buffalo 320GB MiniStation promises to soup up your backup with its TurboUSB utility.

The pocket-size MiniStation measures 0.8 by 3.3 by 5 inches (HWD). A cushioning system surrounds the internal mechanism. Buffalo claims that a (non-operating) drive can survive a 5-foot drop.

The drive has some nice extras, like a utility for AES-level encryption and the TurboUSB feature, which is both Mac and Windows compatible. Buffalo says that TurboUSB can increase the drive's transfer rate as much as 64 percent over that of a 4,200-rpm drive. While some of this gain is likely due to the MiniStation's being a 5,400-rpm drive, I did see a little improvement during tests with TurboUSB on.

Regardless, the MiniStation is the speediest drive for USB 2.0 transfers I've seen since we recently started using PCMark05 for testing. With TurboUSB, it took 1 minute 37 seconds to back up our 1.2GB test



Handy wraparound USB cable

Buffalo 320GB MiniStation TurboUSB (HD-PS320U2)

\$190 street



PROS Shock protection. Wraparound, detachable USB cable. "TurboUSB" technology. Comes with spare USB power cable. Speedy performance.

CONS One-year warranty. You must install a utility to activate the TurboUSB feature. No disaster recovery software.

For more: go.pcmag.com/ministation

folder with the bundled Memeo backup software and 0:44 using Windows Explorer. With TurboUSB off, the same tests took 1:39 and 0:57, respectively. The Memeo software is good for document safety, but it doesn't offer disaster recovery.

Compared with other 320GB pocket drives, the MiniStation excels. It's a good choice for those with a need for speed.—*Joel Santo Domingo*

Toshiba recommends
Windows Vista® Business



a laptop that knows

when it's
been stolen.

just what you'd expect
from the laptop experts.

Secure your small business with a little help from Toshiba.

Getting your laptop stolen is not something you walk around thinking about, until it happens to you. That's why the Satellite Pro® A200 is available with an optional Computrace® LoJack for Laptops® security system! So you can relax knowing three out of four laptops with the system are recovered.² And let's not forget about its zippy Intel® Centrino® processor technology and genuine Windows® XP Professional operating system. See what else we can do for your small business at www.toshiba.com/pcmag.

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HearMe

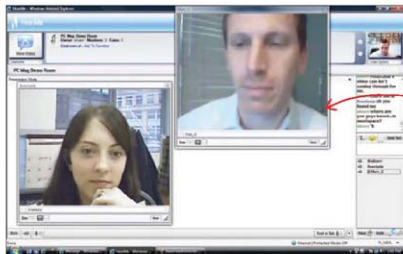
Up to five users, \$29 monthly, up to 150, \$449



PROS Multicasting support for a large number of attendees. All-Web operation. Easy video-conferencing with webcams. Good interface.

CONS Intermittent audio problems. Jerky video in collaboration pane.

For more: go.pcmag.com/heartme



Place images anywhere in the meeting space

HEARME

Scalable Videoconferencing

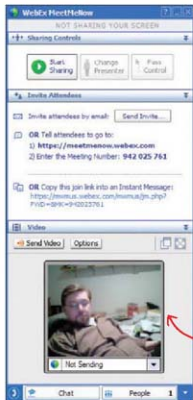
This relatively late arrival on the Web conferencing scene has work to do before it can fully compete with the larger players. But HearMe makes it easy to videoconference and host meetings of varying size without ever leaving a browser, and at a good price.

Unlike WebEx MeetMeNow, which moves you to an entirely different platform when groups grow to more than 10, HearMe supports up to 150 attendees with a single, variably priced product. One platform can handle general business collaboration, small e-seminars, online training, and e-learning sessions.

Audio and video support is good, too. The product works with any webcam—you simply click on Show Video—and in a single meeting you can

scroll through images from several dozen webcams. At its best, audio is full-duplex, though it dropped to half-duplex several times during testing. Video in the collaboration pane got a little jerky at times, for example with PowerPoint animations and fancy transitions, but it was still serviceable.

HearMe doesn't support advanced features like customer tracking, survey building, attendee polling, or lead tracking, so it's not recommended if you want to attract customers via Web conferencing. As a training and e-learning tool, however, it's got all you need—the basic features, support for video, and the ability to handle large meetings easily. For this role, it's a solid choice.—*Oliver Rist*

**WebEx MeetMeNow**

Up to ten users, \$49 monthly, \$468 yearly



PROS Good organizational meeting features. Smooth presentation and video performance. Easy wizard-style meeting organizer.

CONS Desktop application performance a little quirky. Direct voice and video connections are not as easy as they should be.

For more: go.pcmag.com/meetmenow0308

Our nose-to-the-grindstone analyst teleconferencing from home

WEBEX MEETMENOW

Online Meetings at a Nice Price

Of the many WebEx online-meeting solutions, MeetMeNow will likely be the most popular with small businesses. Though it offers few extras and limits meetings to ten people, it covers the basics and costs less than most competitors.

The meeting initiator must download software, but attendees just need a browser that can install an ActiveX or JavaScript module. A wizard lets users set meeting times and send invitations via e-mail or IM. The interface consists of a large collaboration pane on the left and a tool pane (with the chat window, attendee list, and so forth) on the right. MeetMeNow generally works with webcams, but advanced videoconferencing requires special partners and services. There's no support for event management, e-learning seminars, or lead tracking, but MeetMeNow isn't designed for audiences needing those capabilities. It's for small businesses wanting to collaborate online, and for that it's fine. My PowerPoint presentation imported easily, and video was clear.

Overall, though, I was a bit underwhelmed. Videoconferencing is easy, but VoIP isn't supported, and anything advanced seems to cost extra—even session recording, which Microsoft Live Meeting 2007 and Adobe Acrobat Connect Professional include. Still, the service is one of the cheapest I've seen, so if you don't need advanced frills, keep MeetMeNow at the top of your list.—*OR*

THE MOTHER OF ALL HOOKUPS.

As acronyms go, USB means more than most. Because this wildly popular technology is how the world holds hands. Or rather, how computers and their supporting peripherals carry on meaningful relationships.

We're talking connectivity, of course. And a level of consumer acceptance that leaves other technologies feeling envious. With data throughput speeds up to 480 Mbps. Security that inspires confidence. Sync-and-go simplicity.

And the sort of reliability that sometimes gets taken for granted. Think about it: Has there ever been a more user-friendly technology?

Now think about how the USB suite of technologies—Certified Hi-Speed USB, Hi-Speed USB On-The-Go or Wireless USB—makes it possible for various technologies to get along. In the world of computers and peripherals and mobile devices, it's love at first sight.



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**Nikon D300**

Body only, \$1,800 street, with 18mm-to-200mm lens, \$2,540



PC **IMMEDIATE CHOICE**
PROS Outstanding image quality and features. 51-point autofocus. Two live view modes. Excellent menu system.

CONS Expensive.

For more: go.pcmag.com/d300

NIKON D300

Near-Perfect D-SLR Delivers

A worthy successor to the top-notch D200, the 12.3-megapixel Nikon D300 stands out as one of the best D-SLRs you can buy. Among the new features are a big 3-inch LCD with a wide viewing angle, a 51-point autofocus system with 3D tracking, two live view modes, and enough manual settings to fill a 421-page user manual.

Despite the high price, when everything the D300 offers is considered, it easily replaces the D200 as our Editors' Choice D-SLR.

Nikon offers two lens kits for the D300, or you can purchase the body alone for about \$1,800. For my testing I used the DX 18mm-to-200mm (equivalent to a 35mm lens with a 27mm-to-300mm zoom) f/3.5-to-f/5.6G ED VR lens (\$2,540 for body and lens). There's also a less-expensive DX 18mm-to-135mm f/3.5-to-f/5.6G ED AF lens. The former may be seriously pricey, but unless you're a professional photographer, it's likely to be the only lens you need.

No question, the D300 is hefty, and carrying it around for long periods of time with the lens attached is no picnic. The weight (2.1 pounds with battery and CompactFlash card) and feel, however, are indicative of the camera's quality construction. The back of the camera is dominated by its huge 3-inch LCD, which has a wide 170-degree viewing

Big, 3-inch LCD with wide viewing angle

angle, letting you see the image clearly from most vantage points.

The feature I found most enjoyable to use was the new autofocus system, which has two modes. The normal 51-point AF shooting mode works exceptionally well, using 15 cross-type sensors and 36 horizontal sensors to track moving objects and people. The second mode adds a 3D tracking system that captures smaller movements within a frame. Active D-lighting (increasing light in shadow areas) is another excellent addition. In test shots of a sunlit room filled with shadows, setting D-lighting on high brightened up the room without eliminating the shadows entirely, resulting in a much clearer shot.

Using a DX-format CMOS image sensor, the D300 produces exceptional images. Daylight and flash still-life shots were superb, with accurate colors and more than adequate flash coverage. I was also pleased with the camera's performance in low-light situations: Images showed very little noise even at a high ISO of 3200. Overall, photo quality was near perfect.

Although the D300 is expensive for its category, its tremendous photo quality alone makes it worth the price.—David Gussman

Hello, world.
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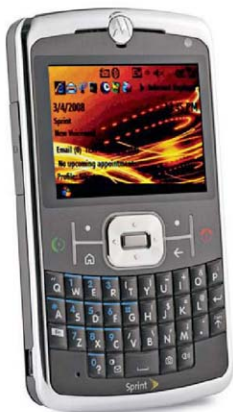


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BREAKTHROUGH
HAFNIUM
DESIGN**

**Motorola Q9c**

\$99.99 (with a two-year contract, after a \$100 mail-in rebate)



PROS Excellent value. Very comfortable keyboard. Pleasing voice quality. Robust software suite.

CONS Bundled extended battery adds bulk. Mid-dialing camera.

For more:

go.pcmag.com/q9c

MOTOROLA Q9c

A Sweet Smartphone for Sprint

Originally billed as the RAZR smartphone, the Motorola Q has been wildly popular, and now Sprint users can finally get one. The new Q9c for Sprint is an inexpensive yet capable handset, even if a few flaws hold it back from top greatness.

Besides its bright, 320-by-240-pixel display, the first thing you notice about this Q is its big extended battery pack, which comes standard. It detracts from the phone's otherwise slender design—but it delivered an impressive 6 hours 56 minutes of talk time. The revamped keyboard is a nice improvement over the original model, too, with larger, more comfortable keys.

As a voice phone, the Q9c excels. Test calls were clear and punchy, with plenty of volume. Powered by a Marvell 312-MHz processor, the Q9c feels reasonably speedy. The Windows Mobile 6-driven handset accesses the Internet with an EV-DO Rev 0 data modem and works with POP, IMAP, and Microsoft Exchange accounts, along with push e-mail. The Q9c includes the excellent DataViz Documents To Go, which views, creates, and edits Microsoft Office documents. The camera is an unimpressive 1.3 megapixels, but the Q9c supports Sprint TV, which offers dozens of live TV channels.

If you can live with its bulky battery, the Motorola Q9c offers the best balance of price and performance in a smartphone on Sprint.—*Jamie Lendino*

RIM BLACKBERRY PEARL 8120 (AT&T)

An Even Better BlackBerry

The Pearl has always been a slim and stylish vehicle for stellar BlackBerry push e-mail. And the latest incarnation for AT&T takes this successful design and adds more media verve.

The 8120 doesn't mess with the original's winning formula; it looks almost identical, with its love-it-or-hate-it hybrid keyboard and signature trackball. But to make a more multimedia-friendly handset, RIM has traded in the nonstandard headphone jack for a universal 3.5mm one and has moved the microSD slot from its pesky spot under the battery to the side of the phone, making it easily accessible. The camera has also been upgraded from 1.3 to 2 megapixels. It's not the world's sharpest, but exposure metering and color balance are unusually good, so outdoor shots look terrific.

You also get Wi-Fi, but that doesn't really matter right now. Currently, you can't use wireless to make calls, as you can on some T-Mobile phones, and RIM's Web browser is optimized for slow networks, so you don't really see an increase in speed over EDGE.

In true BlackBerry tradition, this Pearl handles pretty much any type of e-mail account effortlessly, and the quad-band GSM handset has very good sound quality. Battery life was also impressive at more than 10 hours of talk time.

We've always liked the BlackBerry Pearl, and the 8120 simply improves on the excellent original.—*Sascha Segan*

Takes standard music headphones

RIM BlackBerry Pearl 8120 (AT&T)

\$199.99 (with two-year contract)



PROS Slim and attractive. Outstanding push e-mail. Improved camera and headphone jack. Excellent sound quality.

CONS Can't make calls via Wi-Fi, and browser is optimized for EDGE.

For more:

go.pcmag.com/8120



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- PoE functionality ■ 302.3ad compliant
- Data-driven IGMP prevents IP multicast traffic flooding
- Auto-sensing per device ■ Flow control
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SIERRA WIRELESS USBCONNECT 881

Swift Surfing Without Wi-Fi

The cellular wireless data world is a continual game of one-upmanship, with AT&T, Sprint, and Verizon fighting over which has the fastest network and the best coverage. There's a new speed demon in town. AT&T's high-speed network has the fastest wide-area uploads we've seen yet, and the Sierra Wireless USBConnect 881 is the best device for accessing it.

Setting up the USBConnect 881 on both Macs and PCs was relatively painless. And since USB is universal, you don't need to worry that the device won't work on future PCs. One tiny quibble: The USBConnect 881 is a bit bulky and lacks the memory card readers and built-in flash memory storage you see on some of the latest Sprint and Verizon cards.

AT&T's weakness is nationwide coverage. The company's HSPA network covers fewer U.S. metro areas than Sprint's or Verizon's competing EV-DO Rev A networks, causing devices to drop down to slow EDGE speeds when they're outside a 3G area. Be sure to check AT&T's coverage map before you sign up for the \$60-per-month service.

The AT&T devices do work overseas, though. In Spain, the card worked seamlessly, and no special configuration was required.

If you need to hit high-speed networks in Europe, or you're looking for the best possible upload speeds in AT&T HSPA cities, this is the device to buy.—*Sascha Segan*



Dedicated battery inside boosts signal

Sierra Wireless USBConnect 881

\$299.99; \$100 and up with contract



PROS Future-proofed with the latest high-speed technologies. USB port makes it very flexible.

CONS AT&T hasn't fully rolled out its high-speed upload network. Some USB modems are smaller than the 881 yet have memory card readers.

For more: go.pcmag.com/881

Toggles between main menu and current screen



SanDisk Sansa Fuze

2GB, \$79.99 list, 4GB, \$99.99; 8GB, \$129.99



PROS Inexpensive. Cute, compact design. MicroSD slot for memory expansion. FM radio. Voice and radio recording.

CONS File support is limited. All video and photo files require conversion.

For more: go.pcmag.com/fuze

iPod-esque controls

SANDISK SANSa FUZE

Nano Competitor Is Small, Simple, and Inexpensive

Offering similar flash memory capacities at lower prices, the Sansa Fuze is clearly trying to take on Apple's iPod nano. At 2GB, 4GB, and 8GB capacities (for about \$80, \$100, and \$130, respectively), it gives users the same storage at much lower prices than the 4GB (\$150) and 8GB (\$200) nanos. The player may be weak in the area of file support—particularly with video—but it still comes equipped with the typical array of SanDisk features, like a microSD slot, an FM radio, and a voice recorder.

To get files onto the player, you can either use its microSD card slot or transfer media to the device's internal memory via USB. Only MP3, WAV, Audible, and WMA audio files are supported. And although the Fuze supports JPEG and MPEG-4, all visual files require conversion with the included software. (Additional file formats can be converted, too—I had no problem converting WMV or Xvid.) Is it a hassle to convert all your videos in order to load them onto the player? Sort of, but at least the process is easy and the end result is a video that closely resembles the source file.

SanDisk excels at making good-looking, easy-to-use players, and the Sansa Fuze is no exception. If you want an inexpensive yet solid device, the Fuze's slim design, array of features, and affordable price make it worth considering.

—*Tim Gideon*

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Logitech Squeezebox Duet Network Music System

\$399.99 list



PROS Streams music wirelessly from PCs or Macs. Excellent on-screen graphics on remote. Robust file support. Expandable by purchasing additional receivers.

CONS Remote has a long lag time and occasionally freezes up with some functions.

For more: go.pcmag.com/duet

LOGITECH SQUEEZEBOX DUET NETWORK MUSIC SYSTEM

Affordable Music Streaming

Need a way to get the music from your PC to your home stereo? Logitech's slick Squeezebox Duet does that and more for just \$400, while competing systems fetch as much as \$1,000. If you're a Pandora, Rhapsody, or Slacker Internet radio lover, the Duet even lets you stream tunes from online accounts sans PC.

The Duet uses 802.11g Wi-Fi and works with both Macs and PCs. The system consists of a compact box and an easy-to-navigate remote control with a bright and colorful 2.4-inch LCD, which is the star of the show. The included SqueezeCenter software accesses your computer's iTunes library and streams its contents with ease. The system is expandable: Controllers and receivers are also sold separately—additional receivers are \$150 each. As a multiroom system, however, the Duet becomes less viable, because multiple boxes eat up additional bandwidth and slow streaming down. The competing (but vastly more expensive) Sonos ZonePlayer 80 doesn't have this problem.

Audio playback quality is strong, with very few defects resulting from streaming, but the device is not without issues. The worst is a long lag time between when you press some of the remote-control buttons and when they respond. Still, the cool outweighs the bad here.

For those reluctant to part with a grand for a Sonos system, the Duet is a capable yet affordable alternative.—*Tim Gideon*



Joystick control is difficult to operate

Cowon A3

30GB, \$320 list;

60GB, \$390



PROS Sharp photo and video display. Records audio, video, voice, and radio. Strong file support. Excellent EQ.

CONS Poorly designed joystick controller. Big and bulky.

For more: go.pcmag.com/a3

COWON A3

Talented, but Touchy, Portable Media Player

Given Cowon's recent stab at a PDA and portable media player rolled into one—namely, the ungainly Q5W—I approached the \$320 A3, another big-screen PMP, with some skepticism. I was pleasantly surprised. This big, 9.9-ounce device may not have a ton of extras, but it focuses on the essentials: music, video, and photos. And the result is a really solid 30GB hard drive–based portable media player.

While its user interface is reminiscent of those on Archos devices, the A3 is better looking and offers more effective navigation, as well as more controls—including the most intense EQ function I've

ever seen on a portable player. It even records quality video without the need for extra accessories.

Let's be clear, though. This gizmo is not for iPod nano lovers who enjoy a player's compactness and utter simplicity. Control freaks who want a highly customizable player with possibly the most comprehensive file support available and a sharp, sprawling 800-by-480-pixel, 4-inch screen for video, however, should give the A3 a look. Just one annoying flaw, a clunky joystick control that takes a very delicate touch to operate, is what keeps the A3 from earning our Editors' Choice.—*TG*



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PROS Unique, attractive design. Excellent HD video processing. No overscan with high-definition sources. No delay in HD gaming.

CONS Relatively expensive. Jagged-edge artifacts in standard-definition material.

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This slick set is a rarity in that its deep red frame makes it look a little more stylish than your average TV. In addition, its 32-inch screen provides full 1080p resolution—twice the number of pixels of other same-size LCD HDTVs. At \$1,499.99, it isn't the least expensive 32-inch LCD going, but the Sharp Aquos LC-32GP3U-R does deliver superb high-definition detail.

Sharp is one of the very few 1080p television manufacturers to provide a setting that eliminates overscan with all HD video formats (720p, 1080i, 1080p) and HD-compatible inputs (HDMI and component video). I measured picture overscan with standard-definition (SD) video to be a reasonable 6 percent. Still, it would be nice to have an option to eliminate overscan altogether.

Primary color testing revealed good accuracy overall, though green was shifted slightly toward cyan. I also noticed that cyan and magenta were tilted a little more toward blue than they should have been. In terms of viewing angle, I saw a loss of color saturation beginning at 20 degrees off-axis. Dark browns lightened to an almost yellowish-gray as the viewing angle exceeded 30 degrees off-axis—typical for this type of LCD.

The darker an HDTV's depiction of video black, the more detailed and colorful its picture appears to the viewer. The LC-32GP3U-R's admirably dark black measurement of 0.11 cd/m² resulted in a contrast calculation of 878:1—a very good result.

Video playback of a selection of classic DVD movie scenes at standard definition was good. That said, the TV occasionally lost its lock on film-sourced (24p) videos, resulting in some loss of detail and the occasional flicker artifact. The set was superior HD performer: It breezed through the HD HQV Benchmark test with a perfect score, and the assortment of satellite and disc-based HD clips I fed it produced a well-detailed picture with no sign of distracting artifacts. While playing console games in HD, I saw no noticeable delay (an annoying lag that can crop up between control input and on-screen response), so I recommend it for gamers.

Exploring new territory for a 32-inch LCD HDTV by incorporating all the resolution a 1080p screen can handle, the Sharp Aquos LC-32GP3U-R produced a picture quality with HD sources that really blew me away. Add to that a unique design and this set stands out as a stylish, albeit pricey HDTV that any gamer (or fashionista) would love to own.—Robert Heron

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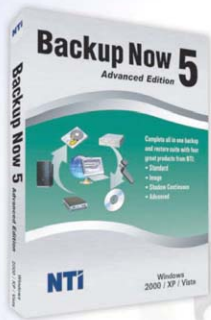
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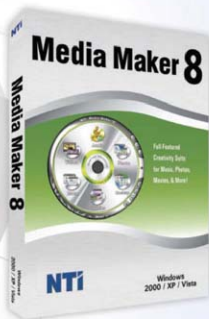
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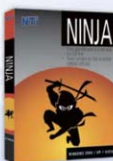
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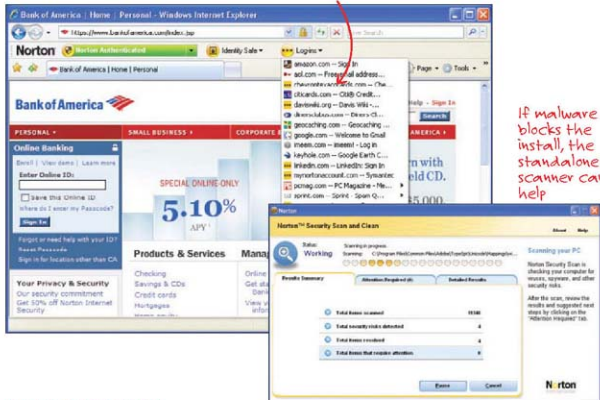
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PROS Powerful, silent firewall, anti-malware. Fully automated background scanning, Online or local backup. New Registry cleanup. Built-in access to help, live chat. Password, personal info protection.

CONS Antispam accuracy low. Parental controls are rudimentary. Remote monitoring lacks detail and the ability to fix remote problems.

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For most PC Magazine readers, a hands-on security suite like Norton Internet Security 2008 is the best fit. But when you go to set up a less technical person's computer, choose Norton 360 version 2.0 instead. N360 protects systems just as NIS 2008 does and adds features like backup and PC tune-up. Most of all, though, it works silently, saving you from becoming a tech-support department.

The suite runs all scans and protective tasks during the computer's idle time and is smart enough to put its work on hold when the system is running on batteries. You can also order it to perform all pending tasks and optionally shut down the computer when finished—a nice touch, as is the handy Quick Tasks menu that now pops up when you hover the mouse over the main window's four big status panels. Of course, you can still click the big Fix button to take care of any problems.

The improved backup facility has new destinations (iPod, Blu-ray disc, or HD DVD media—though this last is of increasingly limited appeal). It includes a feature for backing up multiple computers to a single shared server and offers an optional visual indicator showing files needing backup. Restoring all backed-up files or finding a specific file is also easier, and the Tune-up module adds a tool to sweep away erroneous and useless Registry information.

As in NIS 2008, Identity Safe captures username and password data for secure sites the first

time you visit, protecting stored credentials with a strong master password, and then automates the log-in process. It can also store one or more "cards" of personal information used to fill in Web forms automatically. Other features also found in NIS 2008 include wireless network security, remote monitoring within the local network, and built-in live-chat tech support.

Norton 360's firewall uses the same technology as NIS 2008 but is even quieter. The average user won't see it in action at all. It may be a smidgeon less effective than the NIS 2008 firewall, but it still beats the competition without frightening any newbies. Norton 360's antivirus technology, which is certified by major independent labs, proved only slightly less effective than NIS 2008 on my tests but still quite good. When this technology is used to block a virus attack, the user sees nothing more than a "Processing threats" message—and even that can be turned off.

Symantec has also updated its add-on pack of second-tier features. The parental-control component, for example, now allows per-user settings—but the facility remains rudimentary. And although the spam filter is supposed to be enhanced, my tests failed to turn up any significant improvements—filtering junk mail is still the Achilles' heel of this suite. Where it counts, though, Norton 360 version 2.0 comes through.—Neil J. Rubenking

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iGOOGLE

Start Your Web Day With Google?

Because it got into the personalized start page late in the game with iGoogle (originally Google Personalized Homepage), Google has had some catching up to do. It's made progress, too—adding themes and, like My Yahoo!, Netvibes, and Pageflakes, letting you set up small regions of content it calls “gadgets.” It still falls short, however.

Just like its start-page rivals, iGoogle lets you move gadgets around your custom page using simple drag-and-drop, but you can't just choose “move to top” for a gadget that's buried at the bottom, as you can in Netvibes, for example. And locating essential gadgets takes too much work: You can search and sort by most popular, but finding even the Gmail gadget requires sifting through pages of results. Google's themes need work, too; they're less encompassing than those of the competitors, affecting only the header and gadget window frames. You get no custom backgrounds, and, shockingly for Google, you can't search for a theme!

Despite the massive resources at its disposal, Google clearly has yet to put the thought and effort into its personal portal that Yahoo! and even smaller players Netvibes and Pageflakes have. Although iGoogle offers a wealth of gadgets, loads faster than most of the others, and lacks the obtrusive advertising of My Yahoo!, its customization, usability, and sharing features lag. —Michael Muchmore

Header changes with the local time of day



iGoogle

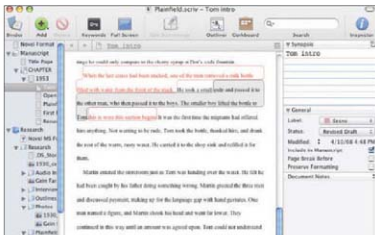
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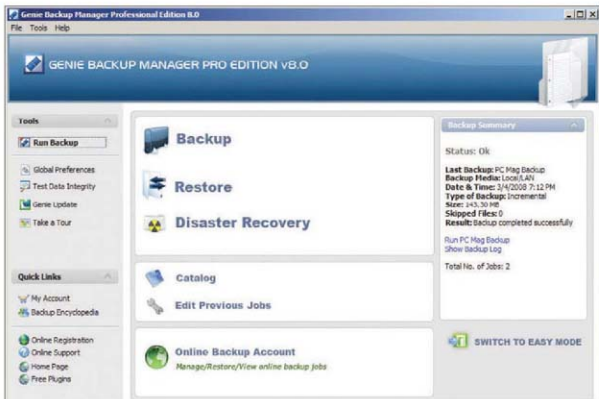
SCRIVENER

A Novel Approach to Writing

If you're a Mac user with a pent-up novel straining to burst forth from your teeming imagination, Scrivener is the obvious choice. It's fun and simple enough for wordsmiths who have little or no experience with this type of software, but it also gives veterans the tools they need.

The interface, which resembles StoryMill 3.0's, puts your manuscript in the middle, a folder and file hierarchy on the left, and scene synopsis, stats, and metadata on the right. But unlike its overly complex competitor, Scrivener has just three basic sections: Draft, Research, and Trash. And if you download the extras with the app, you can choose a preconfigured formatting option, such as Novel Standard Manuscript or Screenplay. From there, you start writing a new manuscript or import directly from a variety of file formats, including Microsoft Word.doc (a trick the other software I tested couldn't match).

By the time you read this, the company should be offering a free upgrade that will split out scenes automatically. Writers who edit a novel as one manuscript can do so in the Edit Scrivenings mode. When you print or export, the software puts the document into proper manuscript format—a critically important feature. Scrivener doesn't have some of the capabilities of yWriter, our Editors' Choice for the PC novelist, but it's the most user-friendly tool I've tested and well deserves our Editors' Choice for Mac scribes. —Erik Rhey



GENIE BACKUP MANAGER PRO 8.0

Wish Number One: Never Lose Data Again

Genie Backup Manager Pro 8.0 is a heavy-duty backup-and-restore program that performs almost any file storage and rescue task you can imagine. This is the program to choose when you've got a few thousand files you can't manage without, and when you need to be able to restore your Windows settings instantly.

I was impressed by the program's depth of features and the thoughtfulness that went into the options. The menu system is a fine example: It looks simple enough already, but clicking on a *Switch to Easy Mode* button makes it even simpler.

The utility lets me create automated, scheduled backup jobs and provided useful options—for instance, one that automatically adds the date and time to the filename of the backup. I appreciated that I could also choose backup locations ranging from local drives through writable DVDs to FTP sites to Genie's online backup service. My only disappointment was the absence of secure FTP support.

In deciding what to back up, I could choose from prebuilt categories (like My Documents, Outlook, and the Windows Registry) or, of course, select any combination of folders and exclude certain types of files other than a user-specified date or larger than a user-specified size. A plug-in even lets me back up and restore settings of dozens of applications!

Advanced options include incremental backups with rollback. The convenient rollback feature preserves earlier versions of files rather than overwriting them. I also admired the unique Swift Restore option, which creates a self-restoring backup—no software needed.

Genie's restores are just as customizable as its backups. For example, when I restored my Windows Mail messages, the program let me choose between merging my backed-up mail messages with my existing ones or simply overwriting my current messages.

The program includes an advanced feature for creating an emergency restore disk. One option first creates a bootable CD or DVD, then a backup that saves the full set of your Windows and program files on removable media or any external or network hard drive. The carefully designed disaster-recovery backup let me easily restore a fried Vista system.

I still use drive-imaging software to back up my main system, but Genie Backup Manager Pro 8.0 may be a better way to go when you want to back up a limited number of files. For a file backup program, I don't know of a better choice to make. This flexible, exceptionally well-designed, reliable backup utility should be part of everyone's toolkit.

—Edward Mendelson

Genie Backup Manager Pro 8.0

\$69.95 direct



PROS Extremely deep feature set. Useful preset backup strategies. Emergency CD restores corrupted Windows system. Can create self-restoring backups.

CONS No secure FTP support.

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Edward B. Burger, Professor of Mathematics in the Department of Mathematics and Statistics at Williams College, earned his Ph.D. from The University of Texas at Austin. Professor Burger's teaching and scholarly works have been nationally recognized; most recently, Williams College awarded Professor Burger the 2007 Nelson Bushnell Prize for Scholarship and Teaching.

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JOHN C. DVORAK

Standards for the Greater Good

One of my biggest long-standing complaints concerns standardization. Nothing progresses far without standards, and industries that constantly bicker over standards are moribund. The folks who fight for standards do so in the hope that they can then control those standards and make the most money. The irony is that when industry players agree quickly on standards, the market grows faster and they actually make more money than if they controlled the standard. Everyone is happier.

One of the reasons for incessant debates is the engineers' lament about how this standard or that standard is no

In businesses with strong standards, progress is faster, and companies that jump on the standards bandwagon do the best. Case in point: Olympus and Sony push against camera-industry standards all the time. It has not helped either company at all. The standard memory used in digital cameras was initially CompactFlash but has moved toward SD memory. Early on, Olympus tried to sell a "smart media" card. When that stopped evolving, Olympus (along with another also-ran, Fujif) dreamed up xD memory, an oddball as well. While Olympus uses standard CompactFlash in some of its high-end

defined pace, just now appearing is the 45-nanometer process. You don't have a 42, 43, 48, or any other oddball number.

Sometimes standards deteriorate for one reason or another. For example, in the race for better performance on the desktop, the standard memory for an up-to-date PC has vanished. I blame the power-hungry game players along with the clock-boosting maniacs for this development. The result is market confusion and a slowdown. I recall some years back that when you put together a machine, you would buy the motherboard and a standard set of memory chips such as the PC-100 array. You didn't have to know the speed or the details, you just ran PC-100.

Now, upgrading is like buying tires for a car. Every car seems to have its own specific size and shape, with various rim options. While I enjoy the individualism of having my own distinctive car, I can't deny that if every car were exactly the same, we then could develop a standardized transportation grid. Imagine a car you don't have to drive; it would simply hook into a freeway grid. You punch in the destination and the road does the rest. This dream will never happen with all the nonstandardized cars and trucks on the road.

I know someone will argue that I'm suggesting the world become so standardized that it would be dreary and depressing. I am not convinced that this is true; there are plenty of ways to express yourself outside of the system.

Nobody has ever explained to me why almost every phone has a nonstandard charger plug. Or why there are so many different USB connectors. But nobody has to. I already know the reason: to jack up the prices and make you pay more every time you turn around. Charming.

DVORAK LIVE ON THE WEB John's Internet TV show airs every Wednesday at 3:30 EST on CrankyGeeks.com. You can download back episodes whenever you like.

Nobody has ever explained to me why we have so many nonstandard phone charger plugs and USB connectors. I know the reason: to gouge customers.

good. In fact, most standards are faulty in some way. But engineers also know that workarounds can correct flaws. Workarounds are used frequently—and with a rigid standard, relying on workarounds is actually easy. The more rigid the standard, the better off we are.

The advantages of standardization are no better exemplified than by comparing U.S. and French strategies in nuclear power. France has one of the most vibrant nuclear generation grids in the world, thanks to standardization. If you want to hire someone who has worked in one plant and put him to work in a different facility, he fits right in because he doesn't have to learn anything new.

In the U.S., every plant is a custom job. A facility may be more modern, with newer technologies than those in France, but everything costs more. One recent plant took 20 years to complete. The parts are not standard. The employees are specially trained and unmovable. It's ridiculous.

models, its nonstandard effort actually hurts the company by creating ill will with customers.

The same concept holds for Sony, which insists on using its Memory Stick so it can force customers to pay more money. Nobody appreciates being maneuvered into shelling out extra cash, and Sony is suffering loss of market share because of its piggheadedness. What gets me is that the companies insisting on using nonstandard memory pay no attention to all the complaints thrown at them. Companies that have stuck with standards—Canon, Nikon, and Panasonic—dominate most of the camera categories.

Probably the best example of standards resulting in multibillion-dollar megabusineses is the semiconductor industry. All the chip makers rely on rigid yet evolving standards. The sizes of the slices of silicon are standardized across all the suppliers and equipment makers. The trace size on the most advanced chips shrinks at a well-

Dvorak's InsideTrack

Personal Grievance Dept.: Is anyone other than me **sick and tired** of the **hard plastic packaging** that far too many products are encased in nowadays? You need metal shop tin snips to open them. **Knives** will not cut the stuff. If you tear it you risk **cutting your hand wide open**, as the plastic turns into a razor blade when torn. Some of these packages have perforated tear-open doors, but often they do not fully release the product. Whose idea was it to develop this sort of crappy package? I hate it! Now I appreciate the fact that in certain European Union countries the law limits the amount of plastic that can be used for packaging.

If we get lucky, a few of these companies will be sued when someone **nearily bleeds to death** when the plastic slices someone's wrist. A few lawsuits will do the trick. I've cut myself a number of times.

HDTV on your laptop. After that rant, I'll note that this next product came packaged in this very same plastic. Luckily, I removed the product easily. It's the new **HDTV digital USB tuner** from Pinnacle. For \$129 or so, the PCTVHD Ultimate Stick is a complete HDTV system and DVR on a USB thumb drive. The thumb drive can store TV shows, too, or you can use your computer's hard drive. A cute little remote is also included.

This sort of product fascinates me since I have always been a proponent of **using the laptop as a TV set** when waiting for a plane in an airport. It's a great idea. I sometimes write or do e-mail at the airport, but a bustling airport isn't a particularly good place to do actual work. Over the years there have been various unsuccessful initiatives to add TV viewing capabilities to laptops. And Toshiba has a few specialty laptops with TV tuners inside. For a moment there, the Sony Video Walkman seemed like a possible candidate for **portable TV reception**, but it died over time. Generally speaking, I do not see people flocking to TV tuners for laptops. And airports are problematic since their structures are mostly metal, and good TV signals are hard to find. In fact, I **have never seen** anyone watching TV on a laptop in the airport. Since lots of people watch DVD movies on their laptops, though, maybe the time has finally come. It's possible that this sort of device, which can also **hook to the cable box**, may prove to be nothing more than a laptop-based tuner for the college dorm room replacing the tuner kids had put in their desktop PCs.

Look Like You Know What You Are Doing Dept.: As many of you know, I do a blog using WordPress blogging software. Blogging is a form of self-publishing that is enabled by **advanced content management software** that's specifically designed for the blogging layout. But most of this software is powerful enough to be used as a more versatile content

management system similar to those used by magazines and newspapers. The key is **modern and powerful** templates that overlie the software to produce the final appearance. Recently I've noticed that a new unbloglike look and feel is evolving on the Web. I call this the **neo-blog**, and its appearance belies the fact that blogging software is running underneath the hood. Typically, you need a custom programmer to do anything like this, but one coder, Brian Gardner (www.briangardner.com), has produced a series of templates called Revolution that are well worth your time since they **blow away** any typical design. You'd have to pay a designer a few thousand dollars for even one of his themes. They are a serious bargain at \$79.95 for a single use. And, yes, I have priced these things to an extreme. They are available at www.revolutiontheme.com. Try it.

Get a Better UPS Dept.: Not long ago I lost power to my system and **lost a column** in the process. The UPS I was using was a common "standby" UPS attached to a backup computer. During this incident, the switch from power to battery was awkward as the power went on and off and on again. The computer rebooted. I **do not recommend** using these cheap backup power supplies. People should either get a high-quality, line-interactive UPS or simply move to a professional online or "true" UPS. MGE (www.mgeups.com) makes the trendiest line-interactive power supplies on the market today. The **MGE Evolution** series is perfect for a server room since you can (gulp) **hot swap the batteries** in the device.

Never to be overlooked, though, is Falcon Electric (www.falconups.com), the leader in online power supplies and maker of what I consider the connoisseur's UPS. This sort of UPS always supplies controlled power **directly from the battery**, and there is never a switch from AC to DC power since your juice is always coming from the DC via the inverter. As a result, no AC weirdness can interfere with the **perfect power exiting** the device. I've always thought this would be the best device to connect to a stereophile's rig, just for the power conditioning.

With an online UPS, the AC is actually the backup if the battery fails. Both the line-interactive and the online UPSs are more costly than the cheap backup UPS you are probably using. Insiders in the power business are actually **surprised that the cheap devices work at all**. Also, you can remotely monitor and control almost all these advanced UPS devices. Upgrade soon.

With an online UPS, the AC is actually the backup if the battery fails. Both the line-interactive and the online UPSs are more costly than the cheap backup UPS you are probably using. Insiders in the power business are actually **surprised that the cheap devices work at all**. Also, you can remotely monitor and control almost all these advanced UPS devices. Upgrade soon.

WANT MORE DVORAK? John writes a weekly column for our Web site, too. Log on to go.pcmag.com/dvorak. Or you can e-mail him at pcmag@dvorak.org.





JIM LOUDERBACK

Apple TV's Extreme Makeover

When Apple's video set-top box shipped last year, hype was high. Alas, the product was weak. It simply extended iTunes to a flat-screen TV, and it lacked any compelling features that would encourage even the Apple faithful to buy.

But all that has changed. The new and less-expensive Apple TV dispenses with the PC/Mac link altogether, to provide a direct connection to the Web. A video download service is included, but that's not what makes this a breakthrough device.

Cable TV spent nearly 20 years trying to create true video on demand, without much success. Apple got it right in just 18 months.

Nope, it's the way the Apple TV reimagines online video that's most compelling.

There are thousands and thousands of online video programs accessible via the iTunes store—including 15 popular shows created by my own company, Revision3. But finding and watching those shows, especially on a big screen TV, has been cumbersome for anyone who can't spell RSS. The Apple TV blows it all away, with a single click that lets you watch almost any program immediately, without buffering, downloading, stuttering, or subscribing.

Never seen Tekzilla, but want to try it? Just click on the icon and start watching. An amazing universe of programming is now even easier to find. Cable TV spent nearly 20 years trying to create true video on demand, without much success. Apple got it right in just 18 months.

Oddly, the most celebrated part of the new Apple TV—on-demand movie rentals—is disappointing, since it can take forever to download a flick. This is hardly a movie theater in a box. If you want that, pick up a VUDU. And if you just can't stand to give more money to Apple, consider the

upcoming DivX-connected player from D-Link. It's just as sublime, though it still requires a PC. A few more nits: It won't feed video simultaneously through the HDMI and component ports, and it never seems to go to sleep, which wastes power.

Birth of a New Sun

Back in the mid-nineties, Sun was synonymous with Web serving. If you wanted a fast site, you bought a Sun server, and that was that. But the bursting bubble, coupled

with PC-based Linux and the emergence of the LAMP stack of open-source software, nearly deep-sixed the company.

Fast forward seven years, and suddenly Sun has transmogrified into a computer version of late-night TV pitchman Crazy Eddie, who used to boast "Prices so low, we're practically giving it away." But Sun CEO Jonathan Schwartz has one-upped Eddie: He actually is giving it all away.

It starts with Schwartz's latest toy, MySQL. The company spent a billion to acquire the right to give away the free database, which powers a huge chunk of today's Internet. Java, which runs on more than 90 percent of the world's PCs, and over a billion phones, is also free. Even Sun's productivity suite, OpenOffice, is free—versus \$500 or more for Microsoft Office.

Sure, the company still sells big boxes, SANs, and workstations. But what it really wants to be is a media company. Give away the product, and sell 24/7 support, training, documentation, and more on the back end.

The open-source mantra extends even further. The company recently released a free SAN operating system, which turns a

ragtag collection of low-cost SATA drives into a system rivaling the gold-plated offerings from EMC and IBM. Competitor Network Appliance has taken its displeasure to court, accusing Sun of patent violations.

Sun plans on open-sourcing the network, too. Instead of spending zillions on routers, switches, and other infrastructure from Cisco or Juniper, according to Sun, you can simply cobble together a computer and run Sun's open-source software on top of it. Voila, there's your network operations center—an instant NOC-in-a-box. Sun, of course, thinks its low-cost servers are ideal for this, especially since fast packet inspection and manipulation have been burned into its latest Niagara2 microprocessor.

The company's learned how to market as well. Its data center in a shipping container, dubbed Blackbox, lets you drop a fully equipped IT operation anywhere you can get power and connectivity. Forget those glass and steel towers on Main Street—build your infrastructure out in that tattered warehouse on Industrial Ave.

Ultraight Smackdown

I picked up a new Dell XPS 1330 about the same time one of my coworkers—System cohort and chief engineer Dave Randolph—bought a MacBook Air. One day when he wasn't looking, Iiswired the Air and stacked it up against the 1330. The Dell won hands down. It has a superbright LED screen, it's faster, and it looks great in red. Even better, it has a built-in optical drive and a dongle-free design, so I'll be much more productive. Sure the Air is thinner, but that's about it. The 1330 came out on top, except for one thing. The left quarter of the screen quickly developed an annoying tendency to pixelate, right before it blacked out completely. So back it went to Dell. Guess who's more productive now. Sigh.

KEEP IN TOUCH Contact Jim Louderback at Jim_Louderback@ziffdavis.com. For more columns: go.pcmag.com/louderback.

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DAN COSTA

TiVo Is Not Dead Yet

TiVo is in trouble, or at least that is the conventional wisdom. Despite the fact that the company has brand recognition that not even Kleenex could sneeze at, time-shifting TV programs is simply too basic to build a business around. Consumers are flocking to the free DVR provided by their cable operators, and investors are heading for the hills—analysts like GARP Research have told their clients to avoid the stock. Why, in these very pages, my colleague Jim Louderback wrote an official eulogy for his beloved TiVo just a few months ago. Clearly, the future lies outside the TiVo.

TiVo is poised for a serious comeback—and could be the media hub in the next-generation smart home—as long as the company follows a few simple rules.

Since my recent acquisition of an HDTV, I have been conducting an experiment. Although I have tested the TiVo before and enjoyed it immensely, for the last few months I have been using instead my cable provider's high-definition DVR. Most consumers are doing this these days, because renting a DVR from cable providers is easy and requires no up-front cost. Cablevision charges \$17 for the service (\$7 per month for the digital box and \$10 per month for HD DVR service); the box itself is free. Pretty good, considering that the cheapest HD TiVo still costs \$300 and requires the use of a CableCARD, an inscrutable technology. The choice sounds like a no-brainer, right? Not quite.

My rented Scientific Atlanta Explorer 8800HD does a passable job of recording my programs, but it is no TiVo. It is slow and hard to use, and it stumbles when I try to perform even the most basic of tasks, such as recording a program without the precise channel and time information. I have been trying to record the design show

Dwell for the last two weeks. (What can I say?—my apartment needs work.) The DVR simply won't do it unless I manually scroll through the entire week and find the exact show time. It is absolutely maddening. The moment I concluded that there was no way around doing it manually was the moment I decided that TiVo is poised for a serious comeback, as long as it follows a few simple rules.

PLAY NICE WITH CABLE PROVIDERS. Competing with the cable companies is where TiVo ran into all of its problems. It needs to play nice. The company recently

won a major patent case against Dish and EchoStar. Now it is poised to collect license fees from nearly every DVR on the market. Collect your cash, but don't push it. The goal is to get into more homes and collect a small monthly fee from a ton of users, not push the cable operators into investing in another technology platform. Indeed, Comcast is rolling out TiVo-branded boxes in New England; Cox is going to do the same in Rhode Island and Connecticut. Keep that going.

BE A SOFTWARE VENDOR. The thing that made TiVo great wasn't its hard drive; it was the TiVo interface and back-end software. Put your R&D money there and start pushing your lead again. The TiVo is the most successful piece of living room software ever written. Build on the software and forget about the hardware. (Except for that dog-bone remote control; that is too cool to let go.)

DON'T JUST WATCH TV. TiVo has always been willing to support new media. It signed a deal with Rhapsody to deliver

music, and it just started offering access to YouTube videos. TiVo could be the media hub in the next-generation smart home.

BE SOCIAL. With nearly four million very engaged subscribers, TiVo has one of the most active social networks around. The company already lets users make recommendations and share videos. TiVo should evolve as a platform for members to talk about programs, create their own content, and share media. Playing up the community aspects of its business means real money. The company is already offering next-generation marketing tools, allowing networks and advertisers to get phenomenal amounts of information about its members' viewing habits.

Even if TiVo follows this plan, it still has some competition. Windows Home Server appliances are just starting to hit the market in large numbers, and all of them come with huge hard drives just waiting to be loaded with audio and video. Right now, all of that is sitting on the family PC, relatively far away from the HDTV in the living room. When and if Microsoft ports the Media Center interface to the Windows Home Server OS, the company will have a killer platform that will do everything the TiVo can and more. Luckily for TiVo, Microsoft has been slow to make this move.

I do have an ulterior motive for writing this column. Right now, if I were to use a TiVo box, I would lose about half of my high-definition channels. That isn't a trade-off I am willing to make. If TiVo could make nice with Cablevision, I could have my high-definition *Dwell* and watch it, too.

I know Jim, and a lot of industry watchers, have declared that the TiVo's time is over, but that is the beautiful thing about TiVo—you can always hit rewind.

TALK TO DAN Do you think TiVo can survive? What does it need to do? Let me know at dan_costa@ziffdavis.com.



SASCHA SEGAN

Microsoft's Mobile Speed Trap

Microsoft's religious faith in Moore's Law has led it painfully astray twice in the past few years. One mistaken assumption damaged Vista. The other may make the company an also-ran in handhelds.

Here's how it works: Moore's Law says that with time, processors get both faster and cheaper. Processor cycles are cheap. Code software accordingly—for power rather than for efficiency.

That was how Microsoft programmed both Vista and Windows Mobile. Both OSs were designed to run decently on

dated hardware. Bending over backward to please Intel, Microsoft found a way to "approve" Intel's integrated graphics PCs for Vista, even though Vista didn't work properly on them. The result was a muddle of labels and a lousy user experience.

Microsoft is so dominant in desktops that its Vista misstep won't seriously damage it. But unless Microsoft gets a grip on the handheld chip situation, Apple, Google, and RIM will leave it behind.

Windows Mobile was designed with the same misguided assumption that chips

4700 had a 3-GHz Pentium 4 processor. In 2008, a \$999 Dell Dimension 9200C desktop has an Intel Core 2 Duo E6420 processor that's vastly more powerful. It's smaller, it's cooler, it's faster.

But that Dimension 9200C has only Intel GMA3000 graphics, a minor improvement over the GMA950 series—it has the same Shader Model 2 and no hardware DX10 support. That's Vista-killing penny-pinching.

Meanwhile, handheld manufacturers have focused on pouring in wireless connectivity rather than on speeding up application processors. In 2004, the \$399 Dell Axim X50 had a 520-MHz Intel PXA270 processor. In 2008, you get less processor power for more money on devices like the \$499.99, 416-MHz Motorola Q9h or the \$549.99, 416-MHz AT&T Tilt.

The danger for Microsoft right now is that Google seems to have a grip on the need for efficiency in a way that Microsoft doesn't. In demos I've seen, Google Android devices based on the TI OMAP 850 chipset were quick and responsive.

RIM and Apple, with total control over the user experience provided by their own devices, have gone a different path. They gauge the power their OSs need and design handhelds accordingly. Mobile OS X runs fine on the iPhone's 600-MHz Samsung S3C processor, so Apple isn't letting any 200-MHz iPhones out of the door.

That puts Microsoft in a tough spot, between two better business models: Either produce code that runs on popular chips (Google) or force the use of chips that run your code properly (Apple and RIM). You have to pick one. You can't just wait for the chipsets to catch up to you. As Google generates more devices and Apple improves its enterprise connectivity, Microsoft will need to make a decision: Shape up or get left behind.

GET MORE SASCHA For more of his views, visit go.pcmag.com/segan.

Microsoft's Vista misstep won't seriously damage the company, but unless it gets a grip on the handheld chip situation, Google, Apple, and RIM will leave it behind.

the processors of the day, but optimally on faster processors of the future. Microsoft made the dangerous assumption that PC and handheld manufacturers would keep choosing the fastest affordable chips. That's happened with desktop CPUs but not with handheld CPUs or graphics hardware. And with Vista relying so much on graphical "wow," even a fast CPU doesn't cut it when paired with slow graphics.

Microsoft thought it was safe with its near-monopoly position in desktop PCs. Intel keeps churning out faster desktop processors, and nVidia and AMD are following suit with faster graphics cards. But the faster components actually have to make it into mainstream PCs for Microsoft's strategy to work.

Microsoft mistakenly assumed Intel and PC manufacturers wouldn't cut corners to keep prices down and wouldn't opt for underpowered integrated graphics on desktop PCs. But Intel decided to save money on a series of popular motherboards by using non-Vista-friendly integrated graphics instead of faster, dedi-

would get faster with time. Much of Microsoft's PDA-centric OS was designed in 2003 and 2004, when the Pocket PC ran at 312 or 416 MHz. So Microsoft designed an OS that runs well on a chip equivalent to a 416-MHz Intel PXA270, assuming processors would just get faster from there.

But they didn't. And Windows Mobile runs with a visible lag on any device slower than 416 MHz, which means on most of the products in the market. On 200-MHz devices such as the ASUS P527, it's painful.

Marvell, Qualcomm, Samsung, and TI are indeed churning out faster and faster handheld processors. But few manufacturers are buying them, because of extreme price and power-consumption pressures. Rather, there's a flood of 200- to 300-MHz handhelds, many based on TT's OMAP 850 chipset. Given a choice between making a product faster and making it cheaper, most manufacturers will pick cheaper.

Here's an example of how, as desktop processors get faster, graphics hardware moves more slowly, and handhelds move backward. In 2004, a \$999 Dell Dimension

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SOLUTIONS SUPERGUIDE

501 TIPS FOR BETTER COMPUTING

By PC Magazine Staff

There's a ton of information in your computer's user manual, but it's also hundreds of pages long. To become a real power user, you could read through the entire thing, memorizing the details on each page. Or you could turn to this issue of *PC Magazine*.

For this very special issue, we've boiled down that manual's hundreds of pages into hundreds of tips—501, to be exact—carefully organized into nearly three dozen categories. This should take the hard work out of being an expert!

Crafted by our analysts and editors and tested in PC Magazine Labs, our tips compendium starts with the fundamentals of computing: operating systems and basic productivity applications such as Microsoft Word and Excel. Then we delve into multimedia, mobility, and business, with hundreds of tips in each section. And here's a bonus tip: We've stored them all online. From hardware upgrades to software secrets, all 501 tips are waiting in the wings at go.pcmag.com/tipsuperguide.—Jeremy A. Kaplan

WORKING WITH WINDOWS

Windows Vista

1. Partition unused space

Vista has a built-in hard-drive partitioning tool that'll let you take unused space from your main partition and form an extra partition, say, a D: drive for storing photos and videos. It can also consolidate extra space into a single partition. The utility resides in the Computer Management console located in Vista's Administrative Tools Control Panel.

2. Watch TV on your Vista PC

If one is not already built in, you can buy an external TV tuner and use Windows Media Center to watch TV and record through the handy program guides. For buildings or homes that are cable-ready, high-definition channels are unscrambled or ready to watch without a cable box.

3. Send faxes and scan documents

The odds are good that your PC has an integrated fax modem. Take advantage of it by using Vista's built-in Fax and Scan utility (found in Vista Business and Ultimate editions). This same utility can also take advantage of that old scanner to image documents without your purchasing new, Vista-compatible software.

4. Have kids? Use parental controls

Go to the Control Panel and select *User Accounts and Family Safety*. Next, click the link that says *Set up parental controls for any user*. From there, you can block inappropriate Web sites, set up a time schedule for playing games, limit use of instant-messaging software, and create boundaries for browsing the Internet. You can even print out an activity report for your child.

5. Conserve battery power

In addition to setting up a Power scheme, Vista can automatically crank down the brightness of the screen (via a slide bar or by percentage points) when a laptop is running on battery. Go to *Control Panel | Power options | Advanced Settings | Display* and set the brightness to 50 percent. This can add an extra 20 to 30 minutes' worth of battery time for your commute home.

6. Turn off annoying prompts

Vista added the "A Program Needs Your Permission to Continue" prompt to help prevent you from inadvertently installing malware or making unauthorized changes to your computer. It's annoying to see that

dialog box constantly pop up. If you're computer savvy, you can turn it off by deactivating User Account Control in the User Accounts Control Panel.

7. Two clocks for two time zones

If you work in different time zones, you can add up to two additional clocks on the system task tray. Left-click on the clock, select *Change date and time settings*, and go to the *Additional Clocks* tab. You can then enter the display name for the clock(s) and choose its time zone.

8. Boost compatibility

Before throwing your computer against a wall because a particular piece of legacy software is not working in Vista, try compatibility mode. Right-click on the program's EXE file and choose *Properties*. Then click the *Compatibility* tab, check the box that says *Run this program in compatibility mode for*, and select the operating system that worked best with the software.

9. Expanded shortcut menu

You can add useful options to the right-click menu on any file or folder. By holding down Shift as you right-click an item, add any file to the *Start* menu or Quick Launch toolbar, copy the entire path of the file or folder to the clipboard, or open a command prompt window.

10. Get a health report from Vista

People get physical checkups, and so do computers. Vista can run a complete and well-organized diagnostic report highlighting potential problems. In the Control Panel, click *System and Maintenance | Performance Information and Tools*. In the *Tasks* list along the left, click *Advanced tools*. The last item on the resulting list is *Generate a system health report*.

11. Remove metadata from pictures

Pictures and documents have hidden data about the type of equipment used, as well as personal information about you. You can remove these details by right-clicking the file icon and selecting *Properties*. On the *Details* tab, click *Remove Properties and Personal Information*. You can remove several properties at a time or all of them by the check boxes next to a property.

12. Create a shortcut to lock a PC

Slice steps off your system log-off routine by putting a log-off shortcut on your desktop. Start by right-clicking an empty space on the desktop and then selecting

New shortcut. In the space below *Type the location of the item*, type in `rundll32.exe user32.dll, LockWorkStation` (remember to watch your spacing and case). Finally, create a clever name for the icon in lieu of the default "rundll32"—how about "Lock PC"? Then click the shortcut to lock your computer with ease.

13. Virtualize your keyboard

If you're running Vista on a Mac via Boot Camp, you won't be able to find the PrintScr key—a Mac doesn't have one on its keyboard. Good thing Vista has a virtual on-screen keyboard built in. It's in the *Ease of Access* folder, under *Accessories*, in the *Start* menu. You should see the psk key next to the F12 key.

14. Bypass the log-on screen

You don't have to be confronted by that eyesore of a log-on screen every time you boot up. Make Vista log in automatically by typing *netplwiz* into the *Start* menu search box. That will bring up the Advanced User Accounts Control, where you can uncheck the box that reads: *Users must enter a username and password to use this computer*.

15. Take smarter screen shots

Windows could always capture an image of your desktop (with the PrintScreen key) or an active window (press Alt-PrtSc). With the Snipping Tool, in the *Accessories* folder, you can snip a portion of the screen, or part of a Web site, document, or picture, and save it as an image file. Keep it handy by checking the option to display an icon of it in the Quick Launch toolbar.—Cisco Cheng

Microsoft Office 2007

16. Never leave the keyboard

Learn mouseless control of everything! Tap the Alt key while in any Office 2007 application and the ribbon is instantly covered in small letters indicating the keystrokes. Type the letter for the different ribbon tabs (H for Home, N for Insert, and so on) to access individual ribbon controls and more key shortcuts.

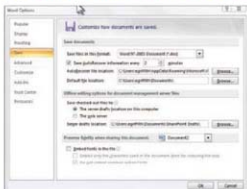
17. Extend Office's abilities

The Office SharePoint Server 2007 running on a server in your office stores documents for modified use later or for collaboration. For example, a PowerPoint 2007 presentation (or just one slide) in a SharePoint Slide Library could be the template for future presentations. SharePoint's Excel services can render a spreadsheet as an HTML doc.

18. Adjust the Quick Access Toolbar

The Quick Access Toolbar takes up space in

26. Increase File Compatibility



OFFICE If you're alone in using Office 2007, save files in the older Office file formats so others can open them. You can set this by default: In Word, for example, go to the **Office** button, select **Word Options | Save**, and then in **Save Files in this Format** select **Word 97-2003 document (*.doc)**. Rich Text Format (*.rtf) will work even outside of Word.

the left side of the title bar in an Office 2007 application window. You can move it below the ribbon (right-click next to Add-Ins to get a menu) and customize it to include just about any button you can fathom.

19. Hide and restore the ribbon

To hide the ribbon in Office 2007, double-click the tab, hit Ctrl-F1, or right-click and select *Minimize the Ribbon*. Now the ribbon will be treated almost like a menu, hidden until you click the tab or use the Alt key to bring up keystrokes, as indicated above.

20. Change default save location

All versions of Office have their own default locations for Save As. To change it in any Office 2007 application, click the round **Office** button (upper left) and choose **Options | Save**. In Word, you can then choose **Browse** to find and specify a new default file location; in Excel and PowerPoint, you have to paste in the drive path to that location from Windows Explorer.

21. Make buttons with WordArt

WordArt is a different animal from SmartArt. It creates wacky-shaped text strings that you can't edit. In Excel and PowerPoint, it's a powerful tool for embedding text with special effects. It's on the **Insert** tab in all three, but in Excel and PowerPoint you use the **Format** tab to change the text's looks, or even make buttons.

22. Add tab for getting started

Confused by changes in Office 2007? Download the "Get Started Tab" sets for Word, Excel, and PowerPoint at www.microsoft.com/downloads. Each puts a new tab on the respective program with links to online interactive guides, demos, and training videos on how to master the software.

23. View documents sans Office

You can open, view, and print Office 2007 documents without owning Office. Download the individual viewers for Word, Excel, or PowerPoint from www.microsoft.com/downloads.—Eric Griffith

Outlook 2007

24. Create a Personal Folder

A Personal Folder appears in Outlook and resides on your local drive, not the server. To create one, go to **File | New | Outlook Data File**. Then select **Personal Folders File (.pst)** and click **OK**—it will appear in your Outlook Folder List. Archive it to often.

25. Distribute in style

Do you e-mail the same group of people over and over again? Instead of typing out

the recipients' names, create a **Distribution List**. Go to **File | New | Distribution List**. Name the list and press **Select Members**, or for external e-mail addresses, select **Add New**. When you want to e-mail that group of people, just type in the list's name.

27. Create e-mail wizards

Outlook's Rules Wizard can be a friend or foe. You can direct messages automatically from a specified sender to an existing folder, or move messages according to keywords in the subject or body of the message. But beware—messages that automatically go into a folder can easily be missed! Before you know it, you've missed 30 e-mails from Mom! Not. Good.

28. Find enormous attachments

Tired of getting the "Your mailbox is over its size limit" message? Go to **Tools | Advanced Find | More Choices**. In the **Size (kilobytes)** drop-down menu, select *greater than*, enter a kilobyte variable (say 1,000, for 1MB), and click **Find Now**. Then drag those giant messages to your **Personal Folder** or delete them.

29. Reunite with long-lost e-mails

Advanced Find can uncover e-mail you thought was long lost. Under **Tools** click on **Advanced Find**. From there you can search by folder, keywords in frequently used text fields (such as To, Cc, and even the message body), Sender, or addressee.

30. Schedule meetings on the fly

Want to schedule a meeting with your coworkers, but not sure when everyone is free? Meeting Request lets you view your invitees' calendars all at once. To schedule a meeting, go to **File | New | Meeting Request**. Click on **To** and invite the recipients. To view their schedules, click the **Scheduling** button. Don't worry about invading your colleagues' privacy: You won't see the details of their appointments, just areas of time that are blocked out.

31. Color-coordinate your calendar

Can't keep track of all your appointments

and meetings? Set up your calendar to use different colors to easily distinguish them from one another. Within the calendar view go to **View | Current View | Customize Current View**, and add **Automatic Formatting** to colorize your appointments.

32. Print only relevant pages

Save some trees! For HTML or Rich Text e-mails, you can easily designate which page you want to print, either by page number or by range. For Plain Text messages, you can print All or only Odd or Even pages. To get better control over the print-out, open the message, select **Edit | Edit messages**, and then select **Format | HTML**, which changes your printing options.

33. Do some spring-cleaning

When you delete a message, it doesn't evaporate into the ether—it's moved to your Deleted Items folder. If you like living on the edge, permanently delete an item from any folder by highlighting the message and pressing **Shift** then **Delete**.

34. Compare your e-mail sizes

Bonus spring-cleaning tip! Within any folder, just above the messages where it says **Subject**, right-click and select **Field Chooser**. Click and drag the **Size** field and drop it between the **Subject** and **Sent/Received** fields on the bar. It will now display the size of each message and help you determine which messages should be deleted or moved to your Personal Folder.—Yun-San Tsai

Word 2007

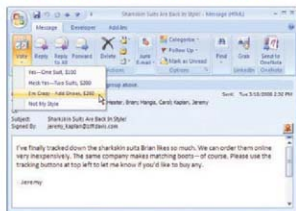
35. Compare docs the smart way

You don't need two windows to compare documents in Word 2007. Go to **Review | Compare**, and click **Compare** one more time. Enter two document names and you'll see the differences.

36. Ensure changes are accepted

There may still be tracked changes in a document, even after you have turned the

37. Put It to a Vote . . . by E-Mail



OUTLOOK Everyone has an opinion, and wants to share it. To start your own democratic system, open a new message, click on *Options*, and in the *Tracking* section check the box for *Voting Buttons*. Select a default or type in your own choices, separated by a semicolon. To view the results, click a response or your original message.

feature off. You need to approve (or reject) the changes already made by going to the *Review* tab and selecting *Accept all changes in document*. Be a pro and double-check before circulating that memo.

38. Look for private data

Before sending a file, use the *Inspect Document* command (under the *Office* button, click *Prepare*). It'll look for hidden text and other info that Word can strip out.

39. Add AutoText to Toolbar

Make AutoText easy to find on the Quick Access Toolbar: Go to the *Office* button, *Word Options* | *Customize*, and under *Choose commands from* look for *All Commands*. Find *AutoText* and click *Add*. You'll now have a drop-down.

40. Speed up paragraph movements
Move paragraphs with just the keys. Put the cursor at the front of a paragraph, hold Alt-Shift, then use the arrow keys to move the text up or down. Use Alt-Ctrl to select an entire paragraph.

41. Jump to previous work

When reopening a large Word document, hit Shift-F5 to jump directly to the last spot you were working on.

42. Make a table of contents

Creating a table of contents for a document is easy, as long as all the headlines and subheads use either Heading 1, Heading 2, or Heading 3 from the *Styles* section of the *Home* tab. Insert a T of C page from the *References* tab and it will fill itself in based on those styles.

43. Use subheads with style

Don't make subheads that are merely bold. To make them fit a style, select a subhead, right-click, go to *Styles*, and then *Select Text with Similar Formatting*. Double-check that the macro didn't select text you don't want, then apply a style like *Heading 3* from the *Home* tab's *Styles* section.

44. Change the default font

Microsoft Word 2007's default font, Calibri,

is a beauty, but you may not like it. Hit Ctrl-D, select the font you want (along with the size and color) and click the *Default* button. This changes the default font in the template called *Normal*, which will be applied to all documents that use *Normal*.

45. Translate words, even sentences
Word 2007 will translate words or whole sentences into Arabic, French, or Spanish as you specify. Visit the *Review* tab and click *Translation ScreenTip* to set a language. Hover the cursor over a word to translate it or select a full block of text and click *Translate*.

46. Insert random text

Need sample text? Type =rand() on its own line and hit Enter. You'll get fake Latin, repeated "quick brown fox," or random instructions, depending on the version of Word. Numerals in the parentheses indicate number of paragraphs and sentences: =rand(5,10) inserts five paragraphs with ten sentences each.

47. Edit image documents

Office comes with a program called *Microsoft Document Imaging*. You can use it to perform quick-and-dirty optical character recognition (OCR) on items you've scanned (save them as TIF files). Click *Send Text to Word* and you can start editing immediately.—EG

Excel 2007

48. Get perfect printouts

If printouts don't match the look of your Excel 2007 spreadsheet, check the page layout (under the *View* tab) to see exactly what the printer will spit out. You can also easily add headers and footers in this view.

49. Make drop-down pick lists

Choose row or column cells you won't use; place one list item in each. Where the pick list should appear, highlight the cells (they needn't be contiguous). Choose *Data* | *Val-*

idation... Under *Allow* select *List*. Check *In-cell dropdown*, left-click in the *Source* box, highlight the cells containing your list, and select *OK*.

50. Make a shortcut to today's date
You can insert the current date into any cell by pressing Ctrl and the semicolon (;) key; Ctrl-Shift-; will put in the current time.

51. Repeat text in multiple cells

Highlight a range of blank cells, type some text (which will appear in the first cell), and press Ctrl-Enter; the text will fill in every cell.

52. Paste plain text into Excel

Want to paste text from Word or IE into Excel without having it munge up the formatting in the cell? Hit F2 so you're in *Editing* mode before you paste. Then only the text will come through, not the formulas.

53. Make a numerical constant

Got one number you use over and over in a spreadsheet? Make it a constant. On the *Formulas* tab, click *Define Name*, and give the cell a name (like "taxrate"). Put a number in that cell. Now you can use the name in a formula (like =b4*taxrate) instead of referring to the coordinates. You can set up as many named cells as you wish.

54. Quickly format an Excel table

Take lists of data and quickly format them as Excel tables, using galleries of styles in the *Format as Table* command—it's on the ribbon under the *Home* tab. Check *My table has headers* in the dialog box (if you have headers) and you can quickly sort or filter columns within the spreadsheet using the headers' integrated drop-down menus.

55. Add a smart column

Adding a new column to an Excel table is a breeze. Place a formula (like *SUM*) in the first cell of that new data column. That formula is automatically applied to all the cells in that column, which can also be sorted or filtered. Add another column and use a different formula (like *AVERAGE*) to create a column that leaves out the *SUM* totals you already added.

56. Insert a total row

In that same formatted table, you might want to total all the numbers at the bottom. Click anywhere in the table to bring up the *Table Tools* | *Design* tab. Click it and you'll see check boxes in *Table Style Options*. Check *Total Row* to add it instantly. Then click each cell in the total row to pick a function (*SUM*, *AVERAGE*, and so on) from the *Drop-down* menu.

57. Add a new row above totals

If you want to add a new row to a table

with an already-formatted total row, click on the last data cell to the right above the totals. Hit Tab once and a new row is inserted. All the new cells will be formatted to suit the table.

58. Color code for visual clues

Apply *Conditional Formatting* (from the Styles section on the ribbon's *Home* tab) to get color coding, icons, and integrated data-bar graphs (or a mix) on each cell. These visual clues provide an instant view of highest and lowest numbers in that column or row, even if it's unsorted.

59. Seek out duplicate values

Conditional Formatting can identify duplicate values. When you highlight a list and click *Conditional Formatting*, pick *Highlight Cell Rules* and specify *Duplicate Values*. The dupes will be highlighted.

60. Paste info as an object

Data from Excel can be pasted as an object. In PowerPoint or Word, go to the *Home* tab, click the arrow under *Paste*, and select *Paste Special*. In the menu, select *Microsoft Office Excel 2003 Spreadsheet Object*. If the radio button on the left just says *Paste*, the data is inserted so that when you click it, it becomes editable as if you're in Excel. If you select *Paste Link*, any updates to the data in the spreadsheet show up in the form in Word or PowerPoint.—EG

PowerPoint 2007

61. Be a quick-change artist

Themes, under the *Design* tab, will change

the entire look and feel of your presentation, assuming you used a theme to start with, or at least utilized Styles on your text.

73. Use universal fonts

Avoid font hassles when you move a PowerPoint file from computer to computer by using fonts like Arial, Verdana, or Times New Roman. Computers with older versions of Office won't always have the PowerPoint 2007 default fonts (Calibri, Corbel, and so on).

74. Keep layouts for yourself

If you want to keep some slide layouts to yourself, make only a subset of them available to others to use by choosing *View | Slide Master* and from the slide layout list on the left of the screen delete any layouts not applicable to this presentation.

75. Embed fonts for easier editing

When transferring a presentation to another computer to edit it, make sure to embed the fonts inside the presentation so they will be available when you make changes. To do this, choose *File | Save As*, choose *Tools | Save Options*, and click *Embed fonts* in the file check box.

76. Leave comments for coworkers

If you're working collaboratively on a slide show and need to communicate with someone, or if you need to remind yourself of something, use a comment. Select *Reviewing | New Comment* and type your comment before dragging it into position on the slide.

77. Customize more than fonts

Fonts aren't the only customized items.

Pictures can be given shadows, new shapes, styles, and effects, and they can be cropped as needed. On the *Insert* tab, click *Picture* to add an image. Select it and the *Format* tab becomes available, where you can experiment with *Picture Styles* or make up custom styles.

78. Styleize tables of data

Tables also have style in PowerPoint 2007. Select any table and contextual Table Tools tabs (called *Design* and *Layout*) will appear on the ribbon. Click *Design* to enter a gallery of premade Table Styles. Make your own with the controls on those tabs.

79. Compress each image

Inserted pictures can be compressed individually to reduce the size of your overall PowerPoint file, depending on how it will be displayed (in print at 220 dpi, on screen at 150 dpi, or in e-mail at 96 dpi). On the *Format* tab, available when you select an image, click *Compress Pictures*.

80. Make a presentation template

Turn any PowerPoint presentation into a template for reuse by first removing any unnecessary slides or information from it. Choose *Save As*, then *Other Formats*, and choose the *PowerPoint Template (*.potx)* option from the *Save as type* list to save your custom template.

81. Use Excel to format charts

To use an Excel chart template to format a PowerPoint chart, click the chart object in your presentation to select it. Choose *Chart Tools | Design | Change Chart Type*, click the *Templates* option, and select the *Saved* template from the list.

82. Align objects on a slide

To align multiple objects on a PowerPoint slide, click the first object and Ctrl-click each additional object in turn. Choose *Drawing Tools | Format* and click the *Align* button. From the menu select an option such as *Align Left* or *Align Bottom*.

83. Use a grid for layout

You can display a layout grid for aligning elements on slides by choosing *View | Gridlines*. To configure the gridlines, go to *Drawing Tools | Format | Align* and choose *Grid Settings*.

84. Show a ruler

To adjust indents for individual paragraphs on a PowerPoint slide, first make rulers visible by choosing *View | Ruler*. Select the paragraphs to change, and drag on the First Line Indent and Left Indent markers on the ruler to change the indents.

85. Free-form a shape

Turn a shape into a free-form shape by

11 Killer Excel 2007 Shortcuts

TO DO THIS

TO DO THIS	CLICK THIS
Apply the outline border to the selected cells	Ctrl-Shift-&
Apply the Date format with the day, month, and year	Ctrl-Shift-#
Apply the Time format with the hour and minute, and AM or PM	Ctrl-Shift-@
Enter the current time	Ctrl-Shift-:
Enter the current date	Ctrl-;
Hide the selected columns	Ctrl-0
Alternate between displaying cell values and displaying formulas in the worksheet	Ctrl-`
Display the Find and Replace dialog box, with the Replace tab selected	Ctrl-H
Display the Print Preview window	Ctrl-F2
Switch to the next workbook window	Ctrl-F6
Display the Macro dialog box to create, run, edit, or delete a macro	Alt-F8

86. Make SmartArt from What's Available



POWERPOINT Only in PowerPoint 2007 can you create a SmartArt object from existing text. To do this, select the text and, from the Home tab's Paragraph group, select the Convert to SmartArt Graphic button and choose a SmartArt style.

selecting it and choosing *Drawing Tools | Format*. From the *Insert shapes* group click the *Edit Shape* button and choose *Convert to Freeform*. Select *Edit Points* and you can change the shape by adding nodes, deleting them, and dragging on shape handles to create Bezier curves.

87. View and edit a presentation

To display a presentation on the screen as you work, click the *View* tab and hold the Control key as you click the *Slideshow* button. This displays the presentation in the top left of the screen, allowing you to move between viewing the presentation and editing it.

88. Use Kiosk mode to autoplay

To play a presentation automatically, select all slides in the thumbnail pane; choose *Animations*, and set *Automatically after* to an appropriate transition. Choose *Slide Show | Set Up Show*, select *Browsed at a Kiosk (full screen)*, and in the *Advance slides* section, select *Using timings, if present*.

89. Add the Developer tab

The *Developer* tab is required to do things such as run macros and add Flash files to a presentation. To configure it to appear on the ribbon, click the *Microsoft Office* button, choose *PowerPoint options | Popular*, and enable the *Show Developer tab in the Ribbon* checkbox. Click *OK*.

90. Insert Flash into presentations

To play a Flash file, click the *Developer* tab, in the *Controls* section click *More Controls*, and select *Shockwave Flash Object*. Click the left mouse button and drag on the slide to create a rectangle where you want to add the control; right-click it, choose *Properties*, and set the *Movie* property to the Flash file's full path.

91. Export to PDF

Save your PowerPoint presentations to PDF files using the Microsoft Office Add-in for saving files as PDFs. Download it

by searching microsoft.com/download for "Save as PDF."—Helen Bradley

Apple Leopard

92. Use fast file previews

Need to find the right file fast? Select a file in the Finder and press the space bar or type Command-Y. You'll get an instant preview of the file's contents without having to launch the application. If it's an audio file, the sound will play, too. Pretty neat.

93. Uncover long filenames

In a Finder window set to column view, click the tab at the bottom of the vertical divider to expand the column to the width of your longest filename. Do it once to optimize for the length of your typical filenames. Hit Option and double-click the tab, and all columns will expand, too.

94. Send the Web page

Why send a link when you can send the whole Web page? In Safari, find your page, press Command-L, and a dialog will ask you for an e-mail address. Fill it in and your recipient will see the page, complete with live links and images, right in his or her e-mail app—if Mail is your e-mail client.

95. Get the full file 411

To find out more about a file, select it, type Command-J, and check the *Show item info* box. Instead of just a folder icon, you'll see the number of items inside it, below the folder name. For a photo, its size will be displayed; for an audio file, you'll see the length, and so on.

96. Stealth surfing

Up to no good at work? Type Command-H to hide an entire application instantly—no matter how many associated windows you have open. When the coast is clear, click the app's icon in the dock to get it back. Command-Option-H will banish all other open programs except for the one selected.

97. Rearrange your desktop

Is the dock cramping your style? Press Shift and select the divider line at the right end of the dock (next to the Recycle bin—provided the dock is at the bottom of your screen to begin with), and drag the dock to the left or right side of your screen. Do the same thing to drag it back to the bottom.

98. Find your favorite Finder view

To customize your Finder view, type Command-1 for icon view, Command-2 for list view, and Command-3 for column view. Command-4 switches the view to Cover Flow, where you can visually flip through your files as if they were CDs in a jukebox.

99. Zoom with a view

Using your Mac for a presentation? Zoom in on your desktop so everyone can see: Open *System Preferences*, click on *Universal Access*, and select *Zoom | On*. Command-Option-Equals zooms in and Command-Option-Hyphen zooms out. Repeat to increase or decrease the magnification.

100. A look-up hook-up

Need a quick definition? If you're reading a puzzling passage in *Stickies*, *TextEdit*, or *Microsoft Word*, highlight and drag the text to the Safari icon in the dock to serve up Google search results. Like what you see? Highlight the text in Safari, drag it to the dock's Mail icon, and open up a new message with the text.

101. O file, where art thou?

Spotlight can find files in a flash, but where do they live? Move your cursor over the search result and a dialog will appear showing you the path. Click the result and your file will open. Hold the Command key down while clicking to open a window showing where your file is.

102. Visit shortcut central

If you prefer key combos to clicks, you can find a list of every keyboard shortcut available in OS X at *System Preferences | Mouse and Keyboard | Keyboard Shortcuts*. Check the box next to the description of a key combo to enable it, or uncheck it to disable. You can even add your own combos by selecting the + button at the bottom left-hand corner of the window.

103. Put your Mac to sleep quick

Send your Mac to bed fast: Press Command-Option and hold down the Eject key for a few seconds. Instant hibernation!

104. System stats, stat!

Monitor fun stuff like your Mac's processor, RAM, and hard drive usage right from the dock. Go to *Applications | Utilities* and drag the Activity monitor to your dock.

113. Organize Your Digital Bookshelf



DIGITAL ORGANIZATION

Create easy-to-use digital records of your CDs, DVDs, books, and video games with Libra (www.getlibra.com). This free app uses the product's bar code to retrieve information that you can then arrange on your digital shelf. You can even use your webcam to capture the bar code.

Launch the program, then click and hold on the icon, and select the activities you want to keep tabs on. You'll see a live graph for each activity.—Wendy Sheehan Donnell

PC Upgrades

105. Before beginning, back up

The most critical step you should take before upgrading your PC to any new OS is to back up your important data. Use Vista's Windows Easy Transfer utility or simply drag and drop your files to an external disk. It's the cheap and easy way.

106. Choose, but choose wisely

Seeking Media Center functionality when upgrading to Vista? Then remember that only the Vista Home Premium and Ultimate versions carry the feature. Home Basic, Business, and Enterprise editions of Vista do not.

107. Check your hardware

Before upgrading to Windows Vista, know that your computer must have a DVD drive installed. Windows Vista doesn't come on CD after all.

108. Add more memory

Although you may have gotten by on 512MB of RAM in your Windows XP machine, 1GB is the realistic minimum for Windows Vista. Ideally, consider running Windows Vista with 2GB of memory installed for more efficient performance.

109. Find the latest drivers

After upgrading your PC to Windows Vista, be sure to run Windows Update, which can provide critical security updates to protect your system. It will also apply updated drivers for your installed hardware. But visit the manufacturer's Web sites, too, which often post new drivers before Microsoft certifies them.

110. Solve problems with a new BIOS

Upgrading to a newer CPU? Check and run the latest BIOS for your motherboard first. This may help you avoid any compatibility bottlenecks.

111. Graphics cards: Mad with power

When upgrading your video hardware for higher performance, always check the power requirements. Multiple-GPU configurations like Crossfire and SLI (as well as graphic boards that have multiple GPUs) require a significant amount of power. It's almost a certainty that you'll need to upgrade your power supply too.

112. Antivirus apps trump installers

When upgrading to Windows Vista, be sure to disable any antivirus software run-

ning on the machine. Forgetting to do so can cause the antivirus software to conflict with the installation and can result in system pauses—or a complete system hang.

114. Convert IDE to SATA

You've decided to upgrade your motherboard but find that it doesn't have enough IDE ports to support your old drives—a common problem, actually. Fret not, IDE-to-SATA adapters are readily available at places like www.newegg.com.

115. Brace for trouble

Prepare yourself: much of your software may not operate under Vista without upgrading. Run the Application Compatibility Toolkit (ACT) found in the download center on Microsoft's Web site. It'll point you to any upgrades you may need.

116. Speed USB transfers

Is that flashy new external USB hard drive taking longer than expected to migrate your data? Ditch that ancient USB 1.1 technology on your XP machine by upgrading to a USB 2.0 card. They're available today for under \$20.

117. Check your hardware, part II

Before upgrading your aging Windows XP PC to run Windows Vista, be sure to download and run the Windows Vista Upgrade Advisor. It can help you determine which version of Vista best suits your needs, or if your Windows Vista PC is ready for a more powerful version of Vista. Note that the Upgrade Advisor works only with XP and Vista systems.—Brian K. Neal

Digital Organization

118. Don't browse, aggregate

The Web is too big to browse. Use a custom filtering service like iGoogle, MyYahoo!, or our favorite, NetVibes, to create a custom portal with multiple e-mail addresses, news sources, and blogs all in one place.

119. Clear your inbox every day

You don't keep snail mail in your mailbox, so why keep e-mail in your inbox? Every e-mail needs to be filed, acted on, or deleted.

120. Search your files with Google

Sure, Outlook comes with a search function, but Google Desktop (desktop.google.com) is much faster and can also be used to search files on your PC.

121. Create separate accounts

If you share a computer, make sure that every user—coworker, child, or spouse—has a separate user account. You can create them in the User Accounts Control Panel in Windows XP and Vista. And make sure children don't have Administrative rights.

122. Take the perfect picture

The speed and inexpensive nature of digital photography means you can take multiple images to get just the right shot. But you don't need to have multiple photos of that sunset when you're back home. Pick the best and trash the rest.

123. Scan your personal documents

Paper is so 1908. In 2008, there is no reason not to have a searchable PDF of every important document you own: your birth certificate, driver's license, marriage certificate, tax forms, divorce certificate, and so on. Most scanners scan to PDF natively.

124. Get a bigger monitor

Using a larger monitor could save the average worker 2.5 hours per day, according to University of Utah researchers. You can also use two smaller displays to simulate a larger screen. Use one for constantly updated windows, like your e-mail inbox, and the other as a primary workspace.

125. Filter and tag your e-mail

Think about who you get e-mail from (your boss, your credit-card company, newsletter publishers) and set your mail client to move messages directly to a dedicated folder. Then you can respond accordingly: Ignore your boss, put off the bills, and read this week's PCMag newsletters.

126. Name that tune

Store-bought songs usually come with accurate ID3 tags, but if you are tapping, *ahem*, other sources, use free apps like TagScanner 5. They can help you add the correct artist and album info.—Dan Costa

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- 2 Who is leaking company confidential information via chat, web mail or removable media (such as flash/USB drives, DVDs, CDs...)
- 3 Which employees spend the most time surfing web sites and see EXACTLY what they do on them.
- 4 What employees search for on Google, MSN, Yahoo and more.
- 5 Which employees are posting resumes on Monster.

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MAXING MOBILITY

Windows Mobile

127. Know when to quit

Windows Mobile doesn't quit programs, so you'll want to do that periodically whenever the handset seems slow. Fire up the Task Manager—in WM6 Professional it's located at *Start | Settings | System Tab* (at bottom) | *Task Manager | Running Programs*. Now click *Stop All*. (On Windows Mobile 6 Standard, the Task Manager has its own *Start* menu icon.)

128. The point is a better UI

Have iPhone envy? Power up your handset's user interface with the free PointUI Beta (www.pointui.com); it's not only more attractive, but it also lets you navigate with your fingers instead of your having to take out the stylus all the time.

129. Pull a fast one on Bill

Windows Mobile 6 Standard devices can view and edit Microsoft Office documents but not create them. So fool the OS by transferring blank Word and Excel documents from your PC. Then open one and rename it with a different name each time you need a new document.

130. Upgrade and conquer

Some Windows Mobile 5 devices—including the AT&T BlackJack, the Palm Treo 750, and the T-Mobile Dash—can be upgraded to Windows Mobile 6. Visit www.microsoft.com/windowsmobile/6 and click the *Upgrades* tab for details.

131. Teach your phone to share

Your Windows Mobile handheld makes a great cellular modem for your laptop, particularly if it's on a carrier with a 3G network (AT&T, Sprint, or Verizon). Search for "modem tethering" at www.smartdevicecentral.com for step-by-step instructions for each carrier as well as an OS X-specific how-to.

132. Synchronize important stuff

If you're a Vista user, you should grab the latest version of Windows Mobile Device Center (www.microsoft.com/windowsmobile/devicecenter.mspx) for synchronizing your handset with your PC. If you're running XP, check Microsoft's Web site for the latest iteration of ActiveSync, version 4.5.

133. Know where you're going

Download a free copy of Google Maps for Mobile at www.google.com/gmm. It gives

you road-map and satellite views, plus turn-by-turn directions—it will even work with your Windows Mobile handset's built-in GPS radio, if it has one. (Works with Palm OS, too.)

134. 500 channels and nothing's on?

Why pay monthly for mobile TV? If you have a Slingbox, the \$29.99 Sling-Player Mobile lets you watch cable TV or recorded DVR programs—often near 30 fps—right on your handset. Head to www.slingmedia.com/go/spm for details. (There's also a Palm OS version.)—*Jamie Lendino*

Palm OS

135. Find what you need, fast

To find anything on your Palm smartphone, press *Option* and *Shift*/*Find* to open the *Find* dialog box. Enter the text you're looking for, click *OK*, and then scroll to find the item you want.

136. Go dim—and go long

Press *Option* and the *Drop-Down Menu* key to dim the screen to half brightness for longer battery life. Press that combination again to return to full brightness.

137. Boost your handset's endurance

To improve battery life, take the following steps: (a) Set *VersaMail* to poll less often for new mail; (b) Reduce screen brightness in *Prefs | Power*; (c) Turn off *Beam Receive* if you're not using it; (d) Turn off *Bluetooth* in *Prefs | Bluetooth* if you're not using that either.

138. Grab alternate symbols quickly

Here's a shortcut for keying in alternative characters. If you need to type *đ*, for example, press *A*, then *Alt*, and select *đ* from the list that will appear on your screen. This works for all the accented letters that appear in European languages.

139. Make a course correction

Sometimes we all tap the wrong application icon with the stylus. The next time you load a program, hold the stylus down as soon as you select something—then slide the stylus up or down. Let go when the right icon is highlighted.

140. Everyone loves a smiley

Press and hold the center control pad button while writing a message; this will bring up a list of emoticons. (As if the world needs more of them.)

141. Alt-Tab, Palm OS style

Tap and hold the *Home* icon to bring up a list of the last applications you ran. Though Palm OS doesn't multitask, this lets you

flip back and forth between a few key programs quickly.

142. Tame the overaggressive guard
Keyguard, which auto-locks the keyboard, is very useful—except when the screen dims while you're using the handset. Head to *Prefs | Keyguard*. Set *Auto Keyguard* to *5 Seconds After Power Off*. This gives you a window to wake up the handset again before Keyguard locks the keyboard.

143. Watch video on the go

Play virtually any kind of video on your handset by downloading TCPMP 0.72rc1 (picard.exceed.hu/tcpmp/test), the latest version of the open-source media player project.—*JL*

Apple iPod/iPhone

144. Save money traveling abroad

If you take your iPhone abroad, be sure to turn off EDGE service to avoid huge charges. Go to *Settings | General | Network*, and turn *Data Roaming* off. You can still surf using Wi-Fi if you find a hot spot.

145. Type numbers more easily

Save yourself a tap when typing messages on the iPhone or iPod Touch. If you need to type a number or symbol, tap and hold the "123," drag your finger to the number you want, and then let go. The iDevice will insert your number or symbol and afterward snap back to the letter keypad.

146. Type accented characters

If you need to use an accented vowel on the iPod/iPhone's keypad, tap and hold down your finger on the vowel in question. The various options for accents will pop up.

147. Send picture messages

You can send picture messages to other cell phones using the iPhone's or iPod Touch's e-mail application, if you know the recipient's service provider. Send an e-mail containing just one picture to your friend's ten-digit phone number at the appropriate gateway. For Alltel, that's @message.alltel.com. For AT&T, it's @mms.vmcingular.com. For Sprint, it's @messaging.sprintpcs.com. For T-Mobile, it's @tmomail.net. For Verizon, it's @vzwpx.com. Just beware: This doesn't always work.

148. Teach names to your iPhone

Make sure to fill your iPhone's address book, including street addresses. The iPhone's dictionary learns from the address book, so it'll learn all of the names, street names, and such that you've dropped in there.

155. Gussy Up



IPHONE You can make a Web app look more like a real app by giving it an icon on your iPhone or iPod touch's home screen. Go to a Web app page (pick one from www.apple.com/webapps) in mobile Safari, press the + button at the bottom of your screen, and then click **Add to Home Screen**.

Cell Phones

156. Dry out a soaked phone

If you've dunked your phone in water, don't despair. Try taking the battery out and packing the whole thing in dry white rice overnight. Sometimes the rice can draw the water out of the phone.

157. Get rid of old phones

Don't just leave your old cell phone in a drawer. You can recycle it at any Sprint store or at www.racetorecycle.com, donate it to a good cause at www.exphone.org, sell it on eBay, or get cash for it at www.cellforcash.com.

158. Rescue camera-phone shots

Are pictures "stuck" in your phone? Buy a memory card (1GB cards cost \$15) and a PC card reader (usually under \$10). In your phone's photo gallery, choose **Move** for each photo to transfer it to the card. Pop the card into the reader and you'll have your pics. Or use picture-messaging to send the photos to your e-mail address—but you'll probably be charged per message.

159. Fix reception problems

Update your CDMA phone's tower list for the best coverage. On Verizon, that means dialing *228 once a month to update the phone's list. On Sprint, dial *2 every six months and ask for a "PRL update," which pushes down a new list of cell towers.

160. Charge your phone in a pinch

If your phone charges via a mini USB jack, you may be able to charge it by plugging into any PC with a standard-USB-to-mini-USB cable, available for under \$10 at many electronics stores. With Motorola phones, you'll need to download free drivers

from developer.motorola.com/docstools/USB_Drivers.

161. Sync your phone and PC

Syncing your cell phone's contacts and calendar with a PC can make it even more useful. How to sync varies from model to model. Nokia and Sony Ericsson phones come with good, free syncing software. For other phones, try Spark Technology's CellStik, the free Bitpim.org program, or Motorola's Mobile Phone Tools.

162. Refresh your phone's coverage

There are several cues for poor cell reception. First, make sure you aren't covering your phone's antenna (usually a bulge in the shell) with your fingers. A passive add-on antenna like the \$32 ARC Wireless Freedom Antenna can give you a further boost. A powered amplifier like the Wi-Ex zBoost (\$300 to \$400) can pull out signals where they seem to be nonexistent.

163. Search Google free

Text GOOGL (46645) with a business category or name near an address to get local business listings. Texting 4DNFO (44636) can get you weather, news, TV or movie show times, or even Wi-Fi hot spot locations; find instructions at www.jinfo.com.

164. Get free directory assistance

Never, ever pay for directory assistance. Use 800-FREE-411 instead. Yes, you'll have to listen to an ad first, but it's free 411! If you can't get the hang of its automated system, there are also live operators.

165. IM without IM

No IM on your phone? You can do pretty much everything possible on AIM through text messages. Check out mobile.aol.com/aolproducts/mobile-aim/aim-txt for the full instructions. That goes for Yahoo! Messenger, too. See mobile.yahoo.com/messenger/sms for those details.—SS

Laptop Trickery

166. Safer on a VPN

Got VPN—a virtual private network? Use it, especially when you're at a public Wi-Fi hot spot. It's safer than relying on your firewall and the benignity of strangers. If you don't have a VPN, use JiWire Hotspot Helper (www.jiwire.com) to get one.

167. Get off the grid sometimes

Kill your Wi-Fi radio antenna when you're not using it and save even more battery power. Also, kill any other applications you aren't using. Every little bit helps!

168. Save Juice: Stop the spin

Want to watch a movie on the plane? Load

149. Scope out suspicious e-mails

There may be no viruses for the iPhone, but you can get phishing e-mails. If you see a link in an e-mail, tap and hold your finger on it and the full URL you're about to jump to will pop up. Don't follow the link if the URL looks the least bit suspicious.

150. Make free iPhone ringtunes

Who wants to pay \$1 for a ringtone? Not us. If you have a Mac with GarageBand 4.1.1, you can turn any non-DRM'd song into a ringtone by dragging the song into GarageBand, selecting up to 40 seconds, and picking **Send Ringtone to iTunes** from the **Share** menu. Windows folks can use Efiko Software's \$15 iPhoneRing ToneMaker to do the same thing.

151. Sync with multiple PCs

Get a new level of control over your iPhone or iPod by turning off automatic syncing. Check **Manually manage music and videos** on the **Options** section of the iPhone/iPod screen in iTunes. Then you'll be able to fill your iDevice with music and video from multiple computers without that irritating "we're going to erase everything" message appearing.

152. Fit your 'phones

Most headphones don't work with the iPhone because of its recessed jack. You can get an adapter from Griffin or Shure, or dare a DIY solution: Take a sharp knife (like an X-Acto) and pare the rubbery housing away from the quarter-inch area just above the plug on your headphones. Make sure not to dig into the hard plastic under the rubber. That might give you just enough extra room to plug in your 'phones.

153. Fix the iPhone's reception

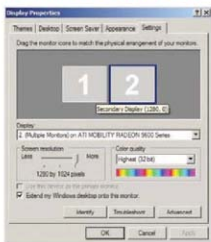
Believe it or not, you can improve your iPhone's reception by holding it differently. Try just pinching it between two fingers at the upper right-hand corner of the phone. The key is to avoid having your hand cover the plastic part at the bottom of the back of the iPhone, which contains the antenna. That might get you just enough extra signal to make your call.

154. Convert DVDs for iPods

It's possible to watch your commercial DVDs on an iPhone, though transferring them onto your device remains a legal gray area. PC users need two free products: DVD43 and HandBrake. Mac users may get away with just HandBrake, though they may also need MacTheRipper to extract the DVD source files. Remember, don't share your DVD files with others!

—Sascha Segan

176. Not So Bright



LAPTOP TRICKERY Reduce the screen brightness on your laptop to get 10 to 20 percent more juice out of your battery. Browse [Power Options in the Control Panel](#) for other ways to increase uptime.

it onto a USB key (how you get the movie in the first place is none of our business). Watching a movie off a thumb drive means no spinning disks (DVD, hard drive) and less battery drain.

169. Close the bloatware

When your laptop starts to get old and slow, consider swapping out your bloated OS. If you're using your computer only to access the Internet and check your e-mail, a light version of Linux is all you really need.

170. Safer in a sleeve

A laptop sleeve can save your laptop from the dings and scratches it's bound to pick up jostling around in your bag. For the best protection, get one that's made specifically for your laptop model; the snugger the fit, the better the protection.

171. Boost your screen real estate

Reap the many advantages of a dual-display workspace by using your laptop's screen as one of the displays. Connect a second monitor to your laptop and right-click anywhere on your Desktop screen. Choose *Properties*, click on the *Settings* tab, and specify both monitors as *Attached*.

172. Privacy protection

Want some privacy on the plane? Shield your laptop screen from prying eyes with a screen filter—a good one is the 3M Notebook Privacy Computer Filter (from \$40). It's transparent when seen from straight on, but turns the screen black when viewed from the sides.

173. Other ways to increase speed

Swapping out your OS for a lighter one might be the most effective way to speed up an aging laptop, but there are other, less-involved ways to do it. For instance, a RAM boost is the easiest (but most expensive) way to bump your laptop's speed. Another way is to go into *Control Panel* | *Add or Remove Programs* and raze absolutely everything you can live without. And don't forget to defrag your disk.—*Kyle Monson*

Going Wireless

174. Place routers up high

A wireless router with an integrated access point (AP) or an AP all by itself should be placed as centrally as possible in a house or office to provide the best signal. Put it up high—even mount it on the wall—not down low, and definitely not under a desk.

175. Avoid radio signal bounce

Metal objects like big filing cabinets or cement walls can cause interference for wireless network signals, so try to keep

your router/AP away from them. Even the slightest move could change the way the radio signals bounce.

177. Limit Wi-Fi conflicts

Be sure the channels on an 802.11b/g network are set to 1, 6, or 11 (check your manual to find out how). Those are the only three channels usable in the United States that don't overlap. Channels that overlap other Wi-Fi networks can cause interference.

178. Look for interfering networks

If you suspect interference—for example, if your once fast network seems slooow—find out if your laptop can see networks other than your own. Someone nearby may have a network on the same channel. Check with your neighbors about which channels they are using, and make a switch if needed.

179. Upgrade to better security

If you're concerned about security but still use Wired Equivalent Privacy (WEP) for encryption, you're not concerned enough. WEP is easily cracked by anyone with the time and the easy-to-find tools. Upgrade your software/firmware (and hardware if necessary) to use Wi-Fi Protected Access 2 (WPA2), and use a long, strong password. That will make it almost impenetrable.

180. Mix dynamic and static IPs

Mix your use of DHCP's rotating addresses with static IP address: Assign static IPs for your own computers, and reserve a limited pool of DHCP addresses for guests.

181. Skip the CD setup

Many Wi-Fi vendors provide a CD for accessing router features. You won't need

it. If you know the router's IP address—typically 192.168.1.1—just type that into the Web browser of any PC that gets its IP address from the router. The Web-based controls for the router will be at your fingertips once you enter the router's username and password.

182. Firewalls can block shared PCs

If two computers on the same network refuse to see each other for sharing files or printers, temporarily deactivate any software firewalls you've got running. If the connection works, you know the culprit. Enter the IP address for the entire network on each firewall to allow continued access.

183. Reserve IP addresses

Using DHCP means sometimes your computer changes IP addresses, depending on when an address renews (192.168.1.101 one day, but .104 the next). You can use static IPs to solve this, but better yet, use the "DHCP reservations" feature some new routers provide. It matches a specific IP address with the unique MAC address of a computer's network adapter, so the IP address, even though it's a dynamic IP, never changes.

184. Find the MAC address

You can find your network adapter's MAC address (called the "physical address") and the IP address (either dynamic or static) by opening up a Windows command line (at the *Start* menu, go to *Run*, then type *cmd*) and typing *ipconfig /all*.

185. Avoid 2.4-GHz competition

Interference can come from other items using the same radio spectrum. 802.11b/g uses the 2.4-GHz frequency—and so do many cordless phones and even microwave ovens. If your Internet access goes out when you're heating up a burrito, move the laptop out of the kitchen. If you can afford it, switch to a router with 802.11n supporting both 5-GHz and 2.4-GHz, and reserve the 5-GHz side for your most important connections.

186. Third-party DNS adds features

DNS servers are assigned by your ISP; they convert the IP addresses used to communicate over the Internet (such as 63.87.252.186) into easy-to-remember URLs. OpenDNS (www.opendns.com) replaces a default DNS, speeding up queries a touch, and provides extras like phishing filters. Find the DNS settings in your router's Web-based interface and replace them with 208.67.222.222 and 608.67.220.220, then sign up for an account to get the extras.—*Eric Griffith*

IMPROVING MULTIMEDIA

Printers

187. Improve ink yield

Ink cartridges (but not toner) have a shelf life; that's why Epson, HP, and others put a "use by" date on the box. You'll get the highest yield if you use up the ink within about six months after that date.

188. Keep your ink jet in shape

It's in the nature of ink jets to clog if you don't print regularly. Print a page every few days to minimize the odds of the printer getting so badly clogged that you need to replace the cartridge or, worse, the printer (if print heads are permanently installed).

189. Buy only what you need

Match the cartridge capacity you buy to the way you print. Bigger ink tanks or bundled packs will give you a lower cost per page, but not if you let them sit around past the end of their shelf life.

190. Compare photo quality

Because paper characteristics affect how colors transfer, photos printed on different stock can turn out noticeably different. To compare, print several photos on both the recommended paper and the third-party paper you're considering.

191. Choose photo paper carefully

If a photo's longevity is more important to you than its cost, stick with the printer manufacturer's own paper. Wilhelm Imaging Research, an independent lab whose tests are the de facto industry standard, has repeatedly found much longer lifetimes for printer manufacturers' own papers than many third-party papers.

192. Ease manual duplexing

If your printer doesn't have automatic duplexing, see if it has a setting, found on some printers, to help with manual duplexing: It automatically prints every other page in a document, then stops and waits for you to turn the stack over and reload them for printing on the second side of each.

193. Be wary of third-party inks

Approach third-party inks with care; some are better than others, but many don't deliver on promised savings, with lower yields, more frequent failures, or both. Keep track of output, and compare the third-party version with the original on a cost-per-page basis, not per-cartridge.

194. Skip the draft photos

Don't print drafts of photos on plain paper

unless you're doing it to judge composition or layout. With virtually all printers, colors will vary depending on the paper you print on, often dramatically between plain paper and photo paper. In short, you can't judge the quality of the photo from a draft.

195. Kill a print job

Some printers have a cancel button that stops the print job immediately and clears the print queue on your PC. But the cancel button on some AIOs doesn't stop a print job, so don't assume that's what the button is for. Check now so you'll know how to kill a job in the future.

196. Look for an ink-saver mode

Consider using the driver's ink-saver or toner-saver mode (if your printer has one). It can increase the cartridge yield and decrease the cost per page, often without noticeable effect—particularly for text.

197. Run a water-resistance test

Conduct your own tests on your photos so you'll know how carefully you need to handle them. Immediately after printing four copies of a photo, handle one with moist fingers to see if it smudges, and drip some water on another, leaving the drops to dry to see if they have any effect. Wait a day and repeat with the other two photos to see if they're more resistant when dry.

198. Run a scratch-resistance test

How do your photos hold up to scratches? Print 10 or 12 photos and shuffle through the pack a few times—the way someone would if you handed him or her a stack of photos to look at. Then examine them carefully for surface scratches that may show up only from some angles.

199. Compare 4-color with 6-color

For printers that offer both four- and six-color printing, don't just assume that six colors will give you a better-looking print. Print a few photos both ways, compare the results, and then decide whether it's worth the extra time and effort to print with two extra colors.

200. Set the driver to the paper

Make sure you set the printer driver for the paper you're using. This is particularly important for photos, since the settings will affect the color results.

201. Print just the pages you want

For programs that don't offer a setting to print noncontiguous pages, look for an option that can print a file to disk in a for-

mat that another program with the option can read. If your accounting program can print a file in a format that Word can read, for example, you can then print the non-contiguous pages from Word.

202. Switching from color to mono

Install a second copy of your driver, set it to print in monochrome, and name it "my B&W printer." Switching to the alternate driver is a quick and easy way to lower cost per page when you print Web pages that you don't need in color.

203. Buy small near the end

Before investing in a "cost-effective," high-capacity toner cartridge, consider, based on your printer usage, whether or not the printer will outlive the toner. If you print only 100 pages per month and a replacement for your aging printer is on your short list, it doesn't make sense to buy a 10,000-page cartridge.

204. Increase photo longevity

Be particularly careful about entrusting your photos to third-party inks. Printer manufacturers have developed combinations of inks and papers with photo lifetimes measured in decades or longer. Photo lifetimes for some third-party inks are measured in months.

205. Check out your printer driver

Get familiar with your printer driver. Its features could very well extend to ones as sophisticated as a setting for printing booklets, which prints two pages side by side on each side of the paper and reorders them so you can fold the stack in half, to read through like a book.

206. Duplex vs. simplex made easy

Got a duplex printer, which can print on both sides of the page? Install one copy of the driver set to print in duplex and one set to print in simplex (on one side). Switching your choice of driver is faster and easier than changing the setting in the driver. —M. David Stone

Digital Cameras

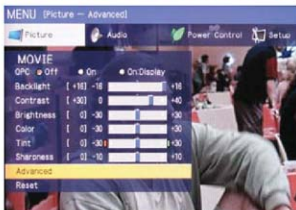
207. Disable screen for quicker shots

Most cameras have some sort of start-up screen that appears when you turn the camera on and adds to the total time spent snagging a shot. Although all cameras have different menus, the option to disable it is generally in the main menu. Do so and you won't miss that precious shot.

208. Prevent pixelation

Every point-and-shoot camera, be it an entry-level camera or a high-end super-

251. Know Your Backlight Controls



HDTVs & DVDs A flat-panel LCD's backlight control directly affects its power consumption. Reducing an LCD's backlight level when viewing in a dimly lit environment minimizes eyestrain, extends the life of the backlight system, and can cut power consumption by half or more.

the center and the top button simultaneously, for as long as 30 seconds. If it doesn't reboot, try connecting it to your PC overnight—it can sometimes take hours to revive an old iPod.

243. Drown out the noise

Can't afford good active noise-canceling headphones? Shure, Ultimate Ears, and Etymotic all make in-ear earphones that passively cancel out background noise and sound great—for a lot less dough.

244. Forget EQ, upgrade your 'buds

Most people rely on equalizer presets (like "rock" or "jazz") on their MP3 players to improve the sound. Upgrading the cheap earbuds that came with the player is usually a far more satisfying solution. If price is no object, consider Shure or Ultimate Ears models, but Sennheiser makes some relatively inexpensive options. —*Tim Gideon*

HDTVs & DVDs

245. Say no to bad video

Avoid composite video (the yellow cable/port); it's the lowest form of life in the video food chain. If you must use an analog video connection, S-Video is superior, and component video is the best. If the source device and the HDTV offer HDMI connections, always use them.

246. Safer disc cleaning

A Blu-ray player can have problems reading a Blu-ray disc that has fingerprints on it. Keep a clean microfiber cloth on hand for quick and safe disc cleaning.

247. Push the menu button

Modern game consoles and DVD and Blu-ray players need to be configured to display properly on a widescreen HDTV. Check the setup menu on these devices to ensure it matches your current display hardware.

248. Don't convert!

Except in the case of a quality A/V receiver or standalone video processor, never use a converter to transform an analog signal into digital (or vice versa); the image quality won't be any better than if you ran the unmolested signal directly into the HDTV.

249. Preserve battery life

Remove alkaline batteries from seldom-used remote controls to prevent damage to the battery contacts (or worse) from corrosive leakage.

250. Can you hear me now?

Audio quality is dependent on what connector you use. HDMI is the most convenient, but digital audio out (Toslink or

coaxial) may give you higher-quality surround sound if you have an A/V receiver.

252. TV Setup 101

Reset all your picture settings to use as your extra-bright daytime viewing mode. For viewing at night or in a light-controlled environment, select a picture preset named something like "movie," "natural," or "theater."

253. Don't scratch that screen!

Avoid using harsh cleaners on A/V equipment, and never spray a liquid directly onto an HDTV's screen. Also, never use paper towels to clean screen surfaces or glossy finishes—wood fibers will damage the finish. A dry microfiber cloth is all you need. Lightly dampen the cloth with clean water if the grime is particularly tough.

254. Great A/V cables for less

Save a bunch of cash on quality A/V cables by shopping online at stores such as www.monoprice.com and www.bluejeanscable.com. Prices are often a tenth of what you would pay in most retail stores, and the quality is excellent.

255. Speed surfing

Having an HD cable or satellite set-top box convert all standard and high-definition signals into one format (such as 1080i) usually speeds up channel surfing. The HDTV won't have to constantly sync itself to the different video formats broadcasters use.

256. Add more HDMI

Need more HDMI ports? Consider picking up an HDMI switch. IOGear has products that will automatically select the active port, and others can be operated via remote control. The least expensive are manually operated.—*Robert Heron*

TiVo & DVRs

257. Prevent overheating

Remember, a DVR has PC guts that are running 24/7: Make sure you keep some

space around the box for ventilation. And keeping the DVR in a closed cabinet with limited airflow can be just as bad.

258. Record from the road

Use your remote scheduling options: TiVo can schedule remotely from TiVo.com, Verizon FiOS is testing a scheduling feature from Verizon Wireless phones, and PC-based DVRs like Media Center and SnapStream have online schedulers.

259. Build a long-lasting remote

Use a pair of lithium ion batteries (instead of alkaline) for your remote: They will likely outlast the DVR's effective life (or at least the remote's).

260. Customize the skip settings

Some DVRs allow you to change the skip ahead/skip back settings: 30 seconds forward is enough to skip most commercials one at a time, and skipping back 5 to 10 seconds is enough to catch a bit of missed dialog. Check the manual for how to fine-tune your remote control to your liking.

261. Monitor what kids watch

Like your TV, your DVR has parental controls. You can set the DVR to block TV-MA programs or R-rated movies (or everything). You may have to change settings for both TV programs and movies, since they use different rating systems. Check your manual or online help for information.

262. Pick the right quality levels

Got kids? Go for quantity rather than quality: Cartoons (Disney/Pixar movies excluded) rarely look better in HDTV, so record afternoon programming in standard-def and hold more on your DVR (as much as 5 to 10 hours of SD for every hour of HD). Just record the channel's "regular" feed; for example, in the NYC area, record *Ice Age 2* on channel 340 (Starz) instead of Channel 855 (Starz HDTV).

263. Fix problems: Pull the plug

If your DVR is acting up (it has a jerky picture, or it's slow changing channels or

271. Kill Those Ads!



MEDIA CENTER Let's face it, skipping commercials is one of the reasons people buy and use DVRs (sorry, advertisers). But you're using a computer, not just a TiVo, right? Put that power to use. Download **Lifextender** (www.lifextender.com), which will cut ads permanently from your recorded TV shows.

Windows Media Center

272. Improve video quality

Most people use Windows Media Player for music. But Media Center depends on WMP for video playback, too. For the best quality, let your video card do the challenging decoding work. Visit **Tools | Options | Performance | Advanced** in WMP and select the box next to **Turn on DirectX Video Acceleration**.

273. Speed file sharing

Media Center can add files (such as photos and music) that you've shared from another PC. But its media discovery engine is slow. Force your PC to process your files by opening Windows Media Player, clicking the **Monitor Folders** button under **Library**, and adding the directories there. When it's done, they'll show in Media Center.

274. Queue clips in Internet TV

The neat new Internet TV feature has a big limitation: When your file stops playing, MCE automatically picks something only vaguely relevant for you. Instead, pause your file, use the **Back** button, and browse for something to watch next. Press **Record** rather than **OK** on your remote to add the file to a hidden play queue.

275. Improve your audio experience

To get the best sound from movies and TV, configure your speakers twice. First, make sure your setup is correct in the **Sound** control panel. Highlight your speakers, click **Configure**, and set the number of speakers and quality. Then from the MCE menu, select **Tasks** and scroll to **Settings**. From the **General** tab, select **Windows Media Center Setup** and set up your speakers again.

276. Use a secret theme

When advertising Vista's MCE features way back in 2006, Microsoft ads showed a "coral reef" theme that was unfortunately

never distributed. Pick up the next-best thing by searching for "Aquarium theme" at www.deviantart.com. You may need to adjust security permissions to modify the background, which is stored in a DLL.

277. Put it to sleep

Find your system awake in the middle of the night? The guide is set to update in the few hours. Change it by right-clicking **Computer** and selecting **Manage**. In the **Task Scheduler**, expand the tree **Task Scheduler Library | Microsoft | Windows**, then select **Media Center**. In the right-hand pane you'll find the recurring guide update, **mcupdate**. Select a better time—noon, perhaps?

278. Schedule recordings remotely

MSN can talk directly to your PC, letting you schedule recordings of shows remotely. Download the **Remote Record** app from tvmsn.com and install it on your PC. Then MSN's TV listings will include an extra item for remote recording—say, from your PC at work.

279. Pown Netflix!

Netflix users gained fantastically easy access to a world of streaming video with the release of MyNetflix 2.1. Download this plug-in at www.anpark.com/Software.aspx. It lets you browse and update your rental queue, but beyond that it gives you full-screen remote control over Netflix's Watch Now library. Simply awesome.

280. Hide unwanted images

Tell MCE to monitor the folder where you store music and it'll add those songs to its music library... and the cover.jpg album images to your photo library. Duh. Hide those files to prevent this. Launch **CMD .EXE** from the **Run** dialog. Enter **CD My Documents (just Documents in Vista)**, then **CD My Music**, and type **ATTRIB +H folder.jpg /S** to add the Hidden attribute to those files in the current directory and all subdirectories.

281. Play DivX, Xvid, and more

MCE plays DVDs by default, but not Xvid, DivX, or the other file formats you'll encounter on the Web. Support those and dozens of other formats with the **ffdshow** package—www.ffdshow.info. Just download and run the simple, free application—which is under constant development, so check back often for new versions.

282. Add instant-messaging

Early versions of Media Center came with Windows Messenger, letting you chat with your friends on screen. Neat! Vista MCE doesn't include this functionality, so get it back with the free **Media Control Plugin** (damiembt.free.fr).—*Jeremy A. Kaplan*

navigating the memos), try power-cycling it first: Unplug it, wait 10 to 15 seconds, and then plug it back in. This process will clear up a multitude of problems.

264. Make TiVo less annoying

You can turn off those TiVo beeps if you think they're annoying, or make them louder: Go to **Messages and Settings | Settings | Audio | Sound Effects Volume**. You can then set the beeps to **Off** (or high).

265. Enable the 30-second skip

The most requested TiVo tip: the 30-second skip, which lets you use the skip button (→) to jump ahead 30 seconds (the average length of a commercial). During playback of a recording, hit **Select | Play | Select | 30 | Select**. You'll hear three bongs. Then you can skip ahead. Do it again to turn off the feature.

266. Move video directly to an iPod TiVo has the ability to transfer shows from your TiVo to your PC or Mac, and automatically transcodes them to play on your iPod or other portable media player. Check **TiVo.com** for the **TiVo Desktop Plus** for Windows software (TiVoToGo), or get **Roxio Toast** with TiVo Transfer for Mac.

267. Get CableCARD—if you dare

If you're setting up CableCARD for your DVR, you will likely have to do the final tweaking yourself. Cable installers have a lot of experience with flat-panel TVs, but may have only limited experience (if any) with TiVo or Windows Media Center Edition setups. MCE PCs with CableCARD readers are still a rarity.

268. Watch TV anywhere

Not at home when you want to watch? Consider the **Slingbox**, which lets you connect to your DVR from any notebook PC or mobile phone. A Slingbox can set up new recordings on your DVR or check on existing schedules. And it works with just about all DVRs, whether they are cable-, satellite-, or PC-based, or a TiVo.

269. Boost your storage capacity

If your DVR has an eSATA port on the back (like the Scientific Atlanta 8300 or TiVo Series3/HD), consider an external drive for more storage. You can add over 60 hours of HD programming with a 500GB drive.

270. Go from PC to TV

You can view your home videos on your DVR: It's easy for a Media Center PC or Apple TV. If your cable company supplied your DVR, you'll have to install a program on your home PC—ask your cable company for it.—*Joel Santo Domingo*

GOING ONLINE

Google Tools

283. Limit search to blogs

To find something in a blog—any blog, not just those using Google-owned Blogger—search at blogsearch.google.com.

284. Remove cached, dead sites

Many sites that die off stay cached in Google's search. If your late site is there and you want the world to forget it, request its removal via the Webmaster tools (www.google.com/webmasters/tools/removals).

285. Print calendars to PDF

There's a *Print* command in Calendar, but it doesn't print, technically speaking. It brings up a dialog box for customizing the appearance (for example, setting it to black and white instead of color). It then generates a PDF for each month, which is perfectly suitable for framing—or printing, e-mailing, or saving.

286. Auto-update spreadsheet data

In a Google Docs spreadsheet, you can create up to 250 cells that update automatically using the *GoogleLookup* function; they could contain such data as stock tips or population counts. Check the Functions listing under *Advanced Editing* at www.google.com/support/spreadsheets.

287. Read Gmail in IMAP clients

Gmail now supports IMAP so you can access it in a client like Outlook or Thunderbird. In such an app, copy files to your local folders to back up Gmail messages locally. Likewise, copy files to Google folders to back up local e-mails in your Gmail space.

288. Convert PDFs to editable text

Want to convert a PDF file to text? Send it to your Gmail account and view the attachment as HTML. You can then cut and paste it, with formatting, into a word processor.

289. Search single sites

Refine the power of Google's Web search to just one single site. For example, typing *tips site:pcmag.com* will limit your search to tips stories on PCMag.com.

290. Subtract search terms

When you search, limit what's returned by including the term you don't want with a minus sign. For example, *celebrities -Seacrest* means celebs except the überhost. This works also for Google News.

291. Get schedule by text message

Set up your phone with Google Calendar (under *Settings* | *Mobile*). Send a text mes-

sage with the word *day* to short code 48368 to get back a text of your day's schedule. (Text next for tomorrow's schedule.)

292. Nab more reading real estate

If you want more space to read articles in Google Reader, hit the U key—it'll get rid of the left-hand sidebar listing your feeds. (Another tap on U will bring it back.)

293. Send executables by renaming

Gmail won't let you send executable files (EXE, DLL, others) even if they're compressed in a ZIP file—Google says it's to protect against viruses. But you can change a file's extension to something benign (like .txt), send it, and tell the recipient to change it back.

294. Advanced message searches

If you need to search your Gmail messages, limit how you search by using *to*, *from*, and *subject*: as operators. You can also use *label*: and *even after*: or *before*: to search by date (formatted as *beforeyyyy/mm/dd*).

295. Publish Google presentations

When you make a presentation in Google Docs, publish it to get code embeddable in a Web page (just like a YouTube video). You can also save it as a PDF file to send to others (though you can't save it as a PPT file for use in PowerPoint—yet).

296. See reader stats

Curious how much you're reading in RSS feeds? Google Reader will show you stats on how many subscriptions you have, items you've read, shared, or e-mailed, and more.

297. Find full phrases

Quotation marks around a phrase (like "save the cheerleader") will find only pages with the full phrase. Couple it with individual words (like "save the cheerleader" plus *Heroes*) to get more specific. In fact, using the plus sign (+*Heroes*) will bring back only pages with that word.

298. Spell out Advanced Searches

Google's Advanced Search (www.google.com/advanced_search) spells out all the operators, wildcards, restrictions, and more you can use while searching.

299. Weatherize a calendar

Add your local weather reports to Google Calendar. Go to *Settings* | *General*, enter your location, and choose degrees centigrade or Fahrenheit.

300. Gmail your calendar

If your Gmail messages include date or

time information, click on that data. Gmail will offer to turn the message into an event in Google Calendar. If the message includes a date, Google Calendar will usually interpret for you and put the event in the right spot.

301. Use other addresses in Gmail

You can associate a non-Gmail e-mail address with your Gmail account. This is helpful if you get calendar invites at the non-Gmail address. Upon receipt you can associate them with your Google Calendar. Go to your Google Account Settings at www.google.com/accounts/EditUserInfo to add an additional e-mail address.

302. Sync Office with Google Docs

Ensure the files you edit in MS Office are available in Google Docs using DocSyncer (www.docsyncer.com). It works with Windows, migrates files to Google for you, and launches Google Docs by clicking a file, as if it were a local application.—Eric Griffith

RSS Feeds & Podcasts

303. Pick the right feed

Many big-name blogs offer multiple RSS feeds; for example, you can read every post or just get the feed for the stuff you're interested in. Check for a listing of feeds by category or tag before you subscribe.

304. Speed-read with Firefox

Make Firefox Live Bookmarks as easy to access as possible. Store your favorite RSS feeds there so they'll be constantly and readily available, rather than storing static links in Bookmarks Toolbar folder.

305. Make a feed where none exists

If your favorite column or writer doesn't have an RSS feed, search for the name with your favorite news search engine, like news.search.yahoo.com or news.google.com. Once you find a combination of terms that provides what you want, subscribe to the search's RSS feed.

306. Import and back up feeds

The Outline Processor Markup Language (OPML) format is used for importing and exporting your big list of RSS feeds from a reader. Use an OPML file to move from one reader (say, desktop software like Feed-Demon) to another (an online reader like Bloglines or Google Reader, or even IE7).

307. Read feeds as bookmarks

You can view an RSS feed as a set of bookmarks—called Live Bookmarks—in Firefox. In the *Tools* menu, go to *Options* | *Feeds* and choose *Live Bookmarks*. The

next time you click the orange RSS icon in an address bar, you'll have the option to add the feed to your bookmarks, where it will add new links as the feed updates.

308. Subscribe with iTunes

Podcasts are essentially RSS feeds with an audio or video attachment. iTunes makes it easy to subscribe to them: Just search for the podcast you like, or browse in the iTunes store until you find one to subscribe to. iTunes will download the latest episodes whenever you open the software.

309. Make feeds mobile

You can make any site with an RSS feed more mobile-friendly by going to [www.google.com/reader/m/view/feed/\[insert feed address here\]](http://www.google.com/reader/m/view/feed/[insert feed address here]). Google will reduce the feed to just the headlines for easy viewing on phones.

310. Put feeds in your screensaver

Some screensavers will read RSS feeds so the headlines are available when you return to your desk. Macs have one built in called RSS Visualizer. The free RSS Screensaver for Windows (www.nuparadigm.com) shows your photos in the background.

311. Reading shortcuts

In Google Reader or Bloglines, the J key will cycle you from one article to the next, down, down, down; the K key will move you back up to previous articles. Tap the space bar to move only one screen at a time, so you miss nothing.

312. Turn e-mail into RSS

Use Bloglines for "e-mail subscriptions": Create an e-mail address through the service and use it for subscribing to newsletters (or even forward your e-mail to that address). Then read all the messages in Bloglines' Web-based interface.

324. Subscribe without iTunes

iTunes links to most podcasts, but if you can't find the one you want there, you can go to the podcast's site to find its feed, usually ending in .xml. Paste this into an RSS reader or podcast aggregation software like Juice (juicereceiver.sourceforge.net). Juice dumps the files it downloads into iTunes for playback.—Eric Griffith

Internet Explorer 7

325. Back up your Favorites

Protect your hard work—make a backup of your Favorites. Choose *Import and Export* from the *File* menu, select *Export Favorites*, and follow the prompts to export to an HTML file. You can load this file back into IE, import it into Firefox, or browse it like a Web page and click on the links.

326. Protect your passwords

If you let IE memorize your username and password for secure sites, anybody with access to your logged-in user account can visit those sites. Turn off this feature: Under the *Tools* menu, select *Internet Options* | *Content*, click the *Settings* button in the *AutoComplete* area, and uncheck the box *User names and passwords on forms*.

327. Ease viewing with ClearType

ClearType can improve the appearance of many Web pages. To enable it, click the *Advanced* tab in *Tools* | *Internet Options* and check *Always use ClearType for HTML*, then restart IE7.

328. Let IE catch phish

IE7's phishing filter won't screen out every fraudulent site, but it does catch quite a few. Be sure it's on. Click *Tools* | *Phishing Filter* | *Turn On Automatic Web Site Checking*.

329. Organize your Favorites

Organize your Favorites into categories, making them easier to sort through. Hold the Shift key while selecting *Organize Favorites* from the *Favorites* menu; this opens the entire *Favorites* folder. Now create folders for each category and drag individual Favorites into them—this is much quicker than using the regular *Organize Favorites* within IE.

330. Keystroke to launch a URL

To launch a URL of the form www.domain.com, just type the domain part in the address bar and press Ctrl-Enter. IE will put www.infrontandadd.com at the end.

331. Don't search by accident

When you type a URL incorrectly, IE7 may redirect to a Microsoft search page. To prevent this, in the *Tools* menu, select *Internet Options* | *Advanced*, and check the option *Do not search from the Address bar*.

332. Correct off-size windows

If IE's windows appear in small or awkward sizes, do this: Close all IE windows, relaunch IE, and click a link to create a secondary IE window. Size the secondary window as desired, and close it by holding Shift while clicking the close icon at the top right. Do the same for the primary window.

333. Easily open link in new window

Hold Shift while clicking a link to open it in a new window; hold Ctrl while clicking a link to open it in a new tab.

334. Start IE at a blank page

To make Internet Explorer start instantly without attempting to load a specific page, set your Home Page to *about:blank*.

335. Manage the Links toolbar

The Links toolbar is a parking spot for your very favorite sites. Right-click any existing links that you don't want and choose *Delete*. Drag from the address bar onto the Links toolbar to add the current site, or drag any link from the *Favorites* menu.

336. Un-hide IE's menu

IE7 normally hides its menu until you press Alt or F10. To make the menu permanently visible, as it was in IE6, select *View* | *Toolbars* | *Menu Bar* from the menu.

337. Eliminate pointless searching

If you do not have a proxy server installed, keep IE from wasting start-up time looking for one. Under the *Tools* menu, click *Internet Options* | *Connections*, click the *LAN Settings* button on that tab, and uncheck all the boxes in the dialog that appears.

338. Make tiny text bigger

If the text on a Web page is too small, hold down the Ctrl key while scrolling up with

11 Dynamite Shortcuts for IE7

TO DO THIS

Open a link in a new tab in the background	Ctrl-Click
Open a new tab from the address bar	Alt-Enter
Switch between tabs	Ctrl-Tab
Close current tab	Ctrl-W
Switch to a tab	Ctrl-Number
Open Quick Tabs	Ctrl-Q
Put focus on the information bar	Alt-N
Give focus to the address bar	Alt-D
Go to the toolbar search box	Ctrl-E
Open your search query in a new tab	Alt-Enter
Bring down the search provider menu	Ctrl-Down Arrow

CLICK THIS

346. Be Discreet



FIREFOX If you use Firefox on a shared computer, delete the telltale traces of where you've been. Go to the **Tools** menu, select **Options**, and click **Privacy**. Click the **Clear Now** button to delete your history of sites browsed, downloads, and much more. You can also check a box to always clear private data every time you close Firefox.

Firefox

347. Use *Exit* to close entirely

When closing Firefox, use **File** | **Exit** instead of hitting the red X button; this closes every instance, even other open windows. You can also configure Firefox (in **Options**) so that when you reopen it not only all tabs but all separate open windows are restored.

348. Store Firefox preferences

To backup your carefully calibrated Firefox preference changes from *about:config*, find the *prefs.js* file in the *Firefox Profiles* folder on your hard drive and save it somewhere safe. Just drag it back there if you reinstall or lose your preferences in the future.

349. Combine toolbars

Customize and consolidate toolbars: Right-click next to the **Help** menu, select **Customize**, and drag buttons where you want—even next to the menus or bookmarks. With the **Customize Toolbar** box open, drag buttons between menus. The **Toolbar Buttons add-on** (grab it from *mozilla.org*) provides even more options.

350. Supercharge bookmarks

Make a shortcut for a frequently visited Web site. Find it in the **Bookmarks** menu, right-click it, and select **Properties**. Assign it a brief keyword or even a letter (like *g* for Google). Type that keyword alone in the address bar, hit **Enter**, and you're there.

351. A shortcut to site search

Search a specific site often, like YouTube or a favorite forum? Find the site's search box,

right-click it, and select **Add a Keyword for this Search**. In the **Add Bookmark** dialog, type the name (*YouTube*) and a keyword (something short like *u*). Then type *u* and the term you want in the address bar; it'll automatically jump to YouTube and search results on the term.

352. Resurrect killed tabs

Bring back the tab you closed accidentally (whoops!) by typing **Ctrl-Shift-T** (Command-Shift-T for Mac users). **Ctrl-W** (or **Command-W**) will close your current tab.

353. Perform drag-and-drop search

Drag a highlighted word on a Web page to the search box to automatically search—no manual cut-and-paste necessary.

354. Restore deleted bookmarks

Accidentally deleted a bookmark? Go to the **Firefox Profiles** folder (in XP you'll find it under *C:\Documents and Settings\<username>\Application Data\Mozilla*) and find the *bookmarkbackups* folder. It usually holds five days' worth of backups. Change yesterday's file to *bookmarks.html* and replace the one in the *Profiles* folder.

355. Use address auto fill

Firefox's browsing history appears in a drop-down menu as you type a URL. To get the browser to finish entering the address for you based on this history—just like IE—surf to *about:config* in the address bar and find *browser.urlbar.autoFill*. Double-click on it to set the value to *true*, and restart the app. Double-click on it again to restore the old drop-down menu selection.

356. Recover leaked memory

Firefox isn't great with returning memory. To reduce memory use when it's minimized in XP (better than nothing), go to *about:config* and right-click; in the drop-down menu select **New**, then **Boolean**. Enter *config.trim_on_minimize* and press **Enter**, then select **True** and press **Enter**. Restart Firefox. If you launch **Task Manager**, you should see memory use drop when you minimize the browser.

357. Pipeline for fast page loads

You may get a boost in page-loading speed by turning on pipelining, which downloads several pages at once. In *about:config*, set the following values at *true*: *network.http.pipelining* and *network.http.proxy.pipelining*. Set the *network.http.pipelining.maxrequests* value to 8 to load that many pages.

358. Navigate with ease

To go back to a previous page, you usually use the arrow icons on the toolbar. The same effect works by holding the **Alt** key while hitting the **Left** or **Right** Arrow keys.

the mouse wheel (that is, away from you), or select **View** | **Text Size** from the menu and choose a larger size.

339. Alphabetize your Favorites

Can't spot what you want from the Favorites menu? To alphabetize your Favorites, pull down the menu, right-click any item, and choose "Sort by name" from the pop-up menu that appears.

340. Remove AutoComplete Items

IE's AutoComplete feature redisplay data that you've previously typed into fields in Web forms. If it displays an incorrect or unwanted value (*PC World?* Yuck!), use the **Down Arrow** on the keyboard to highlight the offending item and press the **Del** key to delete it.

341. Fill the screen with kiosk mode

Internet Explorer's kiosk mode, toggled by pressing **F11**, totally fills the screen and autohides the menu and toolbars. To put a public computer in display-only kiosk mode with no menu or toolbars, go to the **Start** menu and click **Run**, then enter *ieplorer -k* followed by a URL.

342. Back and forward shortcuts

You don't have to click toolbar buttons to navigate back or forward. **Alt-Left Arrow** navigates back one page and **Alt-Right Arrow** navigates forward. Or hold down the **Shift** key while scrolling the mouse wheel toward you for back, away from you for forward. (Works in Firefox too!)

343. Two accounts, two windows

You can't open two instances of some Web-based mail accounts in two IE windows; logging in to one logs out the other. To get around this, launch Windows Explorer, select **Tools** | **Folder Options** from the menu, click the **View** tab, and check the box titled **Launch folder windows in a separate process**.

344. Multiple home pages

If one Home Page isn't enough, you can have IE7 open multiple pages in tabs. Select a page you want to add, click the down arrow next to the **Home** toolbar button, and select **Add or Change Home Page**. Check the option **Add this webpage to your home page tabs** and click **OK**.

345. Identify add-on problems

To check whether an IE7 problem was caused by an add-on, right-click the IE icon on the desktop and choose **Start Without Add-ons**. If the problem goes away, click **Tools** and select **Manage Add-ons** | **Enable or Disable Add-ons**, then experiment to see which was the culprit. —Neil J. Rubenking

368. My Keys My Way



OPERA Opera users have a simple way to reconfigure keyboard commands. Go to **Tools | Preferences, then Advanced | Shortcuts**. Click on the **Keyboard setup** entry *Opera Standard*, then click **Duplicate**. Now, double-click on the copy (rename it if you want to) and you can edit the keyboard setup.

359. Spell-check input fields

Firefox has a spell-checker that works in text areas, the big parts of an online form where you write a lot. But it's turned off by default in regular input fields (such as those for your name). Turn it on for both by going to *about:config*, finding *layout.spellcheckDefault*, and setting the value to 2.

360. Dismiss the Go button

You don't need a Go button taking up space next to the address bar if you press return every time you type an address. In *about:config* find *browser.urlbar.hideGoButton* and set the value to *true*.

361. Perfect URL cut-and-paste

Sometimes you want to cut two lines of text and paste them into a text field on a Web page that takes only one line. Impossible? Nope. In Firefox, enter *about:config* in the address bar; scroll to *editor.singleLine.pasteNewlines*, double-click, and change the value to 2. Next time you copy two lines, both will paste into a single field.

362. Turn off page prefetching

Firefox prefetches Web pages to its cache during idle time based on links in the site you're looking at, so it loads faster if you follow the links. You can turn this off using *about:config*. Find *network.prefetch-next* and set its value to *false*.—Eric Griffith

Blogging

363. Keywords boost visibility

Frontload your headlines with keywords, such as proper names. Sure, it might mean using the passive voice from time to time, but what's a possible style faux pas in light of a big traffic upswing?

364. More after the jump!

There are many schools of thought on how much text should be offered in RSS feeds, ranging from simple headlines to entire posts. Compromise by offering all the pre-jump text: Anything that can be read on the front page of your blog without clicking the "more" link should be offered in your feed.

365. Cite your sources

Always credit your sources. There is such a thing as blog karma; most successful bloggers subscribe to the "do unto others" school of thought.

366. Post early—and often

While it's not a great idea to post simply for the sake of posting, even the best-written blogs have trouble retaining audiences with sporadic or infrequent updates.

367. Are questions useful?

Ask questions in your posts. It will prompt

user discussion, and there's no better way to build a community than by fostering an active comment section.

369. Tags foster browsing

Include tags on posts as often as possible. Giving users the ability to search within your site will only serve to increase traffic.

370. Flaunt your opinions

They might scream "print media" to some, but columns expressing strong opinions are a great way to develop voice and authority for your blog while generating feedback.

371. Encourage bookmarking

Social bookmarking sites such as Digg, del.icio.us, and StumbleUpon are great ways to promote posts. Make submitting to these sites a bit easier on your readers by including modules directly on your posts.

372. Use movies, audio, and more!

Adding multimedia files like MP3s and YouTube videos breaks up the monotony of text-only posts. YouTube offers embed code directly on its site; MP3 files can be posted to a sharing site and linked to.

373. Dazzle them with fine art

Pictures, pictures, pictures! Nothing says "read this post" quite like an intriguing piece of art. —Brian Heater

Opera

374. Speed Dial

Opera's Speed Dial is awesomely useful. It contains nine blank slots into which you can type URLs. Whenever you open a new tab, you see your top nine sites laid out in a grid for you to click and choose. But there's

one oversight: When you're done browsing a site and want to invoke Speed Dial, you can't do it from the tab you're in—you have to open a new tab. Or, to avoid going through the pointless steps of closing your active tab only to open another immediately, you can set a keyboard command (the command is Show Speed Dial).

375. Nickname a bookmark

Instead of clicking a button to bookmark a page, take a second to type in an intuitive nickname. In the future you can simply type the nickname into the address bar instead of finding the bookmark. Fallen in love with nicknames? Go to *Bookmarks | Manage Bookmarks...*, and nickname your existing bookmarks as well.

376. Edit the keyboard setup

Setting your cursor into the address bar in Opera requires you to press two keys (Ctrl-L), while IE requires just a Tab (assuming you haven't clicked any fields on a page). Or just press the H key, for history; it brings your cursor to the address bar and drops down a URL history, so you can easily scroll to a recently visited site.

377. Come on and zoom

Now even IE can zoom in and out on a page. But Opera did it first, and still does it best—or at least makes it easiest, with single keystrokes. 0 zooms in, adding 10 to the percentage (100, 110, 120, and so on); 9 zooms out by 10 (90, 80, 70); 8 zooms in by 10; 7 zooms out by 100; and 6 returns you to 100 percent.

378. Jump around

If you're on a page with a Next link, pressing Ctrl-Right Arrow should activate it. Unfortunately, this won't work on every site—for example, Opera doesn't seem to recognize the Next links on PCMag.com—but it does work on many.

379. Do not click Go

Press Ctrl-C to copy a URL, but instead of going to the address bar and pressing Ctrl-V followed by Enter to launch it, go to the address bar and press Ctrl-B to copy and launch it all at once. Better still, copy a word or phrase, move your cursor to the search bar, and use Ctrl-B to launch the search.

380. Search your way

Opera doesn't support those space-hogging toolbars every search engine wants to install. For easy access to Ask.com, Clusty, and the like, right-click in the site's search field and select *Create search...*. Fill in the dialog box as you wish, to add the search engine to the browser. Don't neglect the keyword field, which lets you search from the main address bar.—Sarah Pike

BOOSTING business

Servers & Storage

381. Use VMware's remote access

VNC is a remote-access technology optimized for virtual environments. If you're looking to manage your servers from off-site, check it out before investing in a pricey third-party solution; VNC is built into VMware and will let you connect to any of your virtual machines via the host's IP address or DNS name.

382. Restrict access for Macs

Restrict Print Center access for your Mac users—they can switch default printers and mess with print jobs by default, which can hurt the next user in line. Make sure no user has root access, and restrict access so that users can still initiate jobs and switch between printers, but that's it.

383. Control the Time Machine

If you're frustrated that Time Machine slows down your Mac every time you start it (and again once every hour when it's taking a snapshot), take heart and look outside the Apple orchard for help. First, download third-party widget Red Flag (www.Jonelycomputer.com), which lets you keep track of when Time Machine has done a backup and when it's going to run the next one. Then get TimeMachineScheduler from www.klieme.com. This app lets you edit your Time Machine backup more easily and more completely than Time Machine's own scheduler.

384. Store tape media right

If you're using tapes for long-term storage, make sure they're not stored near electrical equipment or machinery, on window sills, or near radiators. Also make sure they're stored on end, not lying flat. Tape data should be tested every five years and transferred after ten—just to be safe.

385. Manage mobile clients

New Exchange Server 2003 administrators responsible for managing mobile devices should download the Exchange Server ActiveSync Web Administration tool from www.microsoft.com/download. It lets admins manage multiple mobile devices and ActiveSync accounts and parameters via a handy Web console.

386. Manage the iptables firewall

Linux's firewall, called iptables, can show traffic in real time—with the right command from you. Just use the `iptables` com-

mand with an appropriate refresh value and you'll see traffic activity as it happens.

387. Fast command line shutdowns

To shut down one or several Windows servers or workstations quickly, both XP and Vista have a Shutdown command. Running it from the command line as `shutdown -f` will bring up a GUI. This lets administrators add or delete machines based on name, IP address, or subnet. Be careful, though: It's a powerful command that will shut down a domain controller as easily as it will an accounting workstation.

388. Command line AD searches

For administrators looking to run Active Directory searches from their XP or Vista desktops, run the following command: `%SystemRoot%\SYSTEM32\rundll32 .exe, Hit Enter and follow it up with dsquery ,OpenQueryWindow. This will open an Active Directory search GUI.`

389. Add tools to Quick Launch

You can add the Administrative Tools folder icon to your Quick Launch toolbar by dragging it there from Control Panel—not the Programs menu. Since admins use those tools frequently, having this icon at your fingertips is a godsend.

390. Cheat on disk quotas

If you're constantly running into user disk quota problems, you can implement disk limits, delete files based on date, and do other standard stuff. But you can also cheat. To reserve space for an emergency, just copy a few 1GB files (one or two per volume, depending on file size characteristics) and you'll always be able to free up a few gigs in a pinch.

391. Recover deleted partitions

You can recover a deleted dynamic NTFS partition as long as you know its exact original volume size. With that information, you can re-create the partition via the Windows Server 2003 Disk Management snap-in, then use `diskprobe.exe` to recover the backup boot sector. After that, hit `Rescan Disks` in the Computer Management Action console to remount the volume.

392. Make a cheap NAS

Build a low-cost home or SMB file server out of an old PC and some spare hard disks. Just set up an Intel box with as many disks as you can and with at least 512MB of RAM. Then download and install FreeNAS (www.freenas.org), a FreeBSD-based NAS app.

393. Make an even cheaper NAS

If you're considering purchasing a new router for your network, insist that the new

model have one feature: a USB port. Plug a USB hard drive into the router, then adjust a few settings in the router's firmware and you've quickly turned it into a network-attached storage (NAS) device, with the drive available to all of the PCs on your network.

394. Customize your command line

Make the Windows Server 2000/2003 command line your own. Just open the Command Line window, select *Properties*, and go to the *Quick Edit Mode* check box. If you increase the number of buffers to 5, you've increased the number of lines in the Command Prompt window to 5,000. Up the screen buffer size to 999 and you enable scrolling.

395. Speedy Linux data security

For fast data encryption on Linux servers, try `cryptsetup`. It's free and straightforward, though you'll need to compile it yourself (code and directions at [cvs.sourceforge.net](http://cvs.sourceforge.net/~cvs/saout)). You'll also need to create a new partition and move your data there, because `cryptsetup` can't install over an existing partition.

396. Check out Ubuntu's prefabs

Ubuntu isn't just for desktops. Similar to Windows 2003 with its "server roles" concept, Ubuntu has Prefab Server Stacks. Just click the tasks you need your server to perform during installation and Ubuntu's installer sets up the needed tools automatically, including mail, Samba, DNS, print services, and more.

397. Watch for compliance

If you're managing storage in a regulated vertical industry, like health care or finance, make sure you're in compliance with long-term data retention legislation. If it turns out you'll need to store data longer than your hard disks can handle, consider optical. Write-once read-many (WORM) drives hold up to 60GB per disk and have a storage life of 15 to 20 years.

398. Map your Exchange servers

If you've got more than one Exchange Server, you'll want to see them in a topological map. Make this easy with the Exchange Server Topology Diagramming Tool (technet.microsoft.com/en-us/exchange/bb288471.aspx), which will find your Exchange Server automatically and create the map. Just have either Visio 2000 or 2007 or a Visio file viewer installed—you'll need it to see the map.

399. Red Hat free = CentOS

You can get features comparable with those in Red Hat Enterprise Linux, but

400. Improve Marketing with Video E-Mails



COLLABORATION

To market your products or services, make video e-mails. Use your webcam or camcorder to create a personal message or demo and then send it to your potential customers via a service like Eyejet or SightSpeed.

with a lower price tag (free) and a straightforward interface—it's all in the CentOS distribution of Linux. You can download it from www.centos.org.

401. Find Exchange problems

Having unexplained Exchange Server 2000 or 2003 problems? Before calling a consultant, get a handle on the problem by running the Exchange Best Practices Analyzer or the Exchange Troubleshooting Assistant. They're both free downloads from Microsoft's Download Center and can identify the source of your problem with surprising detail.—*Oliver Rist*

Collaboration

402. Start Twittering

Create a Twitter stream for all your business updates and invite your associates to subscribe. This will let you contact the whole team from wherever you are using your mobile communicator.

403. Don't fear IM

Instant messaging is an efficient method for getting answers quickly and cuts down on distracting chatter. Encourage your employees to use IM—but remind them not to use it for anything confidential (conversations are saved on servers, and the messages are very easy to intercept).

404. Refrain from e-mail flames

Never send an e-mail in the heat of anger. Write your screed and save it as a draft, telling yourself that you'll send it later when you've settled on your course of action. (You'll probably never send it.) This will result in fewer burnt bridges that could hurt your business in the long run.

405. Prioritize your Outlook inbox

Use Outlook's flag feature when you don't have time to respond to an e-mail right away. In Outlook 2007 you can specify a

time period to deal with it; the deadline will show up in your Task pane.

406. Succinct subjects don't suck

Make the subject line of your e-mail reflect, well, the subject itself: Don't reply to an e-mail on an old, unrelated subject; start a new thread instead. It's good etiquette, and also makes it easier to find a specific conversation.

407. Use shared calendars

Google's calendars play well with lots of other online services, so they make for a good beginning. Start by inviting two colleagues you work with often. Once you hone your procedures, invite the rest of your office.

408. Eschew huge attachments

Need to share large documents or images? Use YouSendit or a similar Web storage service. Your e-mail correspondents will thank you for not jamming their mailboxes full of storage-depleting attachments.

409. Empower PowerPoint design

For your PowerPoint presentations, use simple backgrounds, small amounts of text, and large fonts. You want the people in the back of the room to be able to read your text.

410. Talk to everyone at once

Got friends on AOL Instant Messenger, MSN Messenger, and Yahoo? Don't keep several IM clients active on your desktop. That would just slow you down. Instead, download Trillian 3, a single messaging client that can communicate across the five biggest protocols, from Cerulean Studios (www.ceruleanstudios.com). Or better still, simply create an account at www.meebo.com and use Meebo's Web-based chat functions without installing any apps at all.

411. WebEx excellence

When recording WebEx meetings, use NBR (network-based recording—it's avail-

able for an extra fee) to get a much smaller file size. You will also then get a streaming URL that you can forward to other people. NBR recording can be downloaded and converted to Flash (.swf extension) using a network-based recording player.

412. Videoconference on the cheap

Buy all your employees good webcams, and use low-cost videoconferencing from ooVoo (www.oovoo.com), which allows up to six collaborators. It's helpful to see your colleagues' expressions as well as hear their voices during remote meetings. These services will save you thousands compared with traditional turnkey videoconferencing systems.

413. Schedule meetings efficiently

Frustrated by all the back-and-forth e-mails for scheduling meetings? Use the free TimeBridge service to propose and settle on meeting times (www.timebridge.com).

414. Share that screen

Conduct demos with GoToMeeting, WebEx, or other screen-sharing software. Be sure to practice with the service ahead of time, and make sure everyone's computer supports the software.

415. Wikis ain't tricky

Set up a wiki where knowledge and procedures about your business can be stored and edited by all employees. You can do this through www.wiki.com or www.jivesoftware.com.—*Michael Muchmore*

Windows Server 2008

416. Event subscriptions

IT managers don't have to monitor servers individually. Admins can set up a Vista or Server 2008 system to subscribe to specific events on other Win 2008 servers. To do so, use Event Viewer to connect to the system you want to monitor, and select the *Connect to Another Computer* option in the Event Viewer snap-in. When those events are logged, they'll be forwarded in real time.

417. Set multiple password policies

In the past, you could have only one password policy per domain—for example, one rule for minimum password length, for expiration, or for complexity. In Server 2008, you can set more- or less-strict rules for different groups to as granular a degree as you want. Create a few for maximum flexibility.

418. Avoid server downtime

When a network domain controller goes down, you may want the domain con-

troller locator to find and connect to the next-closest DC, but the feature is off by default. Turn it on by enabling the *ThyNextClosestSite* Group Policy setting. TechNet provides the info at www.microsoft.com/technet when you search for "next closest."

419. Stickiness prevention

Use Group Policy to configure clients to check for "stickiness" (continuing to use the next-closest domain controller, when the closest becomes available again). In Server 2008, a group-policy-configurable time interval has the client machine do a new search to see if you're attached to your local domain controller. If not, it will attempt to reconnect to it. You can learn more at this MSDN page: msdn2.microsoft.com/en-us/library/ms675983.aspx.

420. Track elevated privileges

Only one person needs full-time admin privileges: the admin. Other users, however, can elevate their privileges for certain tasks. Keep track of who's doing what by enabling *auditing process creation*, a sub-category of the detail tracking category in security auditing. Get full instructions by searching for "auditing AD DS changes" at Microsoft's TechNet site: www.microsoft.com/technet.

421. Restore a wizard

The Initial Configuration Tasks wizard appears the first time you log in, and vanishes after that. It's handy, though, walking you through common initial tasks like naming the server and setting the time zone. Want to get it back again? Just type *oobe* at the Run prompt.

433. Shared configuration in IIS

In Server 2008 with Internet Information Services 7.0, there's an option to export the configuration from a Web server to a file: It makes setting up server farms much easier. After you save that file onto a file share and point all the new servers to the shared config file, they'll configure themselves automatically. You'll find complete setup information here: learn.iis.net/page.aspx/211/shared-configuration.

434. Enable desktop features

If your laptop runs Server 2008 but you need it to look like a normal Windows system (say, for sales demos), do this: In the *Start* menu, select *Server Manager*, click on *Add Features*, check *Desktop Experience*, click on *Next* and then *Install*. After the install, enable the Aero look; run *services.msc*, right-click on *Themes*, choose *Properties*, select *Automatic* for start-up type, click on *Start*, and then click on *OK*. Right-click on the desktop and choose *Personalize | Windows Color and Appearance*. Pick *Windows Aero* in the resulting window, then click on *OK*.

435. Never customize PowerShell

This one comes direct from Microsoft's PowerShell team. PowerShell 1.0 installs several XML files as part of the initial build. You can create your own XML files for your personal use—that's fine. But many folks have been adding customizations to the files installed by Microsoft. That's a no-no, because when the software reverts (and it will—soon), Microsoft will simply wipe these out and exchange them for new ones. All your custom work will be lost. So keep

your own work in your own files and save yourself some frustration down the road.

436. Install the new backup utility

To install Windows Server Backup (which replaces the slower, less user-friendly *Ntbackup.exe*), go to *Start | Administrative Tools | Server Manager*, click on *Features* and then on *Add a Feature*. Add the Windows Server Backup.—Gary Berline

Online Business

437. Use Skype to lower phone bills

Using Skype from your PC lets you call other Skype users free, and call almost any landline or mobile phone in the world for a low per-minute fee. It can make your business appear international, too: Skype also offers low-cost phone numbers in other countries.

438. Do your own marketing

With a quality color printer, you can print your own marketing materials. Visit www.hp.com/sbo/productivity/office to find a range of HP's downloadable business identity kits with coordinated designs for letterhead, envelopes, business cards, and brochures.

439. Train online

Have to learn a new application quickly? Online learning can be undertaken at any time and almost any place. Services such as VTC offer Web-based video training for a large range of business applications. Some 20 percent of VTC's video tutorials are free; others are accessible for a small monthly fee.

440. Track your time

Using an online time tracker like 88 Miles (www.88miles.net), you can set up projects and record the time you spend working on them. Reports available include time sheets, staff reports, and project reports. Devote the time you would have spent at the end of the week doing paperwork to drumming up new business, instead.

441. Stay in touch

Create a blog using a tool like Google's Blogger (www.blogger.com) to keep in contact with your customers. Use your blog to provide customers with information about your products and how to use them, answer customer questions, and so on. Blogging is free and requires no programming skills—you can be up and running in minutes.

442. Use online snail mail

When you need to send a letter but can't get to the post office, use esnailer.com. Type your envelope and letter online and

11 Useful Windows Server 2008 Shortcuts

TO DO THIS	CLICK THIS
Close the active item, or exit the active program	Alt-F4
Cycle through items in the order in which they were opened	Alt-Esc
Cycle through programs on the taskbar	Windows-T
Cycle through screen elements in a window or on the desktop	F6
Lock your computer or switch users	Windows-L
Display properties for the selected item	Alt-Enter
Refresh the active window	F5
Open the Run dialog box	Windows-R
Search for computers (if you are on a network)	Ctrl-Windows-F
Display the System Properties dialog box	Windows-Pause
Open Task Manager	Ctrl-Shift-Escape

443. Take Your Office Online



ONLINE BUSINESS Visit workspace.office.live.com, sign in, and choose the *Office Live Small Business* tool. Here you can do everything from creating a Web site for your company to managing contacts and promoting your business. Most features are free. The *Office Live* add-on gives direct access to documents in Word, Excel, and PowerPoint.

click *Send eSnailer* sends the letter via U.S. Postal Service, and you either pay \$1.50 per letter or have it sent free by agreeing to receive advertising in return.

444. Download business forms

Need a receipt, packing slip, agenda, time sheet, or absence request form? If you use Microsoft Office, look no further than Microsoft's site; click the *Templates* tab at office.microsoft.com. You'll find a range of useful business templates, which can be downloaded automatically into the appropriate app.

445. Create PDFs free

When you need to create a PDF and don't have a PDF writer, you can do it online, free, using www.pdfonline.com. Here you are able to upload files in a variety of formats, including Word, PowerPoint, Publisher, Excel, and various image formats. Then they are converted into PDFs and e-mailed to you.

446. Store documents remotely

Creating a letter, worksheet, or even a presentation online is easy with tools from Zoho.com. Zoho offers a suite of typical office tools that let you create and save documents online using just your Web browser. Documents can be printed, e-mailed, exported, or saved locally.

447. Get free business cards

In exchange for advertising on the back of your business cards, some printers offer free business cards that you create online using their templates. Visit vistaprint.com to sign up for 250 free business cards (with advertising), for which you pay only a shipping and processing fee.

448. Share Office files

Save and share Microsoft Office files online using the Windows Live Skydrive (skydrive.live.com). You get up to 5GB of online file storage and a choice of folders for personal, shared, and public access.

449. Add a world time display

Avoid phoning a business contact overseas

at an inconvenient time (like 2:00 a.m.), by keeping track of the time anywhere in the world. If you use Firefox, the FoxClocks add-in (addons.mozilla.org) puts a world time display on your status bar. Simply add locations for all your overseas contacts.

450. Do 21st-century invoicing

If your business involves invoicing customers and tracking payments, then Invoiceplace can help. On its site you can create your invoices and e-mail or print them, and you can manage overdue payments. The application also handles multiple currencies and creates receipts.

451. Get your CRM from the Net

24SevenOffice offers CRM tools online. Use it for sales force automation, managing contacts and activities, and obtaining management reports. Through its association with WebEx, you get access to collaboration and Web-conferencing tools alongside your CRM tools—making WebEx events much more powerful networking tools.

452. Fax to e-mail

When you need to send and receive faxes but don't want to invest in a machine and phone line, try eFax.com. eFax gives you a dedicated fax number and software for composing outgoing faxes. Incoming faxes can be forwarded directly to your regular e-mail inbox.

453. E-mail large files hassle-free

Store important business files online at File123.com. This site lets you deliver files by fax, or you can scan paper documents and upload or e-mail them to the site. Documents are automatically processed using OCR software so you are able to search them using keywords and share them with others.—Helen Bradley

E-Commerce

454. Let customers contact you

Make your site's contact information—

street address, e-mail address, and phone number—easily accessible through a "Contact Us" link. Doing so will inspire confidence in both current and prospective clients.

455. Enlarge product descriptions

Give the customer as much information as you can about the features, capabilities, and limitations of your products, whether there are different configurations, and how they compare with other products. A mere product number just doesn't hack it.

456. Ensure transaction security

The safest online transaction method is via credit card. When using one, you can challenge charges and withhold payment in the event of a dispute with a merchant. Under the federal Fair Credit Billing Act, you are liable for only \$50 if your card is used fraudulently (and you are rarely required to pay even that).

457. Print out your orders

Print out paper copies of any orders you place. Most vendors will send an e-mail confirmation, often with a link for package tracking, but e-mails can get lost or deleted. Having a physical copy of the order ensures that you get what you paid for.

458. See what other customers say

Before ordering from an unfamiliar Web site, do a search on the company or site name to see what customers have to say. Or check with the Better Business Bureau (www.bbb.org), which accredits and rates businesses as well as summarizes customer complaints, noting whether the company resolved them.

459. Make sure an offer is legit

If a deal looks too good to be true, it probably is. Call the merchant with any questions you may have. No phone number or physical address offered on the Web site? Fuhgeddaboutit.

460. Investigate possible scams

Think you may have been scammed? The National Fraud Information Center (www.fraud.com), a program of the National Consumers League, provides information on a wide range of online and telemarketing scams, helps you determine whether something is fraudulent, and lets you file complaints online.

461. Pretty pictures sell products

Adding plenty of product photographs makes a site appealing. First, get a good photographer to shoot them. Later, in a program like Adobe Photoshop, you can optimize size, contrast, and brightness, and minimize file size by saving as JPEGs.

469. Syndicate Your Content



E-COMMERCE Create RSS feeds. This way subscribers can automatically (and quickly) get information delivered to them about what's been updated on your site. A program like FeedForAll (\$39.95, www.feedforall.com) can help you create, edit, and publish your RSS feed.

Keep images small (but linked to larger, better-quality versions) or your pages will take forever to load.

462. Make sure you're encrypted

A safe Web site has SSL or similar encryption. Pages that ask for or display personal information should have a URL that begins with <https://>. You should also see a lock icon (in the locked position) near the address bar or at the bottom of the page.

463. Keep in touch with customers

Collect e-mail addresses from customers who wish to subscribe to newsletters or other mailings. You can do this by adding a form to your site or providing a link to a separate subscription page.

464. Create a privacy policy

Your e-commerce site should have a privacy policy detailing what you will—and won't—do with customer information. Examine the policies of Web sites you visit to see what they include. Still need help? The Direct Marketing Association provides a privacy policy generator at www.the-dma.org/privacy/creating.

465. Buy search terms

You can advertise your business in search results from Google, Microsoft Live, or Yahoo! for surprisingly low costs of entry: Google AdWords Starter Edition carries a start-up cost of just \$10, with no minimum monthly spend on keywords. Yahoo! has a \$1 minimum per day, and Microsoft has a \$2-per-month minimum. All three offer lots of help and make it easy to get started.

466. Recommend products

Provide a list of recommended products and things "other customers also bought" with each item. You can do it in your database by connecting products based on customers' actual purchases.—*Tony Hoffman*

Business Software

467. Conveniently store HR data

The HR Notes tool in SurePayroll lets you store unique employee data. In addition to a list of suggested HR categories, you can add 12 custom fields for data such as Medical/Dental Information, Education, Salary History, and I-9 Verification. Later, you can easily access the information in the account center or download it in the HR Notes report.

468. Save time viewing reports

If you're viewing a report for a particular pay period in SurePayroll and want to see another from the same period, you don't have to return to the main report center.

Just select the desired statement from the report drop-down menu.

470. Break out employee pay type

You probably know you can select from several earnings types for each employee. But to choose more than one of those pay types, you need to click on the employee's name. This will bring up a screen that lets you view the amount of pay by pay type for that worker.

471. Create multiday events

To get around the limitation of having to create events day by day, use the recurring event option at the bottom of the page.

472. Start tagging

With the Winter '08 release, Salesforce.com instituted personal tagging. Now you can mark information with your own tags, such as "hot opportunity," and later search by those tag categories.

473. Don't reinvent the form

Before creating a form, check the SurePayroll library, where you'll find dozens of forms—19s, W-9s, direct-deposit authorizations, job applications, and more. You can download them and, when appropriate, populate some of the data.

474. Tie benefits to earnings

If you enter the benefit hours used by your employees during a pay period, the system will calculate the earnings, subtract those benefit hours from the regular hours total, and adjust benefit-accrual balances. You can also make other adjustments to accrual balances without having to process a payroll.

475. Get alerts for critical tasks

So you won't forget important tasks, you can set SurePayroll to e-mail you notes or have alerts appear in your account center. Use the My Reminders feature to schedule alerts to occur at specified dates and times, either once or on a repeating basis.

476. Proper bonus withholding

To avoid over-withholding when the bonus or commission earnings and pay-

roll schedules differ, go to SurePayroll's payroll entry screen, click *Add Additional Checks*, selecting the employee, choose *let the system calculate taxes and deductions*, and select the proper pay bonus or commission frequency (such as Quarterly). There! Problem solved.

477. Suspend direct deposits

If an employee is switching bank accounts, you can stop direct deposit and issue a paper check until the worker's account information is updated. Just click on the *suppress direct deposit* box on the right-hand side of the payroll-entry screen.

478. Make audits simple

To speed workers' comp audits, assign a workers' comp code to each employee and then pull workers' data by the dates you need. In the reports center, go to the *Workers' Compensation* link, enter audit dates in the "from-to" section, and print. For every employee paid during that time, you'll get info including hours worked (regular, OT, and other), corresponding gross pay, and total wages.

479. Get recommended content

Turn on *Recommended Content* inside *Salesforce Content* and *Salesforce.com* will suggest documents for CRM users based on information such as the industry and competitor related to a sales opportunity. The documents will show up as a related list inside Opportunities.

480. Surviving a service outage

If you're logged in to Salesforce.com during an outage, *don't close your browser!* You'll have to log in again, and if the servers are having difficulties, you'll be out of luck. If you're not logged in, skip the main log-in page and try going straight to your server's homepage. If your server is functional, you'll see a simplified log-in page and can try that.

481. Use free apps

At the *Salesforce.com* AppExchange (www.appexchange.com), you'll find many

482. Solve Negative Inventory Problems

Item	Quantity	Unit Cost	Sales Price
	1,000.00		1,100.00

QUICKBOOKS Selling an item before it's in inventory causes problems. To fix them, select *Vendors | Inventory Activities | Physical Inventory Worksheet*, then adjust your inventory (with *Adjust Quantity/Value on Hand*), putting a check in the *Value Adjustment* box. Then in your summary report, make sure the assets account equals total inventory.

free applications for tasks such as expense reporting, time tracking, recruiting, and project management.—GB

Web Traffic

483. Sound structure

Make sure your HTML structure is correct. While not as important as they used to be to search-engine spiders, metatags (the HTML tags at the top of the Web page, such as title, keyword, and descriptor tags) are a vital part of optimizing your site for SEO.

484. Use trackbacks

When you leave comments on a Web site or blog or participate in a discussion forum, use the trackback feature to boost traffic to your own site. A trackback is basically a link back to your site that connects to your comment, so participants and visitors can click on it and "track back" to your page.

485. Link. Link. Link.

You must link, but link properly and effectively. Google looks at links to and from your Web site when it determines your PageRank (Google's formula for determining a Web page's importance). And the words you use in hyperlinks are of key importance; instead of saying, "Click here to read more about Topic X," you should say, "Read more about [Topic X](#)."

486. Read all about it

A newsletter is one of the easiest ways to drive traffic. Visitors can opt in or out, and they get exactly the content they're looking for. But make sure you create newsletters that are focused and provide value. Spamming people will just irritate them.

487. Tighten up your titles

Pay attention to page titles. Keywords used in the title tag often have more weight (in ranking) than keywords used just in the body of an article.

488. Don't get too fancy

Flash and JavaScript may make your site

look cool, but overwhelming visitors with flashy graphics and no substance won't get you any where. Many experts believe that search engine spiders still prefer HTML.

489. Outside influences

Pitch and plant your stories. Submitting your stories to social media sites, blogs, and ratings engines (like Digg and Yahoo! Buzz) can help drive lots of traffic to your site.

490. Optimize for SEO

Optimize your site for search-engine optimization (SEO). By implementing sound SEO practices on your pages, you can help improve your ranking in search-engine results. Just one example of a very complex subject: Choose words relevant to your business and make sure they appear prominently in page headers and titles.

491. Get listed

You need to get people to your site. One way to do so—and boost your organic, or unpaid-for, traffic—is by listing your site in search directories (like Yahoo!) and search engines (like Google). Various services and companies will do this for you, or you can head over to the Open Directory Project (www.dmoz.org/help/submit.html) and submit your site yourself.

—Vicki Jacobson

QuickBooks

492. Print fringe benefits on W-2s

If the dollar amount of the Auto Fringe Benefit increases over W-2 amounts, rather than printing as it should in box 14 of the W-2, the benefit may be set up incorrectly. The Type should be Company Contribution, and the Tax Tracking Type should be Fringe Benefit.

493. Many payments, one big check

Your system may become confused should a client pay off a few bills with one check. One way to deal with this is to create a main customer with separate jobs or locations. You can invoice each job individually, but if one check comes in for multiple invoices,

you just select the appropriate customer, then choose the specific jobs being paid.

494. Look behind the bills

To expose the general ledger entries behind an invoice, simply press Ctrl-Y. Now you can see all the Debits & Credits behind the scenes of a form.

495. Automate recurring charges

If a bill recurs regularly at the same amount, create the bill, go to *Edit | Memorize Bill* (or hit Ctrl-M) and select the *Automatically Enter* radio button. Set the recurrence frequency, the next time to charge your account, and how many more charges will occur, then click on OK.

496. Insufficient funds

To handle bounced checks, go to *Lists | Item List* and click on the *Item* button. Select *New*, and *Choose Other Charge* as the type. Name the item NSF, make it nontaxable, and direct it to your checking account. When a check bounces, invoicing the customer using the NSF item will deduct the funds from your bank register and set up the receivable.

497. Create an invoice early

When you don't have all the details to invoice a customer, create an invoice with what you know, then pull down *Edit | Mark Invoice as Pending*. To finish the invoice, go to *Reports | Sales | Pending Sales*. Double-click on the appropriate invoice and you can complete it.

498. Expedite data entry

Record your transactions without taking your fingers off your keyboard. Just hit Ctrl-Enter and you won't have to fumble for your mouse to click on *Save & Next*.

499. Perform math in QuickBooks

From any number or dollar amount field, press one of the math operator keys (+ for addition, - for subtraction, * for multiply, / for divide) and the completely undocumented QuickMath calculator appears, allowing you to do the math without having to use a calculator or leave QuickBooks.

500. Enter YTD payroll sneakily

In some versions of QuickBooks, an undocumented feature lets you input year-to-date payroll info without using the payroll setup feature or entering each employee paycheck. Create the employees, then go to *Product Information (Help | About QuickBooks)* and press Ctrl-Shift-Y. The resulting wizard helps you enter summary info for each worker.—GB

501. Save this issue!

This much useful info is rarely found in one place. Be sure to stash this issue on a shelf!



The server room can be a cold and lonely place. We can definitely help with the lonely part.

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Solutions

PROBLEMS SOLVED THIS ISSUE

94 Bringing old media into the twenty-first century

96 Faster date and time entry in Excel

98 Drives forgetting their place

98 Running Mac software on a Windows PC

100 Setting up a server

101 Is your CRM pulling its weight?

102 Too much e-mail

104 Ranking banks by identity theft

106 Getting comfortable with command-line Linux

Manage Your Music

Whether you prefer a simple set of playlists or a sophisticated smart-tagging system, follow these tips to organize your music to your heart's content. *By Jamie Lendino*

When it comes to organizing our collections, today's music lovers have it good. We've come a long way from alphabetizing 300 CDs on a bookshelf. Computer-based stereo systems let us store custom playlists for any occasion, create smart playlists that update themselves, and otherwise keep thousands of songs ready to cue up at a moment's notice.

At the same time, all that power can be overwhelming. Let's assume that you've already figured out how to get your personal music library onto your PC or home server. Chances are, everything is not as organized as it could be. Do you know the best ways to find what you're looking for—specifically or generally? Do you tag? Batch tag? Fortunately, organizing your music for fast retrieval is easier than it looks. A little setup time is all you need to make your music experience soar. We'll go through what you need to know to get started with either iTunes or Windows Media Player.

iTunes 7.6

Since its inception, iTunes has hidden the inner workings of its file management, preferring instead to present a single abstract "Library" to the user. This is fine if you like doing things the iTunes way, but it can be annoying if you prefer to organize things according to where all of your files actually reside on your hard drive.



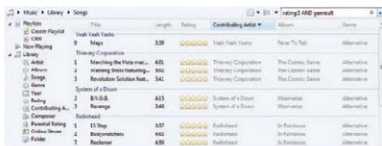
Fortunately, Apple gave in—partway—in Version 7.0, with support for multiple libraries. Hold down the Shift key (Windows) or Option key (OS X) as you start the program, and you'll see a graphic representation of the different libraries you have, along with an option to create a new one.

There are lots of ways you can approach the library structure, such as creating one

STACKS They really do look like piles of CDs. Stacks are the way WMP11 makes it easy to split up your music collection into piles—all without making a mess on the living room floor.



FOLDER VIEW In WMP11, right-click *Library* and click *Show More Views* to get options such as Folder view, which is great for people who like to see exactly where all of their tracks are stored on the hard drive.



RATINGS Once you've rated your tracks in WMP11, use the search box to cue up instant playlists, using such combos as *rating:5 AND genre:alternative*.

7.6. In some areas it beats Apple's venerable media app. So if you have bad memories about older versions that choked whenever you tried to synchronize your MP3 player, don't fear: WMP is a top-quality app today—in fact, it's our Editors' Choice media player utility.

One of WMP11's strengths is in organizing music by album; it's simply faster at this than iTunes 7 and Cover Flow. And browsing albums by cover is, well, fun. Windows Media Player actually beat iTunes to the punch with this feature. Combine it with Vista's search technology, which is built in to the player, and you can cue up any album just by typing in the first few letters in the Search box and then clicking on the familiar album cover.

The Library view has a number of useful options. Click *Genre* and you'll notice that all of your music appears grouped in stacks, like stacks of CDs. Stacks are specific to WMP11 and a useful way to organize music by genre or year. Next, right-click *Library* in the left-hand column and click *Show More Views*; now you'll see options for *Composer*, *Parental Rating*, and the especially useful *Folder* view, which gives

you a birds-eye view of how your music is organized on your hard drive, for enthusiasts who like to keep their folder and file structure in tip-top shape.

About that powerful Search box: To display music from a certain time period (say 1975 to 1979), use two periods and no quotes, like this: *1975..1979*. Find all alternative rock music in your collection by searching that phrase within quotes: *"Alternative Rock."* You can also search for attributes, such as Ratings, by using a colon along with an operator, like this: *rating:5 AND genre:jazz*. This is much faster than sorting columns and scrolling through the entire library, and it allows for greater precision.

Windows Media Player can help you stay organized, too. Let's say you build a playlist and then find that you skip some of the tunes during playback. In the Playlist pane on WMP's right side, click the triangle next to your playlist's name. In the drop-down menu, there's an option under *Skipped Items* to *Prompt Me to Remove upon Save*. Later, when you save the playlist, it will ask you if you want to delete the songs you skipped; this will help you fine-tune your playlists. □

EDITORS' TIPS: MUSIC YOUR WAY

Whether you use iTunes or WMP—or just want some new music—here are a few bonus tips for you.

Use Auto Playlists

WMP's Auto Playlist interface packs some power. Click *Library* | *Create Auto Playlist*. Then add the appropriate criteria. You can create lists by genre, by three different play count methods, and even by bit rate. Here's another tip: Let's say you're listening to an auto playlist. You can freeze this exact version, before it updates again, as a regular Playlist. To do so, right-click the auto playlist, click *Add to Untitled Playlist*, and then save it.

Use Playlist Folders

Create Playlist Folders to organize dozens of individual playlists, such as for genres and subgenres, or ratings.

Unorthodox Ratings

Lots of people let the Ratings section go unused, but why not use it as an organizing method? Decide on a love/hate system, or try assigning different stars to different categories, such as 5 for fast, 1 for chill-out or easy listening, 2 for club music, and so on. Then create a Smart Playlist for each of those; as you add and rate new music, the playlists will pick up the new data automatically.

An Endless Supply of New Music on the Go

You probably don't need us to tell you about those newfangled iPod contraptions. But remember that digital music isn't just about static song files—or necessarily about Apple products. Numerous new services such as Internet radio and all-you-can-eat subscriptions ensure that you never get sick of what you're listening to. For a run-down, check out this story online at go.pcmag.com/solutions, and click on the *Subscription Services* link.

Convert Your Records and Tapes

In these days of Blu-ray players, DVRs, and iPods, it's hard to believe we ever relied on VHS tapes for watching video and cassettes for listening to music. Is it any wonder all those old tapes were stuffed into a cardboard box and left to rot in a closet? But we all have relics—a wedding video on VHS, a first-run White Album on vinyl, or a Grateful Dead concert bootleg on cassette tape—that have more sentimental value than the discontinued media formats they're stored on.

Fortunately, it's not too late to resurrect that old content, to free it from its analog cage and make it part of your digital world. You can turn albums, 45s, and cassettes into iPod-ready MP3s and wrangle VHS tapes onto DVDs. You may need to invest a few dollars in hardware to make the transition, but at least you'll have the comfort of knowing that your wedding video and other treasures will live on forever—or at least until today's media turns old. —Rick Broida



Tapes to MP3s

Some may not think that music on crummy-sounding audiocassettes is worth resurrecting. But how about some old audiobooks, personal recordings, or rare bootlegs?

- 1 DIG OUT YOUR CASSETTES**
Unearth your old Walkman or tape deck; the latter should have a line-level output, so you won't need a preamp or receiver. Connect your player to your sound card or a USB audio-capture device such as the ADS Instant Music. If it's a portable cassette player, get a simple mini-stereo-to-mini-stereo cable; for a tape deck, a stereo-RCA-to-mini-stereo cable will do the trick.



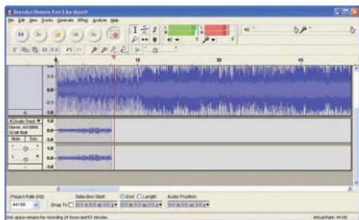
PRODUCTS

- **ADS Instant Music** \$49.99 list, www.adstech.com
- **Audacity 1.3** free, audacity.sourceforge.net
- **Magix Audio Cleaning Lab 12** \$34.99 list, www.magix.com



2 INSTALL AUDACITY

Once you've bridged the gap between turntable/tape player and the PC, you'll need software to "rip" the music from your old media. Look no further than open-source favorite Audacity 1.3, which lets you record audio from any source, edit the tracks, and turn the results into MP3 files. It's available for Windows, Mac, and Linux systems; make sure also to download (and extract) the LAME encoder plug-in, which is needed to produce MP3s. If you want a program that's a little easier to use and can remove hiss, pops, and other audio artifacts, try a commercial editing tool like Magix Audio Cleaning Lab 12.



3 CAPTURE YOUR AUDIO

Fire up Audacity and head straight to the Preferences window (Ctrl-P). In the Recording section, select the input device that matches your connection (sound card, Instant Music, or whatever). Next, click **Audio Files** in the left-hand menu, then the **Find Library** button. Navigate to the folder on your hard drive where you extracted the LAME encoder (*lame_enc.dll*), click the file, and then click **OK**. Now it's time to record your stuff, a process that's relatively simple but too lengthy to describe here. In a nutshell, you'll click the **Record** button, start the tape, wait for it to finish, then split the recording into songs. When you're done, export the songs as MP3s and add them to your music library.



VHS to DVD

Turning old VHS tapes into shiny new DVDs requires two items: a VCR and an analog-to-digital converter.



PRODUCTS

- **Dazzle DVD Recorder**
\$49.99 list,
www.pinnaclesys.com

- 1 The VCR part of this project should be easy enough to find: Fish your old one out of the basement or pick up a used one on craigslist. As for the converter, we've had good luck with the Dazzle DVD Recorder.

- 2 After installing the software, simply connect your VCR to the Dazzle, then plug the Dazzle into a USB port. The software walks you through each step of copying your tape, creating a DVD menu, then burning the DVD. Keep in mind that you probably won't be able to transfer commercial movies, since they're just as copy-protected now as they were ten years ago. But you can use the Dazzle kit with other analog sources, such as camcorders that use VHS-C and Hi8.



Vinyl to MP3s

Records were fun, but they are at least two generations removed from our current listening experience. Why not convert those songs, trapped on pounds and pounds of vinyl, into digital audio stored on a single device that weighs just a few ounces?



PRODUCTS

- **ADS Instant Music** \$49.99 list,
www.adstech.com
- **ART USBPhonoPlus v2** \$129 list,
www.artproaudio.com
- **Ion TTUSB** \$99 list,
www.ion-audio.com

- 1 Ready to revive those old Foreigner albums? As long as your old 33s and 45s aren't warped, they should sound just as good as you remember—provided you still have a turntable. You'll also need a stereo receiver, or at least a preamp—something that can boost the turntable's low-level output.

- 2 Next, head to Radio Shack and buy a cable to connect the receiver or preamp to your sound card's line-in jack. Audiophiles, take note: PC sound cards can introduce unwanted noise to your recordings, so consider upgrading to a USB audio-capture device like the ADS Instant Music. Or kill two birds with one gizmo: the ART USBPhonoPlus v2, which combines a preamp with a USB interface.

- 3 If all this sounds like too much of a hassle, you can buy a turntable built expressly for the job of turning records into MP3s, like the Ion TTUSB. It plugs directly into a USB port and includes a stereo line input so you can also rip tunes from cassettes and other sources.



Ask Neil

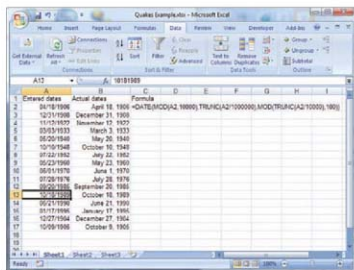
Easy Date and Time Entry in Excel

Q How do I format a cell so that I can input 08/21/2007 with no dashes or slashes and have it appear in the spreadsheet cell as 08/21/2007? No matter how I try to format the cell I get different numbers that bear no relationship to the date I want. Maybe I need a formula? Any help would be greatly appreciated.
—Sheila Stark

Q I have an Excel spreadsheet in which I often have to enter times in the 24-hour format. I was wondering if there was a way to format the cells so that when I type "124" it interprets it as 1:24. It would also need to see "2245" as 22:45.—Jeremy Williams

A Interestingly, these two questions arrived within a couple of days of each other. If you have to enter a ton of dates or times, it makes perfect sense to avoid typing the backslashes and colons—especially the colons, which require hitting a Shift key. Configuring Excel to display date and time digits that you've entered without punctuation is a simple matter of defining the correct custom format. However, changing the formatting doesn't change the actual data. Even when you see 08/21/2007 displayed, Excel will still treat the data as the number 8,212,007. If you want to use the date or time values in calculations, you will need to add a column containing formulas that will translate them into actual dates and times for Excel.

To set up a worksheet so that you can enter dates as MMDYYYY with no slashes between, first click the column header for the column that will contain the dates. Now right-click the column header and select *Format Cells* from the pop-up menu. On the *Number* tab choose *Custom* and enter the following custom format in the *Type* box: 00\00\0000. The forward slash has special meaning in a custom format, so you must precede it with a backslash to tell Excel that you want the literal character, not its special meaning.



Now insert a column just after this column to hold the actual date for use in calculations. Let's say the eight-digit dates were in column A, starting in cell A2. Then you would enter this formula in cell B2 and copy it down the whole column: =DATE(MOD(A2, 10000), TRUNC(A2 / 10000), MOD(TRUNC(A2 / 10000), 100)). The MOD function returns the remainder when dividing its first argument by its second. Thus the first sub-expression returns the last four digits of your number—the year. For the month, we divide by 1,000,000 and use the TRUNC function to throw away any fractional part. And for the day, we do a combination of the two.

To enter HH:MM time values without the colon, you'll simply use a different custom format. The format 0\0 will give one- or two-digit hours, while the format 00\00 will always give you two-digit hours, left-padding with a zero if necessary. A formula like this one would convert the typed value into an actual time value for use in calculations: =TIME(TRUNC(A2 / 100), MOD(A2, 100), 0).

Restore Drive Type Grouping

Q My concern is that My Computer no longer subdivides my PC's storage into "Files Stored on this Computer," "Hard Disk Drives," "Devices With Removable Storage,"

TIME AND DATE

Here's a technique to speed date and time entry in Excel by omitting punctuation marks; naturally you'll need a formula to translate the quick-entered data into usable date and time values.

"Network Drives," and "Other" (which on my PC contains "Control Panel"). Instead, I get the same uncategorized list in both My Computer and Windows Explorer when I select the My Computer folder. The categorization disappeared after I fiddled with My Computer's View settings many, many times (I was experimenting with the different looks and searching for what works best for me). How do I return My Computer to its original state without altering how Windows Explorer displays other folders and files?
—Iyn Robinson Jr.

A Fortunately this is an easy fix in either XP or Vista. In XP, open My Computer and choose *Details* under *View*, so you see things in columns. From the *View* menu select *Arrange Icons By* | *Show In Groups*. Now select *View* | *Arrange Icons By* | *Type*.

If you're using Vista, select the *Tiles* view to start. Right-click in the right-hand pane and choose *Group By* | *Type* from the pop-up menu. Whether in XP or Vista, you've now restored the convenient view that shows your computer's various storage devices grouped by type.

NEED ANSWERS? PCMagazine's software expert, Neil J. Rubenking, tackles your toughest software and Internet problems. Send questions to askneil@ziffdavis.com.

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AskLloyd

Make a Drive USB-Attachable

Q I have a 60GB laptop drive that I salvaged from my dead notebook. It has some of my files on it—pictures and valuable stuff like that. I was wondering if there was a way I could turn it into an external hard drive. I read the article “Build an External Hard Drive” (go pcmag.com/buildexternaldrive), which was helpful, but I was hoping I could plug it in through a USB port. I was also wondering if there were any stores by me that would have the parts I need. Stores that are around here are WalMart, Comp USA, Circuit City, Staples, and Radio Shack.—Blake Leeper

A The short answer is, Yes. What you need is an external drive case that supports USB connectivity. There are dozens of these on the market, and most are pretty similar. I’d recommend getting a case that supports multiple connections. You can even find models that support USB 2.0, FireWire, and eSATA. This will give you additional flexibility in the future.

These cases aren’t very expensive, either. A USB-only case should cost you \$30 to \$75 at retail. Installing a hard drive into one of these cases is quite similar to the procedure outlined in the *PC Mag* article you’ve already read.

Enough for High-Def?

Q If I buy two VGA to DVI-1 adapters, will that allow me to view high-definition content on my computer?—David Dean

A It depends on whether you want to watch protected content.

First, you don’t need two adapters unless you want to watch movies on two displays. However, watching protected content, such as Blu-ray or HD DVD movies, on your PC requires that the entire hardware and software chain support HDCP content protection. This means you need an HDCP-enabled video card, an HDCP-enabled monitor, and software that understands HDCP.

If you lack any of the above, you can still watch HD content, but what you see may be running at a reduced resolution, typically 960 by 540 pixels. If you want the full 1,920-by-1,080 or 1,280-by-720, you’ll need an HDCP-enabled graphics card and display, plus the correct software to view the content. PowerDVD Ultra and the latest version of WinDVD both support high-definition playback in the form of Blu-ray or HD DVD movies.

Mac Software on a PC?

Q I have one very simple question that I don’t recall seeing in *PC Mag*. Since Macs have taken on the same processors as PCs, can I now use the newest Mac software on the most modern PCs?—Jeffrey Frey

A While it’s true that Macs now use Intel processors and chipsets, you can’t just run Mac software on your standard Intel-compatible PC. That’s because Mac OS X doesn’t run on non-Apple hardware.

Some hackers have successfully run OS X on non-Macs, but that usage is definitely unsupported. If you were able to track down these hacks—not all that difficult—you still might not get Mac OS X to work on your particular hardware. And there’s no guarantee the apps would work, either.

Which Kind of RAM?

Q I want to expand the memory in my laptop. It is a Sony PCV-RX651 with a 1.7-GHz Pentium 4. The memory is 256MB of PC2100 DDR SDRAM, expandable to 1GB. Can you tell me without opening the computer what type of memory card is in it—a DIMM?—how much memory per card, and how many cards are in the computer now?—Pat

A Your system has PC2100 DDR (also called DDR-266) memory, as you noted. Memory comes in various flavors and speeds: DDR typically maxes out at 333 MHz (PC2700); DDR2 ranges from PC2700 up to PC3200 for laptops.



NOT GONNA HAPPEN You can try, but you are unlikely to succeed in running Mac apps on a Windows PC.

Laptops use SODIMMs, memory modules that are smaller than those used in desktop PCs. DDR memory typically ships in either a 144-pin SODIMM or a 200-pin SODIMM, but a few systems use something called a DDR Micro DIMM. A DDR2 SODIMM is also a 200-pin module, but it can’t be installed in a DDR socket (and vice versa); each module has a notch in the edge connector that allows it to be installed only in the correct type of socket.

You can identify the type of memory in your computer by using the CPU-Z utility (www.cpuid.com). If you’re running DDR memory, though, there’s no way of telling what type of module you have without opening up the system. The situation with DDR2 is a little cleaner, since DDR2 memory for laptops only comes in 200-pin SODIMMs.

For best compatibility, I would suggest getting a pair of 512MB modules and tossing out your 256MB module. Note that if your PC has four memory slots, for best performance you should avoid filling all of them. Usually filling up just two slots is best. However, if the system has only two slots for RAM, you can fill them both with no problems.

NEED ANSWERS? ExtremeTech.com’s editor, Lloyd Case, tackles readers’ hardware problems in each issue. Send your toughest to asklloyd@ziffdavis.com.



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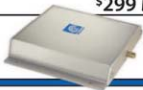
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SMB BOOT CAMP

Server Starter Guide

Setting up your first server isn't too difficult, but it does require some forethought and planning. *By Matthew D. Sarrel*

So, you've decided to purchase and install a dedicated server. Whether it's a file and print server (the most common for small businesses), a Web server, or an e-mail server, setting up any server involves some of the same configuration chores. (For our latest server reviews, see go.pcmag.com/servers/.)

Initially, setting up a server is just like setting up a PC: Unpack everything, compare the box contents with the shipping list, connect the keyboard, mouse, and network cable, and plug in. With a server, however, location is an issue. You want a low-traffic location—a dedicated server room or wiring closet. Physical security is important as well. You can set up all the OS, application, and network security you want, but if someone can pick up and walk out with your server, your precautions mean nothing.

A server environment should be not only safe, it also needs to be controlled for temperature and humidity. You'll need to mitigate or disperse the heat your server or servers put out (for more information, read "Environmental Monitoring" at go.pcmag.com/servermonitor/). In addition, if your server is in a location you don't visit often or there's any environmental risk, you should consider using a monitoring device—for example, the AVtech Room Alert IIe (go.pcmag.com/roomalertIIe/) or the APC Netbotz 420 (go.pcmag.com/netbotz420/). These handy devices track temperature, humidity, motion, air flow, flooding, and more, and they can issue alerts when necessary.

Many servers these days have dual power supplies. Plug each power supply into a different UPS and plug those UPSs into two separate circuits. This way, if you lose a single circuit, one power supply will go off-line but the other one won't.

If the server's operating system has been preinstalled, that will save you an hour or so. If not, insert the CD or DVD in the drive and turn the server on. Here are some guidelines for configuring your new server OS:

INSTALL ONLY WHAT YOU PLAN TO USE. For example, if this is a straight file and print server, you don't need to install Web server or e-mail server software, and it's better not to. There are two reasons for this: The first is that extra software contains extra vulnerabilities; if it's not installed it can't be exploited. The second reason is that extra software takes up disk space and wastes CPU and memory resources.

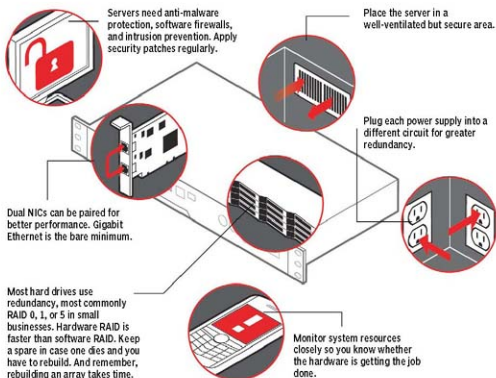
USE A STRONG ADMINISTRATOR OR ROOT PASSWORD. Your password is the key to the kingdom. A strong password does not contain words that can be found in the dictionary, it is at least six characters long, and it contains a combination of letters, numbers, and symbols.

SETTING UP YOUR SERVER

Safety and reliability are key to successful server implementation, and they both begin with setup. Keep environmental factors such as server room heat and humidity in mind, but don't neglect the cornerstones of all computing: anti-malware and intrusion protection to keep baddies out, and redundancy to protect against internal failure.

CREATE USERNAMES THAT MAKE SENSE. It's fine that Jim in accounting wants his username to be ZippyLiverchunks, but how is that going to help you manage your server? Decide on a convention, such as *first initial.last name*, for example, and stick to it. This isn't private e-mail; it's a business environment. Create usernames in advance, assign proper privileges, giving users access only to the directories they need, and force users to change their password when they first log on and periodically thereafter.

PLAN THE SERVER DIRECTORY STRUCTURE. Give each user a home directory in which to store his or her documents, then create specific directories for users



MARKETING

Analyze Your CRM

It turns out you *can* put a value on a relationship. *By Oliver Rist*

to share documents, as well as specific directories to house applications. Assign user privileges appropriately, for example, allowing only a user and the administrator to have access to files in that user's home directory, and restricting department-shared directories to members of those departments. This planning will go a long way, as it will regulate user access to files and applications.

HAVE A BACKUP PROCESS IN PLACE.

Once you bring the server online, everyone is going to start saving files to it—that was the idea, right? The last thing you want to do is consolidate data storage onto a single point of failure and then not back it up. Don't wait for data to go missing or a server hard drive to fail: Get a backup system up and running. See "Determine Your Backup Process" (go.pcmag.com/backupprocess) for more tips on data backup for businesses.

IMPLEMENT A NETWORK SECURITY POLICY THAT PROTECTS YOUR SERVER.

If this is an internal server that doesn't have to be accessed externally, then configure your firewall to block all incoming traffic not originating from a server session (the server will still need to get out to download patches). If this is a departmental server, block network access from outside the department. This can be done with a firewall or by setting up a VLAN (virtual LAN), a network that uses the same physical network as everyone else but a separate address.

MONITOR YOUR SERVER. Many servers come with utilities to monitor them. Check system resources such as CPU, memory, and disk use to make sure the server can do its job. The last way you want to find out that you need to add another processor is through applications starting to crash. Also, it helps to know if the server goes down. Many monitoring programs, or an SNMP management console, have the ability to send an alert if the server goes down.

DON'T NEGLECT SECURITY SOFTWARE.

You're running anti-malware, HIPS (host-based intrusion-prevention systems), and software firewalls on your workstations—why not on the server, too? □



IS IT WORKING?

CRM systems allow amazingly detailed tracking. Using SugarCRM, for example, sales and marketing can see the success of various contact methods, both in aggregate and by individual. This requires data links with your Web site (for items like click-through success) and e-mail (for e-mail success and bounce numbers).

In the SMB arena, CRM is a misunderstood concept. It stands for *customer relationship management*, but too many SMBs focus on the C and write CRM off as just another sales tool. But CRM is really about the R. And making sure your expensive CRM is pulling its weight means tracking the R.

What is successful CRM? This must be quantified during the project planning phase. Quantifying your goals means combining database expertise (what can you track?) with sales creativity (what do you want to track?). The idea is to flesh out customer relationships with new data points—points you can track from the CRM.

Start with the goals you defined while planning. For example, within your customer profile the CRM system may have database values for *Spending* (or you might add *Spending* as a custom value). This value lets you track how much a customer has spent over x amount of time. You'll need to define, at the planning stage, the various values of x—across product lines, within certain customer segments, and so on. Creating a baseline value for these fields at the outset means you'll be able to measure their changes over time. It bears mentioning that all this is dependent on sales staff covering the data points at every sale.

Advertising/marketing and cross-sell/up-sell are two of the success metrics CRM project managers often employ.

Advertising/marketing can be crucial, but be careful how you measure it. The idea is for the CRM to track which of your campaigns are working best. This requires fields for querying customers on how they found out about the product. The fields can be as simple as drop-down menus where sales staff select the customer's ad source, or they can be more complex: for example, different 800 numbers on ads in different magazines, enabling you to track the source of each call, then match the source 800 number with its designated ad. All managers need to do is run a SQL Server report based on those fields.

For cross- and up-sell goals, most CRMs have pipeline tracking built in, matching customers to goals for managers and sales goals to customer leads for sales staff. Just as important is measuring current selling status within an existing pipeline. Managers can get a list of current quotes, then export those results to Excel and create a PivotTable showing the Sales Agent, Customer Name, Product, and Quote Status. Combine the same process across several product lines to measure up- and cross-sell as they are happening.

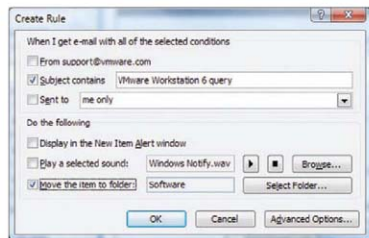
Many companies don't bother designing their own success metrics. These companies wind up at budget meetings without a clue as to whether they've spent their money wisely or foolishly. □

Dealing with the Outlook E-Mail Deluge

You may enjoy handling all your Outlook 2007 messages manually, making decisions about each and every one (read, reply, file, delete, forward, mark unread, tag?). But in case you don't, Outlook provides some powerful tools to help you keep order. One of the more useful is the Rules feature, which you can use to have Outlook filter incoming or outgoing messages. Using Rules, Outlook can look for specific content and act on the messages that match

your criteria. You specify what will happen to those messages by selecting from a lengthy menu of possible actions.

You can create a rule from scratch, by selecting *Rules and Alerts* from the *Tools* menu, or you can create one directly from the message you're currently reading. The benefit of using an existing message is that you get a simple dialog box with some of the fields already filled in. We'll start with this method.—Neil Randall



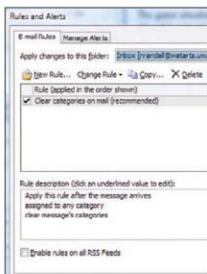
1 USING AN EXISTING MESSAGE

In the Message Pane, locate the message on which to base the rule. Right-click on that message and choose *Create Rule*. The *Create Rule* dialog gives you three criteria to choose for incoming messages, all three of which it fills in automatically from the details of the message itself. You can change two of them—*Subject Contains* and *Sent To*—but not the contact in the *From* field. If you want to change that, you need the *Advanced Options*, which we'll come to next.



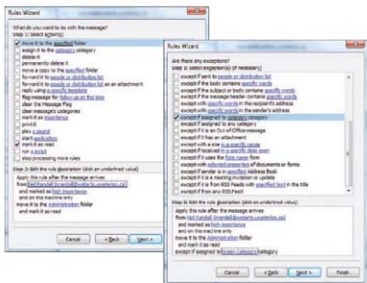
3 STARTING FROM SCRATCH

For the greatest possible flexibility, however, click one of the items in the *Start from a Blank Rule* section. The first filters messages as Outlook downloads them from your incoming mail server; the second filters them after the messages are sent. The next step, "Creating Conditions," will take us through the filter settings.



2 MODIFYING RULES

Now, take the next step: Create a more detailed rule. *Tools | Rules and Alerts* brings up the initial dialog. Click the *New Rule* button to bring up the *Rules Wizard*. Skim the *Stay Organized* and *Stay Up to Date* sections, select a category and click the links in the pane at the bottom to choose options. Click *Next* and you can establish your rule from that starting point.



4 CREATING CONDITIONS

Click *Next* to reveal the list of conditions. Check a condition, then click the related link in the *Step 2* pane, revealing dialogs from which to define your choice. Click *Next* and select from the actions list, again clicking the relevant links to generate specific results. Stepping through the wizard yields the list of exceptions you can specify. Finally, name the rule and decide whether to activate it. Don't choose the *Run Right Now* option unless you're certain the rule will do what you want it to do, because you can't reverse it; having to move messages back manually rather defeats the purpose.

Cyberpower recommends Windows Vista™ Home Premium



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Measuring Identity Theft at Top Banks

Is your bank a top target? Does it matter? *By Larry Seltzer*

Shopping for a bank can be stressful—you want to trust that your savings and financial information will be totally secure. But how do you know for sure? If only the banks would disclose their track records with identity theft. A researcher at the University of California's Berkeley Center for Law and Technology says banks should be required to do just that.

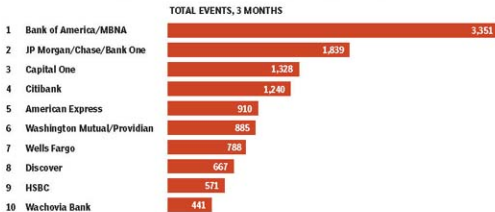
Chris Hoofnagle believes that banks owe it to consumers to be up-front on the matter. They should report basic statistics, he says: the number of attempts at identity theft, the number of successful attempts, the form of theft attempted (such as the typical phishing e-mail), and the products compromised, say, checking accounts and credit cards. Such data could let consumers "vote with their feet" by weighing identity theft metrics when shopping for a service.

Hoofnagle recently conducted a study to determine the main institutional targets of identity theft. The study (downloadable from repositories.cdlib.org/bclt/lts/44) is based on data from a complaint form the FTC provides for consumers; he obtained the results through the Freedom of Information Act.

Bank of America was by far the biggest target of theft in the study—not an

FOR WHAT IT'S WORTH: THE TOP TEN

From Hoofnagle's report, these financial institutions had the highest reported incidences of identity theft claims during January, March, and September 2006.



Complaint data submitted in 2006 to the Federal Trade Commission, obtained for report via the Freedom of Information Act.

unexpected result when you consider the bank's size. It was followed, perhaps more surprisingly, by two telecom companies, AT&T and Sprint.

When looking at the number of incidents per billion dollars of deposit, Hoofnagle found that BoA was second to HSBC, followed by Washington Mutual. This metric, however, doesn't apply to the telecoms.

Because of the source, there are gaps in the data, as Hoofnagle recognizes. For example, the data focuses on account takeovers, as opposed to "synthetic identity theft," in which a new account is fraudulently created. And many cases of ID theft are resolved by consumers working with the institutions; since they don't involve the authorities, those cases are not reflected in the report.

The incomplete nature of the information makes it difficult to draw conclusions: Is an institution particularly bad at preventing incidents, or are some institutions simply bigger targets? Part of this problem is another issue: the lack of standards for evaluation. Hoofnagle suggests that institutions should be reporting their statistics voluntarily, but for that to work, they need generally accepted standards to follow in their reports.

Hoofnagle's work is a step toward addressing both difficulties. He volunteers that his study is an initial attempt, and he invites comment and criticism. "The answer to the limitations of his study is for others to continue and expand on it, because he's right: Consumers need this data." □

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Research Team Cracks Disk Encryption

One big security benefit in Windows Vista is BitLocker Drive Encryption, a system that's supposed to prevent the bad guys from stealing your data even if they manage to steal your laptop. Apple's FileVault serves a similar purpose, as do dm-crypt for Linux and the open-source TrueCrypt. Here's something else these technologies have in common: They've all been cracked by a team including researchers from the Electronic Frontier Foundation and Princeton University, among others.

"People trust encryption to protect sensitive data when their computer is out of their immediate control," says EFF Staff Technologist Seth Schoen, a member of the research team. "But this new class of vulnerabilities shows it is not a sure thing. Whether your laptop is stolen, or you simply lose track of it for a few minutes at airport security, the information inside can still be read by a clever attacker."

According to a news release from EFF, the attack relies on recovering passwords and encryption keys from RAM—even after the computer has been turned off. Naturally this is easiest if the computer is in sleep or hibernation mode, but apparently researchers managed it even with systems that had been turned completely off. For the gory details see EFF's full report "Lest We Remember: Cold Boot Attacks on Encryption Keys" (cltp.princeton.edu/memory). And don't lose that laptop!—Neil J. Rubenking

The Computerlicious Design Experience

eBay Auction May 12-19th

PC Magazine has teamed up with HP to bring you The Computerlicious Design Experience. State-of-the-art HP laptops have been custom designed by premier designers to create stylish new looks that are as fashionable as they are functional.

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PC Magazine — February 2008



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BackSpace

EDITED BY DAN EVANS

The Most Useful Tips in This Entire Issue

You've waded through the 501 tips provided by our esteemed magazine editors and analysts, but you're not done quite yet: We've saved the best for last. Read on for bonus tips, BackSpace-style.

502. Choose Wisely

Your iTunes library is visible on the company network. Use this to your advantage. Go with high-falutin' audio books and symphonies; keep the Howard Stern podcast and The Pussycat Dolls' Greatest Hits on your iPod.

503. Be Careful

Your subscription to *PC Magazine* should give you the ability to communicate effectively with your IT guy, not question his buying decisions or ponytail. Especially not the ponytail.

504. HD DVD Lives

If you have a relative who you're pretty sure will never go to the movies again, or who



BACKSPACE LOVES THE PC D The girls and their music might both be NSFW.

thinks Hollywood peaked with *Xanadu* and will never make another movie worth seeing (Great-Granddad, or Crazy Aunt Shirley), go ahead and click Buy It Now on that HD DVD player with 50 movies for \$200 combo.

505. Join the Right Network

If you are a 45-year-old man looking to get on Facebook, the question you should ask is not "How do I set up a Facebook page?" It's "What the hell am I doing on Facebook?"

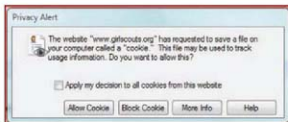
506. Megapixels Don't Matter

Spending the extra \$100 to get a 12-megapixel camera is a waste if you're just taking pictures of Chairman Meow and Indiana Bones for your pet blog.

507. P0wned

A brand-new \$400 graphics card won't buy you any more kills, noob, but it will give you a beautifully rendered view of your smoking corpse. So save your money, loser. —BaCkSpAcEKilla187

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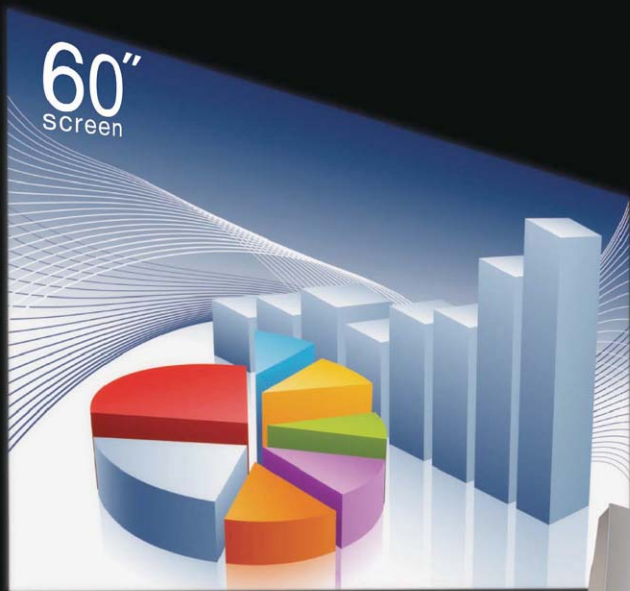
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