



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

Cover Art

Copyright © 2001 by [Carl Nyman](#), Intrepid Informatino Design, Sweden
We need new cover art each month. [Write to us!](#)

Editorial Staff

Publisher/Editor-in-Chief	Michael Tsai
Managing Editor	Daniel Chvatik
Associate Editor/Reviews	Paul Fatula
Copy Editors	Raena Armitage
	Johann Campbell
	Ginny O’Roak
	Ellyn Ritterskamp
	Brooke Smith
	Adam Zaner
	<i>Vacant</i>
Publicity Manager	Christopher Turner
	<i>Vacant</i>
Webmaster	Michael Tsai
Assistant Webmaster	Lee Bennett
Beta Testers	The Staff

Contributing Editors

At Large	Robert Paul Leitao
Games	<i>Vacant</i>
General	Dierk Seeburg
Graphics	<i>Vacant</i>
How To	<i>Vacant</i>
Interviews	<i>Vacant</i>
Music	David Ozab
Networking	Matthew Glidden
Opinion	Tom Iovino
	Mike Shields
	<i>Vacant</i>
Reviews	Eric Blair
	Jamie McCornack
	Gregory Tetrault
	Evan Trent

Shareware Reviews *Vacant*
Technical *Vacant*
[Evan Trent](#)

Artwork & Design

Graphics Director [Grant Osborne](#)
Graphic Design Consultant [Jamal Ghandour](#)
Layout and Design [Michael Tsai](#)
Cartoonist *Vacant*
Blue Apple Icon Designs Mark Robinson
Other Art RD Novo

Emeritus

RD Novo
Robert Madill
Belinda Wagner
Edward Goss

Contributors

Eric Blair
Daniel Chvatik
Paul Fatula
Matthew Glidden
Jens Grabenstein
Tom Iovino
David Ozab
Dierk Seeburg
Mike Shields
Gregory Tetrault
Evan Trent
Michael Tsai
Macintosh users like you

Subscriptions

Sign up for **free** subscriptions using the [Web form](#) or [by e-mail](#).

Where to Find ATPM

Online and downloadable issues are available at <http://www.atpm.com>.

ATPM is a product of ATPM, Inc.
© 1995–2001, All Rights Reserved
ISSN: 1093-2909

The Tools

Acrobat
AppleScript
BBEdit
FileMaker Pro
FrameMaker+SGML
iCab
ImageReady
Interarchy
LetterRip Pro
MacPerl
MacSQL Monitor
Mailsmith
Mesh
NiftyTelnet
ShrinkWrap
StuffIt

The Fonts

Cheltenham
Frutiger
Isla Bella
Marydale
Minion

Reprints

Articles and original art cannot be reproduced without the express permission of ATPM, unless otherwise noted. You may, however, print copies of ATPM provided that it is not modified in any way. Authors may be contacted through ATPM's editorial staff, or at their e-mail addresses, when provided.

Legal Stuff

About This Particular Macintosh may be uploaded to any online area or BBS, so long as the file remains intact and unaltered, but all other rights are reserved. All information contained in this issue is correct to the best of our knowledge. The opinions expressed in ATPM are not necessarily those of this particular Macintosh. Product and company names and logos may be registered trademarks of their respective companies. Thank you for reading this far, and we hope that the rest of the magazine is more interesting than this.

Thanks for reading ATPM.



Sponsors

About This Particular Macintosh is free, and we intend to keep it that way. Our editors and staff are volunteers with “real” jobs who believe in the Macintosh way of computing. We don’t make a profit, nor do we plan to. As such, we rely on advertisers to help us pay for our Web site and other expenses.

We would like to thank our exclusive sponsor, Small Dog Electronics, for its generous support of ATPM, the Macintosh, and all things cool. Sponsorship does not imply endorsement, and endorsement does not imply sponsorship. Thank you for your support.



Small Dog Electronics

www.smalldog.com

You can help support ATPM by buying from online retailers using the following links: Amazon.com, MacConnection, MacMall, MacZone, and Outpost.com.



Welcome

Welcome to the April issue of ATPM. Before we introduce the columns and reviews for this month, let's focus upon an important milestone for Apple:

Mac OS X Ships!

Apple's future has been uncertain at various points over the past few years. With talk of concepts such as NeXT, OpenStep, Objective C, Copland, Rhapsody, Darwin, Cocoa, and Carbon many users were unclear as to where Apple was going, and for what reasons. The nay-sayers and their kin published countless tidings of doom, and Apple's stock mimicked a Six Flags ride.

But Apple's goals became increasingly apparent and focused under Steve Jobs, and finally it seemed as if the press was on Apple's side. Anticipation was appeased somewhat when the earliest demonstrations of OS X were presented. Thereafter the Mac community's confusion was displaced by eagerness and anticipation. The one question on every Mac user's lips was "When do I get my copy of OS X?"

On March 24, Mac OS X officially shipped. The greatly anticipated release of Apple's new operating system was greeted with much enthusiasm. Off-the-bat sales were high, and the initial release appears to be quite promising, significantly improving upon the already impressive Public Beta.

Keep your eyes peeled for future ATPM coverage of Mac OS X.

Poll

Last month's reader poll asked what type of Internet connection you use. Respondents were evenly split between modems and cable modems(31% and 32%), with DSL a close third (26%). The remainder were evenly split between ISDN and T1 (or better).

This month we want to know which retro color motif [you would choose](#) for the next iMac line.

Columns

[Apple Cider: Brand Spankin' New](#)

Tom Iovino tells us about Mac OS X and what it means to the Macintosh community, and the future and directionality of computing in general.

“Think about what a sea change this has been from earlier thinking about the Mac OS. As the Internet has flattened barriers between computers and their users, the goal has changed from offering only Mac-specific technology to providing information to each and every computer user, regardless of platform.”

[Beyond the Barline: An iMac for Any Mood](#)

David Ozab has a shocking rumor to share with us, regarding a new iMac concept that will captivate us all!

“According to a well-placed anonymous source at the MIT Media Lab (actually a personal friend, but I can't divulge names), Apple has recently embarked on a project that will forever change the way we look at computers.”

[About This Particular Web Site](#)

This month, Paul Fatula shares some useful sites regarding OS X applications, zip codes, online gaming, maps of the world, and virus prevention.

[Segments: Report on the Microcomputers in Education Conference](#)

ATPM's new contributing editor, Dierk Seeburg (everybody say “Hi Dierk!”) provides a most thorough report on the Microcomputers in Education Conference and shares some great photos with us too!

This conference is the biggest teaching technology conference in the Southwestern United States. It takes place three and a half months before the biggest teaching technology conference in the United States, the National Educational Computing Conference (NECC). Apple Computer is the Premiere Sponsor of the MEC and one of the sponsors of the NECC.

[How To: Networking the Macintosh Cube](#)

Matthew Glidden discusses the ins and outs of the Macintosh Cube and its networking capabilities—including Ethernet, Airport, and software routing.

Ah, the Mac Cube. It's small, it's easy to understand, and it's getting really, really inexpensive. Buy the basic model, drop \$99 on 256 MB of RAM, and you've got a heck of a machine for \$1400. From the network perspective, life is even easier (is that possible?) with the Cube's built-in Ethernet and optional wireless networking.

Reviews

[Movie Magic ScreenWriter 2000 v. 4.0.1](#)

Mike Shields reviews a major player in the screen writing software arena.

“Recently in these pages, I reviewed similar software. The trap when getting a piece of software like this is to compare it to others, as the box would suggest. It has always amazed me how the product I'm thinking of purchasing seems to beat the one that I currently have, and MMS makes no exception here on its impressively printed box art. The problem I have with that is that some of the claims aren't true, or could at least be more up-to-date. So, instead of attempting to compare this to a product I reviewed a little over a year ago, I'll simply talk about it itself and provide a conclusion at the end.”

[The Sony DPP-SV55 Printer](#)

Paul Fatula reviews a neat gadget from Sony that generates real photographic prints!

“Unlike a lot of 'photo printers' on the market, this one actually prints photos, of the same quality you'd get if you took a roll of film to a developer. That's because the printer isn't an inkjet (whose tiny dots you can see on the page if you look close enough), but a dye sublimation printer, which prints continuous tones. The detail is positively stunning. After the image itself gets printed, a layer of what Sony calls 'Super Coat 2' is added to protect your images. This should give them the same lifespan as a regular photograph, avoiding the problems inkjet prints have with fading after only a few years.”

SPSS 10.0

David Zatz checks out the latest version of a leading statistics tool for the Macintosh.

“SPSS is designed for people who know something about statistics, with brief instructions that assume you understand the tests, or at least that you know statistical lingo. The menus are built differently depending on the options you have installed, with tests grouped together. It takes some experience to figure out exactly which tests go with which label, though the function names are more clear than in, say, MINITAB. (For example, Factor Analysis is listed by name under a ‘Data Reduction’ submenu). The data, output, and syntax views also all have different sets of menus (as they do in Windows), so, for example, you have to be in the data window before you can use a menu to split the file.”

Sweet P 1.1

Eric Blair likes this add-on for Bare Bones Software’s Mailsmith.

“Although Bare Bones Mailsmith is a fully-featured and highly customizable e-mail client, it does lack one feature that can be found in competing products like Outlook Express and Eudora: a palette or button bar that users can modify to suit their needs. Yes, you can write or download various AppleScript files for Mailsmith that can reside in the Scripts menu, but this solution is less than ideal for many people. I tend to suffer from the ‘out of sight, out of mind’ syndrome when I add items to the Scripts menu. Sweet P fills this void with a small application that essentially attaches itself to Mailsmith and provides a floating palette.”

Virtual PC 4.0

Gregory Tetrault has mixed feelings about Virtual PC 4.0.

“With version 4.0 Connectix has completely rewritten VPC, in effect making this new version twice as fast as its predecessors at CPU-related tasks. Users with RAM to spare can run multiple different VPC emulations simultaneously, and each ‘virtual machine’ can have unique RAM and hard drive allocations. VPC 4 also allows expandable drive images that act like normal PC or Linux drives, but take up only the amount of Macintosh drive space used by the actual files. VPC 4 has improved support for drag and drop file exchange and greatly increases its

AppleScript support.... [But] because VPC 4 is a complete rewrite, it behaves more like a 1.0 version of a product. There are many bugs and problems that do not affect prior versions.”

Extras

Desktop Pictures: Icicle Formation and Winter in South Hampton

Winter is almost over, but as a last reminder of the colder times of the year, Daniel Chvatik took the following pictures of an [icicle formation](#) on a tree after a snow storm in Boston, MA. In our second set of pictures this month, Jens Grabenstein shares his winter visions with us. The pictures were taken at a [beach in South Hampton](#), Long Island.



E-Mail

Apples, Kids, and Attitude

[Martians in the Manholes](#) is a thoughtfully and well written story that reflects the clear and purposeful direction of the pure and dedicated spirit. While we may disagree in some small way with what the author said, we appreciate and admire him for inspiring us.

—*Martin Ball*

Zip Disks

Hi,

Can PC zip disks be reformatted for Mac (100 MB Zips)?

Thanks.

—*Anonymous*

Sure they can—I do it all the time. I usually buy Zip disks preformatted for PC in bulk at low prices and reformat for the Mac. You can do it from the Finder easily by using the Erase Disk command and selecting HFS rather than PC DOS from the Format popup menu. Or if you don't have PC Exchange (or File Exchange) installed the Mac will ask you automatically upon inserting a PC formatted Zip disk into your drive. —*Evan Trent*

Printing Problems

I'm suffering form a plague of desktop printer icons—I'm not sure if it's whenever I select a printer in the Chooser, or whenever I select Print, but whatever it is, I get anything up to six or eight copies of the desktop printer icons: and in fact I don't want any of them, I'm perfectly happy with pressing Command-P like I've always done and using the Chooser on the rare occasions when I change between paper and PDF.

I tried to disable something in the extensions, but find only Desktop Printer Spooler and Desktop Printer Monitor, both of which I suppose are needed and shouldn't generate these desktop icons. Actually I thought it was the Desktop Printer Utility which did it, but I can't find that on the hard disk anywhere.

The Mac OS Help files seem to be written for idiots these days, no explanation of how things work so you can actually understand things and make an intelligent choice, just "Do this and you're done."

Any thoughts?

—David

OK, there are two different things going on here. The first issue at hand is Desktop Printing itself. This is a feature of the OS that allows you to have desktop icons representing each of your printers. Only one is set as the "default printer" which is where all Command-P print jobs go by default. But you can drag print jobs from desktop printer to desktop printer.

Generally Desktop Printing is most useful if you have several network printers or different printers for different jobs (i.e. one for color, one for high speed B&W output, one for oversized pages, etc.) but it can also prove invaluable for queuing print jobs for future use. When I am on the go with my PowerBook I simply put my default print queue on hold, and then I can print e-mails or Web sites or other documents. When I return home I switch the queue back on and then poof—all of my queued documents are printed right before my eyes.

If neither of the above scenarios is especially applicable to your situation, you may choose to disable Desktop Printing. To achieve this, simply disable the Desktop Print Manager and Desktop Print Spooler extensions. Printing will then function as it used to in the "old days" before the advent of Desktop Printing.

The problem you describe, regarding the creation of superfluous desktop printers, is most likely the result of excessive Choosering. With Desktop Printing turned on, you need not use the Chooser to switch printers. Instead, select the printer to which you wish to print in the Finder, and then from the Printing menu select "Set Default Printer." Now when you select Print or press Command-P from an application, the job will be sent to that printer (i.e. this procedure has the same effect as selecting that printer in the Chooser).

If you go through the Chooser, often times you will end up inadvertently creating a new Desktop Printer icon. This isn't supposed to happen—you are only supposed to be able to generate Desktop Printers by using the Desktop Printer Utility. But often times the Chooser or the Mac OS gets confused and rather than setting an existing Desktop Printer as the default printer, it generates a new Desktop Printer altogether. As I'm sure you've figured out, you can easily remove desktop printers by dragging them to the trash.

If you can't find a copy of the Desktop Printing Utility on your hard drive, you will be able to install a copy from your Mac OS CD.

You therefore have two options: 1) continue to use Desktop Printing and choose your printer from the

desktop rather than from the Chooser. 2) Disable Desktop Printing and go back to your traditional method of Chooser and Command-P printing. —Evan Trent

Copyright © 2001 the ATPM Staff, editor@atpm.com. We'd love to hear your thoughts about our publication. We always welcome your comments, criticisms, suggestions, and praise. Or, if you have an opinion or announcement about the Macintosh platform in general, that's OK too. Send your e-mail to editor@atpm.com. All mail becomes the property of ATPM.



Apple Cider: Random Squeezings From a Mac User

by Tom Iovino, tiovino@atpm.com

Brand Spankin' New

T.S. Elliot once wrote that "April is the cruelest month."

Hogwash.

April has always been one of the best months on the calendar for me. As I open the new year's calendar at the end of December, I always flip to the April page and look at those dates with eager anticipation.

First, April has always marked the boundary of winter. Sure, it may be cold and icky in March, but, by the end of April, you can be sure that winter is a thing of the past, and spring has sprung. April also signaled that the end of the school year was coming. Sure, I'm not in school now, and I have to work year-round, but that still hasn't gotten rid of the excitement that comes with the fourth month of the year. April also showcases the NCAA Men's and Women's basketball tournaments, which, unless you no longer have a pulse, are some of the most exciting sporting events in the country. My son also celebrates his birthday in April. Can it be three years since he was [born](#)? Nah!

I have eagerly awaited April this year for several reasons. First and foremost is that my wife and I are expecting our second child—a son—on April 10th. It's surprising how slowly days can pass while you are waiting out the last few weeks for the arrival of a child. And, as with every year, I always hold out hope that yes, my beloved University of Maryland Terps will advance to the finals of the NCAA tournament. And, April was the targeted release date of the newest incarnation of the Macintosh operating system, Mac OS X.

Can you believe it? The first major rewrite of our favorite OS since its creation in 1984. Sure, along the way, the OS has had to be freshened up to meet the needs of improving hardware and innovative technology—but this is a major overhaul. This is akin to stripping an old house down to the bare studs, fixing long-standing structural shortcomings, redesigning the kitchen and bathrooms and finishing the sucker to be usable in the 21st century.

Some of the features touted by Apple include:

- Dynamic memory management, eliminating “out of memory” messages and need to adjust the memory for applications;
- Advanced power management, so that PowerBook and iBook systems wake from sleep instantly;
- QuickTime 5, shipping for the first time as an integrated feature of Mac OS X;
- Automatic networking, allowing users to get on the Internet using any available network connection, without adjusting settings;
- Full PDF support and PDF integration into the operating system, so that OS X applications can generate standard PDF documents to be shared with any platform;
- Direct support for TrueType, Type 1, and OpenType fonts, and an intuitive and flexible interface for managing fonts and groups of fonts;
- iTools integration into Mac OS X, for direct access to iDisks in the Finder and Open/Save dialog boxes, and free IMAP mail for Mac.com e-mail accounts;
- Built-in support for popular HP, Canon, and Epson printers;
- A multi-user environment, with access privileges to keep documents secure;
- Support for symmetric multi-processing; and,
- Support for Java 2 Standard Edition built directly into Mac OS X, giving customers access to cross platform applications.

Think about what a sea change this has been from earlier thinking about the Mac OS. As the Internet has flattened barriers between computers and their users, the goal has changed from offering only Mac-specific technology to providing information to each and every computer user, regardless of platform.

Now, you can quickly and conveniently convert documents and Web sites into PDF. You can manage your fonts by use. You can gain access to the Internet or any other network with a minimum of hassle. And, the best part about these features is they are integrated in the OS software. No more extension conflicts to cause those annoying crashes or freezes.

And, if a program does misbehave while running, the protected memory scheme of OS X can keep your computer up and running as you simply restart the offending program. I can't tell you how many times that would have come in handy for me—say—in the middle of writing a term paper back in college!

What makes me happiest, however, aren't the bells and whistles nor the gadgets and gegaws, but the fact that Apple has delivered on a promise. Who can forget back in the dark ages of Apple's impending doom and gloom? Names such as Copland and Rhapsody were tossed around as the salvation of the Macintosh product line. Talk was that every single Macintosh program would have to be rewritten from scratch in order to be compatible with the 'OS of the Future.' This new scheme, which allows the legacy programs to run, is a boon to users with libraries of old programs and developers who are feeling their way through the change to the latest and greatest.

Does OS X come without warts? Heck no! The fact that my 333 MHz Blueberry iMac with 128 MB of RAM is at the bottom rung of hardware compatibility means that I'm looking to need a hardware upgrade in the not too distant future if I'm going to make the leap to OS X. And, the lack of built-in support for CD burning and DVD playback isn't going to win any friends among users. But, you have to admit that even with these shortcomings, Apple is definitely on the right track, and most of the kinks should be worked out in subsequent upgrades.

Yes, indeed, April is a magic month. With our new arrival, our home should be a more joyous and pleasant place to be. Oh, and the arrival of my new son will be great as well!

Copyright © 2001 Tom Iovino, tiovino@atpm.com.



An iMac for Any Mood

This comes straight from the Unsubstantiated Rumors File, so take it with a grain of salt. According to a well-placed anonymous source at the MIT Media Lab (actually a personal friend, but I can't divulge names), Apple has recently embarked on a project that will forever change the way we look at computers. Until now, the decision about a computer's color had to be made at the time of purchase. Indigo or Graphite? Flower Power or Blue Dalmatian? What looks good on display (or online) might not look so good at home or in the office. Or, months later, what seemed like a daring and inspired choice will become tedious and predictable. Soon, you'll find yourself gazing wistfully at the newest ads for the Tye-Dye or the Lava Lamp iMac. Suddenly, Flower Power just doesn't seem so cutting edge anymore.

Introducing the "Mood iMac:" an iMac where the case color can be changed as easily as the desktop background. The idea was sparked a few years ago when Steve Jobs was watching "Scientific American Frontiers" on PBS. The host, Alan Alda, paid a visit to the MIT Media Lab. One of the amazing projects Alda highlighted during the show was a paper thin sheet of plastic that changed color (black, white, or transparent) in response to an electrical signal. The idea was to combine this signal into patterns that would be able to reproduce text and black and white images, resulting in a constantly changing newspaper. "Color is the next logical step," the researcher told Alda, "and all it would require is additional sheets for each of the primary colors."

It was one of those "eureka" moments. Fortunately Steve wasn't in the bath at the time. No one wants to see him running naked though the Cupertino campus (certainly not anymore). But it was definitely an "epiphany." Steve set to work. He contacted the Media Lab with his proposition. Let's craft this incredible plastic into a computer case. The Bondi Blue iMac was already a success, and the "fruit" colors were shipping. The ultimate goal, though, now became the "Mood iMac."

While researchers from the Media Lab worked in secret at one of the old “Skunk Works” hangars outside Edwards Air Force Base (which Disney studio had purchased from the government for the top secret work on *Toy Story*), Steve set the Apple publicity machine into gear. New colors were introduced with each line of iMac (and the new iBook) for the expressed purpose of testing public appeal. The last stage was the introduction of more elaborate designs, Flower Power and Blue Dalmatian, to prepare the Mac buying public for the Next Big Thing.

So how does it work? Well, the plastic sheet originally developed at the Media Lab contains thousands of microscopic disks which are white on one side and black on the other. So the sheet can be white, black, clear (by turning the disks on end), or any combination. The iMac case has three extra layers with red, green, and blue disks respectively. The principal is similar to an inkjet printer, but with many more dots.

In the System Preferences panel in OS X, an option labeled “Case” will bring up a panel with options for every case color in iMac history. One day you can go “Old School” with Bondi, the next day you can be dignified with Graphite, and the next day pick the “Berry” of your choice. Options in the General panel will allow you to coordinate your desktop color scheme with your case, and to randomize your case, so that every day you have a new iMac.

But that’s just the beginning. In the future, expect customizable “Case Themes,” and perhaps the most exciting prospect of all: real-time synchronization with iTunes. So if you’ve been waiting to buy that new iMac, and just can’t decide which color you want, just sit tight. By this fall, you’ll be able to buy one in every color you can possibly imagine.

Disclaimer: First off, when I say “unsubstantiated rumor” I mean what all Internet columnists mean: “I made this all up.” Secondly, while some of the above is true, namely that there was a “Scientific American” episode at the MIT Media Lab on the topic I described, I have no idea if Steve Jobs ever saw it, or if any of the subsequent events described ever occurred. Thirdly, though the old fable about Archimedes includes him yelling “eureka” and running naked out of the public baths and into the street, I have never heard a substantiated rumor of Steve Jobs running naked though the Cupertino campus or anywhere else for that matter. And finally, if you’re going to hold off on buying a computer based on what some grad student on Spring Break says, well...

April Fool!

Copyright © 2001 David Ozab, dozab@atpm.com. [David Ozab](#) is a Ph.D. student at the University of Oregon, where he teaches electronic music courses and assists in the day-to-day operation of The Future Music Oregon Studios.



Segments: Slices from the Macintosh Life

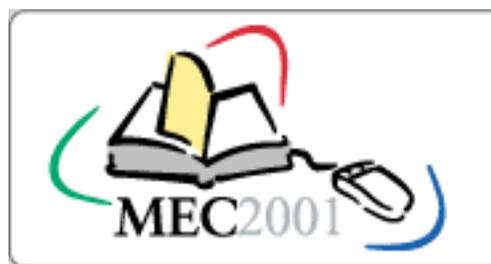
by Dierk Seeburg, dseeburg@atpm.com

Report on the Microcomputers in Education Conference

Hi everyone!

My name is Dierk Seeburg and I am ATPM's new contributing editor. I have been an avid reader of ATPM for years, and now the time is right for me to give back some of what I have learned. My background is in science, specifically in biology, and right now I am finishing a Master of Natural Sciences degree at [Arizona State University](#) while teaching [biology for science majors](#) at [Mesa Community College](#).

My interest in Apple computers dates back to 1984 when I learned Pascal on an Apple IIe (anyone remember?). I have been an avid Mac user ever since, having worked as an Apple Demo Representative and using my Macs in study, research, and teaching. I own and use Macs of all sizes, from 68000 to 68020, 68030, 68040, to Power Macs and G3s (Hi Apple! I could use a G4—refurbished would do!). But enough about me and my obsessions.



My contribution this month is a report from the 21st annual [Microcomputers in Education Conference](#) (MEC) from March 12 to 14, 2001 on the campus of Arizona State University here in Tempe, Arizona. This conference is the biggest teaching technology conference in the Southwestern United States.

It takes place three and a half months before the biggest teaching technology conference in the United States, the [National Educational Computing Conference](#) (NECC). The NECC takes place from June 25th through the 27th, 2001. Apple Computer is the [Premiere Sponsor of the MEC](#) and one of the [sponsors](#) of the NECC.

Interestingly enough, during the few days that I am writing the report from the MEC, several items about Apple in education appeared in the news:

The [first article](#) was prompted by an [interview of IDC analyst Stephen Webber](#) with Computer Reseller News, and ponders the question of whether Mac OS X will help Apple regain the education market. There are plenty of statistical data and news reports to go around—I guess the verdict is still out on that, but Mac OS X and good educational marketing are crucial, if Apple is to dominate in this market and reestablish the position it once had.



The [second article](#) deals with Apple's purchase of [PowerSchool](#), a provider of Web-based student information systems for K-12 schools and school districts. This move should enable Apple to provide schools with end-to-end solutions for managing all aspects of educational computing.

The [third article](#) reports on an [Apple education event in New Jersey](#) whose topic is learning infrastructure. For our esteemed readers in New Jersey, this may be something to check out.

These recent developments appear to be a result of the commitment by Cheryl Vedoe, former Vice President of Education and new Vice President of [Education Marketing and Solutions](#), reiterated in a [Letter to the Education Community](#). She had [joined Apple](#) again late October to head the newly created division of Education Marketing and Solutions.

So, what did Apple do to generate momentum in the Southwestern educational market? As Premiere Sponsor, Apple sponsored the keynote and a number of presentations, some presented by people working for Apple, others presented by education professionals sponsored by Apple in projects involving educational technology.



On the first day of the conference I walked the floor, took some pictures and visited the booths. I talked to many of the vendors and met with several people at the Apple booth. Apple's booth was definitely the best-looking at the conference. It helps to have the biggest booth in the center of the bigger of the two halls. The three Titanium PowerBooks definitely turned heads with their superior screens, and the 733 MHz G4 always attracted a small crowd. It had a digital video camera hooked up to it via FireWire and someone was

running iMovie2 on it, assembling live footage into an on-the-spot movie. The two G4 Cubes sitting on the side tables emanated their simple elegance, just about as much as the fifteen blueberry iBooks available for checkout next to them. More on that later.



Kitty corner to Apple's booth were seven iMac Web surf stations, and near the center of the other conference hall were another seven iMac e-mail stations, all courtesy of Apple Computer. I was happy to use these to follow research leads and check my e-mail until I checked out one of Apple's iBooks. But more on that later.

Back at Apple's booth it was a pleasure meeting one of [Apple's Distinguished Educators](#), Eduard Uzumekis. I betcha you can't pronounce his name correctly right away, phonetically it is pronounced [uzhu'metskis]. In my brief interview with him it was obvious that he truly deserved the Apple title of Distinguished Educator; he is a great communicator and teacher. Uzumekis was nominated by fellow teachers at Gilbert High School in Arizona for his work developing the school's New Media Program, teaching students to develop Web sites, digital story telling, and producing interactive courseware

with teachers. Check out the [June 2000 article](#) in Converge Magazine for an inside look into his work. Uzumekis has since switched jobs and now works at [Yavapai Community College](#) in Arizona as director of the [Digital Media Arts Program](#). Check out his work and send him an [e-mail](#); he appreciates feedback.



In the absence of Apple's National Education Marketing's [Bill Bowman](#), I talked to Apple's Account Executive for K-12 Education [Drew Gibson](#) about what he and his colleagues had set up at the booth and what kind of audience response he had received so far. He said that people are interested in the educational Cube bundle. Besides that, the Titanium PowerBooks definitely drew a lot of attention, especially as Mac OS X draws near.

Also at the Apple booth was Rob Bushman of ASU's TV station KAET. He was involving other people at the booth in conversations and Web surfing to interesting Web sites on the Titanium PowerBooks. One of the Web sites he discovered was the [Technorium](#), a site I can recommend, if you are interested in 3D technology on the Web. Another interesting Web site was [Apple Learning Interchange](#), Apple's online resource for teaching, learning, research, and collaboration.

The rest of my day I spent visiting booths of other exhibitors, exploring products and technologies such as whiteboard-over-IP, distance education offerings, classroom connectivity solutions, and computer access solutions. As a teacher, I am excited about the technological advances that will enable us to focus more on content and less on technology. Too often, we get distracted by the technology, mostly by the difficulties with it.

On the second day I found my way back to Apple's booth to check out an iBook. I received an AirPort-equipped blueberry iBook, in exchange for my Arizona driver's license, with unlimited use until the end of the conference day. If I was ever excited about a technology in recent years, then it is wireless Ethernet, courtesy of Apple's AirPort. Try it yourself, and let me know if I promised too much. I would be lying, though, if I said my linkup had gone without a hitch: I tried to send e-mail, but the outgoing mail server was not configured. Al Terran served as the technical support representative for the Apple booth and helped me out by referring me to the ASU tech support. That person was busy fixing something in a booth just opposite the Apple booth which happened to be the booth of SIRS Mandarin, an information and technology provider to libraries and educational institutions. He told me the name of the outgoing mail server, which solved the problem.



While I was waiting to be helped, the representative from SIRS I spoke to there (name omitted to protect the innocent) was very impressed by the ease of use of the wireless network provided through Apple's AirPort. She did not fail to mention, however, that she hated Macs and always had. Come to find out though, she had never seriously used one,

but got stuck in general PC world phraseology, mumbling about differences in networks which you, the enlightened reader, know is negligible, as most everything today is based on TCP/IP. I wonder if Apple can ever extinguish that age-old attitude, but I did my best bit of evangelism, just stating the facts about the simplicity of setting it up and using it.

At 9:30 am I was finally sitting in an Apple sponsored presentation. It was driven by a G4, an iMac, and a projector. The audience included 30 people, two iBooks (including the one I checked out), one G3 PowerBook, and some other PC laptop. How do I know it was a PC? During the occasional silence during the presentation, the only thing you could hear was that laptop's keyboard. Sometimes we forget the little things that make Apple products so appreciable in situations like these where silence is golden. The presentation was about [PT3](#), the federal grant for professional development. This grant provides financial support for K-12 teacher education while school districts provide hardware through the Students First Initiative. It also combines student teaching plus model school classrooms.

This constitutes a change in the paradigm of teaching only the same way you were taught. Faculty receive professional development, personal one-on-one assistance, in-class modeling and assistance, a library of media materials, and on-line reference materials. The professional development includes 14-week summer sessions with hands-on work, peer collaboration, guest experts, one-day workshops, and open labs. Follow-up or extended training is embodied in the Teacher Education Classroom of Tomorrow Today (TECOTT). Personal assistance includes one-on-one training in software, project, program. Curriculum planning include methods for bringing technology into the classroom, ideas for technology-based projects, and building technology skills.

In-class modeling and assistance includes presentation and modeling of technology use in the classroom and assistance. Library of media materials include software for class demo and check out, print resources on multimedia development, and hardware peripherals available for faculty use.

The professional development course is on-site with collaborative mentor-mentee sessions for six days, and a three-hour follow-up. It is specialized to school curriculum and includes a materials binder, guest speakers, and hands-on experience. The AZCOTT model technology classroom provides hardware,

software, and administrative collaboration and support in the form of correspondence between faculty and principals. More information can be found at the [Arizona Learning Interchange](#).

One of the prime events at the MEC was the first annual [iCademy Awards](#) on March 13. The finalists were presented by Apple's Mark Nichols. The top prize included an iMac DV and a Canon DV camera. Entry guidelines stipulated the use of QuickTime in the form of iMovie and of iDisk for storage space limited to the default 20 MB. [Categories](#) for teachers were Staff Development and Instructional Videos, for Students K-6 were Instructional Videos or Public Service Announcements, for Students 7-12 were Instructional Videos or Public Service Announcements. The iCademy Awards were a great success, especially considering that this was the year of their inception. They were very well received and popular with what was probably the biggest audience during the conference.

The next Apple-sponsored event I visited was a presentation by Apple's Vin Capone on March 13. He presented Ideas in Motion: [Building a Digital Infrastructure](#). Starting off, he cited a study from 1997 which stated that 50% of 19-year-olds get their information from video sources and that by 2005, 94% of all network data will be in video format. This underscored how important a digital media infrastructure is. He went on to state that the cornerstone for content creation, distribution and delivery, and cross-platform playback is QuickTime.



QuickTime includes all components of the digital workflow: capture, editing and composition, delivery, playback, and archival (including backwards compatibility). As for cross-platform compatibility, Capone revealed that Apple's Web server log analysis actually showed that the number one software downloaded off Apple servers is QuickTime for Windows. QuickTime's scalability enables audio, image, and video to be delivered from modem rates to 250 MB/sec. That means that content can be retargeted for broadcast, CD, DVD, Web streams, disk, direct. Apple's distribution of QuickTime now exceeds 100 million copies, about 400 titles/month, including 20,000 licensed products.

As for content creation, QuickTime covers the whole spectrum of digital media, including virtual reality (VR) objects (he showed a beautiful jade statuette from the [Belize Museum of Antiquities](#)), VR panoramas (he showed [Stanford University's](#) panorama), including full-screen panoramas (see [kellybrock.com](#)), as well as interactive images. Beyond that, QuickTime offers support for movies with text tracks and closed captioning. This, in combination with streaming capability, empowers it to deliver online lectures, distance education, and radio and TV programs.

Disappointing many people in the audience, due to his Non-Disclosure Agreement, he was unable to offer any more information about the upcoming QuickTime version 5 beyond what can be gleaned from the [public preview 3](#) currently available from Apple's Web site.



The Apple-sponsored presentation at 2:30 pm on Tuesday was iMovie 2: Desktop Video That Engages Students, presented by Heidi Clevenger of the [Deer Valley Unified School District](#). She presented the iMovie entries for the iCademy awards at her district. The technologies used were a mobile iMac DV, a DV camera, a CD burner, a fast hard drive, and Apple's Multimedia software pack. What was striking was her natural use of iMovie as the digital version of a movie. Showing the iMovie project by fourth graders, she provided

proof positive of iMovie's user-friendliness, and explained how the students did their own editing. Showing the iMovie project by sixth graders, she emphasized how iMovie advanced students' project skills, technology skills, self-improvement, and team work. To round off her successful presentation, Heidi presented the twelfth graders whose project won a national contest.

In summary, I learned a lot during the two days I visited the conference. I also got a pretty good impression of what Apple is doing to improve its position in the educational market. Overall, I think things are getting better, but a lot of issues need to be addressed. It is not enough to have a couple of great software packages (iMovie, Apple's Multimedia Software Package) that prove popular with teachers; Apple needs to better address educational as well as administrative support. The first steps toward that goal have been taken, for the rest of the journey—Good luck!

Copyright © 2001 Dierk Seeburg, dseeburg@atpm.com.



About This Particular Web Site

by Paul Fatula, pfatula@atpm.com

[Native OS X Applications](#)¹

Now that you have OS X running on your machine, you'd probably like some applications to run on it without having to enter Classic mode all the time. Split up into useful categories, this site gives you a simple list of what's out there, with links to the developers' pages. As of this writing, there are over 400 Carbon or Cocoa applications available.

[Jay Computer Services](#)²

Not the most interesting or the most fun site I've ever mentioned on here, but you never know when you'll find it useful. This Web site offers a number of functions related to area codes and zip codes. Going well beyond the Post Office's [zip code lookup page](#)³, this page will tell you what time zone a Zip code is in, show you Zip codes in a particular county, let you calculate the distance between two Zip codes, or even give you a list of all Zip codes within a certain distance (up to 75 miles) from a Zip code you enter. Area code functions let you find Zip codes within a specified area code, and list changes to area codes. Yes, there's more, but you get the idea.

[Infocom Games Playable Online](#)⁴

Remember Zork? The Lurking Horror? The Leather Goddesses of Phobos? Now you can revisit the good old days of computer games, before they were corrupted with graphics and sound. This site tells you about a [telnet site](#) (login: zork) where you can play any of the many text-adventure games Infocom put out. The Web site also links to a few Infocom-related sites; and its [parent site](#), along with a daily journal, offers an amusing collection of links including discordian tarot and an adolescent poetry generator.

1. <http://osx.hyperjeff.net/Apps/>

2. <http://www.jcsm.com/>

3. http://www.usps.gov/ncsc/lookups/lookup_Zip+4.html

4. <http://infocom.elsewhere.org>

[Symantec Security Updates](#)¹

To me, this is an amusement site. Symantec keeps technical documentation on a gigantic number of computer viruses, worms, etc. here, almost all of which only threaten Windows-based machines. Each is described thoroughly, and instructions for removal are given. If someone e-mails you an urgent warning about the latest computer virus, you can pick out a key word and search for it here; almost without exception, the virus warnings I get turn out to be hoaxes. If it is real, you can read about how difficult it is to remove, and laugh at your Windows-using friends.

[PCL Map Collection](#)²

The University of Texas at Austin hosts this site, which makes available some 5000 of the maps in their collection for online viewing. All parts of the world are covered, but unfortunately there's no way to do a search for the location you're interested in. Instead, the maps are listed by region, so you'll have to have at least a vague idea of where a place is if you want to find a map of it. The site also offers an extensive list of links to maps on other sites on the Web.

Copyright © 2001 Paul Fatula, pfatula@atpm.com.



1. <http://www.symantec.com/avcenter/vinfodb.html>

2. http://www.lib.utexas.edu/Libs/PCL/Map_collection/Map_collection.html

The Macintosh Cube

Preface

Ah, the Mac Cube. It's small, it's easy to understand, and it's getting really, really inexpensive. As of this writing, the intro 450 MHz model runs a trim \$1299 from the [Apple Store](#), which differs from the \$1599 model only by less memory and the CD-RW drive. Buy the basic model, drop \$99 on 256 MB of RAM (see [RAMWatch](#) for pricing and vendors), and you've got a heck of a machine for \$1400. From the network perspective, life is even easier (is that possible?) with the Cube's built-in Ethernet and optional wireless networking.

Network Options

The Mac Cube has two network options: one built-in 10/100BaseT Ethernet port and one AirPort card slot for wireless use. The potential of two network connections makes it possible to use the Cube as a software router for shared Internet connections, with some limitations (see the setups below). 99% of Cube owners will use one connection or the other, however.

Typical Setups

Like most new Macs, the Cube is an easy network candidate through its 10/100BaseT Ethernet port. For my Cube, the first network connection was to my Power Mac 8500, as I made the transfer of files that signifies the passing of the mantle from one primary Mac to the next. A crossover cable is your cheapest option here, running \$10–15 at most computer stores. Assuming the file sharing software is already installed and active on each Mac, you just need to connect their Ethernet ports with the cable and you're ready to go. For more info on the complete process, see the Threemacs.com [crossover network page](#).

If you use a hub or switch instead of a crossover cable, the connection is just as easy, as you use a single straight-through Ethernet cable to connect the Cube's Ethernet port to a port on the hub. For more info, see the Threemacs.com [hub network page](#).

If you prefer the chic world of wireless networking, you can spend \$99 at the Apple Store on an AirPort card, then network through any local wireless connection (such as the AirPort Base Station). If you only have two wireless Macs, they can communicate with each other using the Computer-to-Computer wireless option, with each computer using its AirPort card as the connection.

The Cube as Software Router

Although a rather esoteric setup, it's theoretically possible to run a Cube as a software Internet router using both network connections simultaneously. For [security reasons](#), you should only share an Internet connection using two network connections. To do this with the Cube, you need to install an AirPort card and use its Software Base Station (free from Apple), which allows you to share the wireless network connection with other AirPort-capable computers. Because wireless bandwidth is limited, this is only practical for sharing with a few other computers. (You can also use a software router such as Sustainable Softworks' [IPNetRouter](#) or Vicom Tech's [SurfDoubler](#), although they are not free like Software Base Station.)

To set up this shared connection, connect the incoming Internet connection (DSL/cable modem) to the Cube's 10/100BaseT Ethernet port and use the Software Base Station to share the Internet connection across the wireless network. If you would like to share a wireless connection across many Macs, the hardware AirPort Base Station is a better option, since it can share a wireless Internet connection with any number of AirPort-enabled Macs without the same limitations of a software router like the Software Base Station.

Copyright © 2001 Matthew Glidden, mglidden@atpm.com. Matthew Glidden is the webmaster of Threemac.com, a guide to constructing and maintaining home and small-office Macintosh networks. He can also tango and juggle, not necessarily at the same time.



Extras: Desktop Pictures

Icicles

Winter is almost over, but as a last reminder of the colder times of the year, Daniel Chvatik took the following [pictures of an icicle formation](#) on a tree after a snow storm in Boston, MA. The pictures were taken using an Olympus E-20 and processed using Cameraid and iView MediaPro.

Winter in South Hampton

[Jens Grabenstein](#) shares his winter visions with us. [The pictures](#) were taken at a beach in South Hampton, Long Island. They were shot with a Canon EOS 300 using a 28–80mm zoom lens and 200 ASA 35mm Kodak Gold film. After development the images were scanned using a UMAX flatbed scanner. Re-sampling and re-touching were performed with Adobe Photoshop 5.5.

Previous Months' Desktop Pictures

If you haven't seen the rest of the series, it includes: [Yellowstone National Park](#), [Drops](#), [Toronto](#), [Niagara Falls](#), [Monaco](#), [Montréal](#), [Bahamas](#), [Clouds](#), [Aerial](#), [Made with Macs](#), [Landscapes](#), [Northwest](#), [Animals](#), [Spring Flora](#), [National Parks](#), [Insects](#), [Konstanz](#), [Mark Montgomery's Desktop Pictures](#), [Konstanz Part II](#), [British Columbia](#), [New York](#), [France](#), [Maine](#), [From ATPM Readers](#), [New York II](#), [Washington, D.C.](#), [Lighthouses](#), [Mobius](#), [St. Lucia](#), [Icicles](#), and [Winter in South Hampton](#).

Downloading all the Pictures at Once

iCab and Interarchy (formerly Anarchie) can download an entire set of desktop pictures at once. In iCab, use the Download command to download "Get all files in same path." In Interarchy, use HTTP Mirror feature.

Contributing Your Own Desktop Pictures

If you have a picture, whether a small series or just one fabulous or funny shot, feel free to send it to editor@atpm.com and we'll publish it in next month's issue. Have a regular print but no scanner? Don't worry. E-mail us, and we tell you where to send it so we can scan it for you. Note that we cannot return the original print, so send us a copy.

Placing Desktop Pictures

Mac OS 8.5 and Newer

Go to the Appearance control panel. Click on the “Desktop” tab at the top of the window. Press the “Place Picture...” button in the bottom right corner, then select the desired image. By default, it will show you the images in the “Desktop Pictures” subfolder of your “Appearance” folder in the System Folder, however you can select images from anywhere on your hard disk.

After you select the desired image file and press “Choose,” a preview will appear in the Appearance window. The “Position Automatically” selection is usually fine. You can play with the settings to see if you like the others better. You will see the result in the little preview screen.

Once you are satisfied with the selection, click on “Set Desktop” in the lower right corner of the window. That’s it! Should you ever want to get rid of it, just go to the desktop settings again and press “Remove Picture.”

Mac OS 8.0 and 8.1

Go to the “Desktop Patterns” control panel. Click on “Desktop Pictures” in the list on the left of the window, and follow steps similar to the ones above.

Random Desktop Pictures

If you drag a folder of pictures onto the miniature desktop in the Appearance or Desktop Pictures control panel, your Mac will choose one from the folder at random when it starts up.

DeskPicture

An alternative to Mac OS’s Appearance control panel is Pierce Software’s DeskPicture, [reviewed](#) in issue 5.10 and available for [download](#).



Review: Movie Magic ScreenWriter 2000 v. 4.0.1

by Mike Shields, mshields@atpm.com

Developer: Screenplay Systems ([product page](#))

Price: \$229 (street)

Requirements: 68030-based Mac, System 7.1 or later

Trial: Feature-limited (watermarks printing)



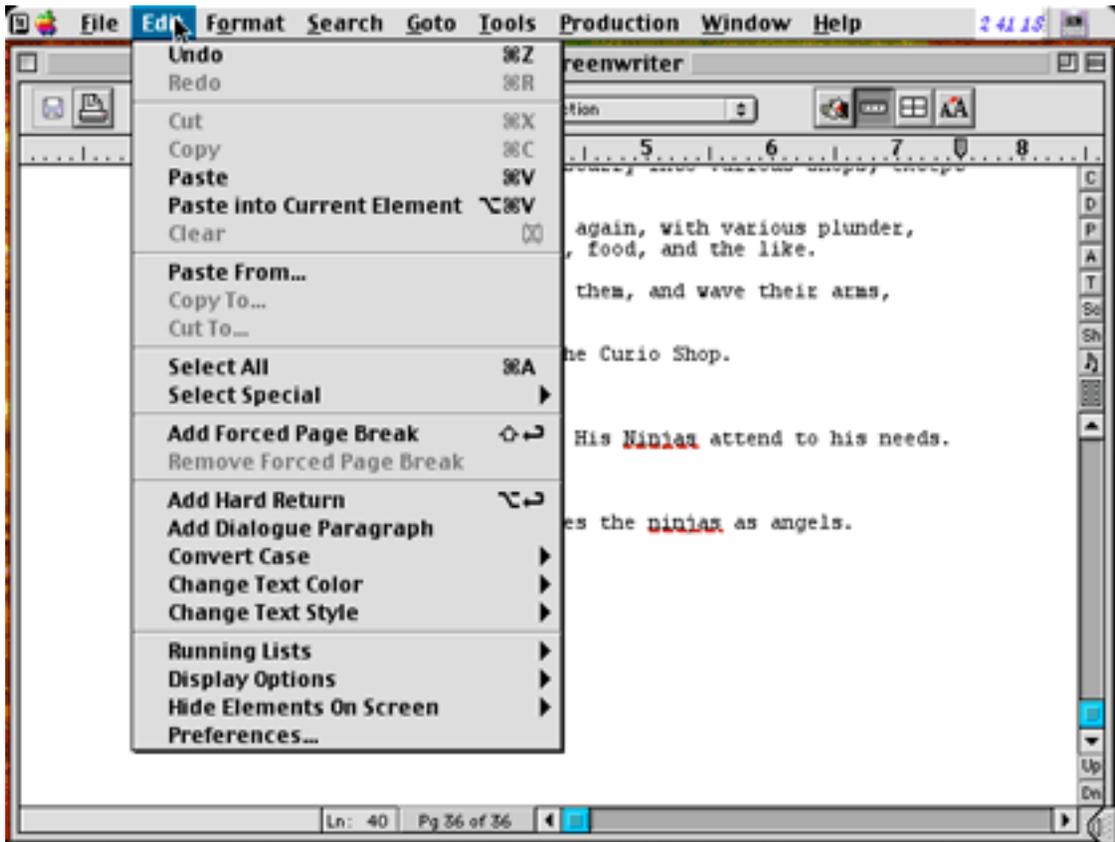
I write movies. I write reviews. So, it was only natural that I write a review of software used to write movies. Okay, screenplays. Also, TV shows and movies of the week. Each has its own individual format, and MMS (like the others before it) handles each unique format flawlessly. Recently in these pages, I reviewed [similar software](#). The trap when getting a piece of software like this is to compare it to others, as the box would suggest. It has always amazed me how the product I'm thinking of purchasing seems to beat the one that I currently have, and MMS makes no exception here on its impressively printed box art. The problem I have with that is that some of the claims aren't true, or could at least be more up-to-date. So, instead of attempting to compare this to a product I reviewed a little over a year ago, I'll simply talk about it itself and provide a conclusion at the end.

Installation, as always with a Mac product, is easy. I only mention it here because for some reason the copy protection has confined me to needing the CD mounted every time I run it from home. However, I was able to register the software from my office computer. This is a bit clunky for me, but you can remove the CD immediately after startup and still be able to run the software. An inconvenience, to be sure. I haven't called tech support on this one yet, but I will be sure to do so and keep you updated in my column.

Starting a New Script

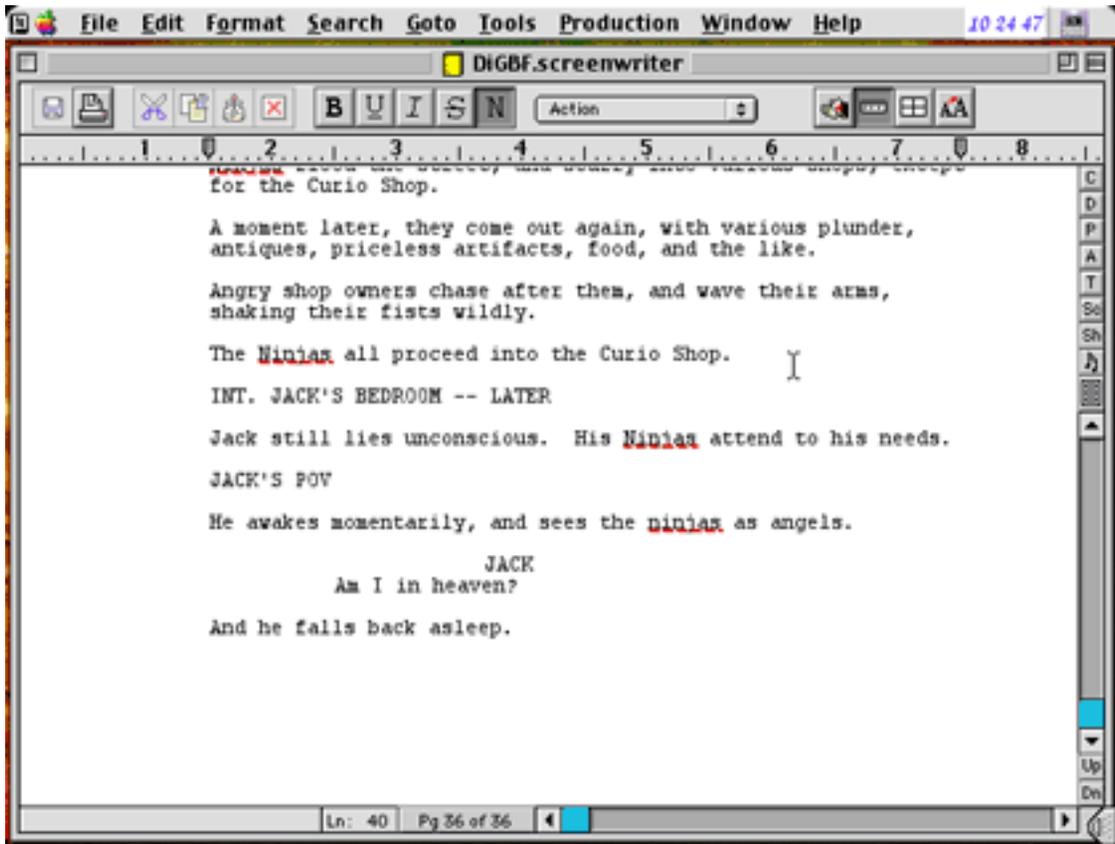
Simplicity in itself. Choose File:New, or Command-N, and it asks what type of template you need from the 11 provided. Personally, I need only three: movie, TV (long form), and sitcom. All scripts have the same elements in common: Slugline, Action, Character Name, Dialog, Parenthetical, and Transitions. I won't get into accepted industry use of the latter two, as many debates have arisen on the newsgroup misc.writing.screenplays. However, this program provides them should the need arise. There are several different ways to create the various elements. (For me, that meant a toolbar on the right side of the screen

that causes unnecessary clutter—that's right, I want all my clutter to be necessary.) Various elements allow for easy transition from one to the next—after a Slugline, it falls into Action; from Character, it goes into Dialog. You can also Tab from one to the next, as well as Shift-Tab to go backwards.



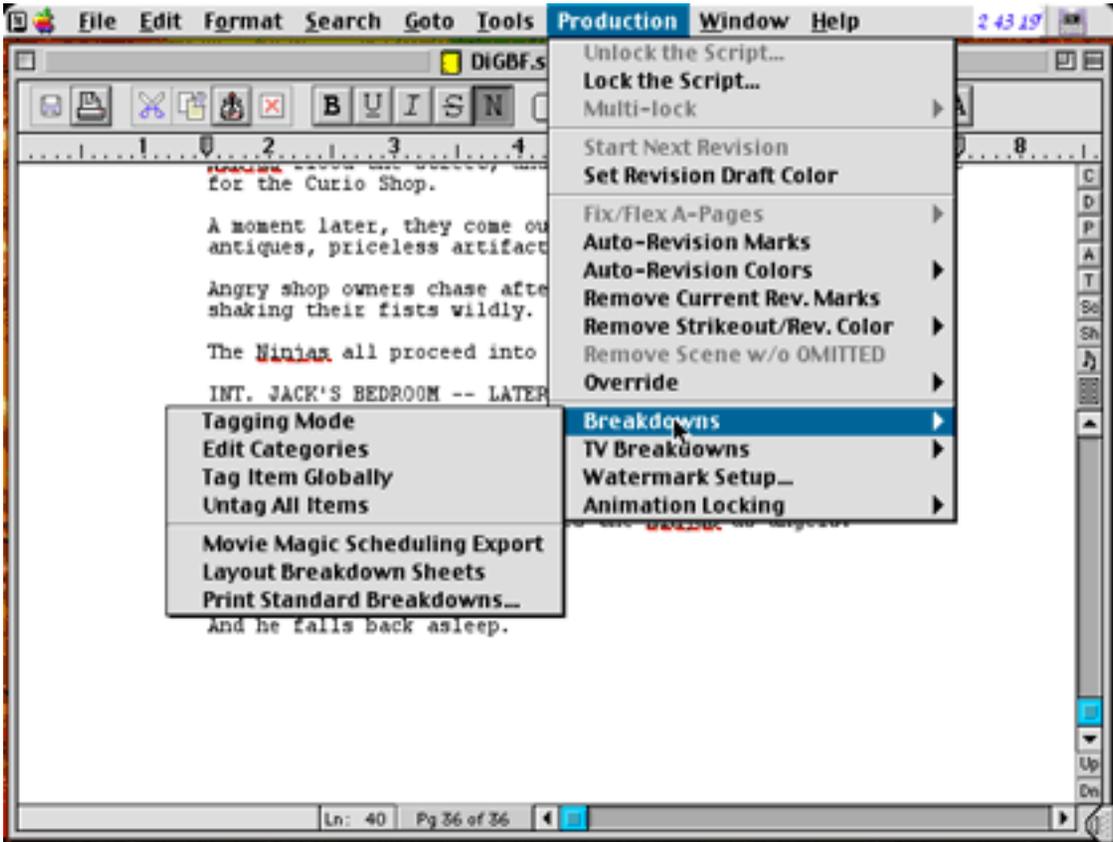
Edit Menu

After musing and creating for awhile, you'll end up with something like this:



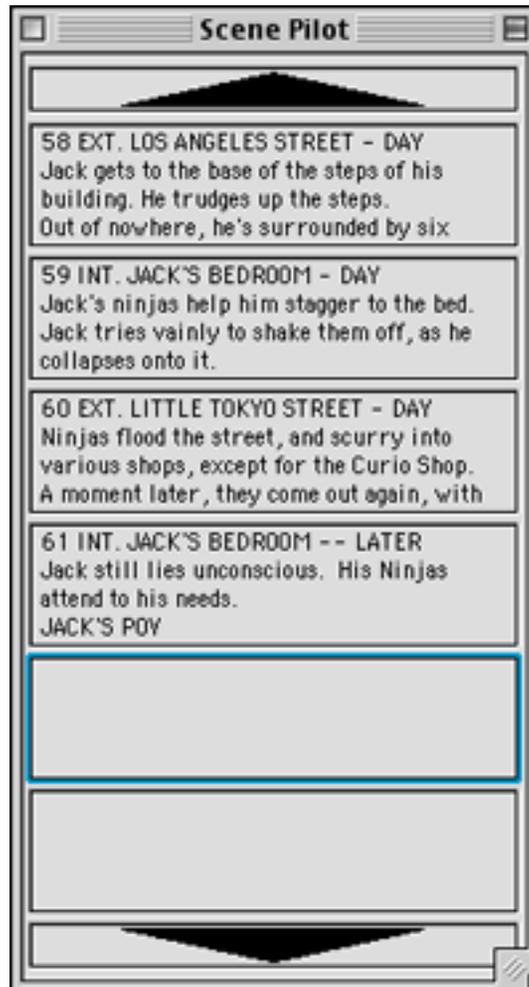
And then the fun begins. A character list is created automatically, allowing for easy retrieval when inputting to the character element. There's also a scene list, which I found both useful and tedious. I was able to import a current screenplay that I was working on; however, it didn't break up the sluglines on import the way I would've liked. Sluglines hold the general form LOCATION—DESCRIPTION—TIME OF DAY, and MMS allows for individual creation of each, and therefore provides three separate lists. But, the time of day

was appended to each slug that I imported, so, if I wasn't careful, I ended up with something like: INT. OFFICE—DAY—DAY. Another inconvenience. I hope it's fixed in further updates.



Advanced Features

The sluglines also provide for the installed scene index cards, which allow for easy editing and moving of scenes.



Scene Cards

Another feature that I really like is the change character name capability.



Character Name Change

A simple dialog box, and suddenly, Jack becomes John. Okay, it's a little more complicated than that, since it wouldn't change the description of the character, but the name would be replaced everywhere.

Yeah, But Should I Buy It?

Well, yes and no. MMS allows for easy creating of screenplays for the first-time writer, and if you don't own any other screenplay software, it's a valid first choice. Although, I feel most of the extra features provided will needlessly confuse someone that has never written a screenplay before, as they are mostly provided for scripts that are in production. For someone that's thinking of changing from screenplay creation software that he currently owns, I wouldn't recommend it. Unless, of course, you're put on a production that requires it.

Copyright © 2001 Mike Shields, mshields@atpm.com Reviewing in ATPM is open to anyone. If you're interested, write to us at reviews@atpm.com.



Review: Sony DPP-SV55 (Printer)

by Paul Fatula, pfatula@atpm.com

Developer: Sony

Price: \$349.95 (retail)

Requirements: Mac with USB and Mac OS 8.5.1 or better (but not Mac OS X) for printing from computer



So you bought a digital camera, and it's great. You'll never again have to worry about running out of film, or taking a bad picture only to find about it weeks later, when it's too late to try again. Best of all, you can store all your pictures on your computer: no more hassles with albums, and the images will never fade. But what if you want to share your pictures with computer-less relatives or friends? Enter Sony's DPP-SV55.



SONY
DPP-SV55
Digital Photo Printer

- 3.3 Megapixel High Resolution Photo Quality Printing
- Scanshots from your Digital Camera
- Full size 4" x 6" Prints (or Economical 3 1/2" x 5" Prints)
- Direct Print from Memory Stick™ Media or CompactFlash™/SmartMedia™ with PC Card Adapter
- Image Optimization Functions Help Improve Picture Quality

Dye Sublimation

Unlike a lot of “photo printers” on the market, this one actually prints photos, of the same quality you’d get if you took a roll of film to a developer. That’s because the printer isn’t an inkjet (whose tiny dots you can see on the page if you look close enough), but a dye sublimation printer, which prints continuous tones. The detail is positively stunning. After the image itself gets printed, a layer of what Sony calls “Super Coat 2” is added to protect your images. This should give them the same lifespan as a regular photograph, avoiding the problems inkjet prints have with fading after only a few years.

Printing takes place in four stages: three colors and then the protective layer. It’s relatively quiet, but certainly not silent, and takes about a minute and a half to produce a 4x6 image. (3x4 print media are also available.) Occasionally when printing, I’ll find an image has a small spot of white (I’m guessing due to an imperfection in the print paper, or a piece of dust stuck to it, since white means none of the three colors were placed on the spot), or a small hair-shaped space where one of the three colors didn’t print (possibly from something being on that particular place on the print film). These problems are both quite rare, and are almost never distracting enough that I decide to scrap the print and try

again. They also are more likely to occur among the first one or two pictures I print out of a day's printing, so perhaps it's just a matter of a little dust accumulating on the media or getting into the print film, rather than a flaw in manufacturing.



Media

The media sizes have a ratio of 3:2, which isn't likely to be a setting on your digital camera. (Though my camera, a Sony DSC-P1, has a special 3x2 setting for the highest resolution, no doubt designed with this printer in mind.) That doesn't necessarily mean you'll have to edit your image before printing, however. The printer will crop the image, a little from the top and bottom, to make your picture into a 3:2 scale image. That means if you cut it close, the printer might end up cutting off the top of somebody's head. But you can certainly edit the image on your own so it will be cropped the way you want it to be. The printer always scales/crops the image to fit the size of the print media. The final

printed image is borderless, once you break off the tabs on the sides. That leaves not quite smooth sides to your image (think, very fine perforation), but its nothing you'd notice visually if you weren't looking for it.



As you'd expect, the printer uses proprietary Sony media; you can't just stick any old piece of paper into this thing. At the 4x6 size, you buy print packs (retail \$19.95) with 25 pieces of photo paper and a roll of print film sufficient for printing exactly that many images. The 3x4 size gives you 30 prints for the same price. A bit under a buck a print then, which is definitely more than you'd pay to develop film. But keep in mind the hassle of two trips to the developer and the advantage of being able to print only the images you want to, right on the spot...and the price of printing out a picture will seem pretty reasonable.

Online, I've seen print media advertised for as little as eleven dollars and change. Advertised, I say, because there isn't any in stock, nor has there been in well over a month. In fact, many resellers seem to have a hard time getting their hands on any of Sony's print media. Those that do have some in stock are charging retail. Last time I checked, CDW had some in stock. With shipping prices (I ordered some media from Outpost back when they offered free shipping, in late February, but they're still out of stock, in spite of an advertised 1-2 week delivery time posted on their site.) being what they are, I dropped by the Sony showroom in Chicago and paid retail plus tax for a few packs of print media.

Printing—Standalone

The printer itself has two slots in it intended for digital camera media: one for (of course) Sony's proprietary "memory stick" (in Sony's documentation, they always put it in quotes), and one for a PC card. So if you have SmartMedia or CompactFlash, you can get a PC Card adapter and you'll be all set. There is also a USB port (though a cable is not included, which I feel is pretty cheap on Sony's part) for connecting to your computer.

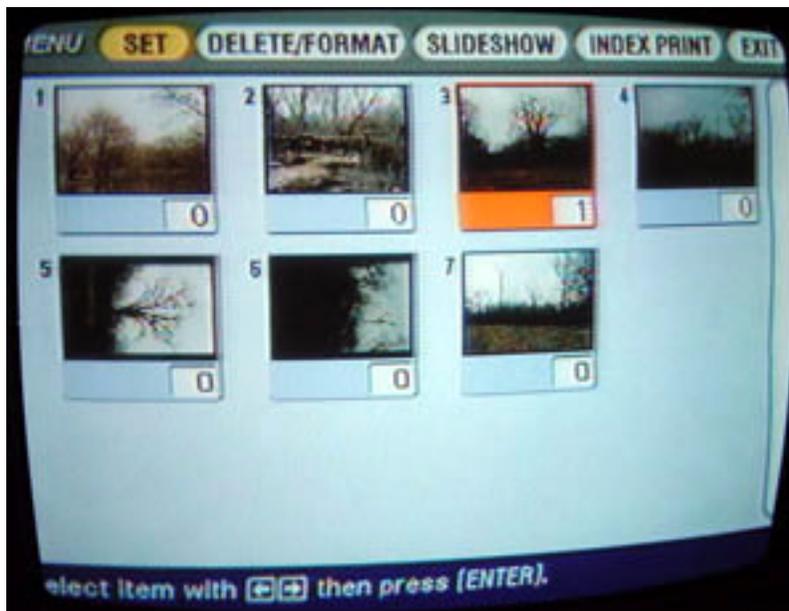
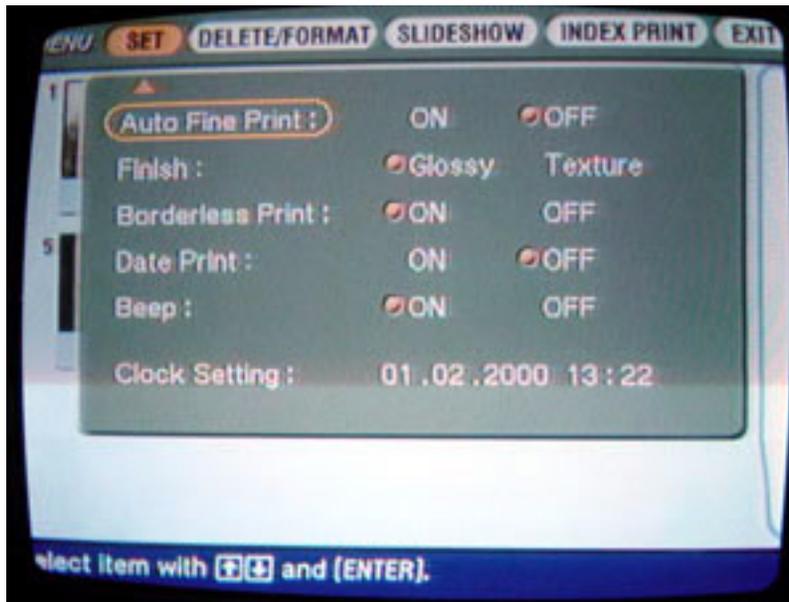


When you insert media into the printer, you can tell the printer to print all images it finds, or just those selected with a standard DPOF marker (again, my Sony camera supports this; I don't know how many others do, so check your documentation), which can be put on a picture by a digital camera. Once you've made that selection, hit Print and let it go. Simple.

Printing—TV

If you happen to have a TV nearby with the right kind of input jack (my five-year-old TV doesn't have one, but my two-year-old VCR does; Sony's manual just calls the cable a "Video connecting cable." An old VCR manual calls it a "round (75 ohm) connector."), you can connect the printer to the TV to afford you a variety of printing options, such as making a card or calendar, or printing the date (of printing, not the date the picture was

taken) on the image. I don't really understand the target market for these doodads; it seems to me they would appeal to people without a computer, but who would buy a digital camera if they didn't have a computer?



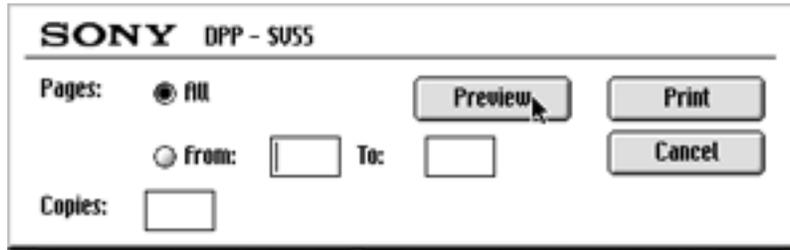
The interface for the TV screen functions is, to me, much more confusing than an image editing program on my computer, though that may just be because of what I'm used to. I had to consult the manual several times in order to get connected (via my VCR) and to get a calendar picture printed out. The process involved going through no fewer than eight screens, and it's quite slow, at least by computer standards. Also, since TVs have downright awful resolution, previewing doesn't give you as clear an idea as you might want of how your picture will come out. All that said, I am happy with the results.



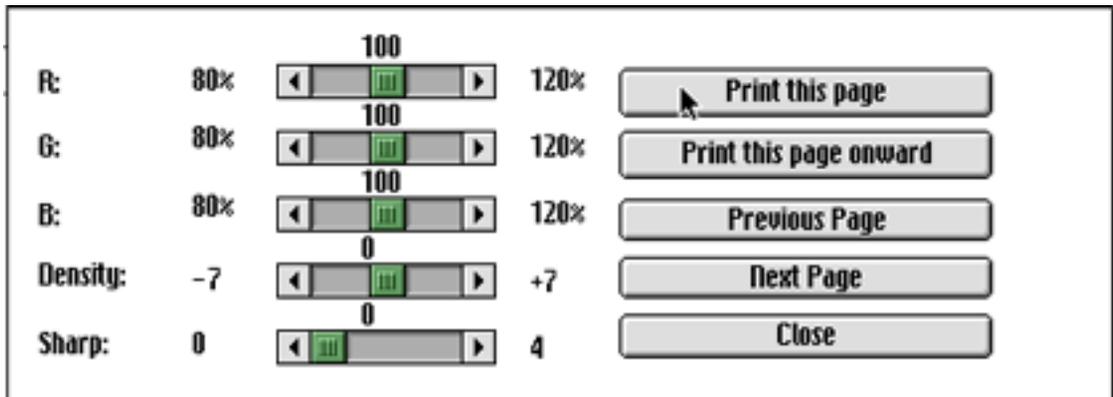
Printing—Mac

Support for printing from a computer, at least a Macintosh, is positively abysmal. I've seen many reports on the Web of borderless printing not working when printing from a Mac, and I've confirmed that with my own experience. (About 1/8 of an inch of white space is

left on one side.) Also, when printing from a computer, none of the automatic cropping takes place to account for images that aren't 3:2, so if you don't crop your image to a perfect 3:2 ratio, you'll again have borders.



The look-and-feel of the print dialogues is decidedly Windows-like, and worst of all, the "Print" buttons visible from "Page Setup" and from previewing the image do not work at all: you have to select "Print" directly. The readme file included with the print software is written in very poor English, surprising given Sony's high-profile presence in the English-speaking world. All in all, it's pretty clear that Mac printing capability was an afterthought, and not tested adequately before sending the product to market. The good news is that these problems could all be fixed by Sony updating its Mac printer drivers...but will they?



Conclusion

Overall, I'm extremely satisfied with the Sony DPP-SV55. I bought it to print out digital pictures, and it performs that function beautifully and easily. The TV interface gives some nice basic options for printing your images, if you're willing to wade through the

numerous screens. My only major complaints about this device are the relative unavailability of print media and the poor support for printing from a Mac. Regardless, image quality is the most important characteristic of a photo printer, and in that area, the DPP-SV55 really shines.

Copyright © 2001 Paul Fatula, pfatula@atpm.com. Reviewing in ATPM is open to anyone. If you're interested, write to us at reviews@atpm.com.



Review: SPSS 10.0

by David A. Zatz, dave@allpar.com

Developer: [SPSS Inc.](#)

Price: \$999

Requirements: G3-based Mac with 64 MB of RAM, 150 MB of disk space, Mac OS 9.0.4.

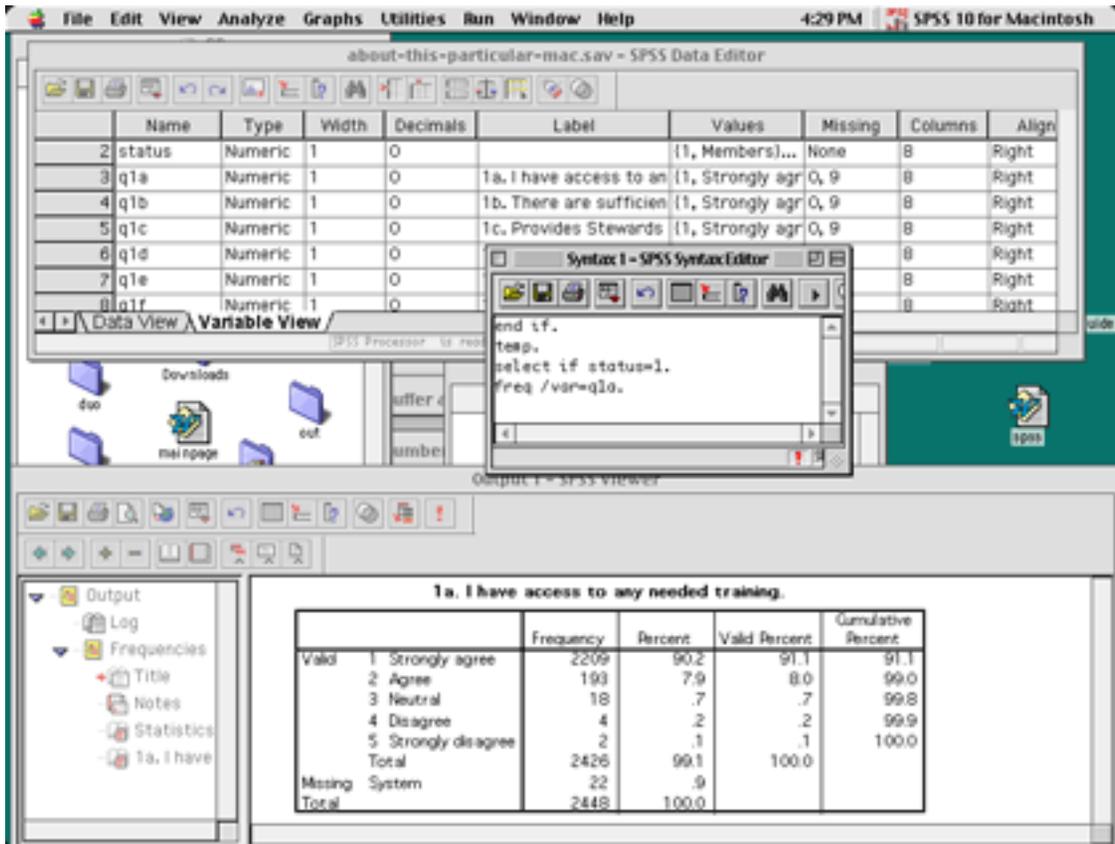


SPSS is the market leader in heavy-duty desktop statistical analysis packages. The program the company is named for, SPSS, does most sorts of statistical analyses ordinary people are likely to know about, as well as a huge number of esoteric ones. It can also easily slice and dice data, generate random data, deal with weighted samples, and handle pretty much anything I can throw at it, except for high-quality graphics.

The first full version of SPSS to run on microcomputers was 4.0, and it ran on OS/2 and the Mac. That was also the last version to run quickly on Macs, with decent performance even on the 7.7 MHz Mac Plus (2 MB of RAM required). The next major release was 6.0, with a completely new user interface and heavy hardware requirements. The Windows version ran well enough, but the Mac version was slow and insanely buggy.

SPSS for the Mac Version 10, on the other hand, is a very good port by MacKiev, whose only drawback seems to be a long boot time (30 seconds on our beige G3). The interface had all the usual Macintosh screen elements, as well as excellent stability. SPSS looks and

behaves exactly like a standard Mac program, and uses the standard Mac OS routines for printing, saving, etc. I tested the program on a beige G3 and an iBook, each with 128 megabytes of RAM and Mac OS 9. SPSS uses a lot of RAM, on any platform.



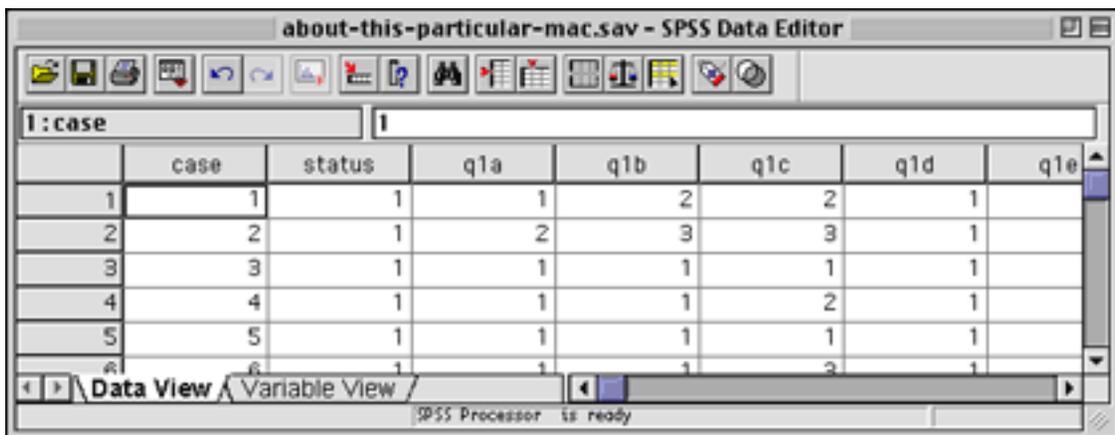
SPSS Workspace

If you forgive the relatively long boot-up time, and small delays in creating windows and some dialog boxes, SPSS 10 for Macintosh on a G3 266 performs at about the same speed as SPSS 10 for Windows on a Pentium III 400. In short, it's a little bit slower than on a comparable Windows machine, but not by much.

The current version is a Classic application, but the company promises either an Cocoa or Carbon version, depending on what they can do with third-party components. That version may well be faster, given Mac OS X's greater efficiency.

SPSS is designed for people who know something about statistics, with brief instructions that assume you understand the tests, or at least that you know statistical lingo. The menus are built differently depending on the options you have installed, with tests grouped together. It takes some experience to figure out exactly which tests go with which label, though the function names are more clear than in, say, MINITAB. (For example, Factor Analysis is listed by name under a “Data Reduction” submenu). The data, output, and syntax views also all have different sets of menus (as they do in Windows), so, for example, you have to be in the data window before you can use a menu to split the file.

Double-clicking on tables and charts in the output window (slowly) brings up a new editing sub-window, not unlike double-clicking charts in Excel or PowerPoint. New to SPSS is a dual-purpose data window; one view shows the data in spreadsheet form, where it can easily be viewed or changed, and the other view shows the variables in a list, along with variable and value labels. (SPSS allows you to provide descriptions for each variable, and for each value—for example, LOCATION can be called “survey location” and location 1 can be titled “Highland Park.”) This can be handy not just for changing variable attributes, but also as a way to remember what your variables are named and where they are. It is far better than the old method of double-clicking on a variable name in the spreadsheet view. However, I hope that in a future version, you can tab among all the views, instead of having separate windows for data, output, and input.



Spreadsheet View

“Syntax mode” operates like SPSS for mainframes, and provides powerful tools such as “temp/select if” and “do if” commands for quickly selecting one or two groups. Writing little programs in the syntax mode can save a great deal of time, and separates professional programs like SPSS from software which fills the needs of more casual researchers (e.g. StatView).

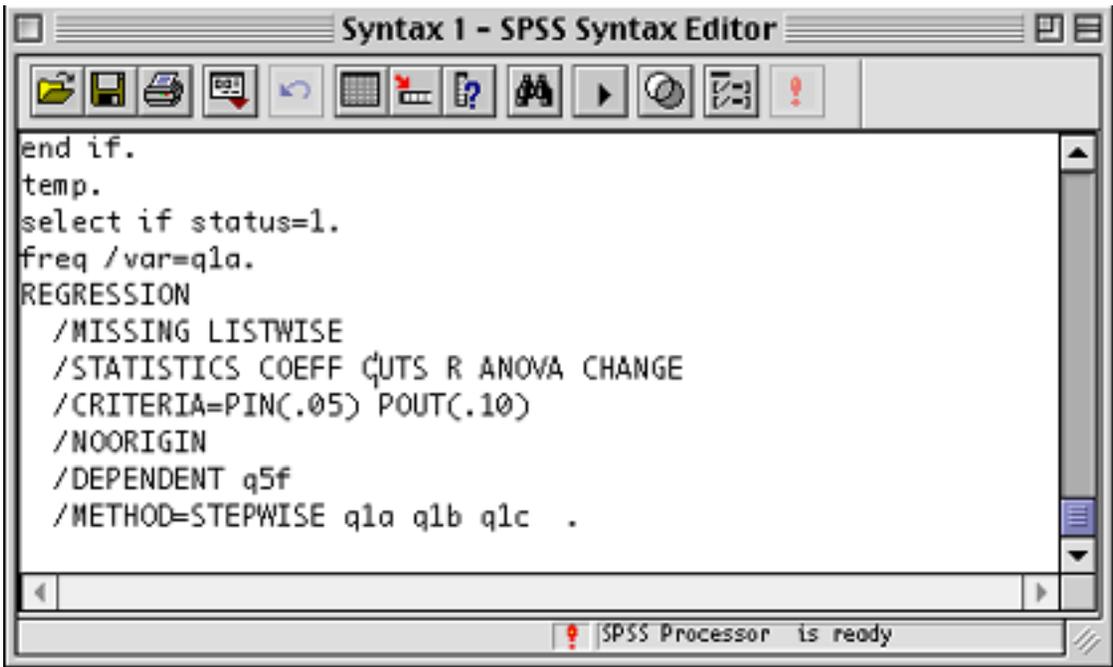
By typing in commands and then running them as a batch, the researcher can take advantage of commands that don’t work well as menus—such as temporary / select if—and can also save frequently used routines. For example, when running a linkage analysis to link employee survey data to customer or financial outcomes, I tend to run a number of regressions. It’s far faster for me to type in these commands than to trek repeatedly through the menus. Likewise, if I just want to see how employees in Kansas answered a given question, I can either go through the menus, select just employees in Kansas, and select a frequency count; or I can type

```
TEMP .  
SELECT IF LOCATION=4 .  
FREQ /VAR=Q4 .
```

Though it takes some time to learn the commands, most people tend to use the same commands over and over again. By clicking on PASTE—which is nearly always an option—rather than OK, the user can tell the program to write the command into the syntax window rather than running it.

Using syntax can also save a lot of time for people who frequently use options different from the defaults. While the menus aren’t too clumsy, simply typing the commands is a major timesaver. Fortunately, unlike some competitors—MINITAB comes to mind—SPSS’ syntax is generally consistent and easy to understand. Commands are run simply by

pressing Command-R, by selecting Run from a menu, or by pressing a toolbar icon. An optional book (which I strongly recommend you buy as soon as you get the program) lists the syntax for each command, with all options.

The image shows a screenshot of the 'Syntax 1 - SPSS Syntax Editor' window. The window has a title bar with the text 'Syntax 1 - SPSS Syntax Editor'. Below the title bar is a toolbar with various icons for file operations (open, save, print), editing (undo, redo), and execution (run, stop). The main text area contains the following SPSS syntax code:

```
end if.  
temp.  
select if status=1.  
freq /var=q1a.  
REGRESSION  
  /MISSING LISTWISE  
  /STATISTICS COEFF QUANTS R ANOVA CHANGE  
  /CRITERIA=PIN(.05) POUT(.10)  
  /NOORIGIN  
  /DEPENDENT q5f  
  /METHOD=STEPWISE q1a q1b q1c .
```

At the bottom of the window, there is a status bar that says 'SPSS Processor is ready'.

Syntax Regression

Output is moderately customizable, and you can use and save different formats for line and cell formats. The user does not have full control, though; for example, frequency counts always come with cases, total percent, valid percent, and cumulative valid percent.

I would like to be able to change table formatting via syntax—indeed, more control over table formatting, in general, would be very helpful. Modifying SPSS-generated tables can be fairly slow, due both to the interface and to a sizable delay in opening tables for editing, on both Mac and Windows. Still, the results are better than in the past, and the controls are improving.

Pivoting trays make it easy to change the way tables are printed; rows can become columns, for example, and layers can be made into rows or columns very easily. Anything can be switched to another place. Only a few commands (including REPORTS and LIST

CASES) still produce old-fashioned, space-formatted, typewriter-font output. Since the REPORTS command is very useful, I hope they get around to converting all the commands to clean, tab-delimited output.

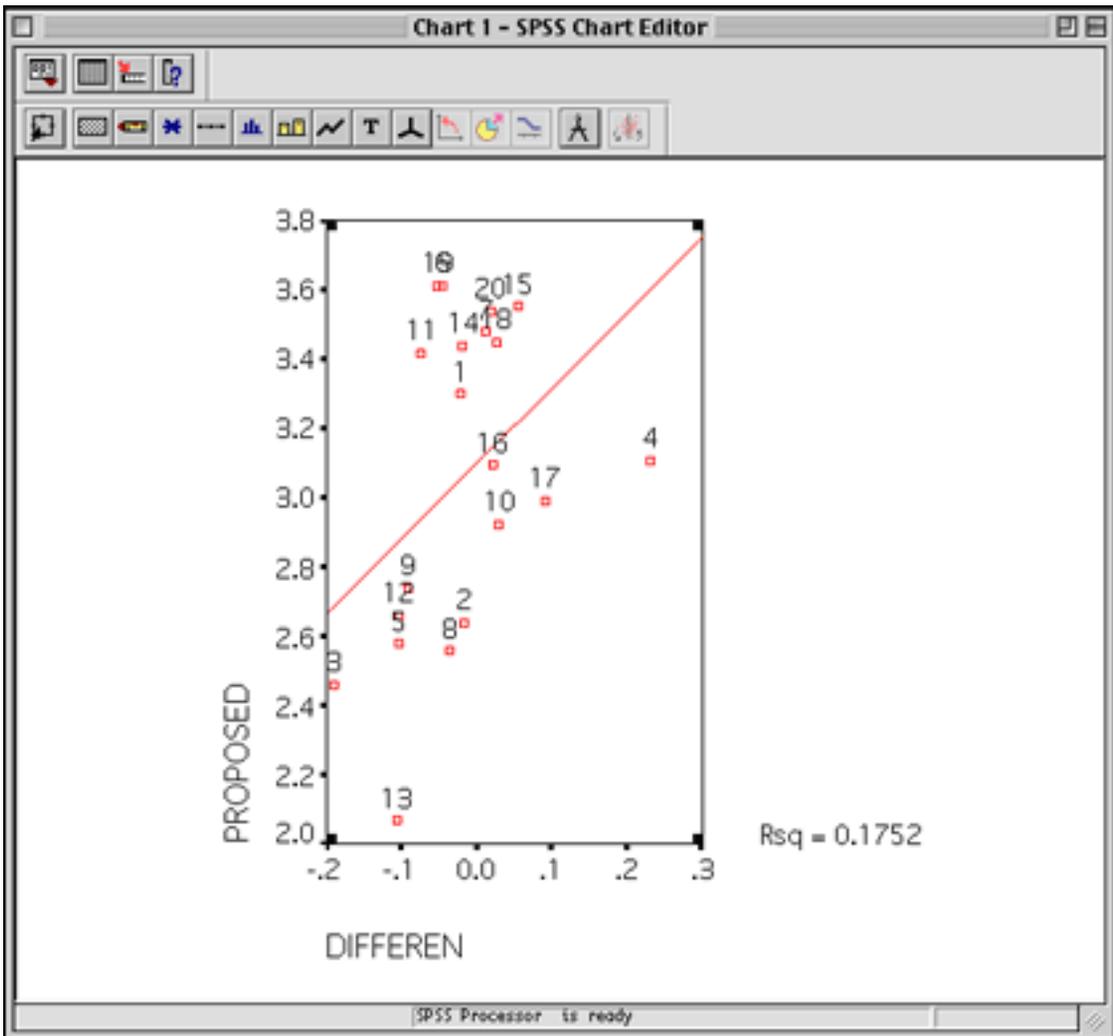
The screenshot shows the SPSS Output Viewer window titled "Output 1 - SPSS Viewer". The left sidebar shows a tree view with "Output" expanded to "Report", which includes "Title", "Notes", and "Text Output". The main window displays a report table with the following data:

STATUS	1a. I have access to any needed training.	1b. There are sufficient opportunities for growth and learning	1c. Promotions are based on merit, not who you know.	1d. This company recruits the best people.	1e. The opportunities provided
Members N = 3	99.8%	97.4%	94.3%	99.6%	
Contributors N = 3	100.0%	96.3%	98.8%	100.0%	
Associates N = 3	100.0%	100.0%	93.3%	100.0%	
Grand Total N = 9	99.8%	97.4%	94.5%	99.6%	

Ye Olde Report

Charts, like tables, can be customized, and various formatting options can be saved as a chart style. While the chart function is a bit slow, the defaults poorly chosen, and the formatting clunky, these flaws are overcome by the useful abilities of saving chart formats

and specifying some options in syntax. Someday, I hope to find a charting program or function as easy to use as Cricket Graph 1.3—which was sold with SPSS 4 back in the 1980s.



Scatter Plot

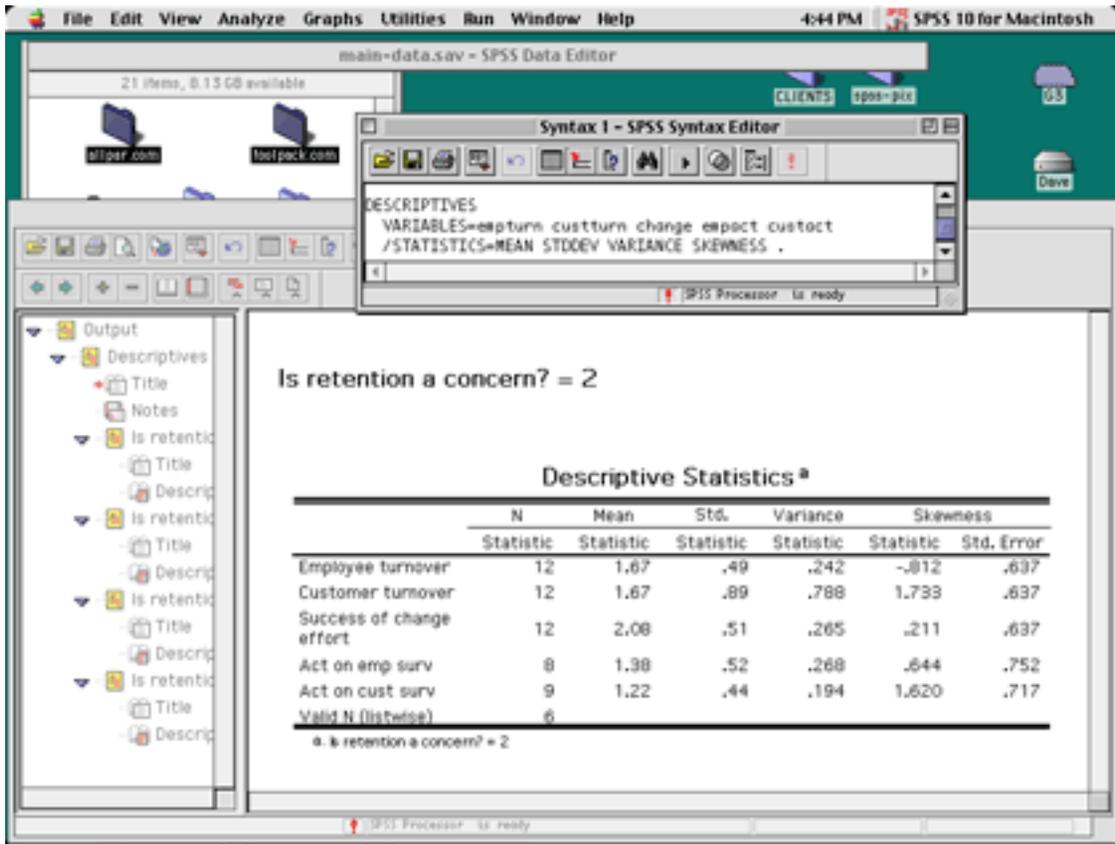
In SPSS 10 for Macintosh, charts can be saved as GIF images for publishing on the Web, and can be copied and pasted into other programs. The tables can also be easily pasted into spreadsheets or word processing programs. Those who are still using SPSS 4 may find this alone to be worth the upgrade. (Some output, such as the Reports, are still in plain text, separated by spaces).

Most people will probably export SPSS tables and charts to other programs for publication, but at least SPSS 10 makes this easier than did previous versions. A little polishing of the output would go a long way to letting people use SPSS alone, without having to resort to Excel or charting programs.

SPSS 10 data files, which are highly compressed to save disk space, are compatible with previous Mac and Windows versions. The program can read and save to a large variety of formats, including tab-delimited text, plain ASCII text (where columns are defined by the user and are not separated at all), and Excel. Syntax files can be shared across platforms, or edited in word processors (they are plain text). Output files can be saved as HTML. SPSS also sells programs which allow other people to view the results and delve deeper into the data.

Like all prior versions of SPSS, variable names can only be eight characters long, generally with just letters, numbers, and underscores. Labels can easily be added, either via the variable view or with the VARIABLE LABELS command. Likewise, each value (e.g. 1 or 2) can be assigned a label, so that instead of seeing a frequency for VAR1 with 22% value 1, you can see a frequency for Cat Breeds with 22% Domestic Short Hair. This makes it much easier to deal with the output; to copy and paste output into presentations or reports without having to retype everything; and, most important, to actually know what is in the

file a year later when you've lost your notes. On the other hand, it would be nice if SPSS would allow hyphens in variable names, not to mention names with more than eight characters.



Split File in Action

Dividing and subdividing data sets is fairly easy with commands such as Split File and extensive reporting features. Split File lets you sort results by a variable (or several variables); for example, running any test or description separately on each location in a survey, using a single command. This can be a real time-saver, and it makes complicated slice-and-dice analyses much easier than, say, MINITAB. Unfortunately for those who use SPSS for survey data, string variables are still limited to 256 characters; otherwise, SPSS would be a terrific survey reporting package.

SPSS is sold as a base program with optional modules, all of which are available for the Mac. Between the base program and the modules, a huge number of analyses, tests, and statistics can be generated, most of them with ease. The company's Web site provides details on what each module does, an important consideration before buying. (When upgrading, the user must pay for upgrades on each module they use as well as on the base program). Some specialized statistics, however, can only be generated using non-SPSS software which is sold in other packages by SPSS (for example, a new program for dealing with very small samples).

Given the breadth of SPSS, it is nearly impossible to go into any depth on its statistical features. However, I can generally say that its statistical range is comprehensive, and that it becomes easier to use as one gets used to the syntax. The program is fairly quick if given the memory it needs, and can handle large data sets without problems—though the view of the actual data in spreadsheet mode can be rather slow (this is also true under Windows). It works well with Excel, and is flexible in many ways.

It's no surprise that SPSS is the dominant player in the statistics market—especially since they have a habit of buying competitors. I only hope that they continue to support the Mac, and that they bring some of their other programs over as well.

Copyright © 2001 David A. Zatz, dave@allpar.com. Dr. Zatz's Web site is at <http://www.toolpack.com>. Reviewing in ATPM is open to anyone. If you're interested, write to us at reviews@atpm.com.



Review: Sweet P 1.1

by Eric Blair, eblair@atpm.com

Developer: [John Gruber \(Web page\)](#)

Price: free

Requirements: Mac OS 8.5, Bare Bones Mailsmith



Although [Bare Bones Mailsmith \(ATPM review\)](#) is a fully-featured and highly customizable e-mail client, it does lack one feature that can be found in competing products like Outlook Express and Eudora: a palette or button bar that users can modify to suit their needs. Yes, you can write or download various AppleScript files for Mailsmith that can reside in the Scripts menu, but this solution is less than ideal for many people. I tend to suffer from the “out of sight, out of mind” syndrome when I add items to the Scripts menu. Sweet P fills this void with a small application that essentially attaches itself to Mailsmith and provides a floating palette.

A Wolf In Sheep’s Clothing

In the past, I’ve never really liked floating palette applications. Most of the ones I have tried require extra steps whenever I want to access them; for instance, program launchers must be brought to the front before they can be used, at which point they don’t provide me with much additional value beyond what I get from a pop-up window.

Sweet P is different. It is similar to a normal application in that it needs to be launched and quit and appears in the application menu (more on this later), but it acts like a floating palette in nearly every other way.



My Sweet P Palette

There are a few traits we've come to expect from floating palettes. Typically they float over every window in their application and they disappear when their application is in the background. Sweet P inherits both of these traits. Visually, there are only two things that quickly indicate Sweet P is actually its own application: the aforementioned listing in the application menu and a slightly different look to the title bar when compared to Mailsmith's floating palette. Aside from these, Sweet P integrates perfectly with Mailsmith.

I mentioned the need to launch and quit Sweet P. At first, this might make you think twice about using the application; after all, what good is Sweet P if I must baby-sit it whenever I want to use Mailsmith? In fact, I passed on Sweet P for a long time for this very reason. Once I downloaded the application, however, I realized my concerns were misplaced. Using the "Mailsmith Startup Items" and "Mailsmith Shutdown Items" folders, you can

automate the launch and quit process. Simply place Sweet P (or an alias to Sweet P) in the startup folder and a one line AppleScript in the shutdown folder. The AppleScript, **tell application "Sweet P 1.1" to quit**, is included in the help file.

Buttons, Buttons Everywhere

By now, you probably get that Sweet P does an excellent impression of a floating palette. If this were all Sweet P did, it would be quite a disappointment. Fortunately, it has functionality to go along with its form.

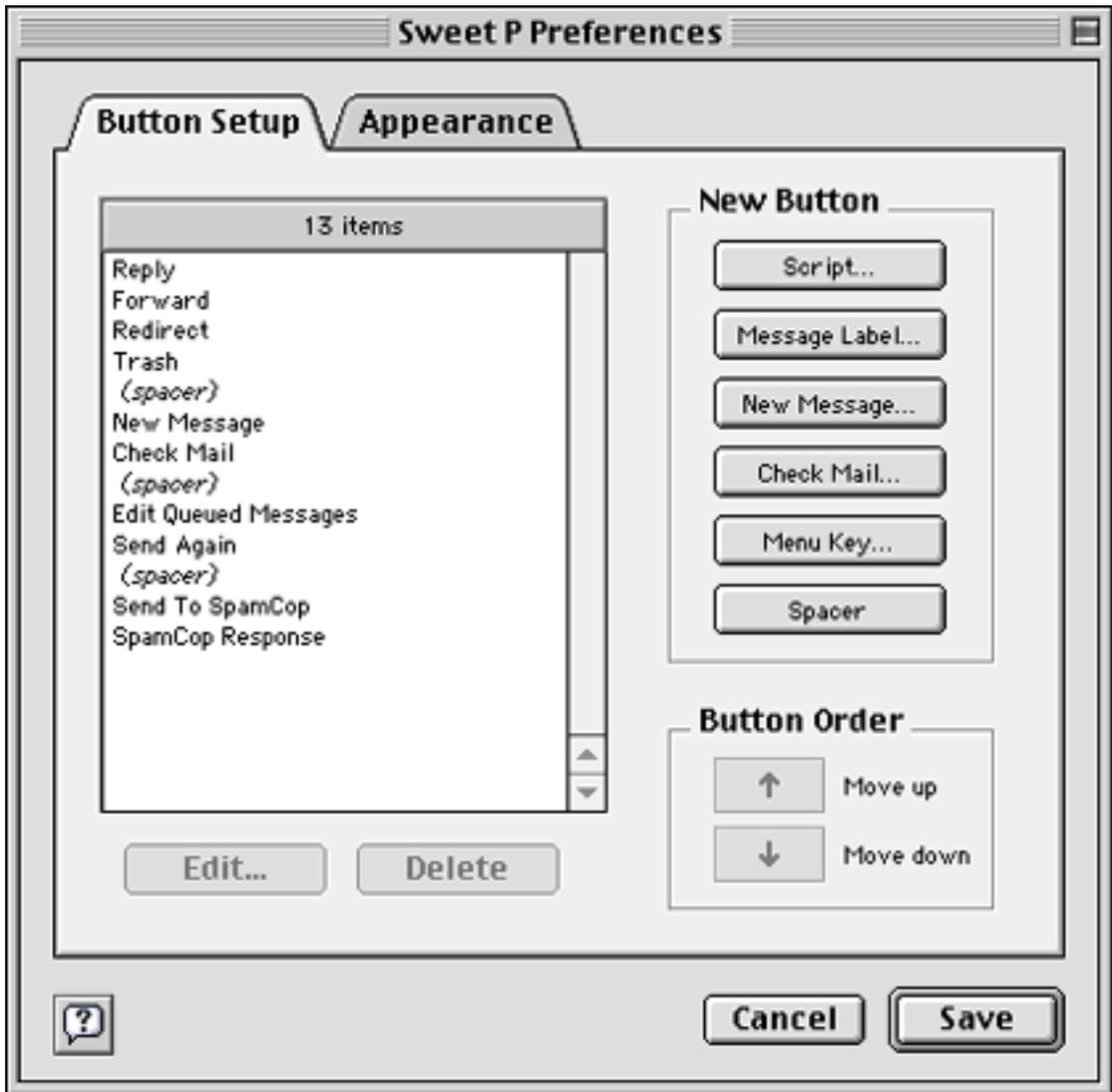
At its most basic level Sweet P supports four different functions via palette buttons. You can create a new message, check your e-mail, change a message's label, and pass a menu key combination to Mailsmith. These options alone will be enough to satisfy many people. As Mailsmith allows you to assign keyboard combinations to any menu item, you can create a button for any item found in a menu.

These four functions may not be enough to satisfy the power-hungry Mailsmith users out there. Many of these people have favorite AppleScripts they use to automate or augment portions of Mailsmith. Fortunately, there is a fifth type of palette button supported by Sweet P—the script button. When creating a script button, you are presented with an open file dialog box where you select the desired AppleScript. All that remains is to enter the text you want to appear on the script's button.

Adding buttons to the Sweet P palette is easy. Simply open the preferences dialog and click on the button type you desire. If additional information is needed, you will be prompted for it. Buttons are moved in the palette with the appropriately labeled "Move up" and "Move down" buttons, or by dragging the entries around in the items box.

You also have some control over the appearance of the of the Sweet P palette. You can add a spacer between buttons, choose the width of the spacer, choose the space between buttons, and choose the width of the border. Also, you can choose to have Mailsmith

come to the front when you launch Sweet P or close the Sweet P preferences. Sweet P doesn't have a lot of options, but it doesn't need them. Most of the work is done by Mailsmith or via AppleScript.



Modifying the buttons in the Sweet P Palette

AppleScript

As far as programming languages go, AppleScript is a fairly easy language to learn. However, those who have neither the time nor the inclination to learn scripting don't necessarily need to miss out on Sweet P's power. It comes with four scripts: two for finding a word's definition, one for toggling a message's read/unread status, and one for opening all the Web addresses within a selection.

For people who want more advanced scripts, there are several repositories on the Internet. Two of the more popular sites are the [Mailsmith AppleScript Repository](#) and the (unofficial) [Mailsmith FAQ](#).

Conclusion

For me, Sweet P has become an indispensable tool. Ever since I installed it, Mailsmith has become even more powerful. Like I said earlier, I almost never used the Script menu. I could never remember what scripts were installed and I didn't want to take the time to scan through the menu. With Sweet P, all the scripts I want to use on a regular basis are right in front of my face. Right now, there are just four, but I use them all regularly. By the way, did I mention that Sweet P is free?

As an excellent addition to the Mailsmith environment, if you use Mailsmith you owe it to yourself to at least try Sweet P.

Copyright © 2001 Eric Blair, ebclair@atpm.com. Reviewing in ATPM is open to anyone. If you're interested, write to us at reviews@atpm.com.



Review: Virtual PC 4.0

by Gregory Tetrault, gtetrault@atpm.com

Developer: [Connectix \(product page\)](#)

Price: \$99 (with DOS); \$199 (with Windows 95, 98, or ME); \$249 (with Windows 2000); \$79 (upgrade)

Requirements: G3-based Mac with Mac OS 8.5 (9.0 for Windows Me, Windows 2000, or Red Hat Linux).

Application RAM: DOS 20 MB, Windows 95 40 MB, Windows 98 50 MB, Windows Me 64 MB, Windows NT/2000 80 MB, Red Hat Linux 80 MB.

Hard disk space: DOS 260 MB, Windows 95 350 MB, Windows NT 500 MB, Windows 98/Me 1 GB, Red Hat Linux 1 GB, Windows 2000 1.5 GB.

Recommended: G4-based Mac, as much RAM as possible.

Trial: None



As many already know, Virtual PC (VPC) emulates Intel Pentium-based hardware. With version 4.0 Connectix has completely rewritten VPC, in effect making this new version twice as fast as its predecessors at CPU-related tasks. Users with RAM to spare can run multiple different VPC emulations simultaneously, and each “virtual machine” can have unique RAM and hard drive allocations. VPC 4 also allows expandable drive images that act like normal PC or Linux drives, but take up only the amount of Macintosh drive space used by the actual files. (Previous versions of VPC used fixed size drive images that used all the assigned space, even if the drive images were empty.) VPC 4 has improved support for drag and drop file exchange and greatly increases its AppleScript support.

I tested two versions of VPC 4: VPC 4 with Windows 98 and the VPC 4 upgrade.

Installation

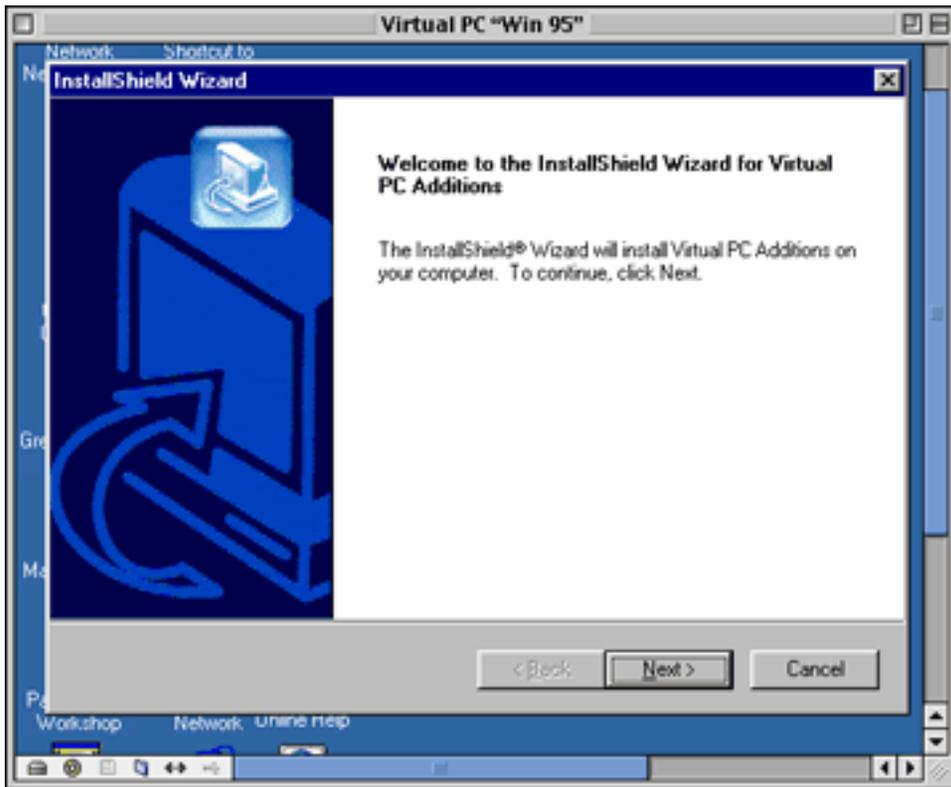
Installation procedures differ greatly between a new installation and an upgrade. A new VPC installation simply requires you to launch the Virtual PC Installer on the CD. Designate a location for the installation, select “Easy Install” or “Custom Install” and click the Install button. When installation is complete, you can either quit the installer or perform another installation.

VPC can then be run without restarting your Macintosh. I recommend restarting anyway, because the VPC Installer closed all running applications, including background functions such as the Control Strip and QuickKeys. When you first launch VPC, you must enter your name, organization, and the lengthy VPC serial number.



Virtual PC Installed Files

The Windows 98 version opens Windows which then requires you to enter the lengthier Windows 98 product ID key. Windows then looks at your “hardware” configuration and completes its installation process. On restart a dialog box prompts you to install the Virtual PC 4 Additions. Once you have done that, installation is complete.



Virtual PC Additions Installer for Windows

Upgrading from a previous version cannot be accomplished using a full version. You must eliminate any saved VPC states before upgrading. The VPC Installer works as described above; launching VPC 4 brings up the info and serial number window. Windows 98 detects new hardware and needs to install new drivers. You must insert your original Windows CD (or earlier VPC version containing Windows) to install the drivers. After driver installation completes, you must restart Windows. To install the VPC 4 Additions, you must launch the vpc4add application. (Its icon is on the Windows desktop.)

Using Virtual PC 4

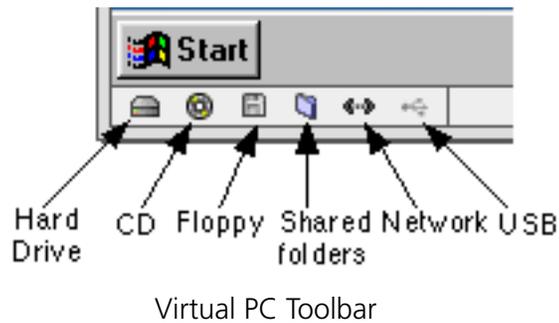
When you launch VPC 4, you see the Virtual PC List window. Select a virtual machine from the list and click the Start Up button. If everything has been set up properly, you will be running a typical DOS, Windows, or Linux environment. You can choose to run VPC in a standard window, or you can have VPC take over the entire screen (including the menu bar). In the latter mode you can view the Mac menu bar by pressing the Command key.



Virtual PC List Window

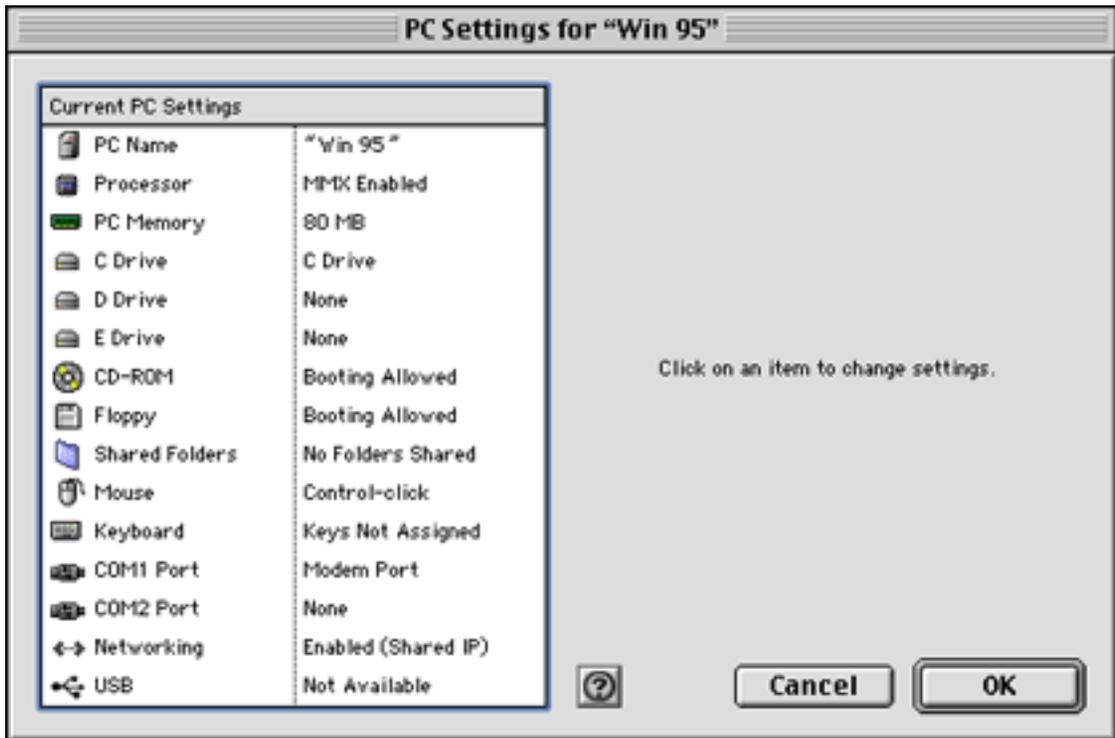
VPC sports a toolbar in the lower left corner. All the toolbar icons use contextual menus (Control-Click-hold). All the icons let you pop up the VPC Settings window. The hard drive icon also can launch the Disk Assistant application; the CD icon can unmount or eject a

CD; the floppy icon lets you unmount or eject a floppy (you also can mount a floppy disk image by dragging it to the icon); and the Shared Folder icon lets you navigate to a Macintosh folder for sharing. You may also drag a folder to the latter to share it.



VPC lets you adjust settings for each virtual machine you set up. Settings include RAM allocations, MMX activity, hard drive images, whether booting is allowed from CDs or floppies, the key modifier to emulate a right mouse button click, special keyboard mappings, COM port assignments, network settings and USB settings. RAM allocation has changed substantially from previous versions. The main VPC application receives a fixed amount of application RAM (7 MB) and each virtual machine is assigned additional RAM

beyond that. This is a substantial improvement over prior VPC versions which required users to adjust the VPC application RAM to change the RAM allocation of the emulated OS.

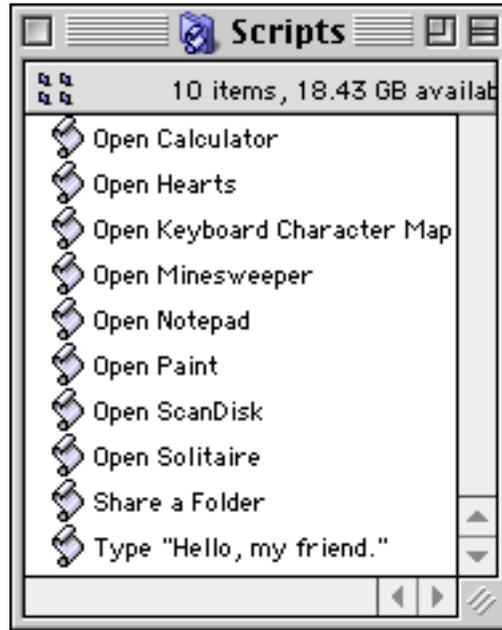


Virtual PC Settings Window

A timesaving feature of all versions of VPC is the ability to quit VPC without quitting Windows (or DOS or Linux). VPC can create a "saved" state that acts the same way as putting a PC laptop to sleep. You can relaunch the saved state in seconds, and your virtual machine appears exactly as you left it.

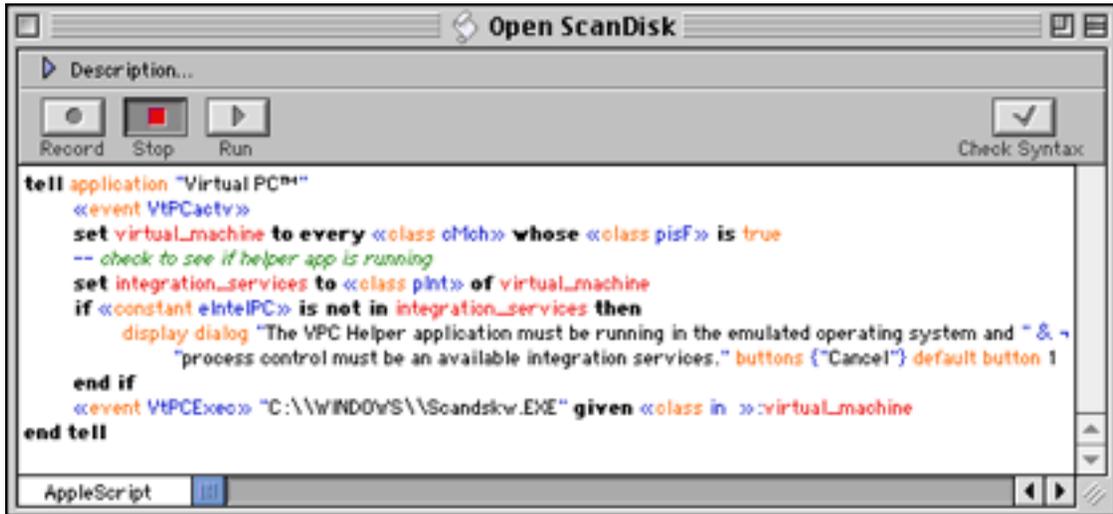
Virtual PC simplifies interactions between the Macintosh environment and emulated Windows or Linux environments. Macintosh files can be dragged and dropped onto the Windows desktop. Cut and paste work correctly for most text and most types of graphics. Macintosh folders can be shared with Windows or DOS virtual machines. Long Windows filenames are automatically truncated to 31-character names when copied from Windows to a shared folder. CDs and other removable volumes can be shared between the Macintosh and the virtual machine environments. If you can set up the virtual machine to

use DHCP (dynamic host control protocol), then your Macintosh IP address can be shared by the virtual machine. A local printer can also be shared, provided that it is a PostScript printer or is compatible with VPC's Epson AP3260 printer emulation (true for most inkjet printers).



Sample Scripts Included with Virtual PC

VPC 4 offers extensive AppleScript support, including recordability. Custom scripts can change virtual machine settings, launch a particular virtual machine, or open files on the virtual machine. A few sample AppleScripts are included. You will need a good background in AppleScript writing if you wish to create your own VPC scripts.



Script Editor Contents of a Utility Launching Script

Speed Benchmarks

Connectix's claims of doubled CPU speed in this version are correct. My [PassMark Performance Test 2](#) benchmark tests showed that VPC 4 integer addition, subtraction, and multiplication were nearly twice as fast as version 2.1.2. Division was only 20% faster, though. Floating point operations were 1.4–2.8 times faster. The overall math score was 2.4 times faster. Reading and writing to memory (cached and uncached) operations were 1.6 times faster. MMX-related tasks were 2.3 times faster, however 2D graphics manipulations were 30% slower. Reading and writing to disk were 6% slower (perhaps because of the expandable disk option, although other users have reported faster disk read/write speeds with expandable disks). The overall PassMark score for VPC 4 was 13.8, only 1.3 times better than VPC 2.1.2's score of 10.8. In contrast, a typical Celeron 300 MHz PC would get a PassMark score of 37.8 (2.7 times faster than VPC 4 on a 267 MHz G4).

I also did a crude speed comparison of VPC 4 vs. VPC 2.1.2 using the Benchmark function of Norton System Works 2.0. On a 250 MHz G3, VPC 4 scored 12 while VPC 2.1.2 scored 7. On my G4 267 MHz system, VPC 4 scored 43 (equivalent to a 200 MHz Pentium I) while VPC 2.1.2 scored only 16. The reason for this dramatic difference is that Norton System Works only benchmarks CPU and memory-related functions and omits graphics and disk read/write tests.

In my unofficial real world usage tests VPC 4 seems 25–50% faster than VPC 2.1.2 on a G3 Mac. On a G4 Mac, VPC seems 50–100% faster. The exceptions are disk-intensive tasks (no significant difference), video tasks (VPC 4 seems slower), and tasks that make use of my 3dfx (Voodoo) card (which is ignored by VPC 4).

Virtual PC 4 Problems and Bugs

Because VPC 4 is a complete rewrite, it behaves more like a 1.0 version of a product. There are many bugs and problems that do not affect prior versions. A major problem is that reopening a “saved” state does not restore network connections; you must restart the emulated OS to regain network connections. This makes the saved state worthless for many users. The inability to open a VPC 4 drive image in the Finder is a loss for many users. This situation affects both the expandable and fixed-size drive images created in VPC 4. Fortunately, drive images created with earlier versions of VPC can still be opened in the Finder, allowing you to copy, move, or modify Windows, DOS, or Linux files without launching VPC. (A workaround via ResEdit is available for fixed drive images created in VPC 4. Read how to do this in article 4483 on the Connectix support Web site.)

VPC 4 will not let you print to serial port printers using Epson emulation when using Mac OS 9.1. If your local printer supports PostScript, you can use it; otherwise you would have to go back to OS 9.0 or to a previous version of VPC. Windows Media Player generates a memory leak that affects application RAM in VPC 4, fixed only by quitting VPC. Many applications written in Java or in Visual Basic 3.x may not work with VPC 4, even if they ran under previous versions of VPC. VPC 4 is incompatible with Sonnet Crescendo G4 CPU accelerator cards (both NuBus and PCI), and does not support 3dfx cards. Gamers and graphics artists using VPC 2 or 3 to run Windows 3dfx programs should not switch to version 4. VPC 4 will not allow transfers of files larger than 5 MB between a Windows NT server and emulated Windows 98. Numerous other bugs have been reported relating to shared folders, Internet connections and telephony, specific Windows applications, etc.

Documentation and Technical Support

VPC 4 ships with a 136-page printed manual (also included on disk as an Acrobat PDF file). This manual is well-organized and useful but is not comprehensive. VPC 4 includes the Apple Guide file “Virtual PC Guide.” However, this file (accessed from the help menu of VPC) actually launches a Help Viewer document, not an Apple Guide document. The Help Viewer document contains some information that is not in the printed manual.



Virtual PC Help Table of Contents

Connectix offers free phone (toll call), e-mail, and Web-based technical support. Updates can be downloaded from the Web site. In the past, VPC technical support has been good and updates to fix bugs were released quickly. However, VPC 4 has numerous significant bugs that have not been fixed at the time of this writing, more than four months after release. The 4.0.1 update released in late January only fixed a few minor bugs.

Strengths and Weaknesses

Virtual PC 4 does have its advantages over previous versions. CPU intensive tasks are twice as fast as previous versions; expandable drive images conserve Macintosh drive space; and VPC emulations can share all your Macintosh Ethernet, PPP, and SLIP settings. VPC 4 can run multiple “virtual machines” simultaneously providing enough RAM is available, comes with full AppleScript support, including the ability to launch Windows applications or documents, and includes free technical support (although I have read many complaints about poor quality and timeliness of VPC 4 support).

Despite these advantages VPC 4 suffers from numerous bugs and incompatibilities. There is no support for 3dfx cards, and VPC 4 cannot print to serial printers with Mac OS 9.1. You cannot open drive images within Finder as with previous versions and you cannot convert an expandable drive image to a *small* fixed size drive image. When a saved VPC session is resumed, network connections are lost. A restart of the virtual machine is required to reconnect to the network. Launching a shut-down emulation always requires two steps (launch Virtual PC List, then launch the virtual machine), even if you have only one virtual machine. Last but not least, you cannot perform a clean install of Windows since a bootable CD is not included. (Virtual PC is being treated by Microsoft as if it were an OEM PC manufacturer. Microsoft will not allow Connectix to include a bootable Windows installation CD as it formerly did with VPC 1 or 2 and Windows 95.)

So what are the alternatives? FWB Software offers a download of [Real PC 1.1](#) via Insignia Solutions for \$30 (expect to pay \$36 for a CD version). If you wish to run Windows or Linux, you must purchase a separate copy. Real PC has had no significant upgrades since its release in 1998, and I do not know how fast or how well it works. Real PC appeals most to Mac gamers who wish to run DOS games.

I will in a future issue of ATPM review some low-cost, hardware-based alternatives to VPC that may work for many users.

Summary

I can only give a qualified recommendation for VPC 4. Owners of Macintosh computers with G4 CPUs who do not need Voodoo 3dfx graphics support will benefit from the increased speed, shared connections, and multiple simultaneous emulation capabilities of VPC 4. Most users will do better with VPC 3, at least until Connectix addresses the numerous problems and bugs in VPC 4.0.

Copyright © 2001 Gregory Tetrault, gtetrault@atpm.com. Reviewing in ATPM is open to anyone. If you're interested, write to us at reviews@atpm.com.



FAQ: Frequently Asked Questions

What Is ATPM?

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

Are You Looking for New Staff Members?

We currently need several **Contributing Editors**, an **Interviews Manager**, a **Copy Editor**, and a **Publicity Manager**. Please [contact us](#) if you’re interested.

How Can I Subscribe to ATPM?

Visit the [subscriptions page](#) or send an e-mail to subscriptions@atpm.com with the word help in the subject line. Instructions for subscribing and unsubscribing will be returned, shortly.

Which Format Is Best for Me?



The **Online Webzine** edition is for people who want to view ATPM in their Web browser, while connected to the Internet. It provides sharp text, lots of navigation options, and live links to ATPM back issues and other Web pages. You can use Sherlock to [search](#) all of the online issues at once.



The **Offline Webzine** is a HTML version of ATPM that is formatted for viewing offline and made available in a Stuffit archive to reduce file size. The graphics, content, and navigation elements are the same as with the Online Webzine, but you can view it without being connected to the Internet. It requires a Web browser.



The **Print PDF** edition is saved in Adobe Acrobat format. It has a two-column layout with smaller text and higher-resolution graphics that are optimized for printing. It may be viewed online in a browser, or downloaded and viewed in Adobe's free Acrobat Reader on Macintosh or Windows. PDFs may be magnified to any size and searched with ease.



The **Screen PDF** edition is also saved in Adobe Acrobat format. It's a one-column layout with larger text that's optimized for reading on-screen. It may be viewed online in a browser, or downloaded and viewed in Adobe's free Acrobat Reader on Macintosh or Windows. PDFs may be magnified to any size and searched with ease.

What Are Some Tips for Viewing PDFs?

- You can [download](#) Adobe Acrobat Reader for free. If you have a Power Macintosh, Acrobat Reader 4 has better quality and performance. ATPM is also compatible with Acrobat Reader 3, for those with 680x0 Macs.
- You can zoom the PDF to full window width and scroll through articles simply by single-clicking anywhere in the article text (except underlined links).
- You can quickly navigate between articles using the bookmarks pane at the left of the main viewing window.
- For best results on small screens, be sure to hide the bookmarks pane; that way you'll be able to see the entire page width at 100%.
- Try turning Font Smoothing on and off in Acrobat Reader's preferences to see which setting you prefer.
- All blue-underlined links are clickable. Links to external Web sites are reproduced in footnotes at the bottoms of pages, in case you are reading from a printed copy.
- You can hold down option while hovering over a link to see where it will lead.
- For best results, turn off Acrobat's "Fit to Page" option before printing.

Why Are Some Links Double-Underlined?

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

What If I Get Errors Decoding ATPM?

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

How Can I Submit Cover Art?

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

How Can I Send a Letter to the Editor?

Got a comment about an article that you read in ATPM? Is there something you'd like us to write about in a future issue? We'd love to hear from you. Send your e-mail to editor@atpm.com. We often publish the e-mail that comes our way.

Do You Answer Technical Support Questions?

Of course. Email our Help Department at help@atpm.com.

How Can I Contribute to ATPM?

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

Segments: Slices from the Macintosh Life

This is one of our most successful spaces and one of our favorite places. We think of it as kind of the ATPM "guest room." This is where we will publish that sentimental Macintosh story that you promised yourself you would one day write. It's that special place in ATPM that's specifically designated for your stories. We'd really like to hear from you. Several Segments contributors have gone on to become ATPM columnists. Send your stuff to editor@atpm.com.

Hardware and Software Reviews

ATPM publishes hardware and software reviews. However, we do things in a rather unique way. Techno-jargon can be useful to engineers but is not always a help to most Mac users. We like reviews that inform our readers about how a particular piece of hardware or software will help their Macintosh lives. We want them to know what works, how it may help them in their work, and how enthusiastic they are about recommending it to others. If you have a new piece of hardware or software that you'd like to review, contact our reviews editor at reviews@atpm.com for more information.

Shareware Reviews

Most of us have been there; we find that special piece of shareware that significantly improves the quality our Macintosh life and we wonder why the entire world hasn't heard about it. Now here's the chance to tell them! Simply let us know by writing up a short review for our shareware section. Send your reviews to reviews@atpm.com.

Which Products Have You Reviewed?

Check our [reviews index](#) for the complete list.

What is Your Rating Scale?

ATPM uses the following ratings (in order from best to worst): Excellent, Very Nice, Good, Okay, Rotten.

Will You Review My Product?

If you or your company has a product that you'd like to see reviewed, send a copy our way. We're always looking for interesting pieces of software to try out. Contact reviews@atpm.com for shipping information.

Can I Sponsor ATPM?

About This Particular Macintosh is free, and we intend to keep it this way. Our editors and staff are volunteers with "real" jobs who believe in the Macintosh way of computing. We don't make a profit, nor do we plan to. As such, we rely on advertisers to help us pay for our Web site and other expenses. Please consider supporting ATPM by advertising in our issues and on our web site. Contact advertise@atpm.com for more information.

Where Can I Find Back Issues of ATPM?

[Back issues](#) of ATPM, dating since April 1995, are available in DOCMaker stand-alone format. In addition, all issues since ATPM 2.05 (May 1996) are available in HTML format. You can [search](#) all of our back issues.

What If My Question Isn't Answered Above?

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

