AUGUST 1998

SUN	MON	TUE	WED	THU	FRI	SAT
2	3	4 7:00	5 7:00	6 7:00	7	8
9	10 7:00	11 7:00	12 7:00	13 7:00	14	15
16	17 7:00	18 7:00	19 6:30	20 7:00 7:00AM	21	22
23	24 7:00	25	26 Picnic	27 6:30	28	29
30	31	1 7:00	2 7:00	3 7:00	4	5

End of DRAGnet

DRAGnet see p3 & 5

---
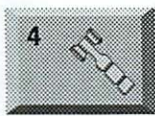
4 **Board of Directors**
mini'app'les members welcome.
Byerly's
7171 France Ave. S., Edina
Bruce Thompson, 546-1088

5 **ClarisWorks SIG**
Southdale Library
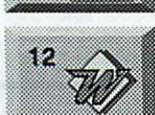7001 York Avenue S, Edina
John Hunkins, Jr., 457-8949

6 **Telecommunications SIG**
Epiphany Lutheran Church
1414 East 48th Street S, Mpls
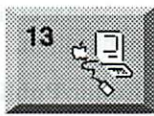Bert Persson, 861-9578

10 **Apple II/GS Main**
Augsburg Park Library,
7100 Nicollet Ave., Richfield
Tom Gates, 789-6981

11 **Newton/eMate SIG**
Java Jacks
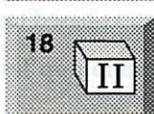818 W 46th Street, Mpls
Jennifer Hunt, 623-4754
jhunt@med.umn.edu

12 **Microsoft Word SIG**
2850 Metro Drive Rm 124, Blmgtn
Tom Ostertag
D 951-5520 E 488-9979

13 **Macintosh Main**
Washburn Library
5244 Lyndale Avenue S., Mpls
"Rick Hammond, Apple iMac"
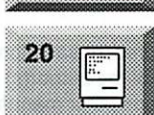Denis Diekhoff, 920-2437

17 **Fourth Dimension SIG**
8200 Humbolt Ave South
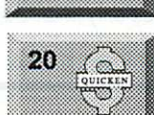2nd Flr. Conference Rm. Blmgtn
David Ringsmuth, 853-3024

18 **Apple II Novice SIG**
Ramsey County Library
2180 Hamline Avenue, Roseville
Tom Gates, 789-6981

19 **Photoshop**
Southdale Library
7001 York Avenue S, Edina
Denis Diekhoff, 920-2437

20 **Macintosh Consultants SIG**
Embers
7525 Wayzata Blvd
St. Louis Park
Bob Demeules, 559-1124

20 **Quicken/Investment SIG**
2850 Metro Drive, Rm 124
Bloomington
Dale Strand, 835-5872
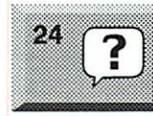
24 **Macintosh Novice SIG**
Merriam Park Library
1831 Marshall Ave, St. Paul
Tom Lufkin, 698-6523

26 **Picnic**
Minnehaha Park
(By the Picnic Pavilion)
Bring your own food and drink
and Chocolate Desert

27 **FileMaker Pro SIG**
1410 Energy park Dr #5
Saint Paul
Steve Wilmes, 458-1513

Mac Programmers SIG
Off for Summer
Restarts in September
Gervaise Kimm, 379-1836

mini'app'les

The Minnesota Apple Computer Users' Group, Inc.

P.O. Box 796, Hopkins, MN 55343

Introduction – This is the Newsletter of mini'app'les, the Minnesota Apple Computer Users' Group, Inc., a Minnesota non-profit club. The whole newsletter is copyrighted © by mini'app'les. Articles may be reproduced in other non-profit User Groups' publications except where specifically copyrighted by the author. (Permission to reproduce these articles must be given by the author.) Please include the source when reprinting.

Questions – Please direct questions to an appropriate board member. Users with technical questions should refer to the Members Helping Members section.

Dealers – mini'app'les does not endorse specific dealers. The club promotes distribution of information which may help members identify best buys and service. The club itself does not participate in bulk purchases of media, software, hardware and publications. Members may organize such activities on behalf of other members.

Advertisers – For information, see Newsletter Ad Rates box within this issue.

Newsletter Contributions – Please send contributions directly to our Post Office, Box 796, Hopkins, MN 55343 or upload them to our BBS at 824-4394.

Deadline for material for the next newsletter is the 1st of the month. An article will be printed when space permits and, if in the opinion of the Newsletter Editor or Manager, it constitutes material suitable for publication.

Editor/Publisher: Tom Ostertag 651-488-9979

Newsletter Layout: John Hunkins

mini'app'les BBS – 612-824-4394, 24 hrs. Settings: 8 -1-0. Call in with FirstClass® Client software or any text-based terminal program.

mini'app'les Voice Mail – 651-229-6952

mini'app'les WWW site: http://www.miniapples.org

Printed by GraphicsXpress

CHANGE OF ADDRESS

Moving? Going to be away from home and leaving a forwarding address with the Post Office? Please send us a Change of Address when you are informing others. By using a moment of your time and a few cents to drop us a card, you save the club some money and you get your newsletter delivered promptly to your new address. If you don't inform us, the Post Office puts your newsletter in the trash (they don't forward third class mail) and charges the club for informing us of your new address. Change of Address should be sent to the club's mailing address: mini'app'les, Attn: Membership Director, Box 796, Hopkins, MN 55343.

Table of Contents

End of DragNet

Come join mini'app'les members for the last sale at DragNet. See page 5 for more details.

Final Days Sale
DragNet
840 12th Ave NE, Minneapolis
August 6, 7, 8, 13,14,15
Contact: Tom Gates,789-6981
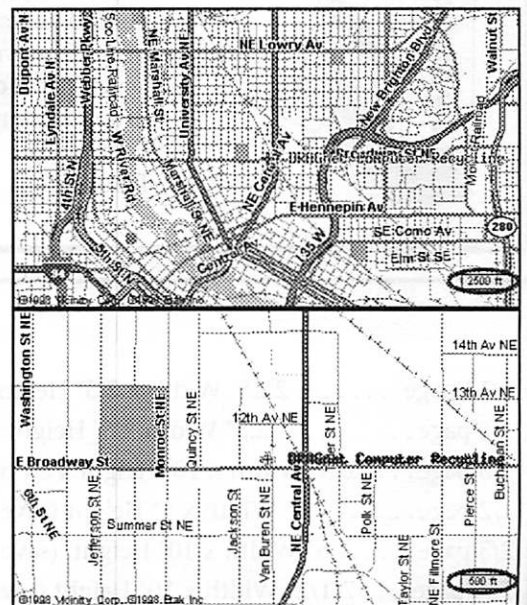
Members Helping Members

Macintosh	Key
Claris Draw	3
Claris Resolve	2
Claris Works	2,8,9,10
Cross-Platform File Trnsfr	6
FileMaker Pro	2
First Class	2
MacWrite Pro	2
Microsoft Excel	3,6,7
Microsoft Word	6
MYOB	7
Photoshop	4
Quicken	3,7
QuickBooks & Quickbooks (Pro)	7
System 7	9
Word Perfect	5
New Users	11

If you would like to be a "Members Helping Members" volunteer, please e-mail John Hunkins Sr. with your name & phone number on our BBS, or leave a voice-mail message at 229-6952, or use the MultiForm mailer near the back of this issue.

AppleII	Key		AppleIIGS	Key
Appleworks	1,6,9		Hypercard GS	1
Applewriter	6		Smartmoney GS	1
Publish It!	1			
To. Superfonts	1			
To. Superform	1			
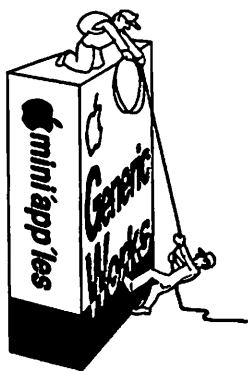
1. Les Anderson   735-3953   DEW
2. Brian Bantz   956-9814   DEW
3. Mike Carlson   1-218-387-2257   D
4. Eric Jacobson   645-6264   D
5. Nick Ludwig   593-7410   DEW
6. Tom Ostertag   488-9979   EW
7. Ardie Predweshny   823-6713   DEW
8. Owen Strand   427-2868   D
9. Bruce Thompson   546-1088   EW
10. Pam Lienke   457-6026   EW
11. Tom Lufkin   698-6523   EW

D-days (generally 9 a.m. to 5 p.m.)
E-evenings (generally 5 p.m. to 9 p.m.)
W-weekends (generally 1 p.m. to 9 p.m.)
In any case, call at reasonable hours and ask if this is a convenient time for them. By the way, these volunteers can also be reached on our BBS! We appreciate your cooperation.

Mac eDOM #981 - Time Utilities

AutoClock 1.4.4

Autoclock is an application and a system extension that maintains the accuracy of your Macintosh clock. As a matter of fact, the clock in your computer has the tendency to deviate from the correct time every day, and can accumulate to minutes or dozens of minutes after one year if not corrected. The applications allows you to: set the clock by calling a time server, set the clock manually from an accurate source, display a log of every clock change on your Macintosh whether it was done with AutoClock or with another application, compute the mean clock deviation of your clock for a 24-hour period using data recorded in the logbook, and display the date and time in almost any country of the world. The system extension allows you to: periodically open the AutoClock application according to your schedule to perform an automatic clock adjustment by calling the time server without any user intervention, keep the Macintosh clock continually correct by adjusting it using the computed mean clock deviation, automatically adjust the clock for Daylight Savings Time, and detect any clock changes done by any other programs and record them in the application's logbook.

Burbank 1.1.1

Burbank is an application that displays the time for up to four time zones using either digital or analog clocks. Keep open in the corner of your screen under MultiFinder or System 7. Handy for PowerBook owners on the road. Updated file with bug fixes.

Clock Talk

This Control Panel allows you Macintosh to speak and/or chime the time. You set your options for each quarter hour on the clock, and let Clock Talk do the rest. It is great for those (like me) who easily lose track of time while on the computer. It comes with several new sounds to enhance your experience.

CClock

CClock is a nifty little program which displays a clock in a window on the Mac. It is MultiFinder compatible so it can run in the background while you work on other programs. System 7 compatible.

Timer 3.5a

Need to time that three-minute egg? Timer is the computer equivalent of the timer on your oven or in your kitchen. Simply set the time period, click Start, and Timer informs you when the amount of time has elapsed.

Vremya 2.0

Vremya is an application that sets your Macintosh clock by using the Network Time Protocol (NTP). Though this is a simple implementation of NTP, the accuracy is sufficient for the Macintosh clock. Vremya can be configured to set the clock and quit automatically.

Y2K Countdown

Y2KCD (Y2K-year 2000, CD-countdown) Keep up-to-the-second countdown of the approaching millennium. May be useful for programmers or others working against the clock to fix the dreaded Millennium Bug. Oh wait, Macs don't have that problem, do they?

Goodbye DRAGNet
by Denis Diekhoff

One of the DRAGNet owners, Guy, told me today that they are going to liquidate to the walls with two garage sales in August. The first day of the first sale(August 6th) will be exclusively for the benefit of volunteer organizations and individuals (us).

Beginning at 10 am, Aug 6, we are invited to come and buy as much of the good stuff, and the bad, as we want at special low prices.

The sale will then be open to the public on Aug 7, 8, 13,14,15. Everything WILL go.

For a recorded announcement call 378-9796. Billy will be at Dragnet this Sat (July 25) and could use our help preparing for the event. Please come down and lend a hand if you can.

The State of Mac Gaming

By David M. Peck

Many a naysayer, including myself has said that Mac gaming is dead. Indeed after the summer of 97 many of us thought that the Mac was dead. Well, the Mac appears to be reviving with the help of Steve Jobs (nickname: the Axe) and maybe Mac gaming too, indirectly because of his efforts.

A look in the August Mac Addict shows a variety of existing games and new releases on the horizon. Although we don't have the row after row of games that the PeeCeers have, you can see from the following list that there is quite a lot to do (or soon will be) in the Mac gaming department. But we all subscribe to Mac Addict so you already knew this. I just helped focus our thoughts. Shoot, I can't even get all the games I have, played.

While there are several game companies mentioned, it's clear we owe MacSoft a debt of gratitude for keeping the multitude of Mac games a rolling out their doors along with Bungie and Blizzard.

A question for the mini'app'les Gaming Group....Which of the Marathon follow-on games will be the one to take over our networking obsessions? <g>

1. Diablo (Blizzard Entertainment, www.blizzard.com) p47.

– An RPG (role playing game) of fight the demons. As one person said, "Bonk the demon on the head and run away."

2. Links LS (Access Software Incorp) p49.

– Jack and Arnie's game.

3. The X Files (Fox Interactive, www.foxinterative.com), p52.

– The never ending govt. conspiracy to hide aliens from public knowledge.

4. Deer Hunter (MacSoft, www.wizworks.com/macsoft) p61.

– Shoot Bambie and drink beer.

5. Star Control 3 (MacSoft) p62.

– Real time space strategy game.

6. Unreal (MacSoft) p63.

– Marathon follow-on?

7. Civilization II (MacSoft) p65.

– Glogal strategy game.

8. Real Pool (MacSoft) p67.

– 3D photorealistic billiards.

9. Crop Circles (Zero Entertainment, www.zeroentertainment.com) p74.

– Draw crop circles and suck up cows for fuel? (really, that's what it says)

10. Dark Vengeance (Reality Bytes, www.realbytes.com) p74.

– Marathon follow-on??

11. Carmageddon 2 (?, www.sci.co.uk) p74.

– Run over little old ladies for points, the sequel.

12. Red Jack: Revenge of the Brethren (?, www.thq.com) p75.

– Pirate story.

13. Defiance (Logicware, www.logicware.com) p75.

– Marathon follow-on??

14. Myth (Bungie, www.bungie.com) p114.

– Carnage extreme in yee merry ole days. Those booby trapped staggering zombies are pretty nasty.

Dave's Limited Knowledge:

15. Starship Titanic.

– A lot like the game Titanic, but on a Starship named Titanic. Supposed to be humorous by the guy who wrote "Hitchhiker's Guide to the Universe". He must make more money doing games.

16. Screaming Demons over Europe.

– WWII era graphic accelerated combat flight sim. Supposed to start beta testing Oct. 97. Parsoft missed production dates, and lost much of their funding. Still say they are working on a Mac version. Fingers still crossed over this one.

Newsletter Corrections

Dear Tom and John

I want to thank both of you for your time and effort you put into the newsletter, but this month when I received my July newsletter I was a bit annoyed. Upon opening the newsletter to page 5, Mac eDOM #980 is credited to Bruce Thompson. This is incorrect. I sent the file to the For Newsletter Staff conference and believe I had my name under the title as submitted by. Please give credit where it is due.

Secondly, I submitted an article from Mac Today that I went to great lengths to get permission from the author for it to be reprinted and I have not seen it in the past two newsletters. What is the story with this article? Lastly, please be advised that my name is spelled BrYan, not Brian, as spelled in the article on the back page of the newsletter.
Bryan Lienke

It was not our intent to omit your name (or misspell it) for the article you wrote. Bruce Thompson has handled eDOM's for many years and old habits are hard to break. As for the article you submitted, please see else where in the newsletter an article titled "Why They Should Care About Apple".

We sincerely regret the errors. - Editor

The Last but Most Anticipated Game Rumor (yes Rumor):

17. Laura Croft (gulp), in TOMB RAIDER, p74.

Opinion- Why are men crazy about this character? Because she shows the achievement that an intelligent, athletic, modern, outgoing, fashion savvy, demure but well endowed woman can reach in today's male dominated action game. <g>

Apple][Software From the Internet

By Thomas Ostertag

There is a wealth of Apple][Software available on the net... as one can find by doing a search with one of the engines in Netscape or Internet Explorer. You can even download via ftp from several archive sites. The software is available as runnable software or as compressed usually in Shrinkit format. The later will require that you have Shrinkit on your Apple to decompress the software. Apple software usually comes on DOS 3.3 or ProDOS formatted disks. The former is available at Shrinkit files and the latter can be compressed but doesn't have to be.

The problem is how to get the software to your Apple //e.

There are a number of different methods for transferring the software. A purist would hook a fast modem to the Apple and then use Lynx through a local provider to ftp the software. The Apple IIGS also has a program called Marinette that hooks up directly to the local service provider.

This isn't the typical setup however, Another way is what is referred to as sneakernet. The sneakernet method requires a Mac to access the archive sites. The software is downloaded to the Mac hard drive. The Mac should be running MacOS 7.5 or later so there is an extension called PC Exchange installed.

The software can stay there, but you can't do anything with it. What needs to be done is to format 3.5" disks, Double Sided, Double Density, (800K) disks as ProDOS. This can be done with the Mac without any trouble at all. Next, copy the Apple software to the 3.5" disk. The Icon on the Mac looks like a 3.5" floppy, but has "II" on it. The next thing is to get the software to an Apple. But the Apple needs to have both a 5.25" drive and a 3.5" drive installed. The 3.5" drive can be a UniDisk 3.5" drive on an Apple //e or an Apple IIGS with a Apple 3.5" drive. Once you have the 3.5" disk in the drive, you can use any standard copy utility such as ProSel to copy the files from the 3.5" disk to the 5.25" disk. The 5.25" disks hold about 143K of software and the 3.5" disks hold about 800K of software or about 5 times as much. You may need a lot of 5.25" disks.

Some of the compressed files may need to be decompressed directly onto a 5.25" disk. Shrinkit should do this for you with ease.

If you have an Apple networked to a Mac, then a number of steps can be eliminated. You can copy or decompress the software directly from the network connection to the 5.25" disks.

iMac at August Mac Main

submitted by Denis Diekhoff

Rick Hammond of Apple Computer will demo the iMac at the August Mac Main. Mark your calendars for August 13, 7 PM Washburn Library.

Rick will also be with us at the September Mac Main where he will demo Mac OS 8.5. Mark your calendars for September 10th, location has not been confirmed.

Will my Macintosh become obsolete?

June 26 1998 by John Galt
Contributing Reader, MacOpinion
Submitted by Brian Lienke

A frequent concern of prospective computer purchasers is obsolescence. Even the cheapest new computer represents a significant outlay of after-tax dollars, and no one wants to be stuck with a boat anchor with performance measured in GB and MHz. Windows users who are unfamiliar with the Apple line often cite perceived obsolescence as their reason for choosing a Pentium box over a G3 equipped Macintosh. How does the Macintosh's life expectancy compare to Windows machines?

When you buy a new computer, even a Macintosh, you must acknowledge that you will be able to buy that same computer in a few weeks or months for less money (in real dollars, unsold computers in inventory lose from about one-half to one percent of their market value every week). By waiting for prices to fall, though, you forfeit the potential productivity you'd gain by using a computer right now. Advice of typical PC users is typically to buy the latest and greatest Wintel box because no matter what you buy, it will soon become obsolete. What to do? The decision is of course highly personal, but an easier one if you decide upon a Macintosh. Here's why:

Macintosh computers enjoy a longer life span than their Wintel counterparts, due at least in part to the fact that upgrades and improvements to their operating systems do not make existing applications (your investments) obsolete. For instance, if I had bought the latest and greatest 80386 PC in 1988 instead of my SE/30, I would have had to replace the processor and increase its clock speed in order to run Windows 95. Then, I'd have to upgrade all my software as well. And since Win95 is so memory and hard disk hungry, I'd likely have to buy a new hard disk and more memory as well. With the plethora of device drivers, configura-

tion software, and other nonsense that would have to be installed, I'd be in for several long weekends of crashes, rebooting in "safe mode", calls to tech support, and digging through manuals while deciphering mystical eight-character file names. When I'm done, I would still have the same crummy display and peripherals that I started with. Moreover, the investment in required hardware and software would likely exceed that of simply purchasing a new computer with a bunch of software already installed. So it's no wonder that no reasonable person bothers to upgrade a PC unless he starts with a totally free computer. Now you know why the PC people say always buy the best. In the Wintel universe, they're right!

Of course, this is brilliant marketing strategy. Planned obsolescence at its best. Microsoft exists and thrives on it. Don't misunderstand me; I'm not bashing the Intel - Microsoft behemoth. Directly or indirectly, they've created millions of jobs and contributed trillions of dollars to our economy. The United States' unprecedented economic success has been driven by computer technology and marketing strategies like this for nearly a decade. No one is forcing the public to buy Wintel products, the free market has created their success in spite of the existence of Apple's superior products. The fact that Apple enjoys less than five percent of the personal computer market share is a curious phenomenon of public gullibility that inspired me to write my previous story, Get the Word Out.

In terms of life expectancy, what can Wintel users expect today? For the answer, lets see what Microsoft has to say. Mr. Yusef Mehdi, speaking at trade shows as Microsoft marketer, has been advising corporations to upgrade directly to Windows NT, an immense operating system that makes it easier to add peripherals like scanners, joysticks, and video cameras to their computers. (This is

news? Haven't Macintosh users been doing that without problems for years?) Microsoft's senior vice president in charge for development of operating systems, Jim Allchin, calls Windows NT "the platform for the next millennium." Wait a minute! What happened to Windows 98? Stillborn. Said David Bank in the June 24, 1998 Wall Street Journal, "the technology underlying Windows 95 and Windows 98 is a dead end." Wasn't it just yesterday that the Rolling Stones introduced Windows 95 as the oh-so-cool operating system for the foreseeable future? Apparently, Win 95 has gone the way of Milli Vanilli.

So what does all this mean to an existing Wintel user? Microsoft says that Windows NT will require - that's right, REQUIRE - a 400 MHz Pentium II class processor and from 64 to 128 MB system memory. This from the company that originally said that Win 95 will run in 4 MB. Yeah, right. Windows NT's operating instructions are nearly twice that of the stillborn Windows 98. The vast majority of systems being sold today simply won't be able to handle NT. Software vendors are directing their energies toward NT since they know 95 and 98 are dead. It's entertaining to watch the expression on people's faces when they're told that their sexy two month old fastest-computer-on-the-block three thousand plus dollar 333 MHz Pentium has just become a relic.

Microsoft is naturally quite pleased with this situation. They stand to gain about twice their present revenue on each copy of NT over Windows 95 or 98. PC manufacturers are happy because they know everyone will want to trade in their 166 and 233 MHz relics for whatever machine they convince you to shell out another $2000 for. Wall Street is happiest of all, because investors know that consumers will be more than willing throw a significant amount of their disposable income at whatever Microsoft and

Intel tell them they need. The likelihood of this is certain — for many years now, Wintel buyers have been conditioned to tolerate planned obsolescence and the perceived requirement to upgrade their hardware and software every few months.

On the other hand, it can be argued that Apple has suffered financially because its products don't need to be sold in garage sales three years after they're bought. But from a consumer's perspective, when faced with an investment decision between the best Pentium box or Apple's current products, the choice is an easy one — IF you're informed.

In contrast with the 1988 vintage PC, today my SE/30 runs many of the same programs that I bought for my Mac Plus back in 1984 despite major improvements to the hardware and innumerable operating sys-

tem upgrades. In fact, if I want to use my SE/30's hard disk on the floppy-only Mac Plus, I simply unplug it from the SE/30 and plug it into the Plus's SCSI port. The Plus will even boot from the hard disk without skipping a beat even though it had never seen a hard disk in its life. Same thing if I want to transfer files to my Dad's Performa, or my brother's G3 running Apple's latest operating system. It's literally that simple. Could anyone using a PC from that stone-age era make the same claim?

The future isn't certain, but in the computer business (unlike mutual funds) past performance is an excellent indicator of future results. Wintel's future will be more fragmentation, more confusing CPU choices, more required upgrades, more unstable and resource-hungry operating systems. As for the pre-

sent, a 233 MHz G3 is approximately twice as fast as a similarly equipped 300 MHz Pentium II. If you look at the Wintel products in a similar price range, they don't have anything comparable today and wont for years. In announcing Merced's delay, Intel has conceded that they wont have a competitive alternative to the G3 for about two years — an eternity in terms of computer evolution. And will their new products require Wintel users to upgrade their software? What do you think? These indisputable facts guarantee against Macintosh obsolescence at least that amount of time during which Apple products will continue to evolve as they have in the past. As a Macintosh user, how can you go wrong?

Why They Should Care About Apple

Life in the Mac Lane (Editorial, Mac Today Magazine, www.mactoday.com)
Why They Should Care About Apple
Apple's success is vitally important. Especially for Windows users.
By Scott Kelbs, Mac Today Editor-in-Chief
submitted by Bryan Lienke

Once a week or so we get an email letter from a PC user smugly informing us that we might as well give up our fight because Apple is dead and Microsoft has won the war. The content of these letters is evenly divided between ridiculing what they call "our pointless defense of Apple" and a paragraph or so on how superior PCs are. These emails are generally self-congratulatory in their tone, as if the writers personally were the victors, rather than Intel or Microsoft.

So much heat, so little light

I've gotten used to getting these letters, but the one thing I really can't understand is their central theme "Apple's dead and we're absolutely delighted about it!" I used to email replies, dissecting their uninformed arguments line by line, and sharing real facts and figures

about Apple that (a) they hadn't heard from the PC-biased press and (b) they could not logically refute because, after all, these were facts, complete with references and sources to back them up. But they'd just respond that what I sent them were bald-faced lies (regardless of the sources) and it would just get uglier from there. I soon realized there was nothing I could say, no fact or figure I could supply, that would change their minds and reverse their deep hatred for Apple. Now, when I get PC-weeniehate mail, I don't go through the whole "dog and pony show" I just send them back this simple response: "Oh yeah, and you're a big fat stupid-head!" That's usually the end of it. I'm fully aware that this sort of sophomoric reply does nothing to help our cause, but it does a lot to keep me out of therapy.

I guess it just amazes me that there are people out there who will interrupt their busy lives to send hate mail to a magazine that deals with a product they themselves don't use. And I'm surprised that they're so passionate about their desire to see Apple wiped out of existence. I could

understand being mad or frustrated with Apple if you're an Apple customer, but if you don't use their product-really, why would you care? For example, when I'm on the road I generally rent cars from National. I like National. And as a National customer I've been quite mad at National on occasion over losing my reservation or not having a car available. But even though I'm a pretty solid National customer, I have no passionate interest in seeing Avis or Hertz go out of business. I just don't-care. In fact, I like the price and service competition that having Avis and Hertz in the rental car business brings.

So what's with these emailers? How would it enhance their lives if Apple went belly up? I guess that as much as we can't understandwhy they hate Apple so much, they probably can't understandwhy we feel about Apple the way we do. So I thought I'd examine why Mac users care about Apple in an effort to help the haters see the light, and the error in their death wish for Apple. The most ironic part is that Apple's continued success is especially impor-

tant to Windows users. They just don't know it. Yet.

Unique in the Industry

Lets look at PC industry leader Compaq. They're known for assembling well-built computers. Good looks, good construction,an Intel chip inside. But Apple, on the other hand, is a technology company. And frankly, comparing Apple to Compaq isn't really fair. It isn't fair to Compaq, because they're just a hardware company, whereas Apple is both a hardware and software company.

Apple also makes laser printers, scanners, digital cameras, personal digital assistants, speakers, monitors, color inkjets, and more. But what really makes Apple so special is that Apple creates, Apple invents, Apple innovates. And you can see Apple's innovation in many of Compaq's own products. For example,next time you're in the computer store, take a look at Compaq's laptop computers. You'll notice that most every laptop has a trackpad for a mouse. That's Apple technology. Apple was the company that introduced the trackpad to laptop computing and-now it's the standard across platforms. If it weren't for Apple,you'd see some lame trackball in its place.

While you're there slide on down to the IBM section of the store. See that video demo running on the IBM Presario? It's running because Apple's QuickTime technology makes it run. That's right, Apple's QuickTime is the standard on both Macintosh andWindows and without Apple you'd be looking at a slide show instead full-motion, full-screen video. And while you're there,check out that built-in CD-ROM player and thank Apple, the first company to bring CD-ROM technology to personal computers.

Now stroll over to the printer aisle. You'll notice that most every PC printer touts its use of TrueType fonts. They probably don't mention on the box that the font technology's full name is AppleTrueType. That's right, the standard for font technology on the PC is created by Apple.

This is just the beginning of what makes Apple truly special among the PC companies of the world, and gives you some insight as to why we care. Apple doesn't just assemble computer boxes, it shapes the entire industry.

Our side of the fence

Another reason we care is simply that Mac users have been spoiled by Apple. We've always gotten the hottest technology first. Icons, folders, menus, QuickTime, speech recognition, CD-ROMs, trackpads, etc., as well as always having the hottest software first.Applications like Adobe Photoshop, Painter, PageMaker,QuarkXPress, Illustrator, and even Microsoft Excel and Word were developed for the Macintosh first. Macintosh is the platformof true innovation.

It's not the box. It's what the box does.

Quick, think of an innovation that Compaq has pioneered that has changed the face of computing? Gotcha! There's no arguing that Compaq makes a great machine (and huge profits), but if they went out of business tomorrow, the public would just shrug their shoulders and move to a different aisle to buy a Packard Bell, a Sony, or an IBM that does EXACTLY THE SAME THING. If Compaq dies, you just buy a different brand. But if Apple dies,the technological leader in desktop computing dies along with it. New inventions would be stifled, new technologies snuffed out, and the only other choice for the technology-hungry public comes from a company that's not best known for original ideas and technology breakthroughs, it's best known for brilliant marketing - Microsoft.

A world with just one "choice"

Microsoft is a marketing juggernaut. It's known as a powerhouse, a monopoly, a company to be feared; but it's not generally known as a real innovator. It's a follower - somebody else has to lead theway. Netscape had the first successful browser. Years later there's Microsoft's Internet Explorer. AOL and CompuServe had the first online services. Years later Microsoft has MSN. CNN had the first 24-hour news station; years later Microsoft has MSNBC. Sony and Phillips had the first TV-based Web browser. Now Microsoft owns WebTV. Macintosh had a trash can on its desktop; 11 years later Microsoft introduced a recycling bin on its. If somebody else can come up with the idea, Microsoft can find a way to make a buck with it.

So why do we care?

Because we realize that Apple's not just another company, it's much more human than that. It has vision, creativity, it has a sense of humor, a conscious and genuine desire to create something better. And this attracts a certain kind of customer. A devoted customer. A passionate customer. One who deeply understands first-hand how different computing would be without it.

There's an intrinsic value to owning a Macintosh, a certain connection between you and the machine, similar to the connection Porsche owners feel with their sportscars, that you just can't putdown on paper. And it's the thought of giving up that feeling, of lowering your standards to settle for something less that sends chills up the spines of Macintosh users. Which makes us have a genuine desire for Apple to make it, and maybe that's why we care the way we do. But even though most PC users don't "get it," luckily we do. And that's why with all the Apple-bashing, Microsoft-bias, and bad news in the press, Apple still just posted a quarterly profit and will sell literally millions of Macintosh computers this year to devoted creative people who do "get it." People who do care about owning something special, and care about the company that makes it - Apple Computer.

Have You Backed Up Today? Part 2

by Adam C. Engst <ace@tidbits.com>
Submitted by Bruce Thompson

In TidBITS-432_ last week, I talked about the importance of backing up and offered some food for thought when considering different methods of safeguarding your important (and not-so- important) data. This week, I'll look at backup devices and software.

Backup Devices

Any storage device can act as a backup device, but that doesn't mean that you should rely on just _any_ storage device. Here are the main possibilities for everyday Mac users; I won't discuss expensive high-end stuff like 8 mm tape, digital linear tape (DLT), or autoloaders. Dantz Development has a Web page of similar information, including a cost-comparison table.
(http://www.dantz.com/backup_hardware/hoptions.html)

• Floppy disk: Get real. Macs come with multi-gigabyte hard disks, making floppy backups extremely unrealistic. If you're a Minimal Backup zealot, you can back up a few files to floppy, but you'll spend a long time recovering the rest of your disk when you have problems. Plus, floppies are notoriously unreliable - some may work for years, others may fail while you carry them across the room.

• Second hard disk: Hard disks are primarily useful as working backups that contain exact duplicates of original data. It's hard to do historical backups to hard disk, and it's expensive to create multiple backup sets. Two hard disks are unlikely to fail simultaneously, but both could be damaged by a serious power surge and are vulnerable to theft or disaster. I can't recommend a second hard disk as a sole backup device.

• Zip drive: Zip drives are inexpensive, with prices under $150, and cartridges prices around $10. But, Zip cartridges hold only 100 MB, which means you might need 20 or more to back up a 2 GB drive. In addition, Zip media and drive reliability aren't necessarily great. I see Zip disks as modern-day floppies, and don't trust them with truly important data.

• Magneto-optical: Magneto-optical drives come in sizes from 128 MB to 2.6 GB; prices on the current generation of 640 MB and 2.6 GB drives are about $400 and $1,700. Cartridges are fairly inexpensive at about $35 for 640 MB and $70 for 2.6 GB. Reliability reports are good, which places magneto-optical drives above other removable cartridge drives in my mind, although the smaller capacity of the less expensive drives might prove frustrating. They also aren't as popular as other types of removable media drives, which limits their utility if you want to use the cartridges for file transfer as well.

• Large removable media drives: Removable cartridge drives such as the Jaz and SyJet are based on the same rigid disk media used in hard disks and can store 1 GB or more per cartridge. These popular backup devices cost from $250 to $600, depending on capacity, but cartridges are expensive, running between $75 and $150. Although the media has the capacity to work well for backup, the cost is higher than I like, and there was a significant disagreement on TidBITS Talk with regard to reliability.

• Travan tape drive: I'm not particularly familiar with tape drives based on Travan technology - there are several products with different specs, and modern drives can read some older QIC (quarter-inch cartridge) tape formats. The general word is that they're quite inexpensive ($300 to $600 for a drive, with tapes running about $35 to $40) and capacious, although relatively slow, which isn't a serious problem for unattended backup. Tapes hold either 4 GB or 10 GB uncompressed, and you can generally assume at least 3:2 compression ratios, depending on your data.

• DAT tape drive: DAT drives are among the more expensive options, with drive costs ranging from $600 to $1,000. There are a few different DAT (also known as DDS) flavors that provide additional storage capacity, speed, and hardware-based data compression. Tapes are cheap, running between $5 and $15 each, and capacities range from 2.6 GB to 12 GB. Tape reliability is good but not great, but the low prices encourage multiple backup sets and lessen exposure to bad media. Many DAT drives come bundled with Retrospect, whereas most other storage devices don't include backup software. I've used an APS HyperDAT for nightly backups for five years now, and I've come to prefer and recommend a tape solution.

• CD-R: With the cost of CD recorders and recordable CD media dropping, CD-R has become a viable backup option. Drives cost between $350 and $600, depending on speed, and recordable CDs are as low as $2 to $3 each for 650 MB. Some people use a dual-media strategy - DAT tape for daily backups and CD-R for periodic archives. Keep in mind that you need backup software for the CD-R drive - standard CD burning software like Toast wastes space for each backup session. In contrast, true backup software like Retrospect or Retrospect Express can avoid that waste by using a technique called packet-recording. However, Retrospect may not support all older CD-R drives - check Dantz's Backup Mechanism Compatibility List or a similar list for other programs.

Backup Software

Backups don't just happen on their own, although some people feel they should. After you've purchased and set up a backup device, you must have software to handle the details of copying your files. Since at its heart, all a backup program does is copy files, there are a variety of different programs that you could conceivably use for backup. They fall into three different categories: true backup programs, file

copying utilities, and file synchronization utilities.

I don't consider a program to be a true backup program unless backup is its primary function. It should be able to perform full and incremental (only changed files) backups to a wide variety of media. You should be able to schedule backups, create multiple historical backup sets, and run backups unattended. High-end backup programs can back up over networks and work with different platforms. True backup programs may not a use Finder-readable format for backups, which enables them to compress and encrypt backups as well.

File copying and file synchronization utilities are fairly similar but differ in focus. Utilities like SpeedDoubler, the now-defunct CopyDoubler, and others focus primarily on enhancing the process of copying files in the Finder. These utilities may offer features for copying only changed files and scheduling copies, but they lack the features and the depth of a true backup program. One interesting entry in this category is DeskTape from Optima Technologies, which enables you to mount a DAT tape on the desktop like any other disk, albeit a tremendously slow one.

File synchronization utilities like Qdea's Synchronize Pro are designed to synchronize files between hard disks, often a desktop Mac and a PowerBook, but they usually claim backup capabilities as well. They can copy only changed files and can sometimes be automated. Unfortunately, they too lack the depth of true backup programs, generally being unable to use multiple backup sets, keep historical backups, or compress data.

Both types of utilities work well for creating simple working backups, but to my mind, relying on working backups to a single device is asking for trouble. To make such a strategy safe, you should back up regularly to multiple disks, include all appropriate files, and rotate backup sets manually such that you have some level

of historical backup. It's not impossible to do this by hand, but it requires thought and regular effort.

Several mainstream true backup programs are available, though many others, such as Redux and FastBack, have disappeared over time.

• Retrospect: Dantz Development is one of the oldest Mac developers, which is impressive considering that the company has only ever had a few products, all devoted to backup. Their flagship program, the powerful Retrospect 4.0, offers automation, compression, support for most backup devices, speedy network backup via Retrospect Clients (even over TCP/IP), support for Windows 95 and NT clients (PC Week even recommended using Retrospect on a Mac to back up Windows machines), flexibility for multiple backup sets on different automated schedules, a backup server that watches for the appearance of PowerBooks, and archiving features. Although Retrospect provides an EasyScript feature that walks you through creating backup scripts to automate backups, I've found that you're better off thinking carefully and crafting a custom backup strategy. I won't pretend that's easy - Retrospect's flexibility can make its interface rather abstract - but it has worked better for me than the generic strategy and schedule provided by EasyScript. I've used Retrospect for years, and once you understand its mindset, it's a great tool. It's also bundled with many tape drives, making it the easiest option for many people. If you must buy it, Retrospect 4.0 costs about $150 and a 5-user pack of Retrospect Clients is about $100.

• Retrospect Express: Retrospect Express is a new product from Dantz that's aimed at individual users, rather than people backing up multiple Macs over a network. Retrospect Express includes most of Retrospect's feature set, but with the notable exception of tape drive support - Retrospect Express assumes you'll use removable media drives, including CD-R. If you must buy a backup pro-

gram and you plan to back up to removable media, the $49.95 Retrospect Express represents an excellent value. It lacks a paper manual, but Dantz did an excellent job on the PDF version on the CD-ROM. Interestingly, the Retrospect Express CD-ROM contains English, French, and German versions of the software and the manual.

• DiskFit Direct/DiskFit Pro: These programs were Dantz's personal backup entries before Retrospect Express. They're very simple, lack flexibility, and don't support volumes with more than 32,000 files. They are compatible with Mac OS 8.1 otherwise, with the exception of the DiskFit Reminder utility. Although you can still find them, Dantz has said that they will be retired in July - after ten years. If you use either, they'll probably work for some time yet, but I can't recommend buying them.

• NovaMac: NovaStor's NovaMac claims a large feature set, including support for a variety of networks, unattended backup, support for numerous tape drives, and password protection. Comments I received indicated that early versions may have been difficult to figure out, possibly because NovaMac comes from NovaStor, a PC company for whom NovaMac is their sole Mac product. One reader said that although he didn't consider NovaMac quite up to Retrospect, he felt it was a good program, especially for people in cross-platform environments who - for whatever reason - didn't want to use Retrospect. NovaMac may be bundled with some tape drives. Otherwise, it appears to cost $49.50, although it's difficult to separate it from the PC versions on either NovaStor's site or in other online stores.

• CharisMac Backup Mastery: CharisMac's Backup Mastery claims to support CD-R, most SCSI tape drives, and removable media. It offers backup of selected files, unattended backup, scheduled backup, and more. It costs $129.95 and has a competitive upgrade offer of $39.95.

For those interested in backing up to tape drives, Backup Mastery is one of only three choices, along with Retrospect and NovaMac.

• DataSaver — Software Architects' $79.95 DataSaver 1.1 is a simple backup program for use with removable media. It provides filters for selecting specific types of files; supports multiple disk backups when using removable media; and estimates the required number of disks, total backup time, and the time before the next disk swap will be necessary.

• Personal Backup: Highware's

$49 Personal Backup is also a basic backup utility for use with removable media. It can perform incremental backups, operate in the background and backup on a schedule. Interestingly, Personal Backup is implemented as a control panel, and includes file synchronization and keystroke recording features. A two-week demo, in English or French, is available from the Highware Web site (275K download).

• A few backup programs for other platforms, such as Windows NT, can back up Mac clients, including Cheyenne ARCserve, Seagate

BackupExec, and IBM's ADSTAR Distributed Storage Manager. I mention these primarily in case anyone needs to convince a Windows NT-specific network administrator to back up a Mac on the network.

More Backup Thoughts

The third part of this series will talk briefly about shareware backup programs, plus look at a new Internet backup service for the Mac and services you can turn to in case of disaster.

Internet Backup via BackJack

by Adam C. Engst <ace@tidbits.com>
Submitted By Bruce Thompson

With the growth of the Internet over the last few years, there's been added interest in backing up data over the Internet. It's been on my mind for a long time - as far back as 1992, I wrote an April Fools article in TidBITS-114_ about a fictional company doing something along these lines.
<http://db.tidbits.com/getbits.acgi?tbar t=03157>

Fast forward to 1998, and several companies have products that enable computer users to back up files over an Internet connection. They don't back up everything, only selected files, and files are encrypted for security reasons. Restoration happens over the Internet, or, if the amount of data is too large, via a CD-R sent to you overnight. Internet-based backup is perfect for a few important files, especially if you aren't comfortable with your offsite backup situation. On the downside, many people on TidBITS Talk said they were uncomfortable relying solely on encryption for security, and to my mind, an Internet backup strategy falls into the Minimal Backup camp, making it most useful as an off-site adjunct to a more comprehensive backup strategy.
<http://www.yahoo.com/Business_and_ Economy/Companies/Computers/ Services/Backup/>

One-Eyed Jacks

The only Internet backup service currently available for Macintosh users is the just-released BackJack from Synectics, although I've heard rumblings about several other services that might appear soon. I've been playing with BackJack for a while now, and it has proved easy to set up and reliable so far.
<http://www.backjack.com/>
<http://db.tidbits.com/getbits.acgi?tbar t=04926>

BackJack's interface provides simple backup and recovery capabilities, which contributes to its ease-of-use, but the first version of the software lacks flexibility. It's clearly a first effort, albeit a functional one, and leaves room for future enhancement. For instance, to back up files, you select the folder that contains them, but there's no way to exclude specific files in that folder, and if you create a folder of aliases, BackJack doesn't resolve them and back up their originals. The company said it plans to address these issues soon in revisions to the free software.

BackJack does sport many basic backup features. You can create multiple sets of folders to back up, and each set can contain multiple folders. Each backup set can have a different automatic backup schedule, and BackJack has successfully kicked in every night and backed up my changed files. BackJack logs every-

thing it does, plus it sends you an email report after each session. You can set how large the log grows, and other options enable you to determine how many revisions of a document are kept online and how long backed up files are kept online after being deleted locally. This functionality is tremendously important, since it enables you to revert to earlier versions of files and to recover if you delete a file without realizing.

The actual backup process is a bit slow, in part because of the transmission over the Internet (I have a 56K frame relay connection; those people with dialup Internet connections will obviously see somewhat slower transmission performance, plus they'll have to let BackJack dial out automatically). Speed isn't much of an issue though, since backups will usually take place unattended in the middle of the night. Another performance hit comes from the fact that BackJack compresses files using a built-in version of Aladdin's StuffIt technology and then encrypts them using a 128-bit key that you generate during setup. No one has broken the 128-bit encryption scheme BackJack uses, so security is high. However, be careful to store the extra copy of your encryption key off-site on a floppy; in case of a disaster that wipes out your computer, you won't be able to retrieve and decrypt your files without a copy of that key. The

BackJack folks are investigating ways of avoiding that situation without compromising the security of the system.

Restoring a file from your backup over the Internet is easy - the Recover window provides a hierarchical view of your stored files, including any earlier revisions. The same interface enables you to enter dates for specific files to be deleted if you want to remove them from your backup. Although BackJack enables you to mark and unmark all the files, it lacks any way to retrieve just the latest versions of files or to find and mark specific ones through a search mechanism. If you back up a relatively small number of files that won't prove problematic, but it might with hundreds of files. The company has plans to offer a service that sends you all files on CD-R if necessary to avoid downloading all your data in the event of a complete recovery.

BackJack's documentation is available online and can be downloaded in HTML format. It's quite well done, although relatively basic, if mainly because the BackJack application doesn't have much depth. The documentation is good about answering the "Why" questions that always arise.

Ante Up

Pricing is a little complicated, since BackJack charges based on the amount of data you back up, the time of day you send it, and how much storage space you use on the BackJack servers. There's a $17.50 one-time setup fee, a $3.50 monthly administration fee, plus data transfer and storage fees. BackJack's transfer fees are 14 cents per megabyte from 11 PM to 9 AM and 35 cents per megabyte from 9 AM to 11 PM. (Times are always your local time.) In addition, BackJack charges less than half a cent ($.0035) per megabyte per day for storage. Recovering data is always free, and you can use BackJack on multiple computers with same account for no additional charge.
<http://www.backjack.com/pricing.html>

You'll usually want to schedule BackJack to back up in the middle of the night, and you should be careful with what you choose to back up, avoiding applications and system files and, for instance, Web browser cache files if you plan to back up your Preferences folder.

In a sample situation where a user backs up 75 MB initially and then about 1 MB per day afterwards, the first month (including the setup fee) would cost about $45 and each subsequent month about $17. That

pricing is in line with two popular PC Internet backup services: Atrieva charges $14.95 per month for up to two computers, and Connected Online Backup charges $19.95 per month per computer for up to 10 machines. Neither charges transfer or storage fees. They're probably betting that most people don't have the bandwidth to back up large quantities of data, plus they're counting on the fact most people won't back up Windows system files or applications because it's so difficult to restore them to a working state without doing a clean install.
<http://www.atrieva.com/>
<http://www.connected.com/>

In response to my comments about pricing, the BackJack folks noted that they felt uncomfortable using a flat rate pricing model that would in essence charge low-end users more to subsidize the high- end users who use far more of the system's capacity. That's a laudable goal, and I hope the pricing model doesn't dissuade people who are uncomfortable not knowing precisely how much they'd be paying.

These concerns aside, I'm quite impressed with BackJack as a first effort, and it's well worth a look for anyone interested in Internet backup, particularly those people planning on buying standalone iMacs immediately when they're released.

The iMac is here!

By Charlie Downs
Submitted by Denis Diekhoff

It's 'downright cute,' and packs lots of power
Online editor's note: We sent Macintosh columnist Charles Downs to check out the new iMac when it rolled through town recently. Here is his dispatch from the cutting edge of technology.
By Charles Downs Special to Arizona Central June 22, 1998

They just don't get it - the pundits who decry Apple's iMac as a "stripped down, cost-cutting, entry-level" computer.

Entry level? Yes, because at $1,299 (computer, monitor, key-

board, mouse and modem), it's the lowest cost Mac in the lineup.

Cost-cutting? Yes, Apple reined in cost by opting for a 233-MHz G3 processor rather than a 292-MHz chip and a 36.6K modem instead of a 56K. Big deal. The iMac still smokes a 400-MHz Pentium II, as you'll see.

Stripped down? That's a mind set. The apparently "Spartan" iMac is showing us the future of personal computing.

The iMac's sort of strange. It doesn't look like a Mac. It's downright cute. It even looks as if it was designed to appeal to kids rather

than adults.

You can almost see its innards through the translucent "Bondi blue" (pronounced "bondeye," after a beach in Australia) case. The keyboard is translucent, the line cord is translucent. The mouse is translucent. I'm waiting for some wag to introduce an after market "illumination kit" that will install small lights in the computer, keyboard and mouse. That would be a kick.

Don't let the pretty face fool you. When you get past the radical design, you begin to see some really user-friendly engineering - and some muscle.

Let's say you want to bump the 32-megs of factory-installed RAM up to the limit of 128MB. Open a rear door, loosen a couple of latches, and you can slide the whole chassis out of the case. The storage devices (hard drive and 24X CD-ROM) are on the chassis, too.

Interconnection ports - there are only two, the USB port and a telephone jack - are hidden behind a cover on the right side. There are two stereo head phone jacks on the front panel, along with the surround-sound stereo speakers. The drop-in CD-ROM tray emerges from the center of the front panel at the touch of a button. A lighted button on the panel indicates that the iMac is sleeping. Touch any key and it wakes up. A 4-megabyte/second IrDA-compliant infrared port on the panel beams data to other IrDA devices such as PowerBooks and printers.

But it's that little G3 chip inside that makes the Apple "entry level" a bit exciting. The $1,299 iMac is 41 percent faster than the $2,599 400-MHz Compaq Presario 4800? And 246 percent faster than a 233 MHz Compaq 4550? Yes, it is. And that $1,299 includes monitor, keyboard, mouse, modem, CD-ROM and Ethernet!

Options? Only one, the "Windows 95 Option," which costs $149.95 at Mac Warehouse. Actually, it's Virtual PC 2.0 with Windows software from Connectix. With Virtual PC installed, you can run Windows 95 and Apple's OS 8.1 simultaneously.

You can drag a file from the Mac window to the Windows window and back again. The iMac's factory-installed 32MB of RAM is enough to run Virtual PC comfortably, but you'd be happier with another 32MB. Oh, and by the way, the iMac uses the cheap SDRAM you can buy at Fry's electronics. A 32MB chip costs $42.95 - $1.34 a megabyte!

Let's see now, $1,299 for the computer, $149.95 for Windows and $42.95 for another 32MB of RAM. That brings the price of this little

box that will beat the pants off of a $2,599 Pentium PC up to $1,491.90.

The iMac was shown off to an appreciative crowd of 300 people at a recent Arizona Macintosh Users Group meeting in Phoenix.

When the iMac was announced in May, the question was, "Will anyone buy it?"

The question posed by some very knowledgeable Mac users at the AMUG meeting was, "Can Apple make these fast enough to meet the demand?"

iMac Product Manager Mike Shebanek assured the audience it will. "The iMac is eminently manufacturable," he said.

And watch for the price to drop, as it usually does when the production line starts cookin'. I'll bet you that before the end of the year you'll find the iMac it at the larger mail-order sources for as little as $999, or it will go for list price with Virtual PC tossed in at no additional cost.

WHAT'S MISSING?

In my description of the iMac you may have noticed I didn't say where the floppy slot is. It isn't. Face it, the sun is setting on floppy disks as a storage medium. It costs developers more money to supply software on floppies than on a CD. And then there's the flop's capacity: "Do you really want to back up your 4GB disk on 1.4MB floppies," asked Shebanek. "Do you know how many floppies that would take?" (Answer: About 3,075.)

But if you really want to use a floppy drive with your iMac, Imation and Panasonic have announced they will have an USB-compatible external floppy drive available for the computer in August, when iMacs begin to ship. The drive will read and write 800K, 1.4MB and 120MB disks in either IBM or Macintosh format. The price hasn't been announced, but I'd guess it will be in the $200 to $300 range.

You can't hook up your ZIP drive or your SCSI scanner or an external to the iMac, either. Gone is the SCSI interface. Instead, Apple has moved

to the next data-transfer technology, the USB (Universal Serial Bus) interface. It moves data at about 1.5 megabytes/second. You can connect up to 127 USB devices such as digital cameras, scanners, printers, joy sticks, and graphic tablets at one time. "If someone does that, give me a call," said Mike Shebanek. "I want to come to your house and take a picture of it."

Both the PC and the Mac worlds are embracing USB technology. If you want to see what you can plug into the iMac's USB bus, take a look at four web sites:

USB Implementers Forum - http://www.usb.org

USB Stuff - http://www.usbstuff.com/

USB FAQs - http://www.usb.org/usb/faqs.html

Why USB on the Mac OS?

USB devices are "hot-swapable." Pull a SCSI cable with power on, and you take a very real risk of frying your motherboard. You can connect and disconnect USB devices with power on. Plug a device in, and the iMac senses that it's been added to the bus, loads the appropriate driver, and the device icon appears on the desktop. No SCSI addresses; no address conflicts.

I CAN'T USE MY ZIP DRIVE?

That's right. And here's where we're going to discuss the future of personal computing. The iMac is touted by Apple as "The Internet-age computer for the rest of us." The assumption is that you have Web access, and that if you have Web access, you have email, and if you have email you can move files - even really big files - from point A to point B electronically.

You're at your office and you need to take a file home to work on it this evening. Instead of dumping it to a ZIP cartridge or floppy, you simply email it to yourself. When you get home, you download it from your email server. When you're done working on it, e-mail it back to yourself.

Or you want to move that Quark

XPress brochure to your service agency. Instead of sending a SyQuest cartridge by messenger, you compress it with StuffIt and email it.

BUT IT'S ONLY GOT A 36.6 MODEM. WHY NOT 56K?

Do you have a 56K modem? Can you achieve 56K performance on your phone line? Betcha you can't. A 36.6 modem - if your phone line will even support that transfer rate, is pretty fast. Most phone lines won't handle much more than 28.8.

But the modem is rapidly becoming an obsolete way to connect to the world. Phone companies, cable companies and satellite services are offering far faster connections that you can get with a modem - as fast as 10 MB/second.

These faster services use Ethernet rather than a modem to get data into

and out of the computer. That's where the little RJ45 jack on the back of the iMac comes into play. The iMac supports 10/100Base-Tx Ethernet. That means it will transfer data at 10 or 100 MB/second depending on the capacity of a network. This lets the iMac shine in the Ethernet environment of an office or a college campus.

And you'll be able to use a LocalTalk Bridge to connect your iMac, via Ethernet, to your AppleTalk printer.

WOULD I WANT AN iMac?

You're darn right I would. I do some rather heavy-duty desktop publishing and web-page maintenance. I'd rather have the 266 G3 MT I'm writing this with simply because its expansion capabilities suit my purposes better. But if some-

one told me I'd have to give up the big G3 for an iMac, I wouldn't be all that unhappy. The iMac would do everything the minitower G3 can do, just a tad more slowly.

The iMac is powerful, fast and takes up very little space in your workspace. It leaves the Pentiums in the dust. It will log on to the Internet right out of the box. You should be so lucky as to have this "entry level" Mac.

Charlie Downs is the public information officer and webmaster for the Arizona Department of Real Estate. Downs, an expert on all things Macintosh, helped manage the Macintosh forums on CompuServe for several years. He is a member of the Arizona Macintosh Users Group, and a team member of the new Mac Web site, MacAlliance. He welcomes your Mac questions and any suggestions you have for topics for "The Well-Healed Mac."

©Copyright, The Arizona Republic

USB and You

by Jerry Kindall <kindall@manual.com>
Submitted by David M. Peck

With the announcement of the iMac we started hearing a totally new abbreviation in the Macintosh world - USB. Gone were our familiar ADB ports and modem ports and printer ports, not to mention SCSI. Why is Apple moving to USB? What was wrong with serial ports and what's good about USB ports?
<http://www.apple.com/imac/>

What Is USB?

USB stands for "Universal Serial Bus" and is a special kind of serial port that's growing in popularity in the Windows world. Most late-model PCs have at least one USB port, and Windows 98 introduces plug-and-play support for devices attached to the USB port. (Bill Gates's widely reported COMDEX crash occurred as he was connecting a USB scanner to a PC running Windows 98. But that's no worse than how Windows plug-and-play often works.)

USB is intended to replace all the various types of low-to-medium-speed data ports hanging off the back of a PC (although most current

PCs with USB also have at least some of the old-style ports). This includes not only the serial ports but also keyboard ports, mouse ports (which, on a PC, are basically another serial port), and parallel ports. Keep in mind that on a PC, the parallel port is used not just for printers but also for other devices such as Zip drives, tape drives, scanners, and even some modems.

Given that USB is intended to replace the parallel port as well as lower-speed serial ports, and to do it all at once, it's pretty speedy. USB devices can talk to the computer at two speeds: 1.5 Mbps or 12 Mbps (that's millions of bits per second, and remember, there are 8 bits per byte if you want to translate to bytes per second). In comparison, the Mac's serial ports max out at 230.4 Kbps, and ADB at just over 1 Kbps. Devices like keyboards and mice will use the slower speed; devices like Zip drives, printers, and scanners will use the faster speed. Both speeds can be connected to a single USB bus.

Ah, the bus. The term conjures images of the Apple Desktop Bus (ADB), Apple's standard way of con-

necting input devices to the computer, with its easy daisy-chaining. USB doesn't support daisy-chaining in the same way. Each USB port can host one and only one peripheral. However, that peripheral can be a device called a _hub_, which provides additional USB ports for more devices. Up to 127 devices can be connected to a single USB port using a collection of hubs. (Theoretically, a device could incorporate a "single-port hub" for daisy-chaining, but this isn't likely in the price-conscious PC market.)

Like ADB devices, USB devices can draw power directly from the bus, within limits. If you have many power-hungry USB devices, you'll want a powered hub to provide current for them. (The serious power hogs - things with moving parts and motors, like printers and scanners - will have their own power supplies and won't rely on the USB for power.)

USB Devices

What kinds of devices will be available? Input devices, obviously: keyboards, mice, graphic tablets, joy-

sticks, and so on. Anything that typically hangs off a PC parallel port is also fair game, which means we'll probably see USB Zip drives and other relatively slow mass storage devices (in fact, Imation and Panasonic have already announced a USB version of their LS-120 SuperDisk drive, which reads both 120 MB and 1.44 MB disks). Other USB candidates include tape drives, scanners, digital still cameras, modems, and printers. Newer Technology has also announced plans to create a USB-based floppy drive, specifically for the iMac. Many cable modems and ADSL adapters operate within the bandwidth of USB, so we might see those kinds of devices as well. The 12 Mbps variant of USB is faster than standard 10 Mbps Ethernet.

Although there will undoubtedly be USB Zip drives (or similar cartridge-type drives like the LS-120), don't expect decent performance from hard disks attached to the USB. Though a USB Zip drive will probably be faster than the PC parallel port version, and more than adequate for the kind of exercise a consumer is likely to give such a peripheral, SCSI is still faster. Even the slowest version of SCSI has a raw throughput of 5 MB per second, more than 3 times faster than USB, and the newer Ultra/Wide SCSI III can reach 40 MB per second. For hard disks and digital video cameras, you'll still want SCSI, or the ultra-high-speed serial port dubbed FireWire, which is yet another topic.

USB and the Mac

How do Mac users benefit from USB? The obvious answer is that we can tap into the competitive jungle that is the PC marketplace. Before long, you'll be able to buy $15 keyboards just like your PC-using friends. (Of course, they'll be PC keyboards, but they'll work on your Mac.) Each USB device identifies itself through a generic "type" ("I'm a keyboard," "I'm a mouse," "I'm a Reality Distortion Field generator"), and a USB-compatible Mac will have

a USB Manager with built-in drivers that let it talk to many devices in at least a minimal way. You'll need Mac-specific drivers to take full advantage of many peripherals, but it's a lot cheaper for manufacturers to create an extra piece of software than to make both a parallel port and a SCSI version of a removable-media disk drive for different markets. PC Cards work in much the same way now - the standard PC Card modem drivers work with almost any PC Card modem, but more specialized PC Cards require custom drivers. A few manufacturers have already announced Mac support for their USB peripherals. If the iMac takes off as retailers expect it to, many more manufacturers should follow suit.

USB has faced an uphill battle in the Windows world because of drivers. One of the primary reasons for the success of Windows over the years is that Microsoft includes a vast collection of drivers for different hardware devices with Windows itself, reducing installation difficulty and conflicts. However, since USB came out after Windows 95, drivers have all been provided by the individual USB peripheral developers, resulting in chaos. The just-released Windows 98 includes better USB support, so there's hope that the field will settle down. Apple's strategy of including drivers for common types of USB devices may make USB far more coherent on the Mac.

The iMac's keyboard, by the way, has a built-in two-port hub, so you can attach one additional device besides the mouse. The iMac itself has two independent USB ports (each with its own 12 Mbps bandwidth), which means that the stock iMac supports two additional USB peripherals (along with a mouse and keyboard), one connected directly to the computer and the second connected to the keyboard. If you need more USB ports, 4-port hubs run about $100 right now, but some observers expect them to fall to the $50 range as USB catches on, much as happened with Ethernet hubs.

Along with Newer Technology's announced plans to create a USB-to-serial converter, the rumor mill is hinting that at least one manufacturer will introduce a USB peripheral that will provide "old-style" Mac serial, ADB, and (really slow) SCSI ports, so users who move to an iMac from an older Mac can take at least their old printers and modems with them and hook up their old hard disks long enough to copy all their data over. An iMac with such an adapter and an ADB credit-card reader and barcode scanner would make a groovy-looking point-of-sale terminal (at least until there are Mac-compatible USB versions of these peripherals). Though it's never a good idea to put faith in rumors, this seems like an obvious product, if it can be produced at a reasonable price. Don't expect total software compatibility, though, as some software products unreasonably assume that no characteristics of serial ports ever change.

You can find out more about USB from a Web site operated by a USB industry consortium, and see what kinds of peripherals are available by visiting USB Stuff, a retailer of USB peripherals. Finally, MacInTouch has collected a variety of bits of information about USB contributed by readers.

<http://www.usb.org/>
<http://www.usbstuff.com/>
<http://www.macintouch.com/usb.html>
[This article is reprinted and updated with permission from MWJ, the Weekly Journal for Serious Macintosh Users. If you can't get enough insightful Macintosh news, sign up for a free, no-obligation, two-issue trial subscription to MWJ, or download some of the free sample articles. For more information, see the MWJ Web site.]
<http://www.gcsf.com/>

MacAlliance

By Neil Shapiro,
<NEIL@compuserve.com>
Submitted by David M. Peck

There's a new Web Site for Macintosh enthusiasts — a Site featuring well-known experts in both the Mac and on-line communities. Best of all, the new MacAlliance is totally free to anyone with an interest in talking about the Mac!

Macintosh experts now associated with eFriends Inc.'s MacAlliance and ready to welcome all to this new and free Internet community site include Neil Shapiro, David Ramsey, Bill Cook, Billy Steinberg, Lofty Becker, Marty Silbernik, Charlie Downs, Bob Hung, David S. Rose, Adam Newman, Doug Groesbeck, Shawn Goodin, Robert Wiggins and others. Those familiar with the Macintosh community will realize that no other organization in the world can offer this level of expertise and support!

Neil Shapiro first established Forums for Apple-branded computers in 1980 when he opened a Forum for the Apple II on a major commercial network. Then, in 1984, with the advent of the Macintosh, that group (known then as the MAUG(R) Group) expanded into more than 15 Forums. Mr. Shapiro was also the founding editor-in-chief of MACUSER Magazine. (While at MACUSER he wrote the editorial and then a monthly column called "The Macintosh Community" and that column continues now on MacAlliance.)

Shapiro is the President of eFriends Inc. and is the guiding force behind MacAlliance. Neil stated, "We hope that by having a Site free to all who wish to share their Mac dreams, plans and techniques that this in itself will help bring the Mac back to the market share it so richly deserves."

MacAlliance is beginning with Forums accessible to anyone on the World Wide Web using any browser. Forums on Software, Hardware, the Mac Community, Gaming and Internet-Related interests will help all Mac owners to zero in on making the best choices for setting up their systems, help them keep their Macs running at optimum efficiency and to get the most value and enjoyment from them. Special sections in these Forums will offer emergency help, guidance in solving System problems, gaming hints and techniques, insider tips on where to go on the WWW and much, much more.

MacAlliance is now the premier stopping point on the Web for anyone interested in the Mac and will be structured as a true community. The goal of MacAlliance, according to Neil Shapiro, is to be always "the best place your Macintosh can take you!"

Drop on by today at <http://www.macalliance.com> and become a Charter member of this exciting new community. And, bring your Mac!

MacGZip – A Unix Utility for Mac Users

By Frank Harris
Submitted by Bert H. Persson
Published in the Washington Apple PI,
The Journal of the Washington Apple PI,
Ltd.

There are many compression utilities and many compression algorithms or formats.

File compression in the Mac world is dominated by Stuffit and Compact Pro. However, the most all-around efficient compression is done by gzip, which is a utility in the Unix operating system.

The place were gzip is needed by some Mac users, is for making the most efficient use of the Los Alamos archives of technical reports and preprints of Physics articles. I recently retrieved a technical report from Los Alamos as a PDF file for Adobe Acrobat Reader (60KB), and then got the source code in gzipped form (8KB). It was also available as PostScript (about 750 KB).

MacGZip is a straight port from Unix. It does two things and it does them well - compress files and extract or decompress files. Unlike Stuffit and Compact Pro, MacGzip does not archive multiple files unless you use Unix Tar or similar utility to make an archive in a separate step. Since I deal with Unix people every day, I frequently use Stuffit Deluxe to make a tar archive, then compress it using MacGZip. The resulting file is 100 % Unix compatible, and somewhat smaller than a stuffed archive. I do the process in reverse when I receive files from my Unix correspondents.

Compressing files with MacGZip is just a matter of dragging the file onto the MacGZip icon. After about a second, a chime sounds and the file is compressed, and a ".gz" suffix is appended to the name. To extract a file, double-click on MacGZip and then choose extract from the menu, and open the file using the dialog box. If you do not see the file you want, it might help to click on the "View all files," check box. MacGZip checks both for the .gz extension, and the Mac file type information. But if "View all files" is checked, it can open gzipped files with the wrong file type and / or the wrong extension.

That's about it. I got a copy off the Internet and uploaded it. I see that it has been placed in File transfer Area 23. It's File number 622 and is named MACGZIPO.3B.SIT.

MacGZip it freeware. I believe it is from GNU and the only conditions for its use are that it should be passed along for free, and not be charged for, although shipping and handling fees for diskette distribution may be allowed. Fast, efficient, and free. What else could you ask for?

Oil of OLE: Document Security and You

by Geoff Duncan <geoff@tidbits.com>
Submitted by Allen Dundack

During the last two weeks, reports of a security problem with Microsoft Office 98 for the Macintosh have been published from Macintosh news venues such as MacAddict, MacFixIt, and MacWEEK. According to these stories, Microsoft Office 98 applications - particularly Microsoft Word - may acquire random data elsewhere on your computer and incorporate it invisibly into your Office data files.

Here's the bad news: the problem is real and long-standing. Further, the problem applies to all applications using Microsoft's OLE technology on the Mac, not just Office 98, and there's no guaranteed way to work around the problem right now.

Here's the good news: though serious, this problem isn't a tremendous concern to many Mac users, and a fix should be available from Microsoft shortly. Furthermore, you can do simple things right now to reduce your exposure to this problem significantly.

Thanks for the Memory

The problem seems to stem from applications writing uninitialized OLE data structures to disk, which allows information previously in RAM or on disk to be incorporated into a document's data. Though the OLE applications don't display or use this data, it does become part of the file and can be viewed in that file using other programs, such as BBEdit or a disk editor.

OLE (pronounced "oh-lay") stands for Object Linking and Embedding, a technology created by Microsoft that, in essence, lets applications share code and data. Although it's more established under Windows, OLE has been available on the Mac since at least 1992 and has been incorporated into a variety of mainstream Macintosh applications, including Microsoft Office and Adobe PageMaker. OLE is also the basis of Microsoft's COM (Common Object Model) and ActiveX technologies, and has outlived competing Apple technologies such as Publish & Subscribe and OpenDoc.

So, what's an uninitialized data structure, and why is writing it to disk a problem?

When an application needs to deal with some data, it asks the operating system for a block of RAM to store the information. In general terms, the operating system either responds with an error (if the memory isn't available) or an address pointing to the start of a memory block.

However, when an operating system gives an application a block of memory, that doesn't mean the memory is empty, just available. In fact, the memory probably contains remnants of previously stored data - possibly even if it was put there before the computer was last restarted (although shutting down your Mac will clear out your RAM). This memory is usually described as "uninitialized," because its initial contents can't be easily predicted. Usually, the contents of uninitialized memory don't matter: the application's next action is often to initialize the memory (filling it all with zeros, for example) or fill it with actual data - sometimes, applications do both. But if the application doesn't initialize or overwrite the memory, any pre- existing data remains intact.

Something similar happens with disk space. When an application writes information to disk, the operating system locates some disk space, then writes the data to it. But, like RAM, the disk space may not be empty, and can contain information previously stored there. (When you delete a file, the areas where that file was stored aren't erased, just marked as available for re-use. That's how data-recovery programs such as Norton Utilities are often able to "unerase" files you've deleted recently.) Once again, an application will usually overwrite any pre-existing data in disk space it plans to use. But if the application doesn't overwrite the entire disk space - and most applications don't aways do so completely - then the original data (or a portion of it) will remain.

Oy vey OLE

Applications that use OLE seem to display two behaviors that constitute a possible security problem. First, information previously stored in disk sectors to which OLE data is written may "show through" unused areas of OLE structured storage, effectively incorporating that pre-existing information into the data of the new file. Second, OLE applications may fail to initialize RAM they've requested from the operating system, then proceed to write that uninitialized memory to disk when they create or save a file.

The net result is that fragments of information that previously existed on your hard disk or in RAM memory may be stored as part of the data file of an OLE application. There's no realistic way to predict what the information might be: it could be part of an email message, confidential financial information, or a part of an unwanted binhexed email attachment you deleted months ago. Further, although OLE applications ignore the extraneous data when working with the file, the information "sticks with" the file when you copy it to another disk, or send it to someone via email.

Testing the Waters

To test these behaviors, I wrote two small applications in C. The first writes a four-byte signature to all free space on a disk, effectively tagging those areas (I used a ShrinkWrap volume as my test disk). The second program fills all available RAM with a different four-byte signature. I used OLE applications I had on hand to create both small (single-character) and large (100K) test files on the tagged ShrinkWrap volume, then examined the contents of those files

with tools such as BBEdit and Norton Disk Editor. Between each test, I re-initialized and re- tagged the ShrinkWrap volume and re-tagged available memory. The OLE applications I tested were Microsoft Word 5.0a, 5.1a, 6.0.1, and Word 98; Microsoft Excel 4.0, 5.0, and Excel 98; and PageMaker 5.0, 6.0, and 6.5.2. The non-OLE applications I tested were Nisus Writer 5.1 and FileMaker Pro 4.0.

The results? Every large test file created by OLE applications contained the test disk signature as part of the file's data, in continuous stretches approaching 4K in size. Additionally, most of the OLE applications also wrote the RAM signature to disk (often using byte ordering common to Intel processors), although in considerably smaller chunks than the those containing the disk signature.

Various applications demonstrated different exposures to these issues, probably due to differences in my test documents and the ways the programs use OLE. Microsoft Word 5.x, for instance, doesn't seem to create OLE objects as part of its file structure by default, thus limiting its exposure to any "see-through" effect. However, Word 5.x documents using OLE objects readily display the problems. Similarly, Word 98 seems to have the greatest exposure, incorporating as much as 10K of "see-through" data in a single-character Word document, presumably because it makes much more extensive use of OLE.

None of the non-OLE applications I tested created files with the disk signature as part of their file data, although one wrote the RAM signature to disk as part of its file data (it created four 16-byte chunks).

I must emphasize I only tested files created from scratch and written to disk once: I did not edit or re-save these files, or conduct tests with pre-existing files. (Many applications have similar - though unrelated - behaviors where deleted material is retained in modified files. Email and database applications - plus pro-

grams with "fast save" features - are typical examples.) Also, since I don't have access to the internals of OLE or the applications, these results indicate a correlation between OLE applications and the reported security issues. Although the findings may be persuasive, they do not constitute absolute proof.

Age Before Beauty

Armed with my test data, I investigated reports of similar problems with OLE. To the best of my knowledge these issues were not reported on the Macintosh before the middle of June, although they've almost certainly existed since the introduction of Word 5.0.

However, on the Windows platform, OLE apparently has a long history of incorporating pre-existing information on disk into new files. Although the articles don't appear to be available online, Steve Manes of the New York Times reported the problem in October of 1995 when it re-appeared in the version of OLE that shipped with Windows 95 (Microsoft had quietly repaired the problem once before with a revision "c" of its Office applications for Windows in the summer of 1994). Although Microsoft released a fixed version of OLE for Windows via the Internet, the fix never appeared in retail versions of Windows 95, which were available until two weeks ago. I didn't find any reports of Windows versions of OLE writing extraneous information from RAM to disk as part of new files.

Saving Your As

Microsoft plans to have a fix for these problems available shortly, and should make an announcement at this week's Macworld Expo in New York. Fortunately, the fix should correct these problems in all OLE applications, not just Microsoft Office programs.
<http://www.microsoft.com/macoffice/>

In the meantime, concerned users who share or transmit files created by OLE applications can avoid

the worst of these problems by using Save As to rewrite a file to a newly initialized disk (like a floppy, RAM disk, or disk image). This will ensure that most "see-through" data in the file is merely blank space from the newly initialized disk. Note that merely copying the file to an initialized disk is not enough: you must use the Save As command. Also, you must initialize any disk you use for this purpose; simply deleting the files it contains is not sufficient. Use a disk utility or the Erase Disk command on the Finder's Special menu to initialize a disk. If you modify or delete a file from your disk, you should initialize it again for the highest degree of safety.

These precautions do not prevent data in RAM from being written to disk; however, in my tests, little data was written from RAM to disk: usually less than 1K total, and always in small chunks. Furthermore, because the data often used Intel byte-ordering (think of it as "backwards" for the Mac), it's less intelligible to Mac users than "see through" data from a disk.

I don't know where to find a complete list of OLE applications on the Mac. If you're concerned about a particular program, you can use the technique outlined above until a patch is available, or contact the application vendor.

You're on Report

The issues outlined here have been widely reported by Macintosh news outlets as a new security problem with Office 98 or Word 98, often in alarmist language. Frankly, the Macintosh media's response to this issue has disturbed me. Although I wouldn't characterize the coverage as irresponsible, I would certainly call most of it incomplete and misleading.

It would seem many Macintosh news outlets are primarily concerned with spreading stories rather than investigating or confirming them. Sure, this isn't a simple case: I spent over thirty hours during the Fourth of July weekend tracking these issues

and conducting tests. Sometimes that amount of work is necessary to avoid passing off unwarranted speculation under color of authority.

So, in short: this is not an Office 98 problem, it's an OLE problem that's been present since at least 1992. If you use OLE applications, have potentially sensitive information on your computer, and frequently share documents with others, consider saving those documents to a newly initialized disk before sending them off until a fixed version of OLE is available.

Non-profit, non-commercial publications may reprint articles if full credit is given. Others please contact us. We don't guarantee accuracy of articles. Caveat lector. Publication, product, and company names may be registered trademarks of their companies.

For information: how to sub-

The iMac: Is it for you?

By Shawn King
Submitted by Denis Diekhoff

Special to Arizona Central - May 26, 1998

Most of you have probably seen the newest Macintosh, dubbed "iMac" (the "i" stands for Internet) from Apple. If not, Apple has a web page dedicated to it.

The iMac is the most interesting designed Mac since the 20th Anniversary Macintosh.

But then again, Apple has always had very good Industrial Design (Powerbook 5300's excepted), both inside and out. The new G3 Powerbooks are notable not only for their speed (faster than any other laptop available and rivalling most desktop systems) but also for their sensual look and feel.

The new Apple Studio Display is another example of Apple's attention to the "Cool Factor".

But the iMac is a radical departure from anything Apple has done in recent years.

Apple has gone a few steps further with this particular Mac than any other. They've added things never before seen in a consumer level computer and removed things that have been in every computer made for the past ten years. And they've gotten the price to a level comparable to PC's at $1,299. (estimated).

The machine itself is undeniably great looking. Here's a fun little experiment you can try (I do it all the time). Grab a copy of a magazine with a picture of the iMac in it (last week's Time will do) and show it to a non computer user (try your mother :-). I've had reactions that range from "What is that?" to "Wow. Where can I buy one?"

The iMac is an "All in One" Macintosh, similar to the old Performa line or the education only "Artemis" G3. That means the monitor, hard drive, CD-Rom, etc, are combined into one piece.

It makes for very easy setup but limits expandability (if you want a larger monitor, you have to buy a new computer).

It is also a translucent greenish blue (or is that bluish green?) that Apple calls "Bondi Blue" (a free MacHome t-shirt to the first reader that sends me a Web page URL that explains that name).

A lot has been written on various web sites about the pluses and minuses of the iMac. I'd like to talk about what the iMac represents for Apple.

As Steve Jobs has said, "Apple has not had a good consumer level Mac available for under $2,000."

And in typical Apple fashion, they didn't just design an inexpensive computer. They designed an inexpensive computer that is faster than any PC in it's field and price range. It's also faster than most 400mHz Pentium II's!

Also in typical Apple fashion, they are trying to redefine what "Consumer PC" means. Apple has choosen to forego putting in SCSI (a fast way of hooking up peripherals like scanners and ZIP Drives) and

ADB (the port your mouse and keyboard fit into) in favor of the emerging PC standard of USB (Universal Serial Bus).

What this means for the buyer is that Apple's legendary "Plug & Play" will become even easier. And don't worry that there are presently no USB devices available in your CompUSA. Remember, the iMac won't even be in stores until August at the earliest and several manufacturers, such as Newer Technologies, Imation Corp. and Panasonic have said they will have various products, including external floppy drives, available by the time iMac hits stores.

Did I say, "External floppy"? Yup, the iMac has no floppy drive!

"What! No floppy!?" Everyone says. That's right. The iMac doesn't have one. Apple has really gone out on a limb on this.

We all know the floppy is, for the most part, a dead end media. You can no longer backup your hard drive on one (or even a hundred!) floppy, very little software still arrives on floppies, and there are a lot of better options for storage, data transfer and software installation.

"But I need a floppy!!"

Tell you what. Between now and August, keep track of how often you use your floppy drive (I am. But then again, I do this sort of thing for a living :-). If you find you can live without a floppy drive (I think I can), then the iMac is probably a good machine for you. if not, there are several other options for you, such as

the external floppy. Not an elegant solution but a solution nonetheless.

Or, if you are a teacher or have children, you can probably buy the above mentioned Artemis All in One at the Education Discount.

And keep in mind the iMac is not the computer for all of us. It's a computer designed for a particular consumer. While we would all like to have on our desks a machine that looks cool, it may not be the machine we all run out and buy.

But it is a machine with an eye to the future. Some folks complain that the 33.6 modem is too slow. Possibly, but Apple has included an extremely fast EtherNet Card with the idea that, in a few years, a lot of us will be hooked up to various kinds of networks such as ADSL.

And you can always spend a bit more money and get a USB 56K modem, when and if they become available. And standardizing on USB means that any USB periheral will fit your iMac. No more searching around for a Mac printer, Scanner, ZIP drive, etc.

All PC hardware will work with you iMac, as long as the manufacturer of the hardware writes software for it. And Apple has said they will help manufacturers write that software.

So, once again, Apple leads the way in "Think(ing) Different". Is that a Good Thing? Yes. When you're the little guy, you have to try harder. And Apple has created a product line that is second to none in speed, configurability and ease of use. And with the iMac, they now have a price range that a lot of potential new users will find attractive. The next thing will be to make sure that non-computer usrs hear and see information about the iMac.

Will the iMac "save" Apple? No. Apple doesn't need "saving". But it does need a product that is able to draw new computer buyers to it. The iMac will certainly do that if Apple markets it properly.

Oh oh. I said "Apple" and Market(ing)" in the same sentence. For a lot of us Mac users, Apple's marketing has been dismal over the years. But, like Apple, it too is making a comeback. But that discussion will be for the next column.

As usual, let me know what you think. About the iMac, Apple, your Macintosh, what you'd like to see discussed in the column, anything at all. You can send me email using the link below.

Shawn King is a Macintosh and Internet expert in in Vancouver, British Columbia, Canada. He has 15 years experience in the computer industry, using both Macs and PC's. He is also the host of MacHome's MacTalk Radio Show, broadcasting for 2 hours every Wednesday on RealAudio beginning at 9 p.m. Eastern Time, 6 p.m. Pacific Time.

Ongoing Deals for Mini'app'les Members

Submitted by Tom Gates and Bert Persson

The following businesses have agreed to provide ongoing discounts to members of mini'app'les. When you contact these companies, please identify yourself as a member of mini'app'les to qualify for these discounts. For questions related to these discount offers, please contact Tom Gates - (612) 789-1713 evenings and weekends.

Power Protection Products

Surge Protection strips, Battery backups, line conditioners, etc. Contact Keith Kalenda at Business Security Products (612) 789-1190. 1/3 off APC SurgeArrest line of products 25% off APC BackUPS, SmartUPS and related products.

CartridgeCare, Inc.

CartridgeCare, Inc. of Roseville is offering Mini'app'les members an additional $5.00 off the cost of laser printer cartridges. They handle supplies for, and do repair work on equipment from a number of manufacturers. For example: Apple, Canon, HP, IBM, Epson, Sharp, Brother, Panasonic, Okidata, Minolta, to name a few. They also provide free next-day delivery and core pickup in the metro area.

For additional information about the user group discount and other services, contact Michael Gigot at (612) 331-7757.

Macmillan Publishing/Peachpit Press

Once again we are offering a 40 % discount on Peach Pit Press and MacMillan family of book companies (Hayden, Adobe Press, Que, Sams, Brady, NRP, and Alpha). Contact person for Peach Pit Press is Keary Olson, he can be contacted at SIG meetings or on our BBS (home phone 724-0031). In order for our members to receive the 40% discount, Peach Pit Press requires that a number of books be orderd at the same time. Therefore please allow at least 4-8 weeks when ordering books from Peach Pit Press. Minnesota sales tax and a $ 0.50 shipping charge will be applied to each book ordered. The 40% off MacMillan book offer can be applied on individual purchases plus Minnesota sales tax and a s/h charge. Use the mini'app'les account number # 10782880 -when ordering.

MacMillan Publishing produces frequent listings of new titles that have been added to their catalog. Mini'app'les will attempt to have these available on the BBS in addition to the catalogs.

Pen Computing: Why did Apple kill Newton?

by MacCentral Staff
news@maccentral.com
submitted by Bryan Lienke

The latest edition (June 1998) of Pen Computing Magazine has an intriguing story by David MacNeil called "Why did Apple kill Newton?" MacNeil, executive editor and a big Newton fan, rounds up several theories-many of them conspiratorial-about Apple's decision to pull the plug on its PDA platform. Among the theories:

• The Newton platform never made any money.

• Steve Jobs hates John Sculley. (Sculley is the former Apple CEO who helped oust Jobs from Apple years ago and who strongly advocat-ed the Newton.)

"Apple makes computers, and computers have keyboards" (an alleged quote from Steve Jobs, Apple's interim CEO).

• Intel wouldn't commit to the StrongARM processor. The StrongARM processor was the chip used in the Newton line. When Intel bought out DEC's chip fabs, the StrongARM suddenly became an Intel product with a questionable future.

•·Newton would compete with Mac Network Computers-and Jobs preferred the latter. NCs are stripped-down Macs with no local storage media that must be connected to a server computer.

• Bill Gates bought the education market from Jobs for $500 million. This theory says that, as part of the Apple-Microsoft partnership announced last summer, Microsoft gave Apple half a billion bucks to whack the Newton, opening a wide door for the entry of Windows CE-based, eMate-like devices into schools.

MacNeil doesn't endorse any of these theories in his article. He merely presents them with pro and con arguments. It's a fascinating read for Apple and Newton fans, and also includes an excellent history of the late, lamented Newton platform. Check it out.

Apple Market Share Up

Apple number five among computer vendors with 9.4% market share
by MacCentral Staff
news@maccentral.com
submitted by Bryan Lienke

Apple ranked number five among June's top computer vendors, according to PC Data results reported in a CNET article. The company has 9.4% of market share, up from around 9% in May.

The top five vendors (and some comments from the CNET story) were:

Compaq with 25.4% market share. "Compaq's new consumer 'Internet PCs' provided a shot in the arm for the Houston-based vendor, which had slipped to the No. 2 spot in May."

IBM, 15.9%. " IBM, one of the few vendors unaffected by May's downturn, retained the No. 2 spot in June on the strength of its low-end systems with processors from AMD."

Hewlett-Packard, 12.9%. "Despite the fact that its Celeron-based HP 8250 was the top-selling desktop in June, HP slipped two positions to No. 3."

Packard Bell NEC, 10.5%.

"Packard Bell NEC continued its yearlong disappointing performance."

Apple, 9.4%. Raining on our parade, one analyst said, "They're growing a little bit, but you have to look at what is Apple, and what is the Apple OS. The Apple OS is not growing at all, they're just taking up the market share of Motorola or Power Computing."

Air Traffic Control Thinks Different

submitted by Bryan Lienke

This tidbit is from: An EvangeLista Who Wishes to Remain Anonymous

IBM has a contract to replace the mainframe computers in the nation's 22 Air Route Traffic Control Centers (ARTCCs). The new computers will be G3s. There will be two "boxes" to run in parallel. Each box contains a primary and a backup G3.

The current National Airspace System (NAS) software will be EMU-LATED by the G3s until native software is developed (about 12-18 months away). Even under emulation, there will be excess computing power that will alleviate some problems associated with current mainframe limitations (doing training and system builds simultaneously currently exceed system ability).

Part of the reason for the choice was the easy upgrade path to a G4 when more computing power is needed. I was quoted a figure of 33 MIPs for each processor. I don't know how that translates to MHz and if that was an effective rating of running the emulated software or for native code.

Benefits of your mini'app'les membership include:

A one year subscription to our monthly Newsletter

A free account on the mini'app'les BBS (45 minutes/day)

Communicate with other mini'app'les members plus get up to date information on mini'app'les events and meetings. Get assistance from other members. Download freeware and shareware.

Eligibility for frequent drawings of free equipment, software, and books.

Just a few of the many items given away free in the last year included: Connectix QuickCam, Microsoft Encarta, Books from Peachpit Press and MacMillan, RamDoubler, SpeedDoubler, Lind PowerBook battery Conditioners and Rechargers, Microsoft Art Gallery, and Apple System 7.5 software.

Discounts on book orders

40% off Peachpit Press, 30% off MacMillan family of book companies (Hayden, Adobe Press, Que, Sams, Brady, NRP, and Alpha)

Periodic special User Group discount offers on equipment and software.

In the past year, Apple, Hayes, Brøderbund, and APC Power Protection (Business Security Products), among others, have offered mini'app'les members significant discounts.

Plus, you're supporting all of mini'app'les' special interest group (SIG) meetings that you can attend each month.

It's easy to recoup your cost of membership with the above benefits.
And a one year membership still costs only $25.

The Road to Mac OS X: Self-scaling operating systems

by Dennis Sellers, dsellers@maccentral.com,
http://www.maccentral.com/news/9808/26.osx.shtml
reprinted with permission
Submitted by David M. Peck

Power users wanting a sneak peek at Mac OS X (10), the consumer version, can keep their eye out for Mac OS X Server 1.0 (formerly known as Rhapsody), due out sometime within the next two months.

One thing that will certainly be worth investigating is how well Apple does on maintaining its plan to streamline and simplify the user experience of its modern operating system. The plan for Rhapsody was to change the "big picture" of the OS. Instead of having the operating system as the context in which most work was done, Apple planned to keep the core of the system largely invisible. Instead, the user would see a collection of applications running on top of the core OS.

Users would extend the system by running more applications, not by adding to an ever-expanding set of extensions, control panels, desktop accessories, background applications, QuickTime components, printing extensions, shared libraries, Finder extensions, Chooser devices and OpenDoc parts. (Yep, Open Doc parts are still with us. Just check out the iMac's operating system.)

Under the new OS plan, the system would be self-scaling. It would allow the user to determine the complexity of their Mac's operating system by running more or different applications. You can use a very simple model or a more complex, dynamic one. The user won't have to understand two dozen different types of system components. There'll just be two kinds of things to keep track of: applications and "bundles." Bundles will be the way to extend applications, not the system as a whole.

In fact, bundles may be the method by which Apple can eliminate system extensions and control panels, as we know them. Apple's already said that this is the goal with Mac OS X; they just haven't said how it will be accomplished.

A self-scaling system would also make it easier for a user to determine what the problem is when an application fails. "The user will spend less time trying to divine the intricate relationship between the system and various applications and extensions," Apple engineers said in a document entitled "Rhapsody User Experience Preliminary Design Document v. 08."

Will Mac OS X Server be self-scaling? Will the end user version of Mac OS X be? I'm betting they will, at least by the time the latter arrives in mid to late 1999. Time will tell whether I'm right or wrong.

Ongoing Deals for Mini'app'les Members

The following businesses have agreed to provide ongoing discounts to members of mini'app'les. Please identify yourself as a member of mini'app'les to qualify for these discounts. For questions related to these discount offers, please contact Tom Gates, 612-789-1713 evenings and weekends, or e-mail on our BBS.

Power Protection Products

Surge Protection strips, Battery backups, line conditioners, etc. Contact Keith Kalenda at Business Security Products,612-789-1190. 1/3 off APC SurgeArrest line of products 25% off APC BackUPS, SmartUPS and related products.

CartridgeCare, Inc.

CartridgeCare, Inc. of Roseville is offering Mini'app'les members an additional $5.00 off the cost of laser printer cartridges. They handle supplies for, and do repair work on equipment from a number of manufacturers. For example: Apple,

Canon, HP, IBM, Epson, Sharp, Brother, Panasonic, Okidata, Minolta, to name a few. They also provide free next-day delivery and core pickup in the metro area.

For additional information about the user group discount and other services, contact Michael Gigot at 651-331-7757.

Peachpit Press

Peachpit Press offers mini'app'les members a 40 percent discount on their books. Our contact person for Peachpit is Keary Olson, he can be contacted at SIG meetings, on our BBS or his home phone, 612-724-0031. Peachpit books may also be ordered on our BBS; go to 'Conferences', 'Special Offers', 'Peachpit Books'. From time to time, Keary will have Peachpit catalogs at SIG meetings. You may also check Peachpit's web page at *http://www.peachpit.com/* for current and soon to be released books.

In order for our members to

receive the 40 percent discount, Peachpit requires a minimum number of books be ordered. Therefore, please allow sufficient time. Minnesota sales tax and a $ 0.50 shipping charge will be applied to each book ordered.

Macmillan Computer Publishing

MacMillan Computer Publishing offers mini'app'les member a 40 percent discount on their family of books (Hayden, Adobe Press, Que, Sams, Brady, NRP, and Alpha). MacMillan books may be ordered by calling an 800 number. Use the mini'app'les account number, 10782880, when ordering. Minnesota sales tax and a s/h charge will be added.

MacMillan's web page is at *http://mcp.com/*. MacMillan Publishing produces frequent listings of new titles that have been added to their catalog. Mini'app'les will attempt to have these available on the BBS in addition to the catalogs.

Benefits of your mini'app'les membership include:

A one year subscription to our monthly Newsletter

A free account on the mini'app'les BBS (45 minutes/day)

Communicate with other mini'app'les members plus get up to date information on mini'app'les events and meetings. Get assistance from other members. Download freeware and shareware.

Eligibility for frequent drawings of free equipment, software, and books.

Just a few of the many items given away free in the last year included: Connectix QuickCam, Microsoft Encarta, Books from Peachpit Press and MacMillan, RamDoubler, SpeedDoubler, Lind PowerBook battery Conditioners and Rechargers, Microsoft Art Gallery, and Apple System 7.5 software.

Discounts on book orders

40% off Peachpit Press, 30% off MacMillan family of book companies (Hayden, Adobe Press, Que, Sams, Brady, NRP, and Alpha)

Periodic special User Group discount offers on equipment and software.

In the past year, Apple, Hayes, Brøderbund, and APC Power Protection (Business Security Products), among others, have offered mini'app'les members significant discounts.

Plus, you're supporting all of mini'app'les' special interest group (SIG) meetings that you can attend each month.

It's easy to recoup your cost of membership with the above benefits.
And a one year membership still costs only $25.

---

mini'app'les
Box 796
Hopkins, MN 55343
ADDRESS CORRECTION REQUESTED

Non-Profit Org.
U.S. Postage
PAID
St. Paul, MN
Permit 2537