

# May 1999

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# 1984 online

# number Shareware 13

# The New Dawn

Welcome to the first issue of our second year in publishing the Mac community's finest ezine. You'll notice two things - the ezine has had a face lift and our site has been expanded into a valuable resource.

We at 1984 produce this ezine for the reader first, therefore you need to tell us what we are doing right or wrong. I've always maintained feedback is the key, with readers input the site has been built with fast navigation and information you wanted. The site is still in the early stages but you'll find:

- Apple's history, one of the most informative trips in to Apple's past
- Comprehensive games tips and codes to all the latest and greatest
- MacBasics, for those new to their Mac
- QuickTips, short, sharp and useful information to keep you on track
- Thunderous Links section, if it's not here it's not Mac!
- 1984's writers best of reviews and monthly columns sections

And so much more.

YOU are the key to success

At the end of the day we are only here to provide cortex stimulation for you, mouse megalomaniacs for your Mac and to protect and serve your hard earned money. So if you don't tell us you want something reviewed, talked about or added to our site we'll not have to type until our fingers burn, drink too much coffee and fall asleep in front of our Macs at 3am. I personally wouldn't change that (well maybe an early night or two would be nice!).

Darren Edwards - Editor 1984 OnLine Magazine [darren@1984-online.com](mailto:darren@1984-online.com)

## A little extra

The popularity of the PDF version is growing far beyond my expectation. It has many advantages over its sister version that are inherent in the Acrobat format. Starting from this issue I am adding a new feature that will not be appearing in the DocMaker version. Called "Icons" it is (relatively) brief biographies of people who appeared in Apple's award winning "Think Different" campaign. We will also choose other people, contemporary and historical, whom we consider worthy of including. I hope you enjoy it and find it interesting.

Chris Patmore, PDF & Assistant Editor [chrispatmore@innocent.com](mailto:chrispatmore@innocent.com)

# editorial



# 13

## ISP – Internet Sells Privacy

**Lee Foster**

Recently, we've witnessed a phenomenal growth in people getting 'online' and with them a whole new booming industry of 'Internet Service Providers' (ISPs). Lately, however, more and more of these ISPs are offering a free internet connection service.

I think it's safe for me to generalise here by saying profit has and will always be the driving factor behind anything any company produces. Otherwise what's the point of providing it? Good will? Pah! The skeptical person that I am refuses to believe anything is for free when it comes to such 'free services' and I always look for the ulterior motive. Just some minor research revealed to me part of the truth behind the free for all, I feared for my life to delve deeper!!

We assume, and with no surprise find, that the telephone companies are cashing in on this bonanza. This new free unlimited connection charge adds to the massive annual profits they already cream off us. Some users tend to lose track of time online (I'm one of them) and may even confuse it with being a totally cost free experience—until they get the phone bill! The Free ISPs, helping the cash mountain grow, receive a share of this bounty and thus pay for their service. But it doesn't end there. Next you have another potentially huge turnover from advertisers and sponsorships. Then of course there are the inflated customer support charges, as much as £1 or more a minute and rarely will you solve the

problem in less than five!

But let's take a look at what you're getting. What do you gain from a free service? No monthly charge. What else? That's it. That's all you're getting folks. What do you lose? Free/cheap customer service for a start. What else? A quality assured service. It's free, how can you complain if it all goes wrong? They won't care, they're not getting money from you (unless you call the help-line). What else do you lose? Well to me, this is more important – your privacy.

Are you aware that you can be tracked across the internet? What do you think all these cookies are for? Some sites throw dozens at you before you can get in. Did you know the Shockwave plug-in is reported to feed information back about the sites you've been to to Macromedia?

A bug in the plug-in initially sent back personal details too, before a fix was released. The free ISPs take your details and give them to companies who think they'll be able to sell you a service that would interest you by seeing which sites you visit. This may not bother some of you, but I hate junk mail and I want the freedom to go

where I wish without wondering whether I'm being watched. The story of 1984 by George Orwell is now so near the truth it's frightening.

I sent the following letter to my ISP and received the expected reply and additional info which got me thinking about this article.

<<From: Lee Foster

To: accounts@prestel.net

Date: 23 March 1999 23:44

Subject: Monthly fee

In light of the many new free and cheaper ISPs that are now available, are there any plans in the very near future for Prestel to lower the monthly fee.

I know you provide a good service but from what I've read and heard, the free services are supposed to be 'very good'. I would be very interested to hear if these questions have been asked by other Prestel users and what incentive is there to remain with Prestel.

Thank you  
Lee Foster>>

And here came the reply:-

Dear Mr Foster,

I can advise you that at present we are conducting a subscription review, but unfortunately, I do not have the information to give you at present, but all customers will be advised as soon as any news is available.

In the meantime, please consider the following:

When you pay for a service, because you pay, you expect the best. You are also entitled to a high level of service because you pay, which is normally higher than a free service, as they have to be careful how they spend their revenue, and thus casts doubts over their problem solving skills.

Secondly, in the February issue of "Computer Active" magazine, an article is headed, "How much is your Privacy Worth". This article goes on to say: "...Freeserve surfers are beginning to discover that there's no such thing as a free lunch – the cost of the service is privacy."

It goes on to say that Freeserve insists on the phone numbers being revealed, before connecting clients to the net. "Those who fail to disclose their numbers, will be barred from sending email, posting discussion groups, updating web pages or accessing certain other parts of the internet."

It goes on further to say the freeserve companies can use these numbers for marketing purposes and to provide information for law enforcement agencies.

I think you can see where I am leading. When you pay for a service, privacy is assured.

I hope this is of some assistance to you.

Yours sincerely,

Andrew Whalley, Prestel On-Line.

Of course Prestel want to protect their investment and are bound to give this advice. But it has also come to light on news websites as well as magazines and newspapers. As for the service they provide? I've had no problems, the customer services are really friendly and helpful and free and they cater for Macs. Most free ISPs chose Windows first and then consider Macs. When it comes down to it, it's your choice. Freedom or free, they don't come together! Look at the Pentium III chip, it has in-built tracking which needs turning off every time you switch the PC on otherwise, off goes your information. Let's just hope Apple respects our privacy enough to let us volunteer our personal information when it suits us, and not sell our names to the highest bidder.

Send your paranoid thoughts to:

[lee@1984-online.com](mailto:lee@1984-online.com)



## Open Source

**Thomas Ash** [[thomasash@hotmail.com](mailto:thomasash@hotmail.com)]

*You can't avoid hearing about Linux nowadays. Touted as a Microsoft-killer and rapidly gaining momentum, its great strength is that it is open source. This means that anyone can download the source code for free, either to use it unchanged or to program in changes. If they do the latter, however, they have to make the changes available to everyone. In this way a totally free operating system can evolve rapidly without a large corporate development team.*

I guess at this point I'd better include a note for the benefit of anyone who does not keep up with the latest Mac news on the web: Mac OS X Server is out now, and it's open source. Now before you start rushing out to get your free NeXT generation operating system, you should know you still have to pay a hefty \$499 (£333) for OS X Server. This is because with open source you can still charge for software on CD, and not all of OS X is open source – only the Mach micro-kernel, the Apache web server, the BSD 4.4 environment and a few Apple networking and graphics technologies.

Now, if you're in the know you might point out that the first three of these technologies were open source anyway. While Apple has made significant improvements to these technologies, it's key asset – namely the superbly well designed user interface – remains proprietary. Of course, it's likely the new community of OS X open source developers will throw together a workable top end, which will be available for free. It is also likely that someone, somewhere will port the kernel to Intel hardware.

In this way those PC users who desire Mac OS X's power can avoid throwing away their PCs, gaining Apple new users which it would not have won over otherwise. Wherever people want Mac OS X's great feature set, they can get it just by modifying the source code. Open source OS X will evolve naturally – that's why it's called Darwin. Not only does this natural process save

Apple's engineers a lot of hard work, it also prevents the loss of hardware sales – existing Mac users will likely stick with Apple hardware.

Apple has been a visionary company, leading the way for the whole of the computing industry with the GUI, 3.5" disks, CD-ROMs, desktop publishing, multimedia, laser printers, SCSI and now Firewire and the abandonment of the floppy. But it deserves a break. Open source developers should help the Mac OS lead the way for the computing world in the new millennium.

**Open source  
OS X will  
evolve  
naturally –  
that's why it's  
called Darwin**



All previous iThink Different columns can be found at [www.thomasash.hypermart.net/bnet/list.cgi](http://www.thomasash.hypermart.net/bnet/list.cgi)



# Multi-what?

**Adam (it takes a lot to impress me) Shutes**

**Well, here we are again. It's that time of the month when the regular mail comes round prompting me into action. Typing action that is.**

Perhaps I could fool you into thinking that I was actually, purposefully delaying writing this column... I wanted to see what announcements Apple would make at NAB, you see. (The fact that we all knew what was going to be announced is by the by.)

QuickTime 4 of course, was the biggy – but I'll come back to that just a little bit later on.

I've had a real multimedia-fest this month, since I've been playing around, not only with QuickTime in general, but also with these MP3 things.

I don't know if you've ever experienced these strange little things, but they've been making wav(es) in the PC world for a short while now (a bit like the mouse perhaps...). Essentially you can rip a track out of a CD and turn it into a near CD-quality MP3 file, all ready to be downloaded by people (or pirates if you're in the music industry) across the Net. The ripping process involves an intermediate stage of turning the CD track into an AIF file – often around 30 Meg for a 3 minute song – and since the final MP3 track is usually 1/10th of that, you can see its attraction.

The reason I started fiddling around with MP3 was that I'd been trying to use QT3 samples on a music web site I run. I bought QT3 Pro, with it's fancy codecs for video and audio, thinking that the digital world would be all mine. It was to

some degree. Although the video compression was great, the audio compression just didn't cut the mustard (or sucked, if you're an American). If I ripped a CD track into QT3, I'd get this strange flanging and whining all the way through, which really screwed up some of the quieter samples I was trying to use – unless of course it was Celine Dion who positively whines all the time. Still, my blood being rainbow coloured (or maybe it's Bondi Blue coloured now), I stuck with it and went the QT3 audio route.

Then, I started getting pestered by this guy from Sweden who seemed to live on my site. Every week he'd badger me about sending him some MP3 of some rare tracks the band (who the site is for) had done 5 years or so ago. I was irritated, annoyed, and then intrigued, so I eventually I tracked down a piece of software called MPecker, and put it through testing. The only CD I had to hand was a Sleater-Kinney CD, which is kind of a Riot Girrrl sound. Not the best sound for testing the subtleties of audio compression – but I thought I'd give it a shot.

20 minutes later (for a 3 minute track) I loaded up MacAMP for a listen to the final product. Hmm, not bad, not bad. No flanging, no whining. Hmm, not bad, not bad.

Hey it plays well in the background...

Hmmm, not bad, not bad.

I think I'd caught the bug, because the first thing I did was shoot back home to pick up an old Catatonia CD and try 'Do You Believe In Me?' – a nice quiet/noisy/quiet/noisy one (maybe I should have gone for Nirvana...).

No flanging, no whining. Fantastic.

Here's my subscription to MP3 Weekly.

## QT3 audio? Pah! MP3 for me.

Apple, I thought, you've been caught here. QT3 audio? Pah! MP3 for me.

The other day Apple release QT4. After a quick download and install I'm up and running. And who'd have guessed it, there it is, MP3 playback from inside that fancy looking MoviePlayer. So Apple haven't dropped the ball after all, in fact they've been keeping their

eyes open, their ears to the ground, the finger in the water, whatever. This really is a new Apple Computer we've got here.

So, I'm happy with Apple's situation on MP3s, but something else QT4 has really put a smile on my face is with Net TV.

We all know QT4 can stream live video and audio, but what I didn't realise they've done is chummy up with the BBC and Bloomberg to provide a live feed from their News and Finance channels respectively. That's live TV down the Net to your desktop folks, in good quality audio, video and in realtime. Realtime QuickTime, I suppose.

So, with one little extension I can fiddle with my standard videos on my Mac HD, I can mess around with MP3s, and I can watch Apple's stock rise up and up in Realtime QuickTime.

Hmmm, not bad, not bad.  
[adam@durandal.easynet.co.uk](mailto:adam@durandal.easynet.co.uk)



# What's in a number?

**Graham Aldrid**

**Dave's is 27, Gerry prefers 9 but finds Dave's 27 attractive. So the Managing Director got his top staff together for a senior management workshop.**

"I've got a question to ask you all. What is 3 and 3?" he says turning to Bert (being Production Director, Bert has a solid, practical sounding name.)

"Why it's 6. Got to be 6, can't be anything but 6. No doubt, absolutely, exactly 6."

"And how about you?" to the Technical Director, who replies, after overloading the calculator:

"That depends," he replies "...on whether it's minus 3 and plus 3, in which case it makes nothing." After a pause which the MD almost filled with his next question. "On the other hand, it could be 3 to the power 3, in which case, it's 27." He sucks on his pipe for a minute. "But on the balance of probabilities, I would go with Bert, let's always look for the simplest answer, it's usually the most elegant, anyway."

"Thanks, Dave." (Which wasn't his name but Technical people should all be called Dave or Bob.)

Turning to the Sales Director he asked the same question, "What's 3 and 3?"

"Well," replied Gerry (good name for a Sales Director, full of bonhomie and savoir faire...) "it could be 6 but if you multiply it could be 9. Yup, I much prefer 9. Although Dave's 27 has its attractions."

"That's good, Gerry, thanks, now..." looking the Finance Director in the eye: "What's 3 and 3, Melvyn?" (Because don't you want to call accountants Melvyn?)

"Easy," replies Melvyn "what do you want it to be?"

Liking the cut of his jib, the MD gives Melvyn more power than is good for him. He convinces the MD to expand Finance Division. (Notice it's no longer Accounts Department – that only records what people who do things have done, Finance, God help us, is allowed to do things.) He introduces Cost Accounting. Now there is only one Cost Accounting joke, which I'll save for a later column.



Bear in mind that the MD had built this company from a workbench in his garage and watched it grow into a multi-national corporation. His wife did the books of an evening and the company had always paid it's way, had little debt and was renowned for probity and fair dealing. (Couldn't possibly have been a Bank.)

The however, comes in here. However, though it had always been profitable, John (the MD) knew he was making money – he sold more than he bought, paid in wages and rent – he was never quite sure how he made the money. So he agreed when Melvyn upped the Wage Bill by mega-thousands to Cost Audit the whole operation. (As an aside, have you ever noticed how when things get tight in a company, the last areas to implement lay-offs are Accounts and Personnel – sorry Finance and Human Resources. Make your own deductions)

Now John is staring at a bankruptcy order but before Melvyn left to take up an appointment in International Finance at one of the big Banks, he left John a full report. No longer making money, John knows where every penny went.

My point? The same one I've been making all along. If you don't know by now, you should: Beware of experts telling you what you want to hear.

So, children, what's 3 and 3?  
[graham\\_aldrid@1984-online.com](mailto:graham_aldrid@1984-online.com)



# Mac It So

**Tony Bilny**

**Hello. My name's Tony and I'm a failed Mac operator. Hold on, this isn't an AA meeting, is it?**

I've been invited to do a column for 1984 and I'm glad they've asked me. Apple HQ UK are, by now, truly sick and tired of my impertinent questions and 'buggy' letters (as in, why are you bugging us?). So I'll 'bug' anyone who can be bothered to read this, because it's cheaper than a psychiatrist and according to those Rorschach tests, I'm not a well man and I need an outlet to purge these uncontrollable desires – one of them being a new 400mhz G3 with a 21" Apple Display.

I've concluded that I am a sad person because I had the temerity to write an unsolicited letter to the customer care department at Apple trying to tell them, sorry, suggest how they should run their business. Although I didn't ask for it they phoned me up, thanked me and gave me a reference number. I am now nerd#124544.

Below is a shortened version of what I wrote to deserve my reference number.

## **1. Improve Claris/Apple Works 5**

This is a package begging to be developed, and if done so, could make Microsoft Office 98 for Mac redundant for most users. I'm not Microsoft's biggest fan by a long chalk, but I must admit Word 97 has been 'helpful' to me when I needed to do a lot of diagrams and its multiple 'undo/redo' feature is one to be prized. I know Office 98 costs a packet (and still doesn't include Access) so it should offer more features, but

just think; even if they increased the price of an altered, improved Claris it would still hit the target.

On the point of Mac Office 98, isn't it curious how much slower and cumbersome it is compared with the PC version? Because on a PC running NT4 Workstation, Office 97 loads almost immediately and runs OK. Surely Bill Gates wouldn't optimize Office 97 to run better on Win 98/NT4?!

## **2. More RAM please, sir**

32MB is just not enough as standard spec on the iMac. System 8.5 bites a big chunk out of it, and it'd be nice to bump up standard RAM on those new G3's as well.

## **3. Never mind the quality look at the bill**

It's funny but you never hear any one going into a BMW showroom and complaining that they are too expensive, and please sir can I have a discount. (To our non driving readers, I'll explain that if you went into a Ford/Vauxhall garage to buy a new car you would more than likely receive some sort of discount off recommended retail price, but try that at a prestige car reseller – to use

an Apple term – and the answer would invariably be no, or they would offer you very little off the price.)

But in the personal computing world price is all, because I believe we, as a nation, have very conservative buying habits and anything different to the norm is always seen as too expensive.

## **I'm well aware of how many times floppy disks fail for no apparent reason**

It's a sad fact of life that for most of us, the little money we get is hard earned. You really can't 'discount' that. And so we buy a Ford Escort instead of say, an Alfa Romeo, because they are cheaper to run. Not because they are more aesthetically pleasing, or give you greater pleasure when using them.

Some questions I've heard raised are, 'Will a £500 PC last the course better than a £765 iMac?' and, 'Is an iMac better built or of higher quality?' I would say no to the former and hope the answer is yes to the latter. I also hope that an iMac CPU upgrade will be forthcoming in the future, but I guess

because of its architecture that'll be impossible. Oh well, I suppose in a few years time there will be iMac owners whose faces will be slowly turning iMac strawberry in rage/frustration. (OK, this is a rather laboured comparison I know, but I'm not Jeremy Clarkson!)

However, because I'm familiar

with the iMac's spiritual predecessor, the Performa 5xxx series, I hope it does better reliability-wise. The Performa 5xxx was also slanted at home/educational use and as a result, I think they built them down to a certain quality/spec due to price.

We have eight 5200/5300's at work and they are now four years old. Very few of them have had an easy life, but their pesky monitors always seem to go wrong. As you may know, there's a PDS slot in them but seeing as no-one makes anything for it re: a CPU upgrade, it's just a little bit useless! And woe betide you if the logic board

goes – it costs £300 inc VAT for a new one. Having said that I still like them, and with TLC they'll soldier on.

#### 4. Floppyless in Seattle (and just about everywhere else...)

As a technician at a college, I'm well aware of how many times floppy disks fail for no apparent reason and the angst it causes. Apple must be applauded for making the break, but the alternative of transferring it through the Internet isn't always desirable or practical. What if you need to transfer stuff from old floppies onto an iMac and you have no Internet access? Do you have to buy a USB Floppy drive/Super Disk to transfer a few 150KB files from your LC475? At the very least, it adds another £60 to the bill for a USB Floppy, and you know what we think about paying more!

I've heard that the iMac has a floppy connection on the motherboard (and can be made to work with a totally unauthorised, unapproved hardware hack!).

Finally, something struck me this week that has been developing over time. Why are so many Mac dealers/

resellers' service less than satisfying? You know, about little things like remembering to call you back re:queries, not forgetting about a monitor in for repair until you prompt 'em, not taking 9 years to do a job etc. Is it just me?! I do try and be polite whenever I call. Honest.

I don't want obsequious toadying, or nicey-nicey manufactured customer service. I certainly don't want the kind of service I received from Hewlett Packard last week. I got pleasant phone manner, but rotten advice – and for one of their own products! To me good service is real, useful help, a pointer in the right direction. Speaking of good service, I see PC World are fully behind iMac sales. Someone I know went in to ask them if they did an iMac bundle, sort of USB Zip/printer kind of thing. They were informed that they didn't, and that they really should buy a PC instead!

Anyway, I'll sign off for now but keep reading and remember: not everything is written in stone, but it feels like it when you're using a PC!  
[tbilny@bilk.ac.uk](mailto:tbilny@bilk.ac.uk)



#### I Can't Live Without My... If I was Apple CEO...

iMac (grape coloured)! As Apple's latest consumer Mac it's my must have piece of hardware as without it I could not do any work at home, surf the internet or even write this article for my favorite ezine – 1984-Online. I think Apple has really got it right with the iMac and now with the new fruity flavored iMacs it's sure to win everybody over, even some PC users. It sure did with me.

**Chris Bunney**  
[thebunneys@lineone.net](mailto:thebunneys@lineone.net)

I can't live without my Mac. What good is a peripheral without one? Next is a toss-up between my Epson Stylus Color 800 and Jade2 Scanner, both of which are essential to my work (and life). Then again my microLaser Pro 600 has paid for itself twice over with the amount of work it's done. What about my Pace 56 modem? I can't choose, they're all essential.

**Lee Foster** [lee@1984-online.com](mailto:lee@1984-online.com)

I don't think I'd change much as Steve Jobs has done a great job. The design of the iMacs and the new 400MHz G3, you can't say they don't stand out above the rest, even if PC World don't turn them on. PC's just look toooo similar, no wonder people have a study to hide them away behind a locked door. The one thing however that I would change would be Advertising. Apple hasn't really got advertising has it? It really needs to tell the public about how good the Mac is, rather than showing lots of Macs floating around the screen ending with the Think Different logo!

**Chris Bunney**  
[thebunneys@lineone.net](mailto:thebunneys@lineone.net)

I'd stop dropping customers in the shit by scrapping heavily supported technologies over night. I'd release a transition model so people can budget/plan ahead. I'd have magnificent adverts full of lies, just like

Microsoft and Intel. I'd bring Macs a step ahead of equivalent specification PC's for the same price. I'd bring out a 17" iMac in chrome, walnut and retro beige! I'd redesign the Blue & White G3's so they don't look so faddish. I'd bring back the Cork plant and apologise to everyone Steve Jobs has crapped on with his dictatorial attitude.

**Lee Foster** [lee@1984-online.com](mailto:lee@1984-online.com)

I would concentrate on growing Apple's presence on every market. Apple's computer line would be completed with a more powerful multi-processor machine with more slots for 3D and movie professionals, and a cheap networked nMac for corporate world. I'd also make Apple printers, scanners, digital cameras and Palm organizers. I would also include a DVD player in all Macs and bring the appearance themes to Mac OS.

**Teemu Masalin**  
[teemu.masalin@helsinki.fi](mailto:teemu.masalin@helsinki.fi)

I wouldn't change a thing.

**Steve** [sharris@dircon.co.uk](mailto:sharris@dircon.co.uk)





# Bring out your Dead!

**Julie Price**

Picture the scene at a local secondary school a few months ago. This school has mostly Apple computers – about 60 in total ranging from Classics to iMacs, but today the management team are delighted that a consignment of “new PCs” is about to be delivered.

The school I.T. technician is notified, but doesn't automatically share this enthusiasm. Where have these machines come from? Well, the school is very lucky to receive them – they've been “thrown out” by a local organisation who have just upgraded their system. And because the school is a “worthy cause”, the old machines have been thrown in that direction.

Don't get me wrong – I'm the last person to snub a freebie, and I know that just because something is second hand it doesn't mean it's useless – in fact, I'd be only too pleased if a publishing house was to throw out their old PowerMacs in my direction. However, when it comes to schools and computers, perhaps we do have to look gift horses in the mouth. If someone is “throwing them out”, just how useful are they?

And so the consignment arrived. The first thing that our I.T. technician noted was that they were far from “new PCs” – in fact, they were largely 486s. The next problem was that they did not come with any monitors. However, anxious to find out more, one of these machines was connected to a monitor and booted up. Which operating system was being run? You've guessed it, the cutting edge system – DOS. Any

software installed? Not a sausage. Modem? Don't make me laugh, these computers were still trying to come to terms with the mouse. One of the teachers tried installing Windows 95 on the beast. It takes two minutes to open a window. At this rate, even if the school was to fork out money for monitors and software, the school day

dead and dying computers, some of them “refurbished”, some not, but rarely are they suitable for use in education – surely this is where we should have the best technology we can afford? Imagine a governor's meeting where the Head teacher announces, “A theatrical company has just donated dozens of

computers, some of their opinions would be laughable if we weren't talking about something as important as our childrens' education. A common one is the belief that “going PC” (whatever that entails) is a step in the right direction. Even in Mac dominated schools, I've heard Heads say “We're going PC in the near future

## the school day would need to be extended by a couple of hours to allow for opening and closing of windows

would need to be extended by a couple of hours to allow for opening and closing of windows.

So, what the school has actually acquired is a large collection of ugly doorstops, and the governors are celebrating! If only they'd have asked our I.T. technician for his advice – but of course, he's only the workhorse who has to keep these dinosaurs running...

The sad thing is that this story is completely true, and worse than this, the practice is commonplace. Our schools are becoming dumping grounds for old

Shakespeare texts to us – they're fine, even though half the pages are missing and the remaining ones are a bit tatty...” Or even “As you know, we've been saving up for a school minibus, but the local farm has kindly donated a few of their old carts. All we need to do now is to buy the donkeys to go with them...”

Even more worrying is the general lack of technical knowledge displayed by school managers. Some Head teachers may be wonderful personnel officers and brilliant budget managers, but when it comes to

to keep up with modern technology”. Although I haven't done any formal word association tests with these characters, this is the sort of result I'd get:– Mention the word “PC” – “Everyone's got one, loads of software, cheap, the school needs more...” Mention Apple Mac – “Old, expensive, company in trouble, no software, not a proper computer...”

A recent report on teachers and ICT stated that “ICT should not be taught by technicians, but by users”. Sorry, but I have to disagree. If staff knew the first thing about processors and

systems, they'd know that the acquisition of a truck load of 486s is a retrograde

## the Mac is the ideal machine for education.

step. I recently spoke to a trainee teacher who is quite competent in the use of most common applications – spreadsheets, databases, and so on. She was working in a school which was entirely Mac and seemed very nervous about using them as this was unfamiliar territory – the problem was exacerbated by the fact that the class teacher had told her that the Macs were “unstable”. I was installing some software on this machine when the trainee said to me “I’ve got a Pentium at home running Windows 95”. (Am I supposed to be impressed?) I told her that I had a Mac, just like the school machine. I went on to say that it had been absolutely wonderful, not a scrap of trouble in three years. She replied, “Ah, so you like the good old-fashioned computers, do you?” You can see what I’m up against. Educating teachers in such matters is a long hard

process of fighting against preconceptions, the most common being that any PC

(even a 486) is somehow superior to a Mac.

Of course, Apple isn't doing itself any favours in this area. Many schools had Acorn machines which are now slowly dying. Here we have a golden opportunity for Apple to get their feet well and truly in the door – after all, the Mac is the ideal machine for education. So what happened? Manufacturers of Windows machines were quicker off the mark. They organised visits to school governors' meetings to show off their fabulous new computers. What did Apple do? Well, a few years after the PC people started to make their visits, Apple put out a couple of nice stylish TV ads. Having asked around, some teachers weren't even aware that the iMac was made by the same company that made their old Performas. The question of advertising raises its ugly head again.

Like it or not, the same people who welcome dead 486s with open arms will soon be given power (and taxpayer's money) to make decisions about new hardware. Would you trust them? Technical support is hardly ever mentioned. No one will bother to ask the school technician what takes up most of his time – the 60 Macs or the 4 Windows machines. What can be done? Well, if you've got kids in school, hassle the governing body. It's even possible that you know much more than they do, and they may be grateful for a bit of input! Other than that, it's the usual thing – to be a Mac user is also to be a Mac evangelist. We want the best for our children and our education system. And a stack of dead 486 machines running DOS with no monitors is far from the best.

[J.E.Price@mmu.ac.uk](mailto:J.E.Price@mmu.ac.uk)

# Ten Good Reasons Not To Get A PC

Matthew Johnston

## 10. Macs don't just work. They really work...

Possibly the best reason but placed at number 10 because in the world of choosing computers, having all of the bits work first time seems not too important.

## 09. Faster Faster Faster.

Recent tests show that the G3/400 is indeed faster than the Pentium III/500. They also show that the PIII/500 is only marginally faster than the PII/450 which goes to show hype isn't the only thing coming out of Intel.

## 08. Y2K.

Ever need a better reason to buy a Mac? Microsoft do not currently have a shipping desktop OS which is Y2K compliant. Win95 certainly isn't, WinNT4.0 has “minor issues” (like the date not being right Doh!) and Win98 failed the Y2K testing performed by the French Government.

## 07. In a word, Innovation.

I'd estimate that 95% of so called innovation in the Wintel world happened on the Mac first. I'll list some examples. Those with \* mean they haven't been done completely.

Innovation PC first year and Mac the second date:

hot-swappable peripherals	1997	1984
networking as standard	1993	1985
32 Bit Clean OS & hardware	1993*	1989
laptops' keyboard@back, trackball@front.	1993	1991
multimedia	1993	1991
multiple monitor support	1998*	1987
PostScript printing	1991	1985
3.5" floppy	1988	1984
first person mainstream networked game	1992	1984
long file names	1995	1983
network browser	1995	1991
built-in CD-ROM	1994	1992
laptop trackpads	1995	1994
PDA (Personal Digital Assistant)	1997	1993

continued

# Now, can anyone tell me what my RJC03260.DLL and my ODIS400.DLL do?

## 06. No FUD

FUD, standing for FEAR, UNCERTAINTY, DOUBT was a standard business practise at IBM during the 70's. It meant that you had to get your IBM engineers in to fix anything that went wrong. This was also adopted by Microsoft. As an example, go to a Windows 95 PC and identify in less than ten minutes the drivers for your networking. On a Mac it's easier because long file names extend right into the system. Now, can anyone tell me what my RJC03260.DLL and my ODIS400.DLL do?

Because you don't know what these files do... how can you effectively administer your own machine? We shouldn't be afraid of computers in this day and age.

## 05. Viruses

Just this week Symantec had their servers brought to their knees after a new Word Macro virus appeared on the Internet. It surfaced on Friday and by Monday morning had seen an unprecedented amount of penetration into the Desktop office. The Virus, named Melissa, uses the close interaction between Word and Outlook Express (email) to work its wonders. Essentially when activated it opens your Outlook contacts

database and emails the first 50 names a list of pornographic sites. As the first 50 names are likely to be internal people, mail servers have been overloaded quickly, followed by Virus Definition servers being overloaded by people seeking a cure. This virus is ineffective on a Macintosh. However we can unknowingly transmit it to PC users. (Not to be taken as an instruction to do this!)

And it's just one example. There are over 20,000 viruses affecting Windows and DOS. There are less than 1000 (including the cross platform Macro viruses) that affect the Macintosh.

## There are over 20,000 viruses affecting Windows and DOS.

### 04. Illegal file names

Next time you are feeling bored. Try and add a ?, /, |, :, \*, >, <, " or \ to a Windows' file name. Ever use the / character when entering a date? Sorry... not on these file names. Now the Mac only has one illegal character, the colon. When you enter an illegal character on the

Mac, it immediately changes the offending character to a -.

### 03. Longer file names

We all know that Windows "supports" long file names indeed up to 260 characters. Very nice. But did you know that support extends only to the full path of the file. i.e. c:\documents\personal\home\accounts\bills-payable\mydoc.doc is actually taking up 59 characters of your 260 character limit. The Mac has a 31 character file or folder name limit at each level. Therefore there is no limit to how deep a Macintosh directory structure can go.

### 02. Scripting

Utilising one of the most powerful, yet user friendly, scripting languages in existence, the Mac can become almost completely automated for repetitive or timed tasks. Close integration with other products such as MacPerl, FaceSpan,

still using the Mac Classic (1990), the Mac II (1987), the LCII (1992) and the SE (1987). Anyone out there still using the Plus (1986) or better still the 512 (1984)? Sometimes the initial cost of a PC seems lower. Examples include the loss leaders common in establishments like PC World.

Once you figure in the additional costs of a decent monitor, decent sound, enough RAM, graphics card and software then they are not quite so attractive. Plus a lot of these machines come without brand names. There's an implied quality in a reputable brand name. And Apple has the best brand in the industry.

The upshot is that if you are already an expert on the PC and can fix any problems with hardware and software then it can be good for you. If, on the other hand, you want to spend more time actually "working" rather than "working on your PC" then maybe the Mac is the better

choice. There are some die-hard PC users on the list here (you know who you are) who swear by their machines. One in particular also swears AT his machine (and slaps it too). If I was motivated enough to do that I'd return the machine to the vendor. This shouldn't be normal.

As a double-tap, it turns out Microsoft Office and Internet Explorer actually work better on the Mac than they do on the PC. Anyone who wants proof of this, email me with a time and a date. Provide me with a Wintel PC and I'll remove dlls and system files for both Office and Explorer from both Mac and PC. On the PC, the application will not run. On the Mac, it will auto-repair.

Nice huh, makes you think?

Matthew Johnston –  
NIMUG (Northern Ireland  
Macintosh User Group).

<http://welcome.to/nimug/>

Photoshop, Frontier, Illustrator or Webstar means that many tasks become infinitely easier and faster and less prone to "human error".

### 01. Value for Money

There are people in our midst still using the older 680x0 Macintoshes. The last one of these was made in 1995. I know that some people are



# ICONS

This is an occasional series of articles about some of the people who appeared in Apple's award winning 'Think Different' advertising campaign. Although many of the faces are familiar why they were chosen will become clearer when we know a little more about them. If any of you, our readers, would like to do some research and write about any of these rebels, or can think of someone else who is deserving of a place in the 'Think Different' hall of fame, please e-mail me for some guidelines.

[chrisspatmore@innocent.com](mailto:chrisspatmore@innocent.com)

## Mahatma Gandhi (1869 – 1948)

In 1893, young Gandhi was visiting South Africa on legal business. Going to the railroad ticket window, he asked for a first-class ticket to Pretoria. Gandhi was dressed neatly in Western style, except for the Indian turban on his head. The ticket agent glanced at him peculiarly but sold him the ticket. When the train arrived, however, and he tried to board it, the burly conductor told him he would have to sit in the third-class section. When Gandhi held up his ticket and quietly remonstrated, the conductor told him to move. Apparently the Indian turban on his head and his swarthy colour labelled him unacceptable for first-class accommodation. Gandhi refused to move and so the conductor shoved him bodily off the train. Gandhi picked himself up, dusted off his clothes, and walked back to the station.

Frustrated and angry, he thought of dropping the legal case he was on and returning to his native India. In his autobiography Gandhi recalls this decisive moment when he asked himself, 'Should I fight for my rights or go back to India?' He decided that it would be cowardice to run away: 'The hardship to which I was subjected was only superficial... a symptom of the deep disease of colour prejudice. I should try, if possible, to root out the disease and suffer hardship in the process.'

He sat down to wait for the next train.

This was a turning point in Mohandas Gandhi's life. His determination to seek to improve the lot of the Indians in South Africa led him to remain there for some twenty years, and it was his efforts in South Africa that set him on the road

to the leadership of India and the eventual reverence with which he was regarded by the entire world.

Mohandas Gandhi was born October 2, 1869, in Porbandar, a small town on the western coast of India, in Bombay Province. His father had a responsible position in the government and the family was in very comfortable circumstances, although they were in the third class of the Hindu caste system. (In the first class were the wise men and priests, in the second were the aristocrats and warriors; in the third were the merchants and tradesmen; and in the fourth were the workers. Lowest were the classless ones, the untouchables.)

Gandhi was brought up in the Hindu tradition. He was not permitted to eat meat or to smoke. In his autobiography he tells us that his brother once induced him to taste meat and to smoke and that he became ill from each experience. Mohandas's home life was affectionate and he had great admiration for his father, whose forbearance, kindness, and truthfulness deeply influenced his own personality. His intellectual life was enriched by the good books in his home, the discussions, and the playing of musical instruments.

Following the Indian tradition, a marriage was arranged between Mohandas and Kasturbai, the daughter of a neighbouring merchant, when they were each about thirteen years old. Their marriage was a lasting one, with mutual understanding and affection through many trials and ordeals. They had four sons.

At nineteen, Mohandas went to England to study law. Photographs of this period (1888) show him in the meticulous attire of an English dandy, with starched white collar, striped vest, patent-leather shoes and spats, and carrying a cane



and gloves. His black hair was slicked down and, because of his slimness and smallness of stature, his ears and pointed nose seemed larger than they were.

Gandhi was a serious student of law and in 1891, after passing the bar examinations, he returned to India to practise law. In 1893 his law firm sent him on a short business trip to South Africa. It was here that he encountered the degrading discrimination against his people that made him determine to stay and combat it.

Gandhi's problems were to unite the Indians in South Africa under his leadership and to bring about reforms, even though his people were an impoverished minority without political influence. He addressed meetings, wrote letters to newspapers and officials and, in 1894, organised the Natal Indian Congress. At last his voice was being heard, and the British colonial government took notice of him as an 'undesirable'. But the more he was abused or mistreated by the government, the more followers flocked to him. The justice of his cause made Gandhi more eloquent than he had ever thought possible. The sincerity and unselfishness of his convictions won over individuals of all ranks and positions.

In seeking to bring about reforms, Gandhi developed a method of nonviolent civil disobedience which he called Satyagraha ('soul force' or 'truth force'). More than a hundred years earlier, Edmund Burke, in urging the British to grant greater freedom to the American colonies, had declared that it is not possible to jail an entire nation for disobedience. The writings of Thoreau and the Russian Tolstoi taught Gandhi the strength of nonviolent disobedience.

To advocate Satyagraha in civilised countries in the second half of the twentieth century is difficult enough. To have applied it in a hostile country in the nineteenth century was even more perilous. Gandhi had as much difficulty in persuading his followers not to retaliate with riots and blows as he did to win public opinion. He and his followers were often abused, beaten and jailed, but they grimly refused to yield or to resort to retaliatory violence.

In 1907 a discriminatory law was passed in South Africa requiring all Indians to register and be fingerprinted. Gandhi

urged his people not to obey, no matter what the consequences. For this, Gandhi was sentenced to jail. But the pressure of his followers did not cease, and he was released.

When questioned about his experience he said, 'Jail is jail for thieves and bandits. For me it was a palace.'

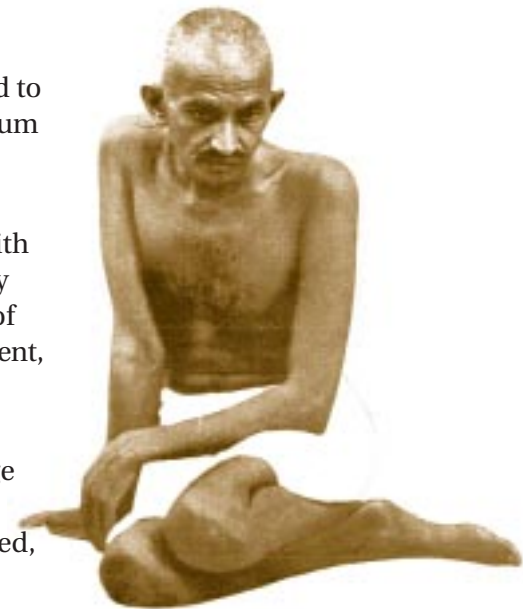
By this time Gandhi had become editor of a newspaper and had, through his law practice, earned a modest fortune. Most of this he now set up in a trust fund to help his people in South Africa. He determined to live simply, to eat the bare necessities of life: fruits, nuts, and vegetables; to perform, himself, the manual labour of the lowliest menial whether it was grinding flour by hand, spinning thread, or emptying the chamber pots; and to live as close to the soil as possible. In this respect he said he was influenced by the English author John Ruskin, who extolled the dignity of labor and deplored the effects of industrialisation. Probably the greatest influence on his philosophy of life was exercised by the Hindu Bhagavad-Gita and the New Testament, in which he found the ideals of forbearance, forgiveness and humility, love of one's fellow man, and the requiting of good for evil. Gandhi abandoned Western attire and began to wear the loincloth, sandals, and white toga which are part of our picture of him today. It was his belief that living a simple life and denying himself physical pleasures would strengthen his will and purpose and bring him closer to goodness and God.

When the Boer war broke out (1899-1902), Gandhi refused to turn against the British but instead, declaring a moratorium on civil resistance, he actually helped by organising an ambulance corps.

Many of his followers disagreed with him, but Gandhi, with the shrewd political insight that he was to reveal on many occasions, was convinced that the best hope for redress of injustice would come from the democratic British government, and so he rendered support.

After the war, the civil disobedience campaign, the mass marches, and the strikes continued. In 1913, he led a huge protest march which was supported by a strike of miners and white railroad workers. The government finally yielded,

**'Jail is jail  
for thieves  
and bandits.  
For me it  
was a palace.'**



and many of the demands of the Indians were met at last.

In 1914, Gandhi was asked by a representative of the Indian National Congress to return to India to help his native land win swaraj ('self-rule') from England. Here his problems were infinitely more complex. There were more than 250 million people in India, formed into different and often conflicting sects, such as the Muslims, Hindus, Sikhs, and Parsees.

Poverty, illiteracy, and corruption were widespread, and swaraj was opposed by the superstitious and traditionalists. It seemed almost unbelievable that this frail, idealistic man could ever have even hoped to unify the destitute, diverse people of India and win their freedom from the powerful British Empire. Gandhi journeyed from place to place in India seeking to achieve justice for the Indian sharecroppers, for the Indian factory workers, for the Indian merchants, and for the Indian employers everywhere who were being treated unfairly by the British. At times he was threatened by the authorities and ordered to leave the vicinity, or was beaten and thrown in jail. He ultimately served more than two thousand days in jail in India. Wherever Gandhi went, Satyagraha, nonviolent civil disobedience, was put into effect against the British. When the Parliamentary Acts were enacted in 1919, giving the government extraordinary powers to punish Indian dissidents, Gandhi called upon his followers to withdraw from all schools and government positions. A massive campaign of civil disobedience was begun. When violence was committed by his people, Gandhi deplored the acts and did public penance to demonstrate his disapproval.

In 1919, British troops fired upon unarmed masses of Indians at Amritsar (the Amritsar massacre), and Gandhi found it an almost impossible task when he sought to restrain his followers from retaliatory violence. His efforts were only partially successful and, when riots occurred, he was blamed and jailed from 1922 to 1924.

Now violence broke out between the Muslims and the Hindus, and Gandhi began a three-week fast to bring about peace. His efforts were successful, but only temporarily.

While, on the one hand, Gandhi was combating the injustice of the British colonial policies, he was also seeking to raise

the sights and standard of living of his own people. Wherever he went, he preached cleanliness, the avoidance of drugs, improvement of farming, the elimination of illiteracy, the dignity of manual labour, and the brotherhood of man. He opposed the caste system and the inhuman treatment of the 'untouchables'. To weaken the caste system, he would break the non-intercourse rule by sitting among the 'untouchables' in the villages, and he even adopted an 'untouchable' girl into his own home. Thus the saintly Mohandas captured the sympathy of democratic peoples everywhere.

In 1925, The British government extended a greater degree of self-government to India, and when the Indian National Congress decided to participate in the new legislature against Gandhi's advice, he retired from politics. However, in December 1926, a group of Indians, dissatisfied with the slow progress toward independence, broke away from the Congress and began terrorist bombings and shootings. This brought Gandhi back into political activity as leader of a new extended campaign of civil disobedience. Joined by hundreds of followers, he walked for twenty-four days to the sea at Dandi where, in violation of British law, they gathered salt, which had been set up as a British monopoly. Again Gandhi was imprisoned but the organised disobedience continued.

The spiritual impact on world opinion of Gandhi's efforts on behalf of the disadvantaged Indian people led important leaders in England to call Mohandas to London for a conference with the King and Queen in Buckingham Palace. Gandhi provided an unusual contrast to the pomp and splendour of the palace by appearing in his usual loincloth, shawl, and sandals.

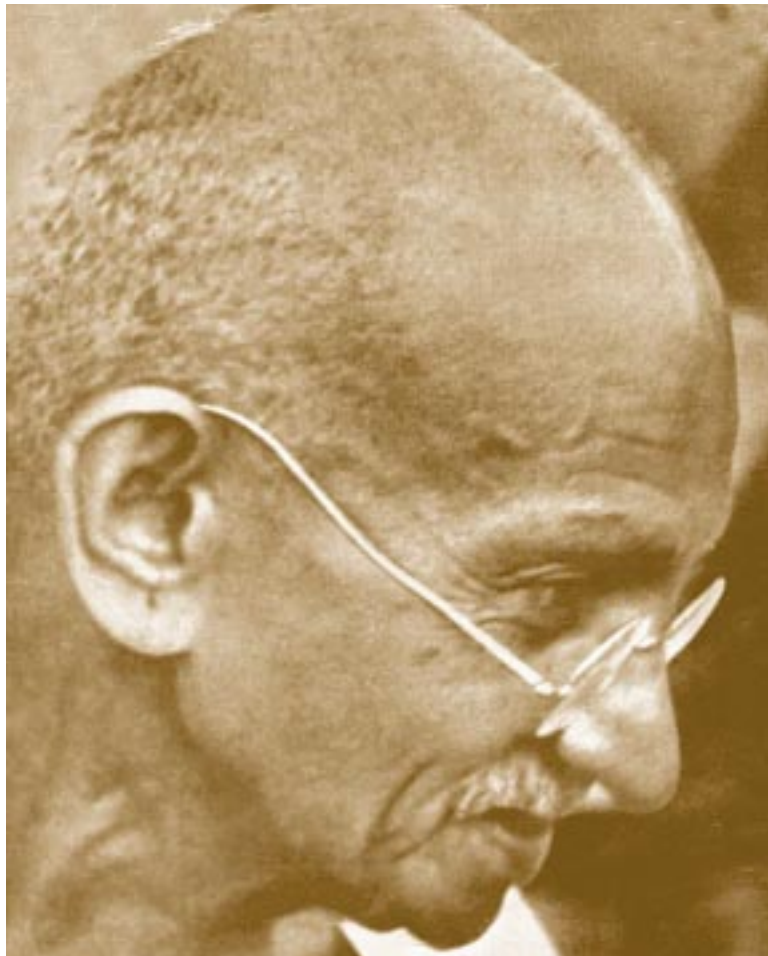
Home rule was promised in 1931 by one British cabinet but denied by their successors. Now the demand by many members of the Indian National Congress and by Gandhi was for complete freedom. The unrest in India continued, and Gandhi and his companions often found themselves in jail. His beloved wife died in 1944 while imprisoned with him.

While being persecuted by the British for his opposition, Gandhi also suffered because of the violent clashes between Muslim, Hindu, and Sikh factions. From 1946 to the end of



his life, the interfactional killings sent him, though he was in poor health, walking from village to village in Punjab, Bengal, and other provinces, pleading for peace and brotherhood. He began fasts and threatened to continue unto death unless peace was restored. So universal was the veneration of this saintly man that again he achieved his purpose.

At last Great Britain was ready to grant India freedom. The terms of the proposed Independence included the partition of India into Muslim Pakistan, under Muhammad Ali Jinnah, and Hindu India, although there were many minority groups in each country. At first, Gandhi opposed the partition, but soon practical political wisdom showed him that the alternative to this arrangement was long delay and continued civil strife, so he and the Indian National Congress agreed, and on 15th August 1947, independence was granted to India.



More than a political leader, Gandhi was known to his country men as Mahatma, the 'Great Soul'. In an age when expediency, desire for personal power, and Machiavellian cynicism seem to have guided the rulers of governments, Gandhi stands out as one who was a symbol of truth and devotion in espousing the cause of truth. Indeed, he entitled his autobiography 'The Story of My Experiments with Truth'.

Although he followed the Hindu religion (he spent two portions of each day in prayer) Gandhi believed that truth and God were synonymous. Where he saw injustice and oppression he fought against them, not with the weapons of war, which serve falsehood as well as truth, but by marshalling the moral forces and conscience of mankind. His tolerance, understanding, and devotion to truth were such that he was willing to yield to his opponents when they were right, though it was disadvantageous to himself and his cause.

Although Gandhi seemed to oppose the industrialisation of India, in fact he opposed rather the evils of the factory system of the early 1900s, in which unskilled labor was exploited by greedy industrialists. His cure for these evils was a return to the soil and to universal hand labour. Some have believed that he advocated socialism but this was not so, for he did not believe in increasing government controls. His desire was to change human nature so that men would share their wealth as he had done. Gandhi urged the world 'to replace greed by love'.

Gandhi understood the basic elements of self-government to be freedom of speech – freedom as the 'breath, the food, and the drink of public life.'

India is now a land of over 500 million. In the lifetime of one man, Mohandas Gandhi, these millions, because of his magnificent example, moved without the bloodshed of a military revolution, from the primitive condition of political illiteracy under colonial rule, to democratic, independent self-rule, and a place of dignity before all nations.

This article originally appeared in Knowledge of Reality and is used with their kind permission. To find out more visit their website <http://www.sol.com.au/kor>

**Gandhi  
stands out  
as one  
who was  
a symbol of  
truth and  
devotion  
in espousing  
the cause  
of truth**



# news

## Keyspan Ships USB Adapter for Palm PDAs

Keyspan is now shipping its new USB serial adapter specifically designed for Macintosh-based users of Palm™ connected organizers and other personal digital assistants (PDA). The Keyspan USB PDA Adapter is available now through leading catalogs and specialty retailers at a suggested retail price of \$39 (UK £25).

USB connections for Palm and other PDAs Keyspan's USB PDA Adapter provides the easiest, least expensive way to connect the Palm Computing® platform to Apple® Computer's iMac® and to Apple's new "Yosemite" PowerMacs. The Keyspan website is located at: <http://www.keyspan.com>



Apple eNews is a periodic news communication from Apple  
[http://www.lists.apple.com/apple\\_enews.html](http://www.lists.apple.com/apple_enews.html)

## Apple in education

Apple Staff Development Online is a suite of web-based courses designed to help educators integrate technology into teaching and learning. The courses let educators proceed at their own pace, allowing them to learn anytime and anywhere they're connected to the Internet. For more information:

<http://henson.austin.apple.com/nshelp/welcome.htm>

## To Pentium or NOT

Has the Pentium III finally overtaken the PowerPC G3 processor found in all current mobile and desktop Macintosh computers? Not according to the FileMaker Pro and Photoshop tests that PC Magazine performed:

<http://www.zdnet.com/pcmag/firstlooks/9903/f990326a.html>

## Next generation HTML

Start using the next version of HTML today. Just by downloading Emile Lite, the free version of the new XML editor for Macintosh from Media Design in-Progress. Find out more at: <http://www.in-progress.com/emile/index/>

## 4th and then some

Forbes ranks Apple #4 among hardware manufacturers in its rating of America's Top Technology Companies: <http://www.forbes.com/asap/99/0405/065a.htm>

The following news/highlights and info are kindly donated by the Northern Ireland Macintosh User Group: <http://welcome.to/nimug/>

## Quake III Arena

The public test version of Quake III Arena out on the Mac first before the Win32 version. This is a very good coup for Mac gaming and is apparently because the hardware and OS on the Mac is more standardised. It's a 21 Mb download, is probably full of bugs at this early stage and won't work on anything without at least a Rage Pro video card (iMac).

<ftp://ftp.cdrom.com/pub/idgames/idstuff/quake3/mac/MacQ3Test.bin>

## Mac OS 8.6

Mac OS 8.6, code named Veronica, official turned Golden Master on April 16th, according to sources. The release, which carries a brand spanking new nanokernel and a number of moderate technological enhancements, has reportedly moved on to the CD production processes.

<http://www.appleinsider.com/macos8.6.shtml>

## Free!

Want a database? One of the best non-relational databases is available for download from MacUser. The download version is 2.1, the current shipping version (including relational bits and web sharing) is 4.1. There you have it, FileMaker Pro v2.1 available for FREE.

Now what can you do with it? Anything you want. FileMaker Pro isn't just a boring database. I use it frequently myself and have used in the past for many other functions. Some enterprising individuals have even constructed word processors, catalogues, EPOS and other systems out of its bits. The third link below includes some FileMaker solutions which are accompanied by run-time versions of the FileMaker application, so you can run them without having FileMaker installed. If you do have FileMaker, you can edit them.

<ftp://ftp.macuser.co.uk/pub/macuser/FileMaker/FileMaker%20Pro%202.1/FileMaker%20Pro%202.1.smi.bin>

<ftp://ftp.macuser.co.uk/pub/macuser/FileMaker/FileMaker%20Pro%202.1/How%20to%20install>

<ftp://ftp.macuser.co.uk/pub/macuser/FileMaker/FileMaker%20Solutions/>

## Apple financial report

Apple has reported quarterly financial results exceeding expectations with a net profit of \$135 million on \$1.53 billion in revenue (an improvement over the year-ago quarter but a decline from the final quarter of 1998). Apple sold 827,000

computers in the quarter, including 350,000 iMacs and nearly 400,000 Power Mac G3s. We had relatively weak performance with PowerBooks – we think we're seeing some deferral of purchases waiting for new models.

The company claims 32 percent of iMac buyers in the last quarter were first-time computer buyers and 11 percent were PC "converts". The company doesn't feel that they are competing with \$399 to \$599 PCs: "We think they're inferior products compared to iMac."

## Updates

Connectix has posted Virtual PC 2.1.3, an update to Windows emulator that fixes a bug introduced in v2.1.2 that prevented the use of the left floppy bay on PowerBooks that support this feature.

[http://www.connectix.com/html/vpc\\_updates.html](http://www.connectix.com/html/vpc_updates.html)

Empower Pro has released 'preview' editions of its Macintosh security software, Empower and Empower Pro, that are now fully compatible with Apple's HFS Extended disk format. The update, Version 5.5, also fixes minor bugs. (A 30-day demo is available.)

<http://www.empowerpro.com/products.shtml>





# Starcraft

**Paul Hughes**

## Introduction:

Starcraft is the “Blizzard Entertainment’s” biggest product launch ever. As commander of the Terrans, Protoss or Zerg species, players head on a collision course for galactic domination. While battling in space, on planetary surfaces and within installations, players face 30 do-or-die missions. With each mission, more of the epic story of the universe unfolds.

## About Blizzard Entertainment:

Blizzard Entertainment® is a premier publisher of entertainment software. Since establishing the Blizzard label in 1994, the company has quickly become one of the most popular and well respected makers of computer games.

With blockbuster hits including the Warcraft® series, Diablo™, and Starcraft™, the company has enjoyed back-to-back number-one selling games, as well as consecutive Game of the Year awards. The company’s free online game service, Battle.net™, is the largest in the world with millions of active users.



## About Protoss:

In stark contrast to the adaptive Terrans and feral Zerg are the stolid, conservative Protoss. With their highly advanced technology and potent psionic abilities, the Protoss have long considered themselves the most powerful species in the known galaxy. Although they are not a prolific people, they have learned to bolster the ranks of their military with robotic war machines and to combine their intrinsic psionic ability with technology, thus producing some of the most effective warriors ever known. If the Protoss have a weakness, though, it is their refusal to accept change.

## About Terran:

These ideals have enabled the Confederate Marine Corps and Colonial Fleet to defend Confederate interests along the Galactic Rim for more than two centuries. Marines come from all walks of life, but they are united in their devotion to the preservation of the Confederate way of life.

## Strengths:

Mobility, great defense, build



anywhere, cloaking, versatility, Marines, strong through whole tech-tree, easy to learn, instant cloak detection, ability to repair buildings and most units.

## Weaknesses:

Tendency to “turtle”, need lots of space, require active scouting, require micro-management for special abilities, vulnerable to Dark Swarm, buildings burn up when highly damaged.

## Cheats:

Stuck on a single-player mission? These cheat codes can provide you with that “edge” you’re looking for. To use a cheat code, press the enter key, type in the code, and press enter again. The message “Cheat Code Enabled” should appear. Note that these codes only work in single-player missions.

**Power overwhelming** - God Mode

**Show me the money** - Gives you

10,000 gas and 10,000 crystal

**Operation CWAL** - Speeds construction of buildings and units

**The Gathering** - Gives unlimited energy to all casting units

**Game over man** - Ends your game as a loss

**Staying Alive** - Prevents the mission from ending due to victory or defeat

**There is no cow level** - Completes the current mission

**Whats mine is mine** - Free minerals

**Breathe deep** - Free Vespene Gas

**Something for nothing** - Gives all upgrades

**Black Sheep Wall** - Shows entire map

**Medieval man** - Free upgrades to units



**Modify the phase variance** - Ability to build all buildings

**War aint what it used to be** - Disables fog of war

**Food for thought** - Ability to build units beyond the support limit

**Ophelia** - Enables level skipping cheat. Then enter the mission you want to skip to (i.e., "terran10") to go there.

### **Recommendation:**

I recommend Starcraft for all Mac users. It's the best game that has been released for the Macintosh this year and at \$50 / £30 it's also priced very well to compete with other great games.

Order your copy now from [www.blizzard.com/market.htm](http://www.blizzard.com/market.htm)

This is a 5 star program...!!



# Bugdom

**Chris Bunney**

**Pangea Software, Inc. the creator of Nanosaur, in a recent report announced that it is the most played game on Mac due to Apple computer shipping copies of it with every iMac since the iMac's debut in August 1998. Following the success of the game Pangea Software Inc. are on the verge of releasing a new game called**



In Bugdom you are a small pill-bug that has the ability to run around, or to roll up into a ball and zoom around like a pinball. The game has many different levels. Some are above ground and some are underground or inside bug hives. Each level has several zones and new game play and cool stuff to see and do! Bugdom is definitely cutting-edge stuff, and as such it has fairly high system requirements. The minimum requirements for the game are:

G3 or iMac (233MHz PowerPC 750 or faster).

48 Megs RAM (32 + 16 virtual is okay).

Any ATI 3D card with at least 4MB of VRAM (Rage Pro or 128 recommended).

The game will not run on any other brand of 3D card due to the special tricks they are doing with ATI-specific capabilities. The game will not work with any 3Dfx cards. This may change before it ships, but currently they need the ATI chip to do what it does.

As far as I know it is expected to be released in early May 1999. A demo of the game should be available around the same time, the fact that there is going to be a demo at all probably means that Bugdom isn't going to be Freeware/Charityware like Nanosaur was, and how much it will be sold for when released is unknown.

If anyone is interested in beta testing Bugdom, please do not contact Pangea Software, Inc. yet. As they are a very long way away from needing testing done. When they need testers they will put out a message, most likely on their web site at <http://www.pangeasoft.net> (which

is well worth a visit).

This looks like it's a game that is rich in 3D graphics and effects and if it is anything like its predecessor it should be quite big in the games world making it the second hit game on the Mac. Pangea Software Inc. has been around for a few years now and has created software titles like Firefall, Power Pete and SteelHarbinger in 1996 – which was their first Playstation game. Pangea Software, Inc. also created that cute demo application called Gerbils which was written for Apple Computer. It was shipped with QuickDraw 3D and is basically a rollercoaster simulator. This was Pangea Software's first official entry into the realm of 3D.

As for me I will be there first in the queue to buy my copy when it is released some time in May, as I have played Nanosaur into the ground.



## Modifying Ambrosia Games – 2

Thomas Ash

*Ambrosia Software (www.AmbrosiaSW.com) has to be one of the best makers of shareware games ever, right up there with id, which nowadays relies on conventional retail for most of its sales. Ambrosia, on the other hand, remains completely shareware based, despite offers of commercial publication. It charges very reasonable prices for its games (\$15, that's £10, on average), but they are always excellent.*

One of the nicest things about them is that they are completely modifiable, using external resource files for everything from pictures to sounds, levels (in some) to sprites. Over the next two months I'll take a look at how to create new levels and graphics (with nothing more than ResEdit – available to download for free from [www.apple.com](http://www.apple.com) and on all good magazine Cover CDs) for many of Ambrosia's games.

Last month I took a look at how to modify Aperia, Avara, Barrack, Bubble Trouble, Chiral, Escape Velocity, and Escape Velocity: Override. If you missed that installation, just point your browser at [www.thomasash.hypermart.net/bnet/items/00044.html](http://www.thomasash.hypermart.net/bnet/items/00044.html) for the complete version of this guide. But now – let the show go on!



Harry the Handsome Executive will no doubt amuse anyone who works in a big office environment as he shoots down corridors on his trusty swivel chair, firing rounds of staples at revolting robots. You can easily modify graphics and sounds – just open Harry Graphics, Harry Music, Harry Sounds, or Harry Titles, locate the

relevant resource, and change it.

Harry the Handsome Executive comes with the Harry Editor located in the Harry Level Editor folder. This is very easy to use, but only works when you register – just run the Register Harry program.



One of Ambrosia's first games, Maelstrom is a reworking of that old classic, Asteroids. Levels aren't modifiable, but sounds, music and graphics are – just open Maelstrom Music, Maelstrom Sounds, Maelstrom Sprites, or Maelstrom Titles and find the relevant resource.



Mars Rising is a great vertical scroller – Ambrosia's first. You (and maybe a friend) must put down a Martian rebellion. Sounds, music and graphics are modifiable, as are levels (unfortunately resource templates aren't included, so editing levels is well nigh on impossible.) To edit sounds and graphics open MR Sounds, MR

Sprites or MR Titles in the Data folder and find the relevant resource. To change the music, replace the MOD files in the Music folder.



Space Invaders was fun for its time, but can it still be enjoyable in this day and age? After playing Swoop, you'll agree that the answer is a definite yes. Levels aren't modifiable, but sounds, music and graphics are – just open Swoop Music, Swoop Sounds, Swoop Sprites, or Swoop Titles and find the relevant resource.



Slithereens is Ambrosia's latest game and it's great! You guide Luther the snake through mazes in a mission to eat his fellow snakes. You can even play two player games. Sounds, music and graphics are modifiable – just open Slithereens Music, Slithereens Sounds, Slithereens Sprites, or Slithereens Titles and find the relevant resource. To edit levels open Slithereens

Levels. In the styl/TEXT resource you will find the levels. tiles is the wall tileset (located in the PICT resource in Slithereens.) ppat is the background pattern (located in the ppat resource in Slithereens Title.) music is, obvious enough, the background music (located in the MDAH resource in Slithereens Music.) avgEnemyLength is the average starting length of each enemy snake. Below these variables comes the map. # is a wall, and . is empty space. This is interspersed with some characters with special meanings. you should be able to work out what all of these mean by playing the game. & is a red pass through tile, % is a green one. You can always define custom tiles – plenty of these are given in the various existing levels. Remember to leave the correct spaces between definitions. End the level file with and end statement.

Well, that just about does it

I hope you find you enjoy modifying these games!

Remember that there are plenty of pre-existing modifications available for download from [www.AmbrosiaSW.com](http://www.AmbrosiaSW.com) and [www.escape-velocity.com](http://www.escape-velocity.com) Take a look at them, get some inspiration, and enjoy.

You can also find me at [www.thomasash.hypermart.net/bnet](http://www.thomasash.hypermart.net/bnet) Comments?: [thomasash@hotmail.com](mailto:thomasash@hotmail.com)



# Amapi 4.0:

## One great intro into the 3D world

**Karl-Peter Gottschalk** [karlpeter@bigpond.com](mailto:karlpeter@bigpond.com)

*Before Electric Image came out with their innovative new modeller, in fact two of them aimed at slightly different user bases, Mac-owning 3D artists would usually be referred to several third-party alternatives.*

One was the rather high-priced form.Z, and the other a far more affordable competitor from France: Amapi. Try pronouncing the phrase "I'm happy!" with a Gallic accent and you will get the idea of how well received it is, although oddly enough it has been quite unknown in many markets.

Which is a shame because it contains an excellent set of tools and is a great almost-all-in-one introduction to 3D. Amapi started life strictly as a 3D modeller and one with a quirky nature but it has matured into something quite different now. Version 4 adds keyframe animation and a very good renderer to its NURBS (Non-Uniform Rational B-Splines, if you must know) implementation, all within a single window interface that looks a bit off-planet at first but fits like a glove after a minute or two of use.

### Interface Heaven...

There is actually a choice of two interfaces, but be brave and go with the more unfamiliar one. There is the option of the familiar vertical toolbar type, but Amapi's workshop interface is so much more in the spirit of the program. The tools are divided up into three groups: Modelling, Construction and Assembly. Makes sense! To switch between each group, just pick up your Wacom pen, or trackball, or mouse and move it quickly to the right. You will get used to it fast as it is so ergonomic. It works very nicely with a pen!

### ... and some nifty styles too.

This version of Amapi comes with a rendering innovation that so far no other developer has seen fit to emulate, and it will have limited applicability: ActiveStyles. It is absolutely in line with TGS's sense of fun



(<http://www.metacreations.com>) Ray Dream Studio and its LiveStyles licensed from ThinkFish (<http://www.thinkfish.com>)

Another unique Amapi feature is in the modelling window where you can zoom and rotate at any time, even when in the middle of an operation. Just use your keyboard to do it. Oh, one more fun aspect of Amapi's interface is that you create your models upon a 3D virtual table that sits in the centre of the window. Yet another justification for TGS's slogan The Natural Way to Model.

Should that one window prove not to be providing enough information, then you can open an unlimited number of extra windows for other views, and in your choice of wireframe, shaded wireframe, flat or smooth shaded displays.

### Now let's build.

Amapi's tool collection is quite remarkable given its price. Use the Drawing tool to generate profiles or cross sections from circles, rectangles, curves, arcs, helicoids or freeform

lines. Or start off with a primitive such as a cylinder, sphere, cone or cube. Then turn your curve into a volume by extrusion direct or on a path. Sweeping is another alternative, with double-sweeping to make more complex forms.

Amapi offers three types of surface tools, Hull, Coons and Gordon. These in combination with curves make it possible to sketch out the basic shapes with curves, then fill in the gaps using the three hull surface tools.

### Bonuses.

These are to be found in Amapi's inclusion of a rudimentary animation module, and more especially in its renderer. There are no real surprises here other than the fact that it is included at all, and it does a damned good job of it. You have all the attributes: diffuse, specular, ambient, transparent and so on. In addition you can apply images to model surfaces and make procedural textures like marble and wood.

The materials editor supports multiple layers also, extending its rendering abilities. This gives you much more control over rendering through control over layer interaction. You can create, for instance, a shader composed of a procedural layer, colour layer and image layer. You can have multiple light sources and multiple cameras, and shadows, smoothing and antialiasing.

Amapi supports a wide variety of file formats and can do file format batch conversion in to the bargain.

So there you have it: a damned good introduction into the wonderful world of 3D modelling at a very good price, with some real surprises thrown in and an esthetically pleasing and very workable interface.

With Amapi 4.0, I am très, très 'appy! So will you be.

**Rating:** 4.5

**Pros:** Intriguing interface; polygons and NURBs modeller with animation and rendering as well.

**Cons:** Unusual interface and workflow may disconcert some new users.

**Developer:** Template Graphics Software, Inc. <http://www.tgs.com>



# CorelDraw8:

getting better all the time

**Karl-Peter Gottschalk** [karlpeter@ozemail.com.au](mailto:karlpeter@ozemail.com.au)

*I recommend readers also check out my review of CorelDraw 8's companion product PhotoPaint 8, as much of what can be said about the pixel editor also applies to this vector graphics program. They have much in common, and can be bought separately as well as in a very competitively priced bundle.*

To cut to the chase, both products are definitely worth considering if you do not need or cannot afford the industry leaders in both areas. In CorelDraw's case its competition is Adobe's (<http://www.adobe.com>) Illustrator 8 and Macromedia's (<http://www.macromedia.com>) FreeHand 8.

Although my personal recommendation is to get FreeHand or Illustrator if you can, do give CorelDraw serious consideration too, as it will evolve into a worthy rival to them both when and if Corel fixes its current problems.

## What you get.



The CorelDraw package is impressive, and I am not referring to the competition-winning package illustration of old time Hollywood star Hedy Lamarr, an amazing image considering it was done solely in vector graphics.

The bundle includes CorelTrace 8, a vector tracing program roughly equivalent to Adobe's StreamLine or FreeHand's built-in Trace tool, PhotoPaint 8, a massive collection

of excellent quality Bitstream fonts, clip art and stock shots, DiamondSoft's (<http://www.diamondsoft.com>) Font Reserve fonts manager, Canto's

(<http://www.canto.de>) excellent Cumulus media database program, and of course the third-party plugins that come with the PhotoPaint component. Corel have upped the quality of their software's colour management, something that Windows graphics software whatever the developer is notoriously bad at. That and fonts.

## Be your service bureau's best friend.

In the past reprographics service bureaux have been very wary of

## The CorelDraw package is impressive

graphics files generated on Windows PCs, and that has continued to the present day despite more misguided potential clients turning up with them. The bureaux have to put so much more work into the job to get decent results, and in most cases simply refuse to guarantee the quality of the outcome. This is why Macs are the graphic designer's first choice.

In contrast to the performance of their Windows versions of the same applications, Corel has done a great job with the font and colour handling of CorelDraw and PhotoPaint. They would make a good addition to the arsenal of any large design firm or service bureau. Another reason to recommend them for this purpose is their ability to handle such a vast range of Mac and Windows graphics

file formats. Who needs an unwieldy file conversion utility with these two at your command?

Also good in both is the ability to customise their workspaces. Enter the preferences dialog, choose whether you want CorelDraw to simulate the look of FreeHand, Illustrator or the Windows version (yeuuccchhh!!!), and it instantly flips the content of the menus and the look of the toolbar. There are some other nice features too, including a colour mixing palette of a type that is supposedly subject to

an all-exclusive patent by a high-end non-desktop graphics software developer.

CorelDraw 8's support of core Apple productivity features like ColorSync and AppleScript is excellent not to mention decent handling of PostScript in general, and the former will bring a smile to your service bureau rep's face.

## Thumbs down to...

There is still too much of Corel's Windows bias in the Mac versions of their products. The oh-so-familiar WindowsWorld mysterious crashes and bugs are still there not to mention bizarre error messages referring to strictly WindowsWorld's problems like the registry and object properties, according to other

users. The icons are still butt ugly and unbecoming a professional graphics application. Get a grip, guys! Don't insult your potential client base. What is it about Windows developers that makes them utterly visually illiterate?

## So...

There are still too many elements in CorelDraw and its bundled applications that mitigate against recommending it for all-round serious graphics production use. It is good as a supplement to your regular programs however, but do not stake everything on it. As a second application suite it works fine, and is a good waystation for students and graphics amateurs who cannot afford Adobe's software standards.

In time, as Corel improves their Mac products, Adobe should watch its back!

**Product:** CorelDraw 8.0

**Rating:** 4

**Pros:** Features, features, features; terrific bundle in combo with PhotoPaint 8; excellent cross platform compatability; affordable.

**Cons:** Many traces of its Windows heritage; buggy; slow; major RAM hog.

**Developer:** Corel Corporation, Canada <http://www.corel.com>



# Corel PhotoPaint 8

**Karl-Peter Gottschalk** [karlpeter@ozemail.com.au](mailto:karlpeter@ozemail.com.au)

*Corel of Canada is one of the largest software developers in North America, which will come as some surprise to Mac users as they will have never, well hardly ever, have seen a software product with the Corel logo on it in any Mac software store.*

## Lasting impressions.

The last time Corel made a foray into the Mac market was with the disastrously received CorelDraw 6, an experience that might have put them off developing for the Mac altogether. It certainly left a bad impression of the firm in the minds of those Mac users who tried out PhotoPaint 6. It was, reportedly, a typical Windows to Mac port that supported the impression such efforts are a waste of time. Windows users appear glad to accept software so badly designed and implemented that a Mac user would not even spit on it.

Corel have made a comeback into the Mac software arena with CorelDraw 8 and PhotoPaint 8, and in doing so have made available for Mac owners our own versions of two of the most popular Windows graphics applications.

## Where is the market?

It is difficult to ascertain exactly who is going to be Corel's user base on the Mac side, however. Forward-migrating Windows-using artists nostalgic for a familiar logo? Home hobbyists who have bought their first iMac? Graphic designers looking for a cheaper and quirkier alternative to Photoshop? Students who cannot afford the pixel-editing market leader?

Of all these I would guess that Corel's largest potential market is in the schools, because a productivity application PhotoPaint 8 is not. It tends to crash, contains not a few bugs, demands heaps of RAM, and for those who learnt pixelpushing on Photoshop will demand a bit of a rethink.

But, it has its advantages and the biggest one is price. In most major markets that should be almost half of what Photoshop normally goes for. With an academic discount the price differential should be more again.

## The good points.

Many of the Windows freaks who contribute to the graphics mailing lists I read love PhotoPaint to death and would never touch its alternative. I have yet to work out why, but let's consider some of the Mac version's good points.

# Corel have made a comeback into the Mac software arena

Launch PhotoPaint and the first big difference you see between it and Photoshop is in its Microsoft style toolbars. If you wish, you can go toolbar and buttons bananas, as PhotoPaint offers a number of workspace customisation options in the Preferences dialogs. It offers the option of mimicking Photoshop's toolbar and menu items.

PhotoPaint contains most, if not all, the features found in Photoshop 4, and some of those in MetaCreations' Painter. It could be that Corel's

programmers have tried to make an amalgam of both applications, because you get a combination of the former's image-editing strength with some of the latter's brushes. That is handy if you want to add some Painter-style natural media brushstrokes to a photograph. However you do not get anywhere near all of Painter's vast array of brush options, and if natural media is going to be your thing then I recommend either Painter 5.5 or its cut-down cousin Painter Classic. PhotoPaint's are a good introduction however.

## It's Webbed.

PhotoPaint 8 contains a number of Web-oriented features you will not find in Photoshop whether version 4 or version 5. You can make multiframe animations in it, and it allows import and export to a vast range of file types both Mac and PC, making it a good neighbour in a mixed platform environment or where your clients are sending you files generated on Windows boxes. No more conversion utilities!

# Windows developers appear to have no sense of the visual at all

## Other good stuff.

Corel has considerably sweetened the deal by throwing a heap of freebies. First off you have the choice of buying PhotoPaint 8 as a

standalone application or in concert with CorelDraw 8.

Whether alone or as part of that bundle, you get the FraxPlorer filter from KPT 2 (an ageing filter that I still use and love), Auto F/X's Photo/Graphic Edges plugin, the CSI PhotoLab photographic filters, Xaos Software's Terrazzo tiling plug-in and its Paint Alchemy brushstroke effects set, the Font Reserve <http://www.diamondsoft.com> font management tool, Canto's <http://www.canto.de> Cumulus desktop media manager, 1,600 of Bitstream's TrueType and PostScript fonts, 1,200 of Corel's best EPS clip art images, 100 high-quality stock art images, and a selection of tiling Web backgrounds, animated GIFs, floating objects and textures.

## The downsides.

So much for the goodies, now for the baddies. I have to say it: Windows developers (and by implication, users) appear to have no sense of the visual at all. Are they all blind or something? PhotoPaint 8 is typical of a Windows application

(even if it is for the Mac) in that the icons are ugly and completely inappropriate for a graphics application aimed at a professional and semi-pro user base. In the past

this kind of sin has been enough for Mac users to dismiss anything coming from a Windows developer.

Also nonvisual is the 548-page manual. I applaud Corel for taking the trouble to produce one this large and comprehensive, but my complaint is that again it seems to be designed by a blindman. Poorly printed and small illustrations and difficult to read, it commits many of the sins of a less than professional print designer. The Libraries Manual that illustrates the clip art and fonts does a good job however.

In typical Windows fashion PhotoPaint's type handling is, well, dreadful. When Photoshop has finally started getting its act together in that regard with version 5.02's Type Tool, I cannot recommend you setting type in PhotoPaint. Photoshop 5's History brush and feature are streets ahead of PhotoPaint's equivalent.

Also problematic is PhotoPaint 8's plug-in filters support. It will support some but not others, and I cannot work out any discernable pattern in it. Filters from developers who are sticklers for writing plug-ins to Adobe's standards may or may not work within Corel products, and this is attributable to Corel's less-than-total support of those specs. This applies to the Windows version as well as this one for the Mac. So it is anybody's guess whether all your plug-ins will work in PhotoPaint.

Lastly, speed and bugs are two other nagging problems I encountered in

PhotoPaint. Painting is slow so that you drag your brush and then have to wait for the actual paint to play catch up.

### In short...

There are good things and bad things in this new version of PhotoPaint. Good is the fact that Corel have finally returned to Mac software development. Choice is good, especially when it comes to image editors. Good also are many of PhotoPaint's unique and not-so-unique features.

If and when Corel manages to iron out all the bugs and improves the interface then they will have a real competitor to Photoshop, and Adobe should watch out. You cannot argue with PhotoPaint 8's price, especially given all the extras bundled with it. But I have a problem with unreservedly recommending PhotoPaint 8, unless you really cannot afford industry standard Photoshop 5.

**Product:** Corel PhotoPaint 8

**Rating:** 3.5

**Pros:** Affordable alternative to PhotoShop; customisable interface; bundled freebies; vast array of tools.

**Cons:** Does not support all Photoshop plug-ins; buggy and crashes; quirky Windows-style elements; RAM gobbler; slow performance.

**Developer:** Corel Corporation, Canada <http://www.corel.com>



## Year 2000 Audit

This was a great little find one night when I was sourcing down info on the Y2000 issue. You Mac 'IS' year 2000 compliant BUT what about the software? If you are unsure then I suggest you should download the software. This is a low cost solution to making sure you are checking and preparing for the date change. Small companies and home users are being left behind, this low cost solution might give you a little more piece of mind.

Y2k SA finds files and then gives you a report categorising the problems in an easy to read list form. Their site has information on a variety of year 2000 issues.

**Site:** <http://www.peda.com/y2ksa/>

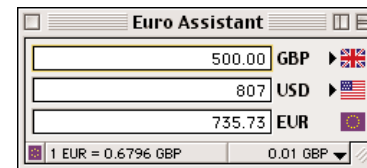
**Cost:** \$38.00 [£23.75]

## Euro Assistant

This is a neat 'must have' if you like using online bidding services or have been looking for a good quality foreign currency converter calculator, then look no further.

In my example above I have converted English pounds to USA dollars and then also to Euro currency.

Euro Assistant is a multilingual application running with ten languages: English, German, French, Italian, Dutch, Portuguese, Spanish, Finnish, Danish and Swedish.



Another great feature is it can convert non-Euro countries too. This piece of software should be called world converter [almost].

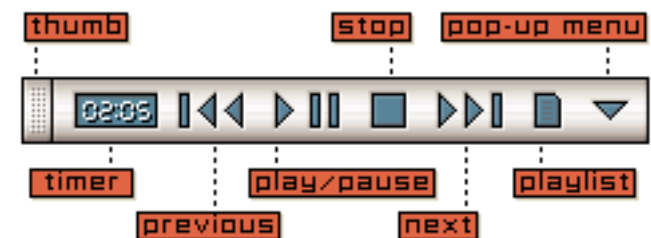
**Site:**

[www.k-inet.com/MaBaSoft/index.html](http://www.k-inet.com/MaBaSoft/index.html)

**Cost:** \$10.00 [£6.25]

## MacAMP lite

MacAMP Lite has been designed to provide an easy-to-use, fast and lightweight interface to play various popular sound formats, such as



MPEG Layer II and III, CD Audio, .MOD, .S3M, AMF, CD audio and more.

MacAMP Lite requires a PowerPC processor, Mac OS™ 7.5 or later, and at least 512K of free RAM. PowerPC 603 or better processor is recommended for MPEG Audio playback.

MacAMP has a sleek interface and I found the program to be very stable through a variety of test formats. The bar controller sits neatly in the corner of your screen much like the control strip bar, and neatly swishes out to reveal a whole host of buttons ready for action.

Again another high quality piece of software brought to you for so little. So think about it, if you enjoy a share program do the decent thing and sent in the shareware fee, or you could end up paying 10 times as much for a commercial application to do the same job, the choice is yours.

**Site:** <http://www.macamp.com>

**Cost:** \$10.00 [£6.25]

[darren@1984-online.com](mailto:darren@1984-online.com)



# Graphic Converter

**Darren Edwards**

**Thorsten Lemke Interview**

After last month's iCab interview and review I thought I'd go for something a little more tried and tested.

So there's shareware then there's shareware gold. I asked 50 Mac users in a mini survey this question. "Do you have a copy of Graphics Converter on your hard drive?" Out of the 50, 43 did. Whoa! result (hope they have all registered).

I used to get all excited when I heard about a new piece of software that could help me with my headaches of converting graphics from a Mac to PC, PC to Amiga, Atari to Mac and so on. I realised some years ago that the only software I'd ever need was Graphic Converter.

It's quality with a capital 'Q' and low cost and you'll find nothing better on the Mac market. If you think I'm joking go to [www.download.com](http://www.download.com) and find out for yourself OR if you're in the UK you'll find it on the cover CD's of MacFormat and Macworld.

Lets have a cup of coffee and see what Mr Lemke had to say for himself.

**1984:** *How long have you been in the software industry and how has it changed for you since those early days?*

**T:** I started with GraphicConverter about 8 years ago (when I bought my first Mac). My first computer was a C64 and then a ATARI ST. The main change for me is the internet with the web and e-mail.

**1984:** *Do you have plans to port to PC or stay Mac faithful?*

**T:** Yes, I have plans – but not enough time.

**1984:** *How on earth did you think of the idea to design Graphic Converter?*

**T:** I started with it after buying my first Mac. I developed the first version to convert my ATARI graphic files to the Mac.

**1984:** *What software in the Mac industry are you most impressed with?*

**T:** BBEdit and Metrowerks CodeWarrior.

**1984:** *What can we expect from Graphics Converter in 1999?*

**T:** I will implement AppleScript support.

**1984:** *How can you constantly fund your software on Shareware alone, you must be a magician?*

**T:** I spend most of my free time for developing the software. Also, I get a lot of feedback.

**1984:** *What would you add to the MacOS if you could have a wish?*

**T:** An addition for the file selection i.e. Default Folder.

**1984:** *If you could have invented any Mac software what do you think it would have been?*

**T:** Oh - that is difficult - I have no idea, yet.

Please direct additional questions to:

Thorsten Lemke  
[LemkeSoft@aol.com](mailto:LemkeSoft@aol.com)



A bargain priced, industrial strength graphics toolkit

## GraphicConverter imports

PICT, Startup-Screen, MacPaint, TIFF (uncompressed, packbits, CCITT3/4 and lzw), RIFF, PICS, 8BIM, 8BPS/PSD, JPEG/JFIF, GIF, PCX/SCR, GEM-IMG/-XIMG, BMP (RLE compressed BMP's also), ICO/ICN, PIC (16 bit), FLI/FLC, TGA, MSP, PIC (PC Paint), SCX (ColorIX), SHP, WPG, PBM/PGM/PPM, CGM (only binary), SUN , RLE, XBM, PM, IFF/LBM, PAC, Degas, TINY, NeoChrome, PIC (ATARI), SPU/SPC, GEM-Metafile, Animated NeoChrome, Imagic, ImageLab/Print Technic, HP-GL/2, FITS, SGI, DL, XWD, WMF, Scitex-CT, DCX, KONTRON, Lotus-PIC, Dr. Halo, GRP, VFF, Apple IIGs, AMBER, TRS-80, VB HB600, ppat, QDV, CLP, IPLab, SOFTIMAGE, GATAN, CVG, MSX, PNG, ART, RAW, PSION, SIXEL, PCD, ST-X, ALIAS pix, MAG, VITRONIC, CAM, PORST, NIF, TIM, AFP, BLD, GFX, FAX, SFW, PSION 5, BioRad, JBI, QNT, DICOM, KDC, FAXstf, CALS, Sketch, qtif, ElectricImage, X-Face, DJ1000, NASA Raster Metafile, Acorn Sprite, HSI-BUF, FlashPix.

## GraphicConverter exports

PICT, Startup-Screen, MacPaint, TIFF (uncompressed, packbits and lzw), GIF, PCX, GEM-IMG/-XIMG, BMP, IFF/LBM, TGA, PSD, JPEG/JFIF, HP-GL/2, EPSF, Movie (QuickTime), SUN, PICS, PICT in Resource, PBM/PGM/PPM, SGI, TRS-80, ppat, SOFTIMAGE, PNG, PSION, RAW, WMF, XWD, XBM, XPM, System 7 Clip, PAC, Icon, RTF, VPB, Psion, X-Face.



# Illume Software Interview

**Darren Edwards**

## The Game Doctors

*Illume Software Utah based company established in 1996, they are committed to producing commercial-quality shareware applications for the MacOS (which they do quite well, actually). They have cut for themselves a nice healthy slice of the 'helping the Mac gamer' market.*

Illume have three main Mac game helper software available at present:

Game Doctor- is a comprehensive collection of hints, cheats, patches, and other game enhancements, which they call "prescriptions" for the Mac. Easy to use and most features are self-explanatory. The interface is very slick and takes seconds to navigate.



Some of GD's features:

- PowerPC and 68K native.
- Over 500 prescriptions edited for consistency and clarity, with more to follow...
- Prescriptions with support for embedded sounds, pictures and Internet links.
- Patch prescriptions that automatically locate and duplicate the intended target.
- Progressive Walk through prescriptions that support the Universal Hint System.
- Direct access to Internet gaming sites from prescriptions.



## UHS for Mac OS

Stands for the Universal Hint System reader for the Macintosh. UHS provides step-by-step solutions to puzzle-based games, like graphic adventures and role-playing games.

<http://www.uhs-hints.com> including over 100 files for Macintosh games!

## Pandora's Box

This is a game enhancement utility that allows you to modify values like money, health, and ammunition for most games on the Macintosh. Unlike other game utilities, Pandora's Box doesn't use pre-defined game templates.

- Power Mac and 68K native.
- Works as a stand-alone utility. Doesn't need extensions or control panels.
- Change numeric game values, such as health, ammunition, and money.
- Locate graphical game values, such as status bars, gauges, and indicators.
- Pause games that don't have a pause feature.
- Reach higher levels and attain new high-scores.

## The Interview

**1984:** When did you first start out on the Mac platform?

**C:** Illume Software was formed in 1996, but we have been developing software for the Mac since 1989.

**1984:** What will you be adding to your already bulging bag of Mac apps in 1999?

**C:** We haven't decided. If anyone has a million-dollar idea, let us know!

**1984:** If you could have invented anything for the Mac platform what would it have been?

**C:** It hasn't been invented yet. A truly simple, but powerful, component-based software development system

**1984:** Apart from your software, what in the Mac industry are you most impressed with at this present time?

**C:** Myth II, CodeWarrior, and PowerBook G3s.

**1984:** What would you say to people that have never tried your software?

**C:** Game Doctor and Pandora's Box: Simply, good software... and sooo inexpensive!

**1984:** Would you ever consider releasing your code like Netscape did to see what other developers could do?

**C:** Yes. Last year we released the code for CoPilot, a Palm Pilot emulator, to the public domain. The code was used by Palm Computing as the basis for the Mac version of the PalmOS emulator.

**1984:** What Macs do you use and what is your most prized piece of Mac kit?

**C:** We use a PowerMac 9500, a PowerBook 540c, and a Power Computing clone. Our prize possession is our NeXT cube, since it inspired some of the technologies in Apple's next great operating system; MacOS X.

If you want a few more Prescription Files for the Game Doctor software you can go to:

<http://members.aol.com/illumsoft/>

NeXT month I'll find someone else to bug!



**Chris Patmore**

*The latest arrival has come home and is taking up all your attention. Jealousy is starting to show on the faces of the older children and the old sibling rivalry is starting to rear its ugly head. You just can't help yourself, playing with this cute new addition to the family. But you did justify it to yourself by saying that the children must not be computer illiterate and the iMac was the best, and most affordable solution. To assist you through the computer literacy hour there are two books that can help and provide some projects for the children.*

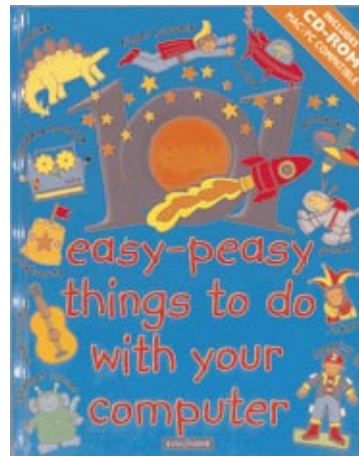
'101 easy peasy things to do with your computer' is aimed at younger computer users. It says from 5 upwards, as it does require some ability to read, even though most instructions are spoken, however my four year old daughter managed to do some of the projects unsupervised. The book, which is wonderfully illustrated, is accompanied by a CD-ROM (for Mac and Windows) full of clip art and activities. Some of the projects include making postcards that can be printed or written to diskette with a recorded message. There are games to make and send to friends. A cyberpet to create and care for and a music machine for composing simple tunes. There are also puppets and masks to create and print so that not everything involves the computer. There is even a section about going online, with advice for both parents and children, and links to kids' sites (we'll look at some of these in another issue).

'101 Amazing Things to do with your Computer' is very similar but aimed at slightly older children (7+), which is reflected in the types of activities. It also explains a little more about the basics of modern computers and the enclosed CD-ROM is also compatible Acorn computers which a lot of schools still use. Both books are excellent, especially if the children are new to computers,

and if the parents are new to computers as well they may find them useful. In fact these books are probably better than some of those "for Dummies" books which really are basic and, in my opinion, a little condescending. My two test pilots (ages 4 and 6) have been brought up with computers so did not find them particularly challenging or informative and were more interested in using their permitted computer time exploring in Riven

*I like making games and cards for my friends*

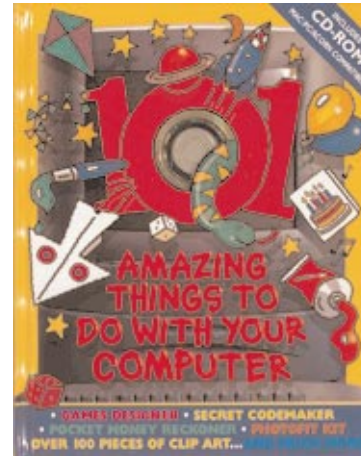
and making pictures in Painter. Although the 6 year old did enjoy creating games that he could give to his friends.



All in all it is well worth buying one of them, but they are really too similar to warrant buying both, unless it is a tactical move to avoid arguments.

**Title:** 101 easy peasy things to do with your computer

**ISBN:** 0 7534 0282 3



**Title:** 101 Amazing Things to do with your Computer

**ISBN:** 0 7534 0310 2

**Publisher:** Kingfisher

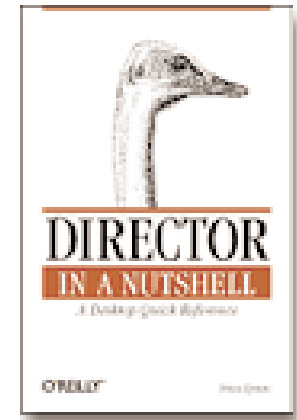
**Price:** £14.99 (each)

**Availability:** Good high street bookshops, children's book clubs or online book stores

**Overall rating:** 🍏🍏🍏🍏

**Entertainment value:** 🍏🍏🍏

**Educational value:** 🍏🍏🍏



**DIRECTOR IN A NUTSHELL:**  
*A desktop quick reference*

**Karl Peter**

**Rating:** 5

**Pros:** Volume 2 of the best Director reference book ever written.

**Cons:** Lingo In A Nutshell is the essential companion volume.

**Author:** Bruce A. Epstein

**Publisher:** O'Reilly & Associates, Sebastopol <http://www.oreilly.com>

**Illustrations:** Monochrome

**Pages:** 628

**ISBN:** 1565923820

**RRP:** AU\$49.95, US\$24.95, CA\$36.95 [£14.99]

Director is 90% undocumented. Thus states Bruce A. Epstein in the preface to **Director in a Nutshell**, the companion volume to last year's **Lingo in a Nutshell**. It is one of the major motivations for him writing this pair of books, that and the fact that there is a morass of practical knowledge out there about this deeply complex program that surely

continued

must be made more easily available to Director users everywhere.

Every user of Director needs a copy of this book, to sit beside **Lingo in a Nutshell**, Macromedia's **Lingo Dictionary**, and if you are still learning the program then add a copy of Phil Gross's **Director 7 & Lingo Authorized**.

If you do not do so, then you are wasting your time. There are no excuses, not least because these O'Reilly In a Nutshell books are simply so affordable compared to most other computer references. Forget about any other books on Director. These are the best. And if you hesitated at picking up **Lingo in a Nutshell** last year because its titles says it covers only versions 5, 6 and 6.5 of Director, hesitate no more. **Director in a Nutshell** brings the duo fully up to date.



## The 4 best Internet tools

for everything you'll ever need to know about the Internet

Paul Hughes [paul.h@1984-online.com](mailto:paul.h@1984-online.com)



### Internet Explorer – Web Browsing:

When it comes to the Internet browsing industry there is really only 2 products worth a look at. You have Netscape Communicator in the red corner and Microsoft Internet Explorer in the blue corner.

I have to break the bad news to you early and inform you that I use IE 4.5, but I have many good reasons for that. Since I started using the Internet three years ago, I have used both browsers around 4 or 5 times, but I always seem to come back to IE in the end. The main reason is that its more compatible with my System (OK don't all shout at once, but it is for me). It loads faster, it's more stable and web sites initial URL check seems to be on average around 5 times faster. Unless of course you are using a proxy supported ISP – which could be banned soon if the copyright law on them is passed.

The BIG disadvantage with IE as with all Microsoft products, has to be the amount of extensions and assorted stuff they cram in to your system folder. My advice for all it's worth (falling on deaf ears), why use all of those extensions, keep it simple, one or two will do.

Available from: [www.microsoft.com](http://www.microsoft.com)

### Outlook Express – e-mail:

No doubt about it, Outlook Express is top of my list. Maybe if the Macintosh had some better competition I would change but NO, say what you like, Outlook is the best around. Email me if you disagree with your argument at [paul.h@1984-online.com](mailto:paul.h@1984-online.com) This might sound like 'I love M\$' BUT Microsoft just happen to have one of the biggest R&D teams working outside of Apple itself.

Available from: [www.microsoft.com](http://www.microsoft.com)

### Fetch – FTP

Fetch maybe a bit out of date and lacking a few features like better protocol support, but its VERY nice to use, friendly and very fast for uploading. Another great advantage in this program is its stability, it hardly ever freezes on me. I like its compact features but wish it had a few more tools

'Why do you need a FTP program?' I hear you ask. The true answer is that you don't if you are using an up to date browser. IE and Netscape both support all the FTP servers, even password protected servers using the username:password@IP Address setup. But why be limited to the basic features of a browser when you can get a special program just for FTP, I recommend that over anything else.

<http://www.dartmouth.edu>

### Snake – IRC:

Great protocol to support if you want nice easy chat or downloading from a friends computer. As it came from the PC, its very text (DOSsy in parts) and command based, but don't worry it's all fairly straight forward .

Got remote friends? Chat to them in your own private chat window. Want to make new friends? Find them on ICQ. It's also great to have if you are a game player, take to people in your Clan (Quake people will know what I mean), arrange games and help each other out when you are stuck.

<http://www.download.com/> (Search for ICQ)

If you want information on web sites with domains look at:

<http://www.internic.net> (.com .net .org) or <http://www.nic.co.uk> (.co.uk .co.ltd .co.org .net.uk)

# Speed

Mark Tennent

**WHOOSH! Is it a bird, is it a plane? No it's a new modem. And what a beauty it is too. Up to 128kps plus two analog ports to hang even more phones off. Using the Zyxel and BT Highway allows you to have not three telephone numbers but six or more multiple subscriber numbers.**

Looking like a standard modem but with a few more LEDs the Zyxel omni-net Plus is easy to set up and use. It comes with copious Windows-centric paper documentation that can be useful if you are already fluent in "modemese". Otherwise it might as well be written in Martian. Mac users are given a disk of modem scripts and a configuration application. Documentation for the Mac is supplied as a well constructed (in Claris HomePage) series of html pages.

As the screen dump shows, the supplied Zyxel QuicConfig application can look a bit daunting but it is easy to follow the step-by-step instructions. The settings can then be saved so that it is possible to quickly change from one configuration to another – auto answer or not, for example. Zyxel QuicConfig also contains a VT102 terminal emulator that allows you direct control of the modem and so you can impress people with a screen full of S Registers as in the screen dump.

Installing Zyxel omni-net Plus takes a couple of minutes. Once the power, modem and telephone cables are attached, the QuicConfig application is installed and modem scripts



copied to the System folder. Then operation is identical to any other modem, using standard Mac software and control panels.

Apple's Modem control panel is used to select the right modem script out of the dozen or so supplied. These range from full 128k, twin-channel ISDN complete with BOD (Bandwidth on Demand) and STAC or V42bis compression, to emulating a 56k analog modem for direct modem to modem connections. While at first it looks daunting to see the choice of scripts on offer, the majority will probably never be needed other than a 64k or 128k connection script. They are, in any case, written in plain English so it is easy for the cognoscenti to adapt or create their own scripts.



The supplied Zyxel QuicConfig application can look a bit daunting but it is easy to follow the step-by-step instructions

Operating the Zyxel omni-net Plus is a real pleasure. Connections are made almost instantaneously. If the 128 BOD STAC script is used, initial connection is made at

## It's a bit like a turbo charger kicking in

64kps that is approximately 8kps throughput. If large up- or down-loads are made, or more than one operation is going through the modem (Web browsing and emailing for example) the Zyxel omni-net Plus automatically switches in the second ISDN channel. It's a bit like a turbo charger kicking in as you drive a car. The front application's progress ribbon switches from an already respectable speed to something pretty amazing. Expect to get at

least 15k per second throughput on a fast Mac. This may not be achievable on older Macs because their serial ports are limited to less throughput speed than

the modem is capable of. SEG Communications and Zyxel both have Web sites for upgrades and additional scripts, etc. While not Mac experts, SEG proved efficient, friendly and helpful. It is interesting to note that other suppliers list the same modem in the same Mac magazines that SEG advertise in, but at much higher prices.

Zyxel omni-net Plus ISDN Terminal Adapter

Price: from £115 + VAT

Supplied by: SEG Communications, 4 Durham Road, Borehamwood  
Tel: 0181 953 3377  
Email: sales@seg.co.uk  
[www.seg.co.uk](http://www.seg.co.uk)

### Key Features

- Full compatibility with both ISDN and remote PSTN via ISDN.
- 112Kbps/128Kbps channel bundling: MLP, and Multilink PPP(RFC 1661).

- Multiple signaling protocol compatibility with the following network switches: DSS1 (for Europe), NJ-1 and DMS-100 (for USA) Supports X.75, V.110, V.120, and PPP Async-to-Sync Conversion B Channel protocols. B-Channel speeds of 56Kbps (in-band Signaling) and 64Kbps (out-of-band Signaling).
- High-speed 460.8 Kbps DTE serial port.
- V.42bis data compression over ISDN using the X.75, V.120, and Bundle protocols.
- STAC data compression using PPP/MP to provide:
- High-speed Web browsing
- Fast downloading of video and high-quality graphics
- Two application program interfaces including ZyXEL ISDN AT Commands an CAPI 2.0.

## Intelligent Features

- Automatic ISDN/analog call detection.
- Automatic dial-in and dial-out B-channel protocol detection.
- Supplementary Service for USA NJ-1, DMS-100 switches and European DSS1 switch, including call waiting, call hold/retrieve, three-way conferencing, call forwarding, etc. Feature Phone operation, including call back, broker, and three-way conferencing.
- Two analog telephone ports with metering pulse function.

- Call-back security with password protection.
- Flash EPROM memory for easy firmware upgrades.
- Provides FSK/DTMF Caller ID signal on analog ports.

## Specifications

**Status Display:** 20 x 2 LCD panel

**Flow Control:** Software XON/XOFF or hardware CTS/RTS

**Configuration Setting:** Software programmable with nonvolatile memory for profile storage

**Diagnostics:** Self and loopback tests

**Line Interface:** RJ-45 for S/T interface

**DTE Interface:** DB-25 connector

**Weight:** 456g

**Dimensions:** 192mm (W) x 46.5mm (H) x 145.6mm (L)

[mark\\_tennent@1984-online.com](mailto:mark_tennent@1984-online.com)



# Networking your Home for Fun and Profit

Nicholas Klingaman

## Hardware

Have you ever been working at one computer and needed a file from another computer in a room down the hall? You could walk between the two computers, copying the files to a floppy disk. But floppy disks are slow and unreliable. If you have one of those new iMacs or Yosemite G3's floppies are unavailable to you. Have you ever bought a second computer and wished that you didn't have to buy a whole other set of peripherals? Have you ever wanted to play multiplayer computer games, such as Quake or Myth? You could play over the internet, but that's slow with a dialup modem. If any one of these three categories fits you, you may want to consider networking the computers in your house. Welcome to the first of a two-part series on networking. This month we'll be discussing a basic network and the hardware needed to set one up.

## What is a network?

To put it bluntly, a network is the means by which two or more computers can talk to each other. The Macintosh operating system has had built-in networking capabilities for more than a decade, dating back to 1986, so no additional software is required for a basic network. A network allows you to access a file on the computer in your basement from the one in the bedroom, share printers and disk drives, and play multiplayer games.

## Are there different kinds of networks?

Yes, at present there are two different kinds of networks available to Macintosh users: the slow, venerable, reliable, and easy-to-set-up LocalTalk, and the more expensive, faster, but sometimes quirky Ethernet. LocalTalk has been around since the inception of Macintosh networking, and involves

a connection between the serial (printer/modem) ports on the participating Macs. It is ideal for small (under 3 computer) networks where not very much speed is required. As the computer industry changes and expands, it is quickly becoming outdated, especially as the newer Macintoshes (the iMac and the Yosemite G3's) do not have serial ports.

Ethernet, on the other hand, is the current networking standard in both the Macintosh and PC worlds. It comes in two basic flavors 10BaseT and 100BaseT (more on this later), and requires that all computers be equipped with a special kind of connector known as an Ethernet jack. Ethernet is best suited to larger (more than 3 computer) networks where more speed is desired. In order to expand an Ethernet network beyond two computers, a box known as a hub is necessary (again, more on this later).

## What hardware is necessary for a LocalTalk network?

Virtually none. LocalTalk networks can be implemented in one of two ways: through a serial cable (like the one that goes from your Mac to your printer), or through standard phone cables. The serial cable is useful if the Macs are 3 metres (about 10 feet) or closer together, and since you probably already have a serial cable handy, you can just plug and go. Most people, however, keep their computers

continued

further apart than 3 metres, and since serial cables really don't come any longer than 10 feet, a longer solution is necessary. Luckily, 10 years ago Farallon Communications <<http://www.farallon.com>> realized this, and came up with a way to implement a LocalTalk network over another thing most people have lying around their house: phone cables. With a couple of adapters (which run about \$10-20 each), you can have a network up and running

## Ethernet is best suited to larger networks

quickly. Just plug one adapter into each serial port, plug the phone wires into the adapters, and you're set!

### What about an Ethernet network?

If you're looking for more speed and expandability, then Ethernet is probably your best bet. Ethernet is more costly than LocalTalk, especially if your Macs don't already have an Ethernet jack. If you don't know if you have Ethernet, look on the back of your Macintosh. An Ethernet jack looks like an overgrown phone jack (not to be confused with the actual phone jack on internal modems). If you're still unsure, consult your owner's manual, which is a good place to start for just about anything you're confused about.

If some or none of the Macs you want to connect have ethernet

jacks, then you'll need to buy a card to put in your machine. Find out what kind of slots your Macintosh has (again, consult your manual), and then call up your favorite provider of all-things-Macintosh and see what they carry. The manufacturers that I recommend are Asante, Farallon, and MacSense. Cards usually range from \$40 to around \$80 for some of the more outdated models. Once the cards arrive, you'll have to install them,

which can be either really simple or painfully difficult, depending on your Macintosh model. If, on the other hand, all of the Macs you want to network have Ethernet jacks, congratulations! You're luckier than most people. In any case, now that we have the appropriate connectors, it's time to buy some cables and a hub!

In order to connect two or more computers via Ethernet, you need to use a hub. A hub is a box that typically has either 5 or 8 Ethernet jacks on it, plus one marked "uplink." You simply plug the cables from each computer into the hub, and it does the rest! Don't touch the jack marked "uplink," as you don't need to use it for this type of network. In terms of cabling, you'll need to measure the distance between each computer and the hub and buy the

appropriate length of cable. If fiddling around with a drill or some molding makes you feel good, go ahead and set up your own nice wiring solution. It doesn't matter where you put the cables, just so long as they connect to the hub and to your computer.

The total cost for each computer you want to network via Ethernet should be around \$50-70, depending on whether or not it has a card and what type of Macintosh it is. Your mileage may vary.

### What's this 10BaseT and 100BaseT stuff?

Those terms refer to the rated speed of an ethernet network. 10BaseT refers to a 10 megabit per second Ethernet network. This is the cheapest and most popular solution, probably best for sharing files, printing, etc. 100BaseT refers to a 100 megabit per second Ethernet network. This is overkill for all but the most demanding users, and shouldn't be used when you're setting up your first network, as it is expensive and difficult to maintain.

### Technical information about networks

LocalTalk will transfer data at the maximum rated speed of your serial port. For Power Macintoshes, and some AV Quadras and Centrises, this means 230Kbps. For older 68K's, it means 56Kb/sec. It's fast enough for print sharing and the like, but if you want to do any serious work

(graphics, intense 3D games, etc.), Ethernet is really the only way to go. As I said before 10BaseT runs at 10 megabits (800KB) per second,

## Mixing 10BaseT and 100BaseT is never a good idea

and 100BaseT runs at 10 times that. Gigabit Ethernet (8000K/second) is coming into play soon, but only at very high costs. Ethernet gets very expensive when you're dealing with older Macs, as the NuBus and PDS slots that they used are so outdated the cards run 3x that of PCI ones. Two computers may be connected with a crossover cable (an RJ-45 where the last four connectors have been twisted together), but those get finicky and I have never really believed in them. Mixing 10BaseT and 100BaseT (even with an auto-sensing hub) is never a good idea, and I strongly recommend against it. In those kind of situations I have seen performance crawl and networks crash without rhyme or reason.

### In summary. . .

#### So, what did we learn today?

1. There are two types of networks, LocalTalk and ethernet.
2. LocalTalk is best for occasional light use and should only be used between two or three computers. It is slow, but not so slow as to prevent usability. It is cheap to set up, and you probably already have

the wiring in your house somewhere.

3. Ethernet, on the other hand, is more expensive, but is speedier and more expandable. There are two

types of Ethernet, 10BaseT and 100BaseT. 10BaseT is fine for all but the most demanding users. A hub must be used to connect the two computers.

Tune in again next month when we'll talk about how to set up the operating system software and the final steps in getting your network setup.

Comments, questions, or love letters?

Nick Klingaman would appreciate comments on his column at:

[appletalking@home.com](mailto:appletalking@home.com)

# XPhiles

XPress tips and XTension news and reviews by Chris Patmore

## Slave of the Master

Last issue we looked at the basis of good production skills in XPress – Style Sheets. To maximise their usefulness they are best utilised in conjunction with Master Pages and Templates. With these elements properly executed and some printed guidelines it should be possible for someone to create documents close to a designer's concepts. Of course the designer/art director will always want the last say but at least the bulk of the work will have been done. These guidelines refer to XPress 4, but should work with 3.3 as well. With so many different ways of working in XPress I'll outline the way I prefer to work.

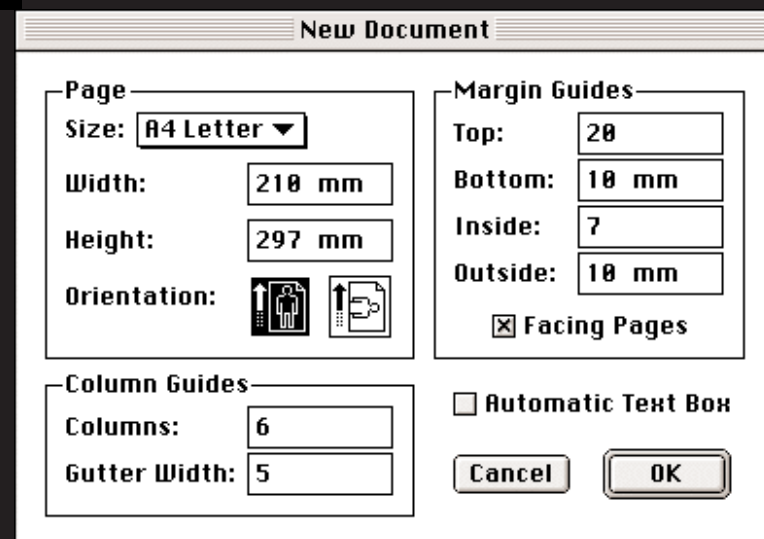
### Master Pages

This is the basis of your document – page size, margins, columns and so forth. XPress only allows one page size per document, but does allow for up to 127 different master pages, although I can't really imagine a document needing that many. For the object of the exercise we'll set up an A4 magazine as this type of document requires the greatest variations. This is not a lesson on editorial design, but how to convert the design into something workable. We'll work with a 6 column grid

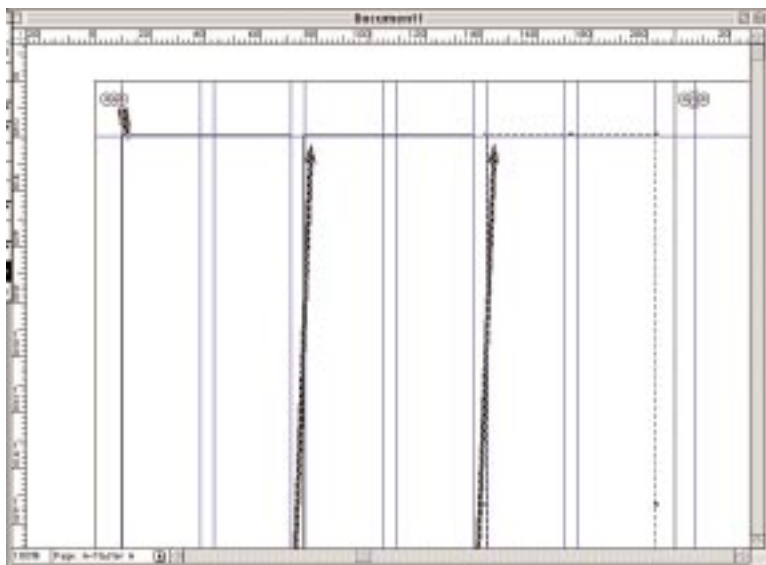
which should give us a selection of layout possibilities. To create Master Pages you need to start with a new document (⌘-N). This will become the default basis of the Master Pages. Select A4 with portrait orientation. Set Column Guides to 6 and gutters to 5mm (for example). Under Margin Guides select Facing Pages and enter your margins. For this default page

make sure that Automatic Text Box is deselected. By doing this you can make two, three or even six column pages within the same framework. It is possible to make Master Pages with more, or less, columns in the grid even once you have made your first Master Page.

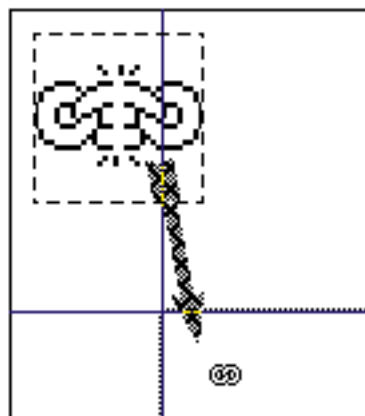
Now to put the elements on the Master Page. Double click on the Master Page icon in the Document Layout palette. This will give you your first Master Page to edit. If you are using Facing Pages you must remember to put all the elements on both pages. The first thing you will need is text boxes. Here there are two viable alternatives, depending on the type of publication you are designing. If it is heavily text based, like a newsletter, it is better to use one text box and set the columns using using the Modify palette (⌘-M). If it is more graphically orientated then it may be better to use individual text boxes that are linked together. Speaking of linking boxes – if you want the text to automatically flow to new pages you will need to activate to page links. Click on the Linking Tool and click on the chain in the top right hand corner of the page then click on the text box. Remember to do this on both Master Pages. If you have set separate text boxes for each column these will need to be



Creating a New Document also creates your default Master Page



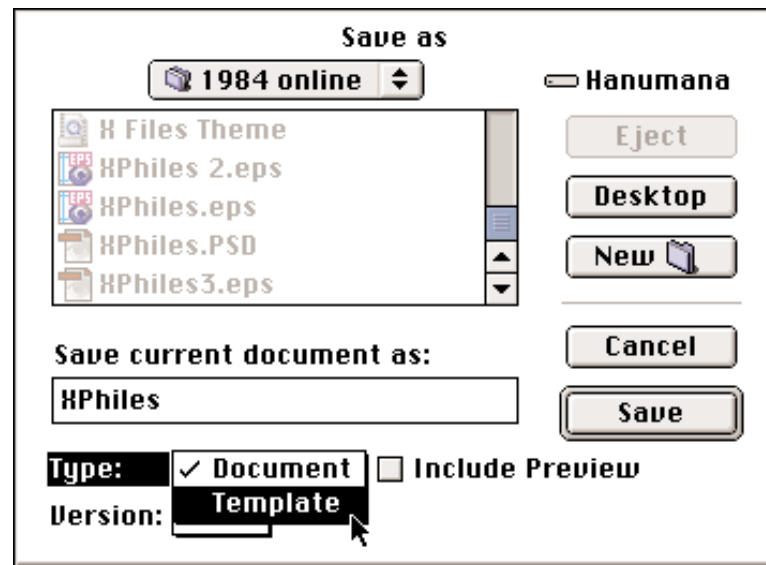
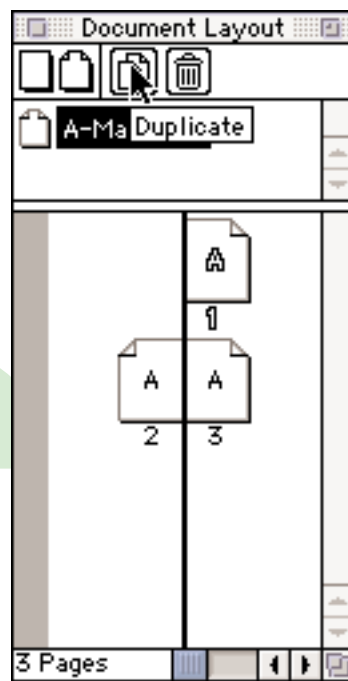
Holding the Option key when selecting the linking tool allows you to link multiple text boxes.



linked as well. Option-click on the Linking Tool will mean you won't need to keep selecting the tool for each Text Box. Other elements that are fixed on Master Pages should be added now. These would include running heads, column rules, any other fixed graphic elements and of course folios (page numbers). Automatic page numbering is easy to implement by making a text box in the appropriate place, typing ⌘-3 and then giving it its type characteristics.

Once this page has been set up you can name it by double clicking on the existing and typing the new name (e.g. 3 column). To create other similar Master Pages click the Duplicate Page icon with the appropriate Master Pages selected, then rename them. With all your Master Pages prepared it is just a matter of either dragging them into the document or using the Insert Page menu command. It is even possible to change the underlying Master Page in a document once it has been done. If, however, Master Page items are edited at the document level they will not be automatically updated.

So now you have your basic Master Pages set up, and of course Saved. To make your publication templates requires you to



Create Templates of your Master Documents in the Save As dialog box

incorporate all the other elements necessary, i.e. Preferences (for Hyphenation, Typography, etc. - see 1984 OLM issue 9), Style Sheets (Issue 12), colours, etc. When these are completed to your satisfaction do a Save As and select the Template option. By doing this every time you open the file it will create a new document with all the elements in place and ready to produce afresh each time. Another feature of XPress that is grossly neglected, and of great help in the production of periodicals, is the Library. Here you can drag any graphic or page elements (such as blocks of text) where they are saved to the palette and then dragged back onto the page when needed. A more in depth look at this will be covered in another issue.

This is just a basic outline (due to time and space constraints) to producing and using Master Pages and Templates. If you have any specific enquiries e-mail me ([chrispatmore@innocent.com](mailto:chrispatmore@innocent.com))

continued

Creating new Master Pages in a similar style to others is simply a matter of clicking on the Duplicate icon



## Updater

With the imminent arrival of Adobe InDesign, Quark has been dropping hints about some of its new developments at Seybold in Boston and also some of the features of XPress 5. These new features are nothing revolutionary - table editing, layers HTML and PDF import/export, but the release to beta testers has been delayed "to allow for further refinements".

## More Freebies

I haven't found any new XTensions this month, but I did come across something that no designer can have too few of and that is fonts. Checkout <http://www.fonthead.com> - they have a great selection of very reasonably priced collections plus some free fonts to download. A very clean site well worth a visit.

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**Does the term MetaNurbs mean any thing? How about Boolean operations? Unless you are familiar with 3D animation programs they probably sound like gibberish. In the last issue of 1984 I gave a brief introduction to the world of 3D programs. Over the next few months I hope to provide a very rough guide to the basics of 3D modeling. In this first guide I will introduce some basic concepts, that I believe is important to understand.**

The most valuable tool you have is your mind. Very often I find it easier to "construct" the model in my mind first before I begin work on the computer. This may sound strange but it can make the process of computer modeling a lot easier. I also find it almost essential to sketch all my ideas down on to paper before I begin any work on the computer. In the case of the robot model below, sketching helped me greatly



to plan how the model should look. Sketching also allowed me to quickly develop my initial idea into a proper project.

## Getting started

The amount of hardware you have does not necessary restrict what you can create. You don't necessarily need state-of-the-art technology to start getting into 3D. In fact the iMac is more than

adequate enough for most people, with its built-in QuickTime 3D acceleration it's ideal for 3D work. But all you really need is a PowerPC equipped Mac, and a colour monitor. (The robot image above was produced on a 66MHz PowerMac 7100, with 16MB of Ram and a 250MB hard drive.)

Once you have your equipment you need some software. In the last issue of 1984 I introduced quite a number of the major software currently available. Most are quite similar and require the same techniques, and approach when it comes to 3D modeling. However it is always a good idea to try out any software before you buy.



This is the first object I created. Future objects were to it, slowly building up the robot

Now that you have an idea, of the equipment and software it's time to start. Firstly you need to plan how

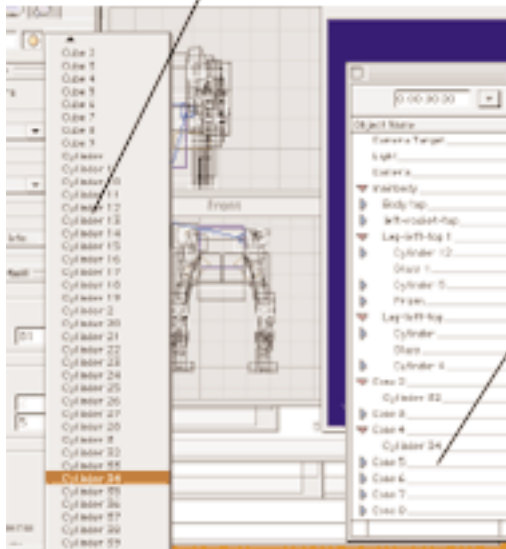
to create your model. This process may take a long time, and often it's tempting to start using the computer straight away, but planning is essential if you don't want to be left feeling frustrated later on.

When you are planning, try to think of your model in terms of basic shapes. For example the robot model is based around a very simple cylinder. From this cylinder I built up the robot component by component. I always try to imagine how in real life I would go about building my 3D models, I find this enables me to build the model up in logical steps. This technique also introduces a sense of realism into your final model.

When trying to create a 3D model things can quickly become very complicated. As you add more objects to your model, slowly building it up you may find that you want to change part of the model. However you may find that you can't select the component you want to change easily. This is why I always name nearly every component that I add to a 3D model. This allows me to quickly select different components of the 3D model for easy editing or animating

continued

Very often the number of objects can run into the hundreds. As this screen shot shows, this robot is made up from a lot of simple shapes such as cones, and cylinders.



In nearly every 3D program objects can be grouped. Organisation is important, objects can be grouped together to form components as seen here. This makes "editing" the robot a lot easier.



### Andrew McNaughton

CD Writing isn't as clean cut as it would seem. We found that it was a tricky business and required a few techniques, not in the manual, to ensure our CD-Rs were written without failure.

The first thing to decide about your CD Recorder or Rewriter is which way you wish to work with CDs. If you'd like to use a CD like removable media, then you should install the Adaptec DirectCD software. This is an application control panel, supported by Mac OS 7.6 and later, which allows you to copy and 'delete' items to and from a CD, initialised by DirectCD in the first place. With CD-Rs the deleted items are removed from accessibility but the disk space they took up is NOT freed for more data. CD-RWs on the other hand benefit from the disk space being freed for reuse. DirectCD works with the UDF format. If you don't have the Adaptec UDF extension installed you can't read a DirectCD formatted disk. If you have System 7.5.5 or earlier you cannot use DirectCD.

Adaptec Toast is more likened to a VCR. You tell it what you want to record and it does it for you. The current version for SCSI devices is 3.5.6 and for USB writers it is version 3.8. Whether Adaptec will combine the two versions in a future release is unknown at this time. If you wish to copy CDs or you have prepared the data you wish to write beforehand, then you should not use DirectCD. DirectCD should be removed or disabled if you intend to use Toast.

Toast has been around for many years now but, like most other software, tends to run into problems as our systems

get more and more complex. So the biggest tip for writing CDs with Toast is to make use of the Control Panel Extensions Manager and create a special reduced set of system extensions. We found that, when writing large amounts of data on a fully enabled system, Toast sometimes ruined CDs. This appeared to be caused by some system extension trying to grab some processor time. Strange error messages about sense keys, that had no explanation, were coming up and the CD in the writer at the time was damaged beyond repair. After researching the issue we found that Adaptec Technical Support is aware of problems like these and they advise disabling extensions not used during the CD writing process. Our recommendation is to create a set with ONLY the following : Date and Time, Apple CD/DVD Driver (or Apple CD-ROM), Apple Guide, AppleScript, AppleScriptLib and Norton Shared Lib (Norton Utilities 4). If you are connecting your writer via a SCSI card you will have to include any software that card needs to run. Of course you need to restart to switch to your

The mini gun mounted on the left shoulder of the robot is easy to make.



the next issue of 1984 I will introduce the basic techniques I used to create the different components of the robot, and give a step-by-step guide on how to build the Mini Gun component of the robot.

Until next month, keep 3Ding [gxu@wxumac.demon.co.uk](mailto:gxu@wxumac.demon.co.uk)

once the model is finished. By using basic shapes it is very easy to build up a complicated model. This technique is easy to learn and use. However this technique has its limitations and draw backs. The creation of more organic shapes is done using other techniques such as using spline modeling. In

newly created CD Writing Extensions set. Don't forget to switch back to your usual set before resuming normal computer use.

Why leave Norton Shared Lib enabled? The answer is part of our next important tip. Using Apple Disk Copy NDIF (New Disk Image Format) HFS/HFS+ disk images for CD data preparation. On older Macs with slower than 16x speed CD-ROM drives this is also vitally important when copying data or Audio CDs.

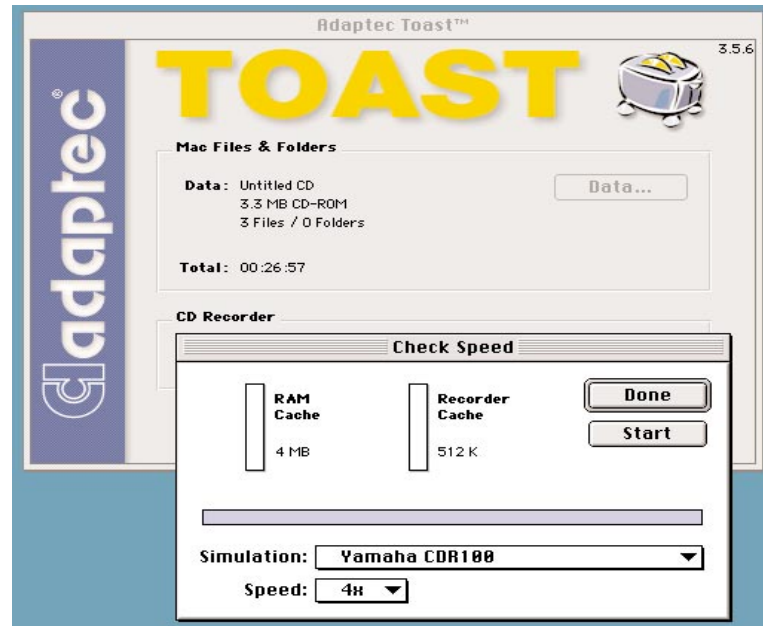
prepared for making CD-sized read/write disk images. From the Image menu select "Create New Image...". From the "Size" pop-up menu you will see it offers you 3 choices of CD-sized images. If you're writing a smaller amount of data you can make a smaller image to suit. Next it's time to copy onto the image the files and folders you need on CD. You can then arrange them for ease-of-use.

You can then run Disk Doctor and Speed Disk, from Norton Utilities, to ensure the data

## create a special reduced set of system extensions

Toast doesn't like slow devices and again can ruin CDs when the source data is transferred to it too slowly. Disk images accelerate the rate at which Toast can read the data and they make all the difference to slower older machines. The current version of Disk Copy is 6.3.2. You can download this version from Apple's Software Updates servers. You may already have Disk Copy on CD if you own a copy of Mac OS 8.x or a recent Power Macintosh or iMac. Disk Copy comes

on the image is in good condition and optimised. Launch Toast and drag in the mounted disk image you've just prepared and use the Data button to configure any options. ALWAYS use the Check Speed feature of Toast before writing any CD. If you're writing a full CD, allow the test to run for at least 3 minutes (with a 4x Speed writer) before deciding it is going to go okay. Then you can go ahead and click the Write CD button, always choosing Write Session.



Always run Check Speed to ensure the disk will write

Write Disc will close the CD off, meaning you can't add up to 650MB to it later in additional sessions.

When copying Audio CDs with a slow CD-ROM drive they may fail. This is again a speed issue. To get around it you have to use Toast's Audio Extractor to turn tracks from an Audio CD into AIFF sound files. Toast can write Audio CDs from 16-bit non-compressed 44.100 KHz Stereo AIFF files. Prepare the tracks on a disk image. No need to run Norton Utilities here. Then instead of dragging the image onto Toast's main window,

drag the AIFF files. Toast should switch to Audio CD. Check Speed on the first two tracks. If they go well, the rest probably will too.

Toast uses a RAM buffer. The RAM buffer should be set as big as you can make it, depending on how much RAM you've got. Sorry, RAM Doubler or Virtual Memory can cause problems for Toast and shouldn't be enabled when writing CDs.

Bootable CDs must be written while the Apple CD/DVD Driver or Apple CD-ROM extension is loaded. Toast uses the Apple CD driver; copying it onto

the bootable CD. The System Software on the CD is best copied from an official Apple bootable CD that you are licensed to own. Do not copy the System Folder that runs your Macintosh and expect it to work 100% from a bootable CD. Remember that the recent machines require the presence of the Mac OS ROM file. Currently version 1.2 or later will suffice. When new hardware comes along a newer version of the Mac OS ROM will be required.

If you have the Yamaha CRW 4416 mechanism you will find that Toast 3.5.5 won't see your writer. You need to install the Yamaha 4416 plug-in driver beside the Toast application itself. Alternatively download and run the Toast 3.5.6 Updater, available from Adaptec's website.

[andrew@1984-online.com](mailto:andrew@1984-online.com)

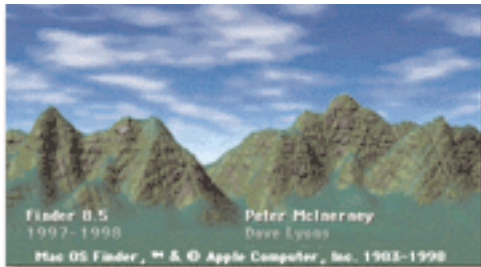


# Tricks of the trade

Tom Martin

This is the first publishing of “Tom’s Tricks and Tips”, a column written by Tom Martin to show off cool tricks in Mac applications and to provide useful Mac-related tips for anyone from the newest Mac user to the most experienced of programmers. Enjoy!

This month, I’ll start out by covering cool tricks in Mac OS. Although all of these tricks are in Mac OS 8.5, most are in every OS since System 7. My first cool trick is a very well-known one; it has been in the Finder since the beginning. When in the Finder, hold down the option, key while clicking on the Apple menu. Instead of seeing the ‘About this computer’ menu item, you should see ‘About the Finder’ clicking on it will bring up a picture of Silicon Valley, with a scrolling list of developers and copyright info.



Anyone who uses Windows knows about the right mouse button and what it does. But what most Mac users don’t know is that Mac OS 8 and above has built-in right-click

emulation. Simply hold down the control, key while clicking to bring up a useful window with many commonly used commands, including ‘New Folder’ and ‘Clean Up’.

The option key has many more uses in Mac OS that it is given credit for. For instance, if you have many windows open at one time, option-clicking one closes them all. And if you hold down option while opening a window, opening another window will make the first one close. This is very useful if your desktop is as cluttered as mine.

Speaking of neatness, if you’re the type of person who keeps all of their file icons arranged by icon, you can snap them to grid by holding down command while dragging the icon.

Well, that’s it for this month’s Tom’s Tricks and Tips! I hope to keep this column running for some time, so keep your eye out for it.

[tmartin@princeton.crosswinds.net](mailto:tmartin@princeton.crosswinds.net)

## Apple Web Help

If you have any questions about Apple Software Updates including all of the latest updates of Apple software, including most printer drivers, System Enablers, updates to utilities and networking and communication software. Currently, Apple Assistance posts Apple Software Updates to the following online services:

- 1) Internet: Apple World Wide Web and ftp sites: <http://www.info.apple.com>
- 2) ftp URL: <ftp://ftp.info.apple.com>
- 3) America Online (keyword: applecomputer)

### Internet: Apple Web Sites

All Apple software updates are posted to ftp servers, but you can also get to the software updates collections from one of Apple’s web sites:

<http://www.apple.com/support> – Apple Support Information – Apple’s USA based web site. Choose Apple SW Updates from the pull-down menu to go to the Apple software updates collection, where you can browse for, search for, and download all US and Worldwide Apple SW Updates. Here are a few handy URLs:

<http://www.info.apple.com/ftp.newfiles.html> – list of newly posted Apple software updates.

[http://swupdates.info.apple.com/Architext/AT-SWupdates\\_USquery.html](http://swupdates.info.apple.com/Architext/AT-SWupdates_USquery.html) – Search page for US Apple software updates.

[http://swupdates.info.apple.com/Architext/AT-SWupdates\\_Worldquery.html](http://swupdates.info.apple.com/Architext/AT-SWupdates_Worldquery.html) – Search page for Worldwide (localized) Apple software updates.

<http://swupdates.info.apple.com/cgi-bin/lister.pl/Apple.Support.Area/Apple.Software.Updates> – Browsing page for all Apple software updates.

### Internet: Apple ftp sites

You can use either an ftp client (such as Fetch or Anarchie) or a web browser to go our ftp sites directly:

[ftp.info.apple.com](ftp://ftp.info.apple.com) (multiple servers, handles 15,000 concurrent users)

When using a web browser, use the following URL: <ftp://ftp.info.apple.com>.

[ftp.apple.com](ftp://ftp.apple.com) (multiple servers, handles 1000 concurrent users) When using a web browser, use the following URL: <ftp://ftp.apple.com>.

[ftp.info.euro.apple.com](ftp://ftp.info.euro.apple.com) (one server, handles 250 concurrent users) When using a web browser, use the following URL: <ftp://ftp.info.euro.apple.com>.



# Think Andrew™

## Mac OS x

**Andrew McNaughton**

The long awaited Unix-based Apple Server operating system arrived in the US on Tuesday 16th March 1999. It's coming to a Power Macintosh G3 or Macintosh Server G3 near you soon.

So what makes Mac OS X (pronounced 10) Server any better than the combination of Mac OS 8.x and AppleShare IP 6 ? Answer: the strength and reliability of Unix (true protected memory and true pre-emptive multitasking), without needing to know Unix, and exciting new capabilities never before seen on any platform; all via a Mac OS-like GUI. These new capabilities are intended to make a Network Administrator's job even easier and increase productivity and speed all round.

### NetBoot Server

Picture this: you have a network that consists of multiple iMacs and B&W Power Macintosh systems. All clients use the same version of the OS and the same applications. Each client previously required individual configuration and software installation. We're talking a lengthy time-consuming process here, that may not be performed entirely 100% perfectly on each client. A new update or upgrade comes along. You can either go around each and every client and install that upgrade or you can install the upgrade on an admin station and then use Network Assistant to copy that onto each and every client. What if you only need ever work on just one disk image on the Server which can then be used to run all clients? Well you can with Mac OS X Server's NetBoot feature. Any Open Firmware booted Power Macintosh system can become a NetBoot client, simply by holding down the letter 'N' on startup or going into the Startup Disk control



# This turns your Macintosh into a true Network Computer because you could remove its internal hard drive



panel and setting it to NetBoot HD. This turns your Macintosh into a true Network Computer because you could remove its internal hard drive; as Steve Jobs demonstrated at the MacWorld conference in January of this year.

### How does it work?

The NetBoot client, when switched on, broadcasts a message, via Ethernet, to find the startup server program. The startup server program responds by sending information (such as an IP address) the client needs to establish a connection to the NetBoot Server. At the NetBoot Server setup stage a range of IP numbers for NetBoot clients will have been programmed in by the Network Administrator.

The NetBoot server keeps track of the client's hardware Ethernet address, and associates it with the IP address and other information in a table. Each time the client is NetBooted, this table is referenced to ensure the client receives the same IP address and other information at startup. IP addresses are NOT recycled. Each client's Ethernet adapter address is tethered to a specific IP address after the first NetBoot. Once the connection between the NetBoot client and the server is established, the Mac OS ROM image is copied from the server to the RAM of the client. This is done using the TFTP (Trivial File Transfer Protocol). The Mac OS ROM file is specific to client hardware. This means it has to be kept up-to-date when new NetBoot-capable hardware is introduced into a network.

Next, the Mac OS ROM mounts the image from the server of the Mac OS and then opens the System file. This is accomplished by a minimal Apple File Protocol (AFP) client contained in the Mac OS ROM and stipulates that there must be an AFP server running on the Mac OS X Server being used as the boot server. The rest of the Mac OS is loaded into the NetBoot client's RAM as it would from a client's internal hard drive.

Disk images are mounted on the desktop after a NetBoot client has completed startup. One contains the OS and the other is the Applications image. All data resides on the server and the client's internal HD is not used. As with At Ease for Workgroups (which Macintosh Manager replaces), each

individual logs in during client startup and can be configured to have read/write access to their own personal desktop.

## The NetBoot Process

- 1 NetBoot client powers on, Open Firmware net-boot begins transmitting BOOTP requests;
- 2 BOOTP server (bootpd on Mac OS X Server) receives requests and looks for a host entry with the client's hardware Ethernet address;
- 3 If no entry exists, the server creates a new client identity:
  - Finds an available IP address on the client's subnet
  - Assigns the client a unique number i, range 1..n
  - Creates an AFP login account
  - Creates a new host entry;
- 4 Once an identity is established, the server: Creates an empty copy-on-write disk image file shadow of the system disk image created the first time and when the size of the shadowed file changes;
5. Places boot parameters into a BOOTP reply, sends it to client;

- 6 Open Firmware client receives BOOTP reply :
  - Stores the reply in the Open Firmware tree
  - Configures itself using the IP parameters in the reply
  - Downloads the boot file, Mac OS ROM, using TFTP
  - Passes control to Mac OS;
- 7 Mac OS retrieves BOOTP reply from Open Firmware tree;
- 8 The "network block driver" initialises itself using information in the reply:
  - Configures its IP stack
  - Logs into the AFP server using the AFP login identity
  - Mounts the system disk image copy-on-write and the application disk image read-only;
- 9 The remainder of the Mac OS startup proceeds as usual;
- 10 Open Transport stack configures itself using BOOTP.

System and Application disk images are shared by all NetBoot clients. Each gets its own shadow system disk. Unfortunately non-Open Firmware Power Macintosh models cannot be NetBooted. It has been suggested that a special 'NetBoot 100Base-TX

PCI Ethernet Adapter' could be developed to change this, however no company has come forward, as yet, with such a device. No 68K-based Macintoshes will support NetBoot.

## NetBoot takes system management one step further

Apple has continually evolved Apple Network Assistant and At Ease for better system management of Macintosh clients. NetBoot takes system management one step further and introduces a new model for keeping Mac clients up-to-date. Many of the features in Network Assistant and At Ease are incorporated in NetBoot. Apple will continue to develop these products to support Mac clients that are not NetBoot-capable and not compatible with Macintosh Manager discussed below.

### Apple File Services

This feature of Mac OS X Server supports 4,000 open files per process and 1,000 simultaneous connections. This enables you to provide file services to a large workgroup from a single Macintosh server. Also user

and group information can be shared among different Mac OS X Server systems, which can streamline the updating of multiple servers. You can add multiple users at one time from AppleShare

IP servers which speeds up server configuration. This makes it easy to add a Mac OS X Server-based system to an existing AppleShare network.

Last but not least, a web-based remote administration tool provides easy-to-use file server management that can be accessed from any Java-capable web browser.

Next month the conclusion of Mac OSX will tie up with overviews and detailed analyses of:

- Apache 1.3.4, The World's No. 1 Web Server (Mac OS X Server includes a fully native port of the Open Source Apache 1.3.4 web server. Touted as being "A technical marvel that commands more than 50% of the booming market for Web server software."

- WebObjects 4.0.1, The World's No. 1 Application Server.

- Macintosh Manager.

- How does Mac OS X Server provide greater scalability than AppleShare?

Join me next month.

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# What is Ergonomics?

Darren Edwards

## A pain in the...

I thought this month I'd take a trip away from the technical hardware/software side of our lovable Mac and bring up a subject we'll all come across at some time.

Have you ever had to stretch with back pain after only 2 hours at your computer or your wrists get very painful and swollen after only typing a few hundred words? That's bad ergonomics.

Ergonomics is the study of human's interactivity with their environment and equipment, everything from lighting, tools, furniture and even heating, basically adapting where we work, live and relax to our needs.

I've touched on this subject before but I still get emails from readers with stories of heavy eye strain, arm and back pains. One of the most common terms you'll hear when people refer to the aches and pains associated with computers is RSI [Repetitive Strain Injury]. This is one rough deal we share with Wintel PC users.

You can apply ergonomics to your office be it at home or at work and everyday computing on your Mac work horse.

## Things to look out for:

### Chairs

Wrong chair height, you should look slightly down at your monitor (roughly 20 degrees). This is so you can glance easily

at your keyboard. If you do a lot of writing at home/work you should invest in a chair that has a lower back support. Try to keep your spine as straight and as comfortable as possible.

### Keyboard and mouse

Wrist rest might look uncool and unfitting around your sleek Mac but who cares if

the desk surface. The rest raises your wrists to the same level as your keyboard.

The job of a mouse rest is the same. I've bought what can only be described as a plastic square tray that can hold your mouse mat or in my case my metal optical plate. It has a raised padded area that lets me rest my

writings place a document holder to keep your eyes at the same level as the screen.

### Other areas

Lighting is so important if you're designing, writing or game playing you only have one set of eyes so adjust your lamps or move your computer to a different area of the room, rather than

## without the correct equipment the body will react to protect itself

your health is at risk. I have to use a keyboard and mouse support due to the workload of site designing, writing and 1984 work. I spend about 6 - 10 hours a day on my Mac and without the correct equipment the body will react to protect itself. Pain being the biggest indicator. It took me about 6 years before I started to take what was happening to me seriously.

Get yourself a wrist rest that is the same length as the main typing area of your keyboard. The objective of the wrist rest is to reduce you resting your hands on

hand and take the strain off the wrist, does the job great.

### Monitors

Don't put your screen facing a window. When you start work you'll have the light shining over your shoulder and on to the screen, leaving you squinting your eyes. I'm not a fan of screen filters I'd rather adjust the monitor settings and brightness for my comfort, but if you find problems you might want to try one if the glare is too much for you.

When you need to type out work from your rough

strain your eyes hour after hour and week after week.

When I used to run at college I was always in pain after long races, constant new sport shoes, qualified coaching to adjust to a more refined and comfortable racing style and a lot of luck I turned out to be a half decent runner. How does this apply itself to computers? Good equipment, correct working practices and skip the luck and use your common sense.

All the best, same place next month. I'll be back on the track of your Mac.



# Online Rage!

**Darren Edwards**

*Aaaaaarrgh!! There is nothing worse than someone who just doesn't have the facts (or indeed a clue) needed to support an argument they are trying to put over.*

This month I give you an online site full of <bleep> "@!#\*@" . I really do not have that much of a problem with people and friends using a Wintel PC, just because they buy low performance and fast depreciating hardware does not make them less of a person. When the discussions start about Mac v PC we'll normally agree to disagree. There is this myth that Mac users have to fight to the bitter end of an argument, that's not true unless we're shown the red flag. THESE SITES FOLLOWING ARE THE RED FLAG.

I am going to let you see some of the wonders our great Wintel PC users get up to in their spare time when trying to load software or restart their crashed machines. <http://www.geocities.com/SiliconValley/Campus/7803/>

Right is obviously a great site, this is where Mac users have got it all wrong. Ditch your Golive 3/4, DreamWeaver, Photoshop, ImageStyler and just type HTML in your word processor and have done with it, just like the late 80's all over again (lets all dig out our Apple IIs and Spectrums). Yeah right! Gives me a warm glow inside if this is the best an Anti Mac site can offer.

When you've finished laughing at the above site follow this link for more side-splitting mayhem [http://members.xoom.com/\\_XOOM/macssux/top100s.htm](http://members.xoom.com/_XOOM/macssux/top100s.htm)

Here are some of the 100 reasons not to have a Mac from the above link:

**100 Think Different, think layoffs - ???** Really! Yawn that's an old one. Dell, HP, Digital have all had layoffs in the last year. This last quarterly financial results exceeded expectations with a net profit of \$135 million on \$1.53 billion in revenue. Apple sold 827,000 computers in the first quarter of '99.

**99 Don't wonder why the schools are so bad, they use Macintosh -** No they just get old 386's and 486's donated to them (dumped on them), that only have a second life as collective door stoppers.

**97 There is really no easy way to get into the computer to fix it -** Yeah right! Getting in to a PC with a 12" crowbar past all the plastic parts that "snap" at the touch of a screw driver is really hard. By the way, anyone remember a PC getting a design award?

**96 Macintosh + AOL = 2 Perfect Matches -** Wintel PC = Less cash + more headaches

**90 No RE-BOOT Button - ?** I give up!

Can't lower myself to answer any more, but for your enjoyment check out some more classics:

89 Too slow at getting input from the mouse



87 There is no-point in having a Macintosh

86 In order to (in PC terms) unzip something, it takes so many long steps

83 Nothing to talk about when you own a Macintosh

80 You can never rely on a Macintosh

78 Everything looks like kids' stuff on a Macintosh

77 Macintosh can't even read a ZIP file, and ZIP files are the files that are mostly on the Internet

73 NETWORKING, what a nightmare

72 Can NEVER have any fun what so ever on a MAC

39 Computers in color, how childish.

29 Hard drive has no letter, all it says is "Hard Drive"

28 ALL Commands are different

11 They try to make a Windows 95 clone, but actually it's the same crappy OS as it was made for

9 Not User Friendly

7 Games for Macintosh aren't in the picture no more

6 The Internet was not made for Macintosh, that is why it's too slow

2 You may think of Macintosh talk as Martian talk

I know, I know you just can't handle all this culture being thrown at you but if you look at:

[http://www.pbbt.com/old/top\\_ten/index.html](http://www.pbbt.com/old/top_ten/index.html) or you could go and sign the guest book at:

<http://callisto.guestworld.tripod.lycos.com/wgb/wgbsign.dbm?owner=macintoshsucks>

Don't be frightened to tell them where you heard about it, I'd enjoy the educated ramblings they might deploy at me.

<http://members.xoom.com/macssux/>

I have saved the best (worst site) until last, oh yes!

<http://www.geocities.com/SiliconValley/Peaks/1870/>

and I quote:

"Is the word 'Macintosh' a thing of the past? Note to Macintosh users: You can keep fooling yourselves that Macintosh is winning and that "Windows is Doomed". Just don't be too upset when Apple goes out of business. Well, maybe as long as you have your big lettering "MACINTOSH RULES!!, WINDOWS SUCKS!!", you will be happy."

OK for the 12,000 readers going RED remember this.

Seems like the people who have these sites REALLY do have an axe to grind. You know me, I'm all for free speech and these people are entitled to their's. Please go to their respective sites and put over a sensible opinion, DON'T flame or SPAM, it's not big or clever, just let them know they're off the mark (well off the mark).

There you go.

Next month I'll find the lighter side of life for you - I hope.



The logo features a small icon of a floppy disk with a blue square on it, positioned to the left of the text. The text 'AppleScript' is in a large, serif font, with a small icon of a floppy disk to its right. Below it, 'for the Mac OS' is written in a smaller, italicized serif font.

## Backing up with AppleScript – 2

Steve Harris

*Caution: This article contains language which some people may find offensive. If you are of a nervous or violent disposition do not read on.*

Let's get these naughty words out the way then, shall we? Feck, arse, girls, drink, Bill Gates, income tax, Manchester United, Microsoft, Gil Amelio, backup.

Backing up your data is dead important, but you already knew that. In the previous part of this series on using AppleScript to make backups, we saw how a simple backup script could be created in a few minutes. This month we're going to look at how to convert this script into something that'll work better in the real world with the minimum of fuss.

### I Demand a Recap

Last time we wrote a simple backup script that looked something like this:

```
tell application "Finder"
  activate

  with timeout of 600 seconds
    duplicate folder "Creative" of folder "Documents" of startup disk to
      disk "Backup Disk" with replacing

    duplicate folder "Steve Harris" of folder "Netscape Users" of folder
      "Preferences" of folder "System Folder" of startup disk to disk
      "Backup Disk" with replacing

    duplicate folder "OE User(s)" of folder "Outlook Express 4.5 Folder"
      of folder "Microsoft Internet 4.5" of folder "Internet Applications"
      of folder "Internet" of startup disk to disk "Backup Disk" with
      replacing
  end timeout
end tell
```

While this will work, it has a few flaws:

1. It doesn't check whether the disk is to backup onto exists, and unless that disk is inserted the script will fail with a silly error message like 'Finder got an error: Can't set disk "Backup Disk" to disk "Backup Disk"'.  
2. If an error occurs while copying, you'll get a similarly worthless message.

3. When AppleScript replaces files on a disk, it leaves the old copies in the Wastebasket until it finishes copying, just in case something goes wrong. While this is useful, if you do not have enough room on your backup disk for two copies of a file you're backing-up, then the backup will fail, defeating the object.
4. Currently, for every file we need to copy, we need a separate 'duplicate' command in the script. While this is manageable in the script's current simple state, the script's size will balloon as we add more and more 'features' to combat the above shortcomings. A neater and more flexible solution is required.

### Donald Where's Your Zip Drive?

Firstly, it would be great if we could check whether a disk is present or not. If it is, then there's no problem, but if it isn't the least we could do is give a nice message. Here is the code to go after 'activate':

```
set BackupDiskName to "Backup Disk"
-- check disk exists
if not (exists disk BackupDiskName) then
  --if disk doesn't exist, exit
  set myMsg to "The disk " & BackupDiskName & " does not exist." &
    return & return & "Please insert the disk and run this script again."

  display dialog myMsg buttons {"Cancel"} default button 1 with icon stop
end if
```

Here is the code, line-by line:

```
set BackupDiskName to "Backup Disk"
```

First, we create a variable which contains the name of the backup disk, as it appears on the desktop. This isn't necessary, but should we ever want to change the name of the backup disk, then from now on we'll only need to do it in one place.

```
-- check disk exists
if not (exists disk BackupDiskName) then
```

Now we check if the disk, actually exists using an 'if' statement. The line above, is a comment. Comments begin with two hyphens and are just remarks used to make the script easier for humans to understand. They don't affect the script, they're not necessary, just nice.

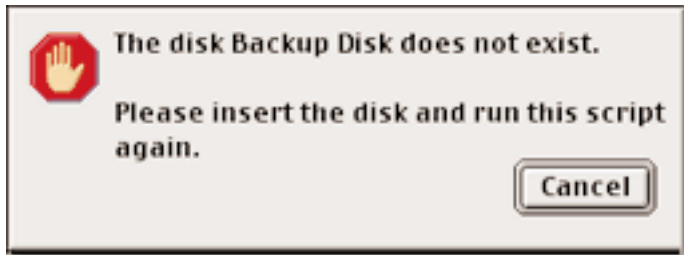
```
set myMsg to "The disk " & BackupDiskName & " does not exist." &
  return & return & "Please insert the disk and run this script again."
```

Here we create another variable called myMsg, which we're going to use in the dialog box we later show. Note that to join several pieces of text together we use an ampersand (&). The 'return' is like typing a newline character.

continued

```
display dialog myMsg buttons {"Cancel"} default button 1 with icon stop
end if
```

Finally, we display the dialogue box using myMsg as the text to display, with a single button called Cancel and the stop icon. When the script runs, this dialogue box will look like this:



NOTE: If you create a button called “Cancel”, then when the user clicks it, the script will stop running, automatically. This is useful, but if you don’t want the script to stop running, but do want a button called Cancel, then put a space on either side of the word like this: “Cancel”. One space will do the trick, but the text will be off-centre on the button. Aren’t I the fussy one?

## Make Room

Next we’ll look at point 2 of our shortcomings list: When AppleScript replaces files on a disk, it leaves the old copies in the Wastebasket until it finishes copying, just in case something goes wrong. If there is not enough room on the backup disk for two copies of the file being backed-up, then the backup will fail.

To get around this (and very important: assuming that your backup disk holds no other files than those we’re backing up), we need to delete all the files on the disk before copying new ones:

```
try
  -- delete the contents of BackupDiskName
  delete every item of disk BackupDiskName
  empty trash
on error theError
  --if there's an error, we quit
  display dialog "An error has occurred: " & theError ~
  buttons {"Cancel"} default button 1 with icon stop
end try
```

‘Try’ is a way of telling AppleScript, ‘try and do this’. If AppleScript can’t do it, then we have another command: ‘on error’. If there is an error, then AppleScript will do all the commands after ‘on error’ to ‘end try’. In this case we display a dialogue box with the error message which came in the variable ‘theError’.

## Make A List

Finally we’ll address points two and four in our list of things to fix. Instead of writing a ‘duplicate’ command in the script for every file we want to backup, we can put all the file names into a list. Lists have been discussed in a previous AppleScript article. They are a type of variable in the script which can contain a collection of values of various types. Lists are enclosed with braces {} and each item in a list is separated by a comma.

Here is how we’d define a list containing all the filenames we want to backup. I’m using my files for this, your files would be different. This appears after our ‘end if’:

```
set ItemList to ~
{folder "Creative" of folder "Documents" of startup disk, ~
 folder "Steve Harris" of folder "Netscape Users" of ~
 folder "Preferences" of folder "System Folder" of startup disk, ~
 folder "OE User(s)" of folder "Outlook Express 4.5 Folder" ~
 of folder "Microsoft Internet 4.5" ~
 of folder "Internet Applications" ~
 of folder "Internet" of startup disk}
```

Note the ~ characters tell the Script Editor to continue the command on a new line. You can insert ~ by typing Command-Return in the Script Editor window.

TIP: If you don’t feel like trying to type in a file’s location, as above, you can use a nifty feature called ‘paste reference’. It works like this: in the Finder, click once on the icon of the file whose name (or ‘reference’) you want to copy, and choose Copy from the Edit menu. Then switch to the Script Editor, and choose Paste Reference from the Edit menu. If you’re using a version of the Script Editor older than 1.1.3, you may need to hold on the Option key before you click on the Edit menu.

## Work through the List

Now we have our list, we can remove all the duplicate commands, and use a new piece of code which loops through every item in the list of files, and includes some extra commands so our script deals with errors in a sensible way:

```
-- do the backup for every item in the list
repeat with theItem in ItemList
  with timeout of 600 seconds -- prevent timeout messages
    try
      duplicate theItem to disk BackupDiskName
    on error theError
      --if we hit an error, give a message and quit out
      display dialog "An error has occurred: " & theError ~
      buttons {"Cancel"} default button 1 with icon stop
    end try
  end timeout
end repeat
```

continued

Line by line:

```
-- do the backup for every item in the list
repeat with theItem in ItemList
```

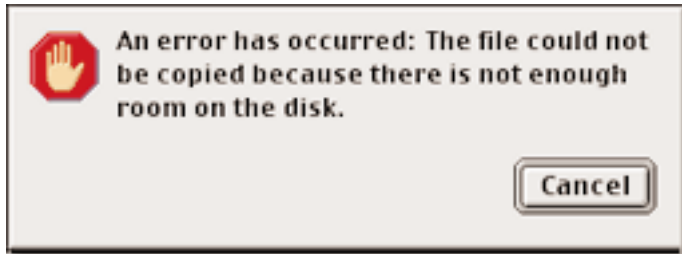
This is a special AppleScript command, that will work through all items in a list, with the variable 'theItem' (in this case) referring to the item in the list called 'ItemList'.

```
with timeout of 600 seconds -- prevent timeout messages
try
    duplicate theItem to disk BackupDiskName
```

Then we have the timeout command set to 10 minutes which we discussed last month, followed by another 'try'.

```
on error theError
    --if we hit an error, give a message and quit out
    display dialog "An error has occurred: " & theError ~
        buttons {"Cancel"} default button 1 with icon stop
end try
end timeout
end repeat
```

When an error occurs, this is something like what you'll see [I hope]:



And that's it. Here is my version of the code in full. In order to get the code working on your own Mac you need only change the list of files to be backed up:

```
on run

tell application "Finder"

    set BackupDiskName to "Backup Disk"

    activate
    -- check disk exists
    if not (exists disk BackupDiskName) then
        --if disk doesn't exist, show a message then exit
        set myMsg to "The disk " & BackupDiskName & ~
            " does not exist." & return & return & ~
            "Please insert the disk and run this script again."

        display dialog myMsg buttons {"Cancel"} ~
            default button 1 with icon stop
    end if

    -- make the list of files to backup
    set ItemList to ~
        {folder "Creative" of folder "Documents" of startup disk, ~
            folder "Steve Harris" of folder "Netscape Users" of ~
            folder "Preferences" of folder "System Folder" of startup disk}

    -- delete old backup
    try
        -- delete the contents of BackupDiskName
        delete every item of disk BackupDiskName
        empty trash
    end try

    on error theError
        --if there's an error, we quit
        display dialog "An error has occurred: " & ~
            theError buttons {"Cancel"} default button 1 with icon stop
    end try

    -- do the backup for every item in the list
    repeat with theItem in ItemList
        with timeout of 600 seconds -- prevent timeout messages
            try
                duplicate theItem to disk BackupDiskName
            on error theError
                --if we hit an error, give a message and quit out
                display dialog "An error has occurred: " & ~
                    theError buttons {"Cancel"} default button ~
                    1 with icon stop
            end try
        end timeout
    end repeat
end tell

display dialog "The backup was successful!" buttons "OK" default button 1 ~
with icon note
end run
```



# You Can Save Money!

## Paul Hughes

As web administrator of 1984 OnLine, I have heard a lot of thoughts about 1984 and a host of other Macintosh ezines. The response I have had from cover CD users is that when trying to read specific issues or articles, they have to search through many different CDs to find what they want – wasting time and energy. From the internet side of things, comments go along the lines of “Downloads are too big”, “This download is very slow”, “I can’t afford to download this”, which makes me worry. Is 1984 losing readers or are the 1984 readers not getting what they need as easily as possible?



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1984 back - DocMaker

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# Writer's kit

## A new challenge

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### Doing it with style

Writing for us is easy. All you have to do is tell us about your Mac orientated experiences. Although we have our regular in-house columnists we'll always have room for more (but space is limited). Our site expansion is on going throughout 1999.

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A good comparison would be the equivalent of about 1200 words or around 1 side of an A4 page of text maximum (although longer at a push).

### Our readership

1984 readers are as varied as our writers. From the first time user to experienced Mac folk, they will all browse our work from time to time.

We are on the cover CDs of both Macworld UK and MacFormat magazines plus many internet postings announce our ezine release date each month.

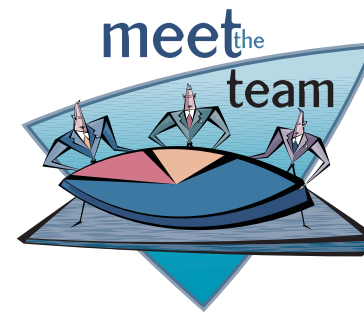
Always keep in mind that not everyone will understand certain terminology, so try to explain a complicated topic wherever possible.

So there you go. Simple guidelines.

If you wish to contact me further then please do. I look forward to welcoming you on board.

Darren Edwards, Editor 1984 online

[new-writers@1984-online.com](mailto:new-writers@1984-online.com)



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