



Rhapsody and blue

Howard Oakley moves from Copland to Rhapsody via the Blue Box. Plug-and-play with a SyQuest drive drives him slightly mad, after which he resorts to a bit of Mac-tricide....

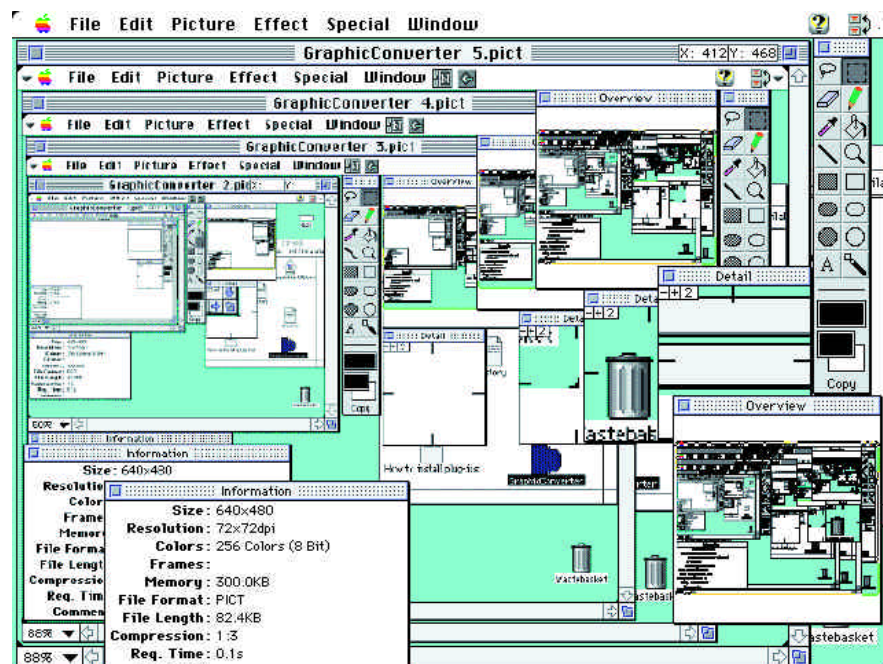
Life with Apple is nothing if not exciting. Just a few issues ago I was advising you how best to prepare for the onslaught of Copland, and now we're looking forward to seeing the first releases of Rhapsody instead, while some are already getting started with BeOS. Thankfully, however different Rhapsody will prove to be internally, most of my previous tips should remain valid. Make sure you have the most recent and capable Power Mac you can afford and your hardware should be well prepared. Trying to work out a software strategy shouldn't be too hard either.

Bohemian Rhapsody

Rhapsody's compatibility with Mac OS will be achieved through an emulator called Blue Box, as opposed to native Rhapsody services which will be delivered through the Yellow Box. Although Blue Box is described as an emulator, this should not be an excuse for the sort of performance decrement which the 68K Mac emulator (brilliant though it is) provides on Power Macs. Blue Box does not have to pretend to be a different processor, but will work through the native PowerPC code used by current applications; it is just the operating system calls which incur overhead.

Indeed, if the Apple and NeXT engineers get it right, Blue Box should be faster than Mac OS in some respects, notably the file system. The current Mac OS file system is creaking and groaning into old age: a nippy emulator laid on top of a sleek Unix file system could be a great improvement.

You should not be afraid to buy current Mac software products, and to continue to hone your skills with Mac OS. Apple has



Thorsten Lemke's GraphicConverter now reads even more file formats. Here's a picture of it showing a picture of...

made it clear that Rhapsody's human interface is being evolved from that currently in Mac OS 7.6, presumably with some of the changes intended for Copland, and with others such as the "Dock" perhaps being absorbed from NeXTStep. Well-behaved applications for Mac OS should run without trouble — and here I do believe Apple, given its previous record with System 7 and Power Macs — using the Blue Box emulator: it will be our bread and butter until Rhapsody can offer a decent software portfolio under Yellow Box.

Plug and...

The biggest dread in the future is of further weakening in one of Apple's strongest suits:

plug and play. Back in the days when a wickedly fast Mac sported a 68030 processor, there was so little third-party hardware around that glitches in installation and use were very rare. With every new Mac model, and every step out into the open, the choice has widened and the risks of incompatibility increased. My Power Mac 9500, perhaps a little passé but still a delight to use, is no exception when it comes to adding SCSI devices.

I had always fought shy of 44/88Mb SyQuest drives, but the recent arrival of a 44Mb cartridge brim-full of shareware ham radio software (thank you, Frank) got the better of me. I spent a few minutes with my local Apple dealer, leaving with their badged

d2 drive in my hands and only slightly poorer. With my Mac shut down, I attached the new box to the external SCSI chain in temporary place of my combined hard disk and CD-ROM writer unit, and attached the SCSI terminator.

Flashing up the SyQuest drive and then the 9500, my worst fears were realised: the startup process ground to a halt somewhere around the loading of the AppleVision monitor extension. Clearly this was a spurious sign and of no help to diagnosis. I hit the Power, Command and Shift keys to force a restart, this time keeping the Shift key held down to disable all extensions. Once I was in a position to shut the Mac down properly, I did so, then turned the SyQuest off. I removed the SCSI terminator and tried starting up again.

...hooray!

Not only did the startup process complete perfectly this time, with all extensions burning and turning, but when I tentatively put the shareware cartridge into the SyQuest drive, it appeared correctly on the desktop. Admittedly it was my second attempt, but I had plugged and it had played perfectly, and without even using the d2 driver software! I ascribe the latter to my having FWB's fine Hard Disk Toolkit installed for my internal disks.

This is the sort of issue which Apple must get right first time when Rhapsody appears. It is many years ago that I played with a NeXT, but I vividly remember the raw Unix shell hacking which had to be done when it had a problem with driver software. Adding such mechanisms to the Mac interface could be a powerful option, but the moment that they might become requisite, a lot of users would choose to make the final Shut Down.

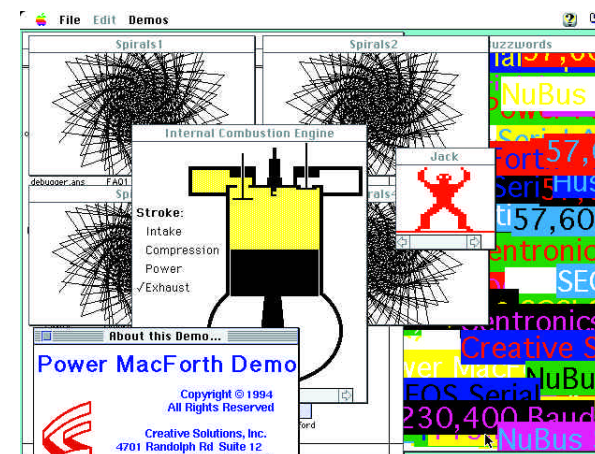
Go Forth

My copy of Power MacForth arrived a couple of weeks ago, and although these are still early days with it, I am thoroughly impressed. Forth buffs should appreciate its compliance with the new ANSI specification, while Mac lovers everywhere will rejoice in its speed. I'm still in the middle of carrying out detailed benchmarking, but

Top Ten Ways of Murdering Your Mac

Is it time to end it all? Do you really want to slaughter your CPU or destroy your data? If so, try some of these sure routes to Mac-tricide.

1. Connect and disconnect ADB devices with your Mac powered up. Plugging and unplugging keyboard or mouse when your computer is running can send nasty voltages to the motherboard, which can burn it out. This is almost as much fun as playing Russian roulette, and replacement is surprisingly expensive.
2. Connect and disconnect SCSI devices when they and the Mac are powered up. If you are really lucky, you can simultaneously destroy both the peripheral and your motherboard, adding greatly to the cost of repair.
3. Cut mains power when your system is busy, ideally writing to a hard disk. At best you will lose data, at worst you will crash the disk and blow a fuse or two. It's much more fun than performing an ordered shutdown from the Finder's Special menu.
4. Eject removable storage media while they are being written. If possible, you can force the paperclip (or other emergency eject mechanism) so hard that you will not only damage the data on the disk, but also break the drive mechanism.
5. Assign two external storage devices the same SCSI number, then save all your work to them. There are plenty of other vile things you can do with SCSI, such as using too few or too many terminators, but this is among the most reliably mutilating.
6. Never back anything up. Disaster only strikes when you are ill-prepared and it would have greatest impact. Keeping regular and recent backups takes the fun and risk out of computing.
7. Never run Disk First Aid. Picking up problems on a disk early might deprive you of the added fun of dealing with them when they have grown really big. It's more exciting to leave it for a major wipeout.
8. Never check for viruses. Although the heyday of Mac-borne infections seems to be over, there's still a good choice of nasties which will nibble away at your documents until your Mac comes crashing down.
9. Keep more than one System Folder on a single disk volume. One for those who enjoy subtle, slow deaths, this creates total confusion and a crescendo of crashes.
10. Perform a fresh installation of System 7.5.x and immediately try to update it to 7.5.3r2 (or another later revision). This will appeal to the connoisseur of Apple's arcanery, who will then try to start AppleTalk up using the new System, only to find it is trapped in a fatal deadlock. If you'd prefer a more productive life, you would do best to avoid these like the plague.



This demonstration of Power MacForth's speed is readily available freeware. It shows off performance and support for multitasking and graphics

so far it seems a good match for a high-quality C compiler and only a little slower than a handcrafted assembler. As it supports the use of inline PowerPC assembler on one hand, and has object-like extensions and complete access to Mac OS on the other, it's close to my ideal development

environment. If you're unimpressed by Java's performance in your latest image-processing application, you may find Power MacForth a better investment.

Promised shortly is RagTime 4, which I hope to cover next month. Not only is it supposed to be an outstanding OpenDoc application which bears comparison in its significance with Cyberdog (Apple's unique Internet suite), but I hear tell that it can bring Microsoft Word and Excel documents into an OpenDoc environment. If it can do this reliably, I could see myself using OpenDoc all the time.

PCW Contacts

Howard Oakley is keen to hear from Mac users and can be contacted via the usual PCW address or email mac@pcw.co.uk. Apple Computer is on 0181 569 1199 and has web home pages at www.apple.com and www.euro.apple.com. Power MacForth is \$299 from Forth; email sales@forth.com. TechTool is freeware from Micromat, GraphicConverter costs \$30 from Thorsten Lemke, and Extension Informant is \$10 from Joseph Cicinelli, all available from most major online services. All prices are exclusive of VAT.