

The Academy of Plumbing 20

The Complete Location Survival Guide, Part 3

The Digital
Plumber
By Paul Ellis

Continued from last month: survival procedures for dealing with a sulky Mac on location, or indeed, anywhere else. Click on the name of any product mentioned to go straight to a supplier or download page. Some of the links earn me a few bob if you buy by clicking on them. If you don't want to do this, simply Google the application's name, find the vendor's site and buy it that way.

PROCEDURES

- **Target Disk Mode**
Shut down your Mac. Restart it: at the chime, press and hold down the T key. Release it when you see a blue (PowerPC Mac) or grey (Intel Mac) screen with a FireWire symbol jumping around it. In this mode your Mac is not a computer but a FireWire external hard disk and can be treated as such. Press and hold the power button to turn it off.
- **Applejack**
Make sure Applejack is properly installed. Restart your Mac in Single User Mode by holding down the Apple and S keys immediately after you hear the start-up chime, keeping them held down until the screen turns grey, and then black. Then release them. The screen will fill with gibberish in white text, which will eventually stop at the line `localhost:/ root#`, at which you type "applejack AUTO restart" (that's lowercase "applejack", a space; then uppercase "AUTO", then another space; then lowercase "restart", but without the quotes), then press the Return key twice.
- **Apple Hardware Test**
This usually lives on a hidden

partition on the Install 1 CD or DVD that came with your Mac. The procedure for running it varies but is always printed on the CD or DVD. You must use the specific version that came with your Mac.

- **Bootable backups with SuperDuper! and Carbon Copy Cloner**
Have a blank FireWire disk, or a blank partition on a FireWire disk of the same size as your internal boot volume. Both SuperDuper! and Carbon Copy Cloner are set up by default to create a fresh bootable backup. Select your boot volume as the Source and your FireWire disk or partition as the Target. The rest is straightforward. To keep the bootable backup up-to-date, buy SuperDuper! or read Carbon Copy Cloner's manual. I currently prefer SuperDuper! for this task. OS X 10.5 Leopard's Time Machine is very easy and straightforward to set up to maintain incremental backups but doesn't directly create bootable backups, although in conjunction with the Leopard Installer DVD it can create a bootable volume from backups. Yet another reason to have copies of OS X Installer CD's or DVD's with you.
- **Reset PRAM**
Restart your Mac, pressing and holding down the Apple, Alt, P and R keys at the chime. Keep them held down until the Mac has chimed three times, and then release them. This will take up to a minute to complete.
- **Reset Open Firmware (PowerPC Macs only)**
Restart your Mac, pressing and holding

down the Apple, Alt, O and F keys at the chime to start up into Open Firmware. At the prompt, type "reset-nvram" (no quotes), then press Return. Type "reset-all" (no quotes) then press Return. The Mac will restart. It may need some things like Startup Disk, Time Zone and mouse tracking speed resetting from default.

- **Reset the CUDA, Power Management Unit or System Management Controller**
The procedure varies by Mac model: links to instructions are in The Sites/Resetting your Mac hardware section of my website at www.thedigitalplumber.co.uk/pages/thesites.html.
- **Select boot volume on start-up (for starting from a bootable backup)**
Restart your Mac, pressing and holding down the Alt key at the chime. Wait until your bootable backup volume appears as an icon on the screen, select it and press the right-arrow (PowerPC Macs) or the arrow under your bootable backup icon (Intel Macs) to start up from it.
- **Boot from CD**
If a bootable CD or DVD is already in the drive, hold down the C key until the grey apple and spinning wheel appears on the screen. Otherwise, follow the procedure above, insert the CD or DVD, select it when its icon appears and click the appropriate button.
- **Run Apple Disk Utility from an Apple Installer CD or DVD**
Using the method described above,

boot your Mac from the Installer CD or DVD that came with it, or a retail copy of Mac OS X. The Installer launches. Select "Choose English as the main language (if that's what you want) and click on the blue right-arrow button. The main Installer screen appears, and with it, the Menu Bar. From the Utilities Menu select Disk Utility. The Installer disappears and Apple's Disk Utility appears in its place. Use this to repair the boot disk, fix its permissions, or



SO, THEN? WHAT ABOUT IT?

Mmm. The Lord giveth, and the Lord taketh away. He giveth much eye-candy, translucency of debateable value, a fully-mature underlying operating system with stable API's, Spotlight the way it always should have been, and noticeably increased speed and slickness of operation, especially where anything involving networking is concerned. He giveth Time Machine, the killer app; Back To My Mac, which if not exactly killer is definitely GBH and finally makes a .Mac account something you really should have; a Universal Install which can boot both Intel and PowerPC Macs (so long as the disk is formatted in PowerPC APM format rather than Intel GPT); Data Detectors in Mail (which recognises things such as postal addresses within emails and offers to import them into your Address Book as contacts, a feature of OS 9 which has finally made it into the OS X world).

Also bestowed upon us are Quick Look and Cover Flow, ways of quickly seeing part of a document, image or whatever without having to actually open it; Spaces, a way of configuring up to four "virtual desktops"; and a much more polished and better-functioning Finder than OS X has ever had before. And he

reckons he giveth more than 300 other goodies, details of which are at <http://tinyurl.com/2rudpg>.

On the other hand, he also giveth useless crap like Stacks in the Dock and simultaneously taketh away the Dock's previous ability to pop out a hierarchical menu of the contents of any folder placed there, replacing it with a virtually-useless Fan display of the first 20 objects it contains. Surprisingly, he also taketh away Tiger's ability to play an instant slideshow of any Finder selection of images, replacing it with Quick Look, which can be made to do the same thing but after two mouse clicks rather than one. He taketh away Classic: sayonara OS 9 software. Finally, of course, as a result of some last-minute code changes that caught developers great and small on the back foot, he taketh away a great deal of compatibility with some rather crucial applications. This situation is improving daily and by publication, certainly by the end of 2007, Leopard will be the OS to have running on any Macintosh that can take it. It will also be required to get the most out of the iPhone, which I've been bullied into writing about next month. Aw, all right, then. Get those letters to Santa written now.



Those of you still hungry for information can keep up by periodically checking my blog at www.thedigitalplumber.co.uk, where you'll also find my contact details.



whatever else might take your fancy.

MAC OS X 10.5 LEOPARD: IMPORTANT

At the time of writing, all 3rd party disk utilities including Applejack and SuperDuper! are incompatible with OS X 10.5 Leopard. Given the delay between my copy deadline and publication, the situation might well have changed by the time you read this. Applejack is likely to take a while before it becomes compatible with Leopard, though. MacInTouch are maintaining a compatibility report at <http://tinyurl.com/2j6ph4> and a Leopard FAQ at <http://tinyurl.com/2cyd85>. Read them before upgrading to Leopard, or be prepared to suffer the consequences.