

# The Academy of Plumbing 34 Bang!

## The Digital Plumber By Paul Ellis

I get a lot of calls from people complaining that something has inexplicably stopped working, or that they suddenly can't send email: stuff like that. Under these circumstances the best fixer's tool is often a blunderbuss rather than a rifle, simply because the blunderbuss' spread of shot is much more likely to hit whatever obscure little fault is causing the problem than attempting to take careful aim with just one bullet. Here are a few blunderbusses for your collection, plus a couple of odds and ends.

### 1. TURN IT OFF, AND THEN ON AGAIN



Your first action should be to turn off your entire system in this order:

- 1) Laptop computers & attached disks
- 2) Desktop computers & attached disks
- 3) Servers & attached disks
- 4) Printers
- 5) Ethernet switch, if you have one
- 6) Internet router
- 7) DSL or cable modem, if you have one.

Leave everything for half a minute, then turn everything on again in reverse order, waiting at each stage until that device has fully booted up and made its network connection. It's surprising how many obscure faults disappear after a full network reboot.

### 2. SAFE BOOT



Another handy blunderbuss. Shut down your Mac. Start it up again, and at the chime, press and hold down the Shift key,

keeping it down until you see the grey Apple and twirly wheel, then release. The Mac will take a while to get going but will eventually display the login screen and the words Safe Boot in red. Log in with your username and password and let the Mac completely start up. Then restart as normal. Lots of checking and tidying-up takes place during safe boot and many problems get swept away.

### 3. APPLEJACK



Of course. Bang!

Applejack is the best software blunderbuss of all. Get it from <http://tinyurl.com/ylyucgw> and install it. To use it, 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. Applejack will automatically do its stuff, after which your Mac will restart normally.

### 4. ARCHIVE & INSTALL



Rather than wasting a day messing around trying to fix a recalcitrant system problem it's usually quicker and better to reinstall OS X using Archive & Install. I like to run Applejack and then DiskWarrior (<http://tinyurl.com/cb2osh>) over a disk before carrying out this process.

- 1) Start up from your Mac OS X Install Disc 1 or Install DVD. If you have a later version of Mac OS X than your computer came with, start up from that. Be aware, though, that you can't install OS X 10.5 Leopard on any PowerPC Mac that runs slower than 867MHz.

Usually, you can start from the disc by putting it into your Mac, restarting, and holding the C key. Or, put it in the computer and click the Install or Restore icon you see in the disc's main window, after which the computer will start from the disc without you needing to hold C.

- 2) Select your language. The Welcome to the Mac OS X Installer window appears.
- 3) Click Continue. The Important Information window appears. Click Continue.
- 4) The Software License Agreement window appears. Click Continue.
- 5) An agreement sheet appears. Click Agree.
- 6) The Select a Destination window appears. Click the volume that you wish to install to. This will be Macintosh HD, if you haven't changed its name.
- 7) Click Options. The installation options sheet appears.
- 8) Select Archive and Install, Preserve Users and Network Settings.
- 9) Click OK.
- 10) Click the Customise button and uncheck all Language Translations except for British English, unless you need to run your Mac with a non-English user interface.
- 11) Click Continue to begin the

Sonnet Fusion enclosures) you're in luck: you can download Seagate's firmware updater and fix it yourself. If not, and you have a duplicate of the data on the affected disk, simply send it back to where you bought it from for warranty replacement. If you're really stuck or terrified by the nerdy update procedure, contact me and I'll see if I can help.

installation. After the Mac has finished installing, has restarted and presented you with the compulsorily-cool introductory movie you'll have to re-enter your contact details. Do so; this goes into your Address Book "Me" card.

- 12) Open System Preferences/Print & Fax and add your printers again. If you're using large format printers you'll probably have to go to the manufacturer's website and download drivers. Install them.
- 13) Run Software Update repeatedly until there's nothing left to update.
- 14) Install and run Applejack.

Then, move your ICC profiles from the old System to the new one:

- 1) Open two Finder Windows in Column view and place one above the other.
- 2) In the top window, navigate from your boot disk (let's say it's called Macintosh HD) to /Library/ColorSync
- 3) In the bottom window navigate to [Macintosh HD]/Previous Systems/[a folder named with today's date]/Library/ColorSync.
- 4) Move the CMMs and Profiles folders from the BOTTOM ColorSync folder to the TOP one.
- 5) Open System Preferences/Displays and click on the Color button. Your screens should now automatically switch to their correct profiles. Photoshop, Lightroom, Capture One and your other software will now be able to find all of their profiles and print properly.
- 6) Some applications that install drivers or copy protection might need reinstalling

or reauthorizing.

- 7) After you've checked that everything works properly, delete the Previous Systems folder and empty the Trash.

It's a bit of a faff but shouldn't take more than an hour or so, depending upon the speed of your Internet connection, and it far easier than trying to debug a really complex problem.

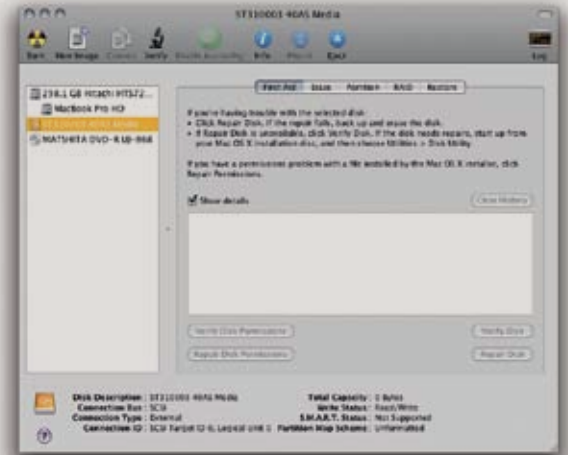
## SEAGATE DRIVE FIRMWARE

Seagate have a reputation for manufacturing decent hard disks with 5-year warranties, but they've come a cropper with their 7200.11 model range. It's emerged that some of these drives have a firmware bug that can cause the drive to suddenly stop responding. Such a drive looks like the image above right in Disk Utility.

Note that the disk has no volume associated with it, that its Total Capacity reads 0 Bytes and the Partition Map Scheme is Unformatted. The 1TB ST31000340AS, firmware SD15 appears particularly prone.

If you have any Seagate or Maxtor drives, check at <http://tinyurl.com/8c86fn> to see if your drives are affected.

If you have a Mac Pro, or MacBook Pro with an eSATA hard disk enclosure such as a Wiebetech RTX and a Griffin ExpressCard/34 eSATA card (the Wiebetech and Sonnet ExpressCard/34 eSATA cards won't work; neither will the



## AOP Digital Season

The AOP is running another season of digital seminars at Leonard St. this Spring. Details overleaf. The seminars will include masterclasses on Workflow & Storage, Advanced Photoshop, RAW Process comparison, Phase One Capture One, Apple Aperture and Adobe Lightroom. Presenters will include me, Nick Wilcox-Brown and Martin Evening, so book early via [www.the-aop.org](http://www.the-aop.org).

*Links to everything mentioned here are at <http://tinyurl.com/9sx3y7>. PDFs of this and all my other Image articles are available to download at [www.thedigitalplumber.co.uk](http://www.thedigitalplumber.co.uk), each with live weblinks for your browsing pleasure. Go and get 'em.*

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