

SuSE Linux 7.1 PowerPC Edition vs. Yellow Dog Linux 2.0

MAC VERSUS MAC



Upon opening the SuSE box you're confronted with no less than six CD-ROMs. Unsurprisingly, they're not all for the Mac with some being dedicated to more esoteric PowerPC systems such as the IBM RS/6000 and Motorola MTX PreP-based machines. Nevertheless, there are an awful lot of programs on these discs, with SuSE putting the tally at over 6,000. We'll have to take their word for this as we were in no way inclined to count them! By comparison Yellow Dog Linux's (YDL) three CDs seem Spartan, but this is a misplaced impression as YDL comes with an almost equally vast array of software and works on the aforementioned PPC systems as well as the new Briq server.

Documentation

The difference between the documentation supplied with these two distributions couldn't be more vast. Both come supplied with masses of documentation on the CDs, but whilst Yellow Dog Linux comes with a terse installation booklet, SuSE 7.1 comes with 514-page manual.

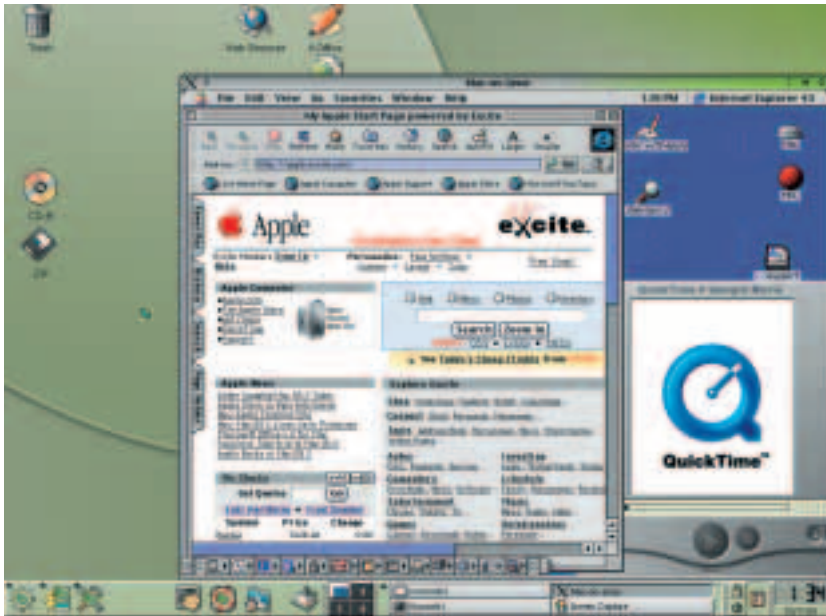
The SuSE manual can be heavy going at times, but it does include everything you need to know about installation, booting, networking, printing, PCI, ISA



and PCMCIA cards, ISDN, security and whole lot more. Apart from this, SuSE kindly provide a couple of stickers and a rather natty looking pin badge.

When all is said and one however, the YDL booklet is really quite comprehensive and covers the majority of scenarios you will encounter. Like SuSE, YDL include some esoteric additions in the box in the form of bumper stickers.

To follow up our recent series of articles on running Linux on Apple Macintosh systems, Jason Walsh takes an in-depth look at two popular Linux Distributions for Power PC computers. The test machine is an iMac Revision B (233MHz, 64Mb RAM, 30Gb 7,200RPM hard drive).



SuSE PPC desktop

As far as the SuSE manual goes, there are a few errors, but nothing of any consequence, just the odd word mistranslated from the original German and a needless section on using WinModems.

Installation

How you go about installing Linux on your Mac depends on the age of your hardware. In simple terms, if your Mac is 'platinum' (Applespeak for grey plastic) in colour it uses an 'Old World' ROM, whereas if it is one of Apple's recent coloured machines, such as the iMac, Power Mac G4 or TiBook, it is based on the more recent 'New World' ROM.

On a New World machine all that you should have

to do is partition your hard disk, install the MacOS and then reboot your Mac from the SuSE CD. Installation with YAST2 (Yet Another Setup Tool) should follow, unless you're short of RAM, in which YAST will be used instead. For no apparent reason the SuSE CD failed to boot on the test machine, which we can only presume was because of a firmware update, as the machine was an ordinary iMac – the only modification being 32 Mb of extra RAM and a speedy, capacious IDE hard drive.

All was not lost however, as there was an alternative method. Linux requires a tiny boot partition in HFS format. Following the instruction in the SuSE manual the suseboot folder was copied from the CD onto the boot partition. Next the Startup Volume control panel was launched and the boot partition selected. After a reboot, installation commenced without a hitch, though with the older YAST text interface rather than the graphical YAST2. From here on in it was just like installing on an Intel system, basically a case of selecting one of the standard installations or choosing you own packages in mix and match fashion.

After the problems we faced in installing SuSE, I decided (for some reason unbeknownst even to me) to take a rather cavalier attitude to installation with YDL and simply stuck the CD in the drive and restarted the machine whilst holding down the C key in order to invoke booting from the CD drive. Unbelievably, the CD not only booted directly into Linux, but also installed flawlessly. It really was as simple as that. Still, if you also want to run the MacOS alongside Linux you will have to partition the hard drive first, reinstall the MacOS and then install YDL.

Alternative distributions

LinuxPPC – Linux PPC was once the premier distribution for the Mac, but the site has been quiet for some time now, however, it can still be downloaded from their servers.

<http://www.linuxppc.com>

<http://www.linuxppc.org>

MKLinux – This still updated version of Linux was once officially supported by Apple as they treaded water before confirming NeXT and BSD as the basis of their next generation OS. Unusually for Linux, it's based on a Mach micro kernel. Not the most popular distribution, but the only one that supports the older PowerPC Performa machines.

<http://www.mklinux.com>

Debian – The godfathers of the GNU movement maintain their own PowerPC version. You'll know if you want to run this already, as it is as powerful, yet complex, as their x86 distribution.

<http://www.debian.org>

Mandrake – Much is expected of this newcomer to the Mac scene. Just as the Intel version requires a Pentium or better, Mandrake PPC requires a G3 or G4.

<http://www.linux-mandrake.com>

First impressions

Should you be using an Old World Mac, upon starting the machine you will be presented with a rather nifty little application named BootX, which graphically enables you to select either the MacOS or Linux. This program is actually a MacOS system file, which shoe horns itself into the boot process, temporarily halting it and enabling you to redirect into Linux.

New World machines are instead presented with the less aesthetically pleasing, but also less kludge-like LILO text interface – identical to that on Intel systems. SuSE includes the alternative MiBoot, which allows you to boot directly into Linux on Old World systems, in much the same way as LILO does on New World machines. However, this is not supported, as it is a technology under heavy development.

Both distros install KDE as standard, but also come with GNOME, Enlightenment and the rest of the usual suspects. All the standard applications come with both SuSE and YDL, including the GIMP, AbiWord, KOffice, Emacs, GNUmeric and so on. Perfect for the home or small office user.

Both SuSE and Yellow Dog were remarkably responsive on a machine that has, by today's standards, a rather minimal amount of RAM and we were able to customise the desktop to our hearts' content, making it almost, but not quite, Mac-like.

Digging deeper

The most interesting Linux application on the PPC actually has very little to do with Linux. Mac on Linux is an environment in which you can run your favourite MacOS applications without rebooting. Mac on Linux has been covered elsewhere in this magazine in more detail, so suffice it to say that the relevant packages are included with both distros and are a doodle to configure.

As always, the PPC distributions lag slightly behind their Intel brethren, but given the ubiquity of the x86 chipset this is not in the least surprising. What is in fact so surprising is the tiny degree by which they lag: PowerPC developers must be an industrious lot indeed. The only things of note that are lacking from PPC/Linux are a journaling filesystem and non-destructive partitioning. Work is no doubt underway on both.

A big problem for Mac owners is the one button mouse, though of course this is not the fault of either SuSE or Yellow Dog. Despite all that has been said, I am a firm believer that mice should never have had more than one button – multi button mice are a strange idea, rather like those cheap pens with four coloured inks. Still, you'll struggle to get the most out of Xwindows with a single button, so it's off to the shop for you. Newer Macs, of course, offer USB support so getting a cheap mouse is no problem. Owners of machines which use the ADB (Apple



Yellow Dog desktop

Desktop Bus) connector and protocol will probably have to go to their local Apple Centre or try one of the many mail order outlets specialising in Apple equipment – a small price to pay for years of successful and productive Linux computing.

Overall

It is difficult to qualify this decision, but I personally prefer YDL, however, I suspect that this is due to the complete lack of installation hassles. As far as actual use goes, both distros seem to perform equally well and it should of course be noted that SuSE comes with over 6,000 applications on the CDs.

If printed documentation is your thing, then I have no hesitation in recommending SuSE, despite my personal preference for Yellow Dog's offering.

The most important factor in choosing which distro to use is of course, compatibility, and though both will work with the majority of Power Macs you would be advised to check out the respective Web sites before handing over your cash.

After the review both Yellow Dog and SuSE have updated their versions. The SuSE 7.2 now ships with eight CDs and two manuals – one of which is a networking manual. Installation ran smoothly first time with YAST2 and it now supports journaling filesystems.

Gracious thanks to SuSE UK and Yellow Dog Linux for supplying the test software.

The author

Jason Walsh is a freelance graphic artist and is currently studying for a PhD in Information Architecture. He has worked as an administrator of a mixed Macintosh, Windows and Linux network.