Open Sourcing your Macs!

An Introduction to running GNU/Linux
on your Apple Macintosh

Prepared by Colin Charles
byte@aeon.com.my
http://www.bytebot.net/

What is this *open source*?

- Free as in freedom (not beer)

- Source code availability
  - freedom therefore to run, copy, distribute, study, change and improve the software

- This isn't freeware
  - It might be free, but source needn't be provided
  - Not shareware either

- www.opensource.org

What is its impact today

- Most of the Internet run on OSS

- Apple has made use of OSS too

  – Apple X11, Darwin kernel, Xcode compiling tools, etc...

  – Many open source tools are available via fink/DarwinPorts

- So why run Linux instead of OS X?
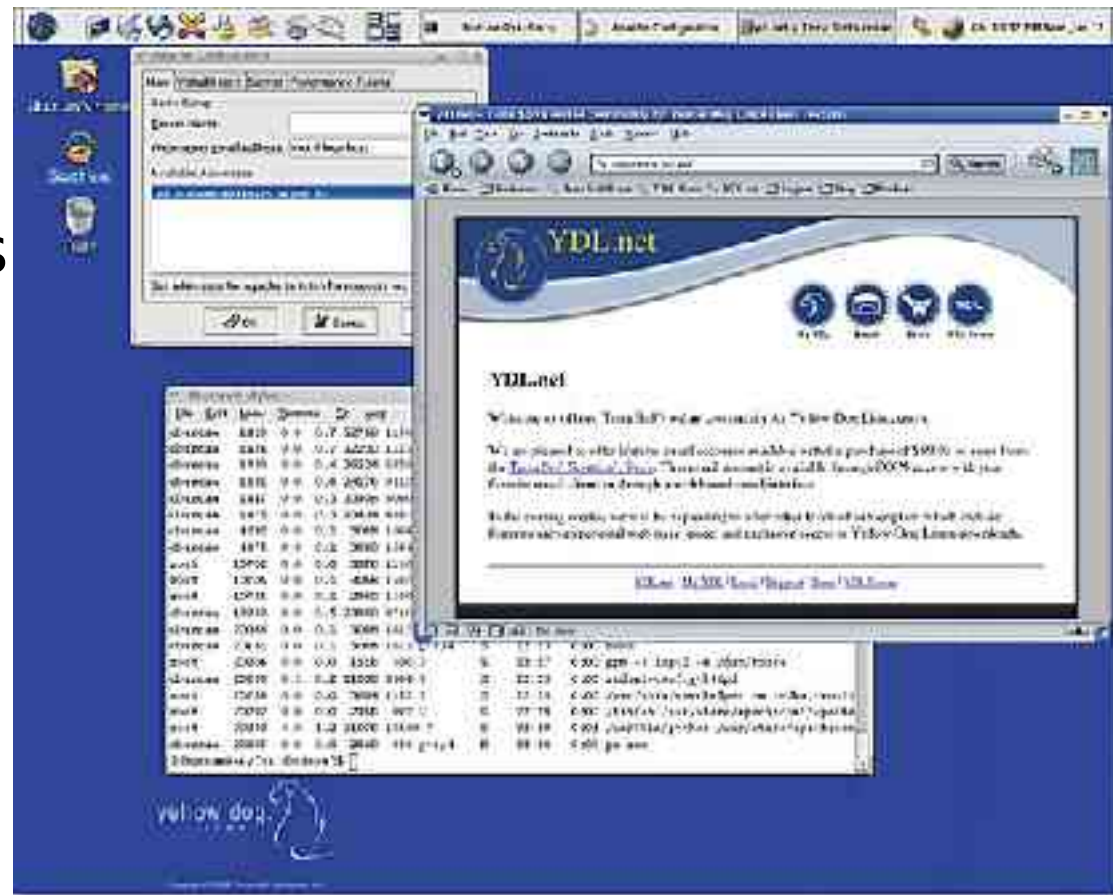
Why Linux?

- Different operating system
  - Fun to tinker with
  - Choice
- Performance improvements
  - Older Macs can't run OS X conveniently
  - Macs with less RAM benefit
- Software behind the culture is FREE
  - Never have to buy shareware again!
- Support, websites, user groups, etc...

What are distributions?

- Linux is just a kernel

- Distributions also include custom packages around it; this makes it a complete, full-featured OS

- Most users like: Yellow Dog Linux / Fedora Core

- Others prefer: Debian GNU/Linux, Gentoo, SuSE, Mandrake

Yellow Dog Linux (YDL)

- Subscription-based early releases
  - Has support options
  - Sells Linux pre-installed on Macs
- Very user-friendly
  - New release to be based on Fedora Core 2
  - Fully graphical installer

Fedora Core (FC)

- Red Hat sponsored

- FREE

- No support

- Generally more updated (with the latest software) than all the others

The others...

- SuSE is friendly – but there are no free installable versions (net install only)

- Mandrake is free, user-friendly, but 3rd party software is lacking

- Debian is preferred by a lot of advanced users
  - Has relatively new software
  - Harder to configure from the start

- Gentoo requires a lot of CPU time!
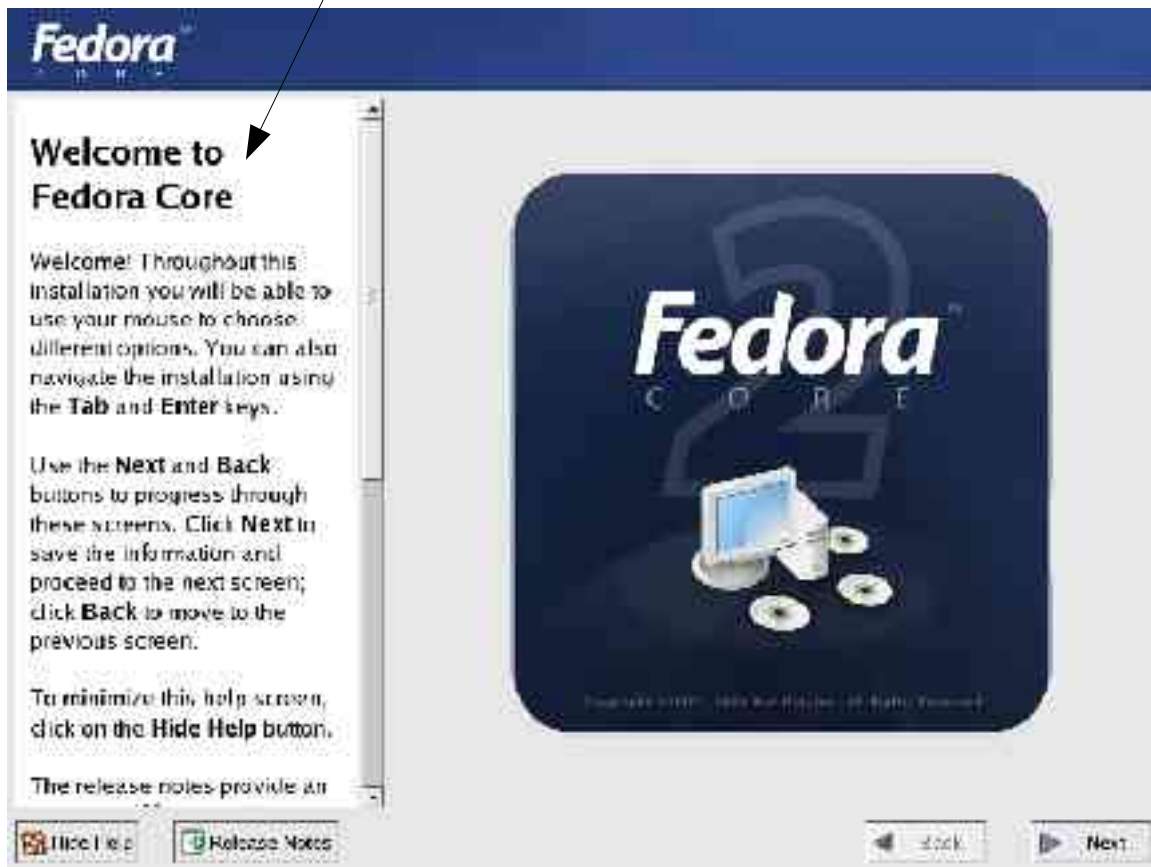
But I only have one Mac!

- That's fine – you can dual-boot
  - like running OS 9 (Classic), OS X and Linux
  - just requires some free hard disk space
- YDL/FC, SuSE/Mandrake auto-partition for you (after Disk Utility has freed space)
  - Debian/Gentoo involve text-based partitions
  - YDL 3.01 from the Net can deal with HFS+

Installation...

- It's as simple as inserting the CD into your drive and booting from the CDROM

  – Holding down the 'C' key enables this

- Debian requires more work:

  – http://people.debian.org/~branden/ibook/

- Gentoo as well:

  – http://www.desertsol.com/~kevin/ppc/

Anaconda... so friendly!

Help so you always know what you're doing

- Anaconda – graphical installer

- Fully help-prompted, and GUI (Back/Next) driven

Constant prompting once options are chosen, for a logical progression

Slide 11

Display Managers

GNOME

- Default for Fedora

- Spatial windows

KDE

- Default for YDL

- Requires configuring
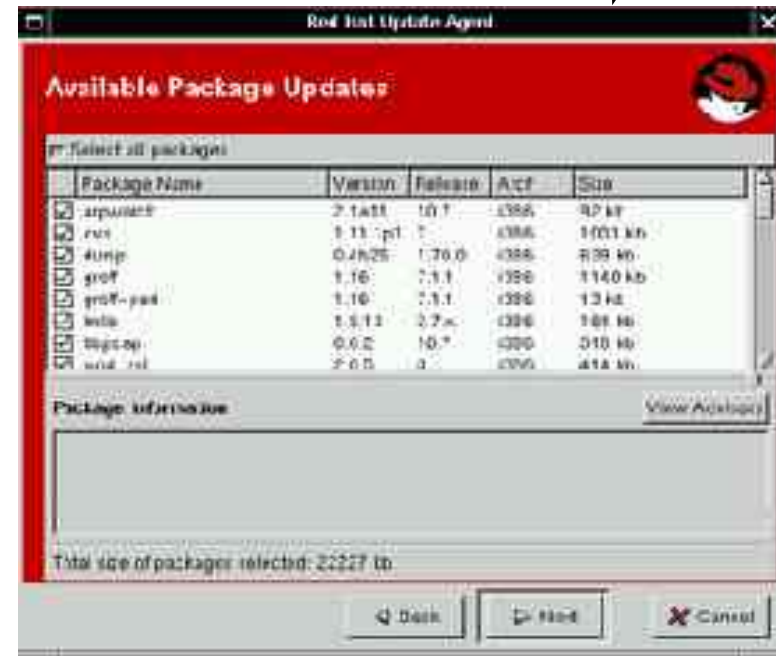
Software Updates

- Provided till the next release cycle
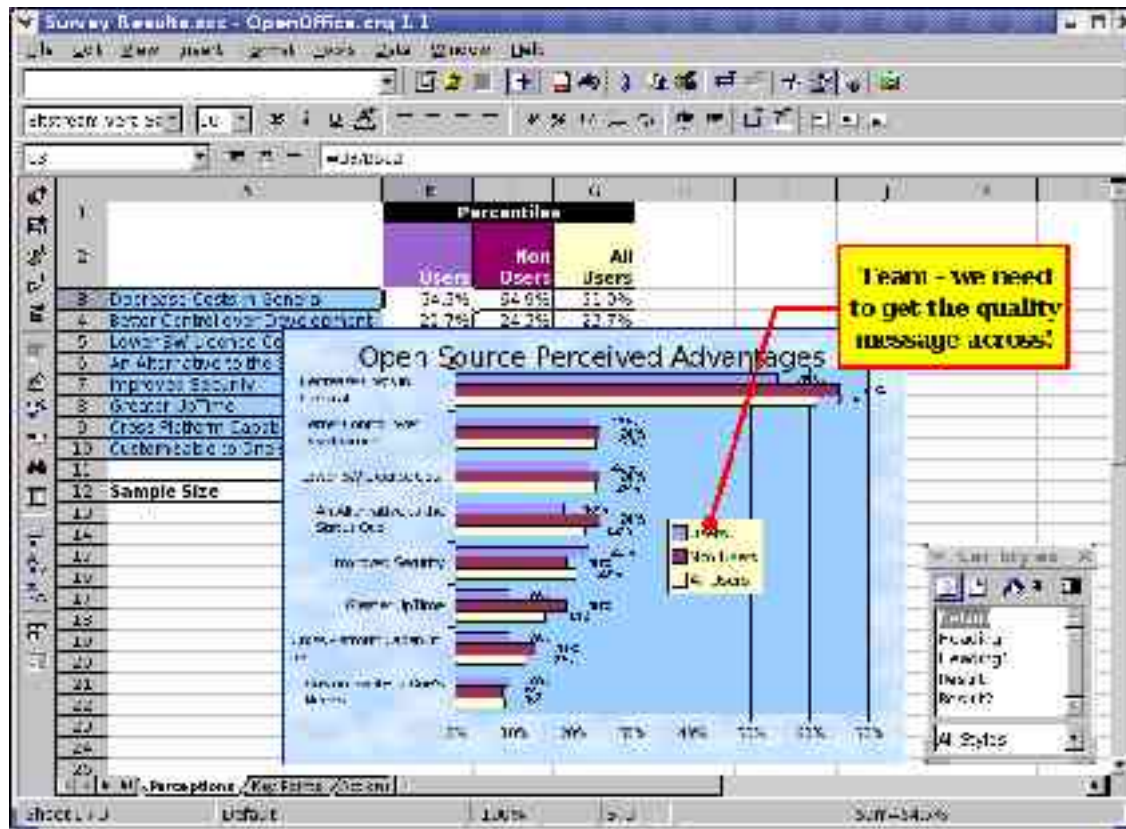
- Provided for at least 1-2 years

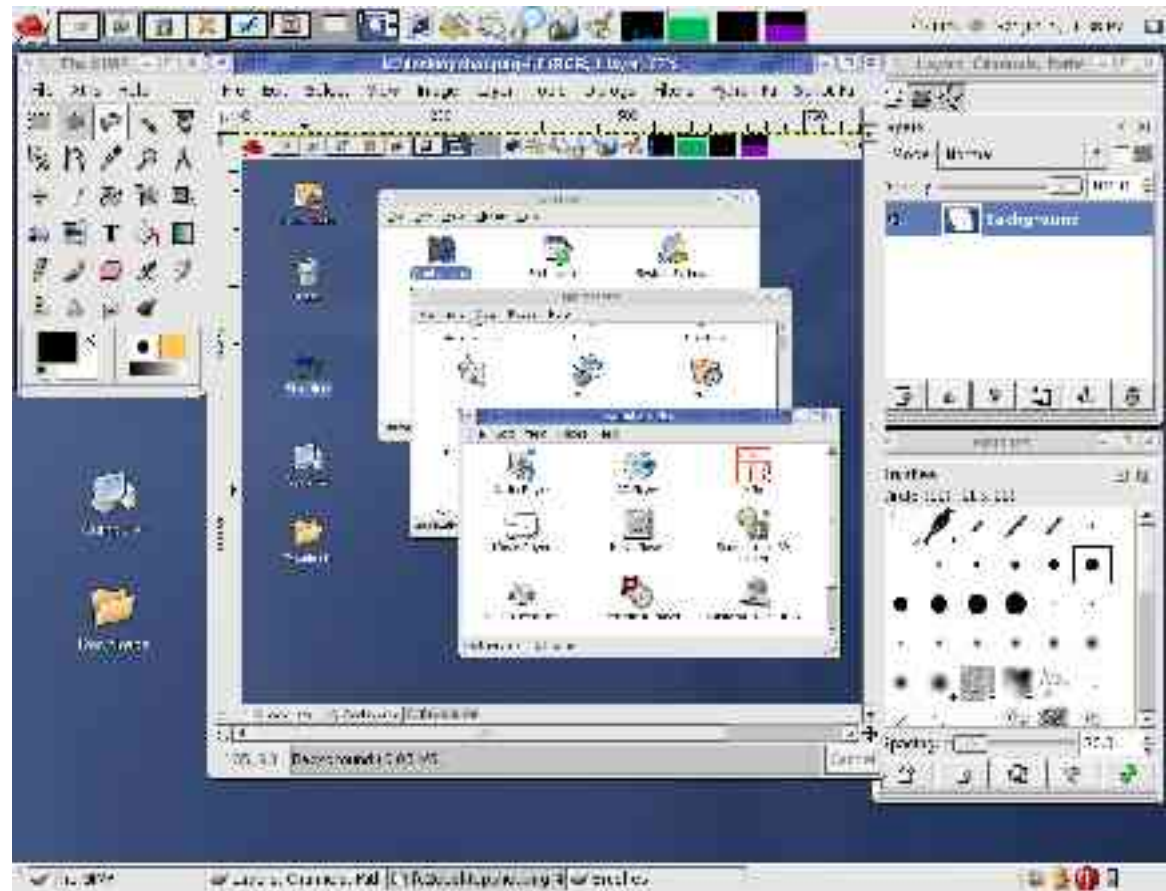Double-click notification icon to update

100% Free Office Suite

- Full-featured free cross-platform office suite

  - Writer (word processor)
  - Calc (spreadsheet)
  - Impress (presentations)

100% Free Graphics Editor

- GIMP, currently at version 2 is touted as the Photoshop replacement

- Slideshow views (GQView)

- Digital camera tool

Internet software

- Browsers are aplenty:
  - Safari – Konqueror based
  - Mozilla, Epiphany
- E-Mail clients:
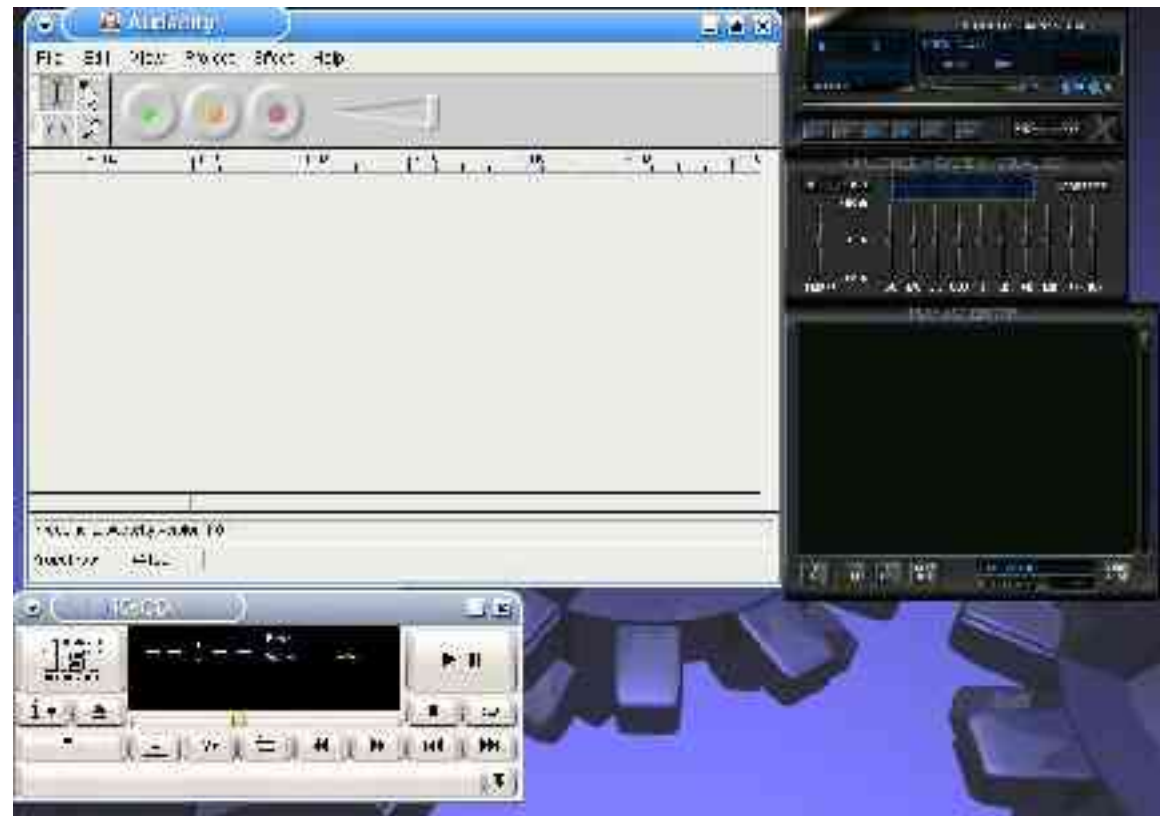 - Evolution, Thunderbird

- Instant Messaging:
  - GAIM, X-Chat

Getting some Tunes going

- Rhythmbox – iTunes replacement

Video

- Playback/editing can be performed

Totem
handles
a lot of
video by
default
in Fedora

Wait, I miss an OS X app!

- Emulation!

- Setup Mac-on-Linux, and run OS X within a window in Linux!

- QEmu exists too...

Hardware Support

- Or lack of it...

- Newer iBook/Powerbook G4's:
  - video out, Airport Extreme

- Newer iBook G3's lack video out

- iMac's/eMac's/PowerMacs/G5's have full support

- Modem requires a paid-for-wrapper (~USD$20)

LiveCD

- Gentoo (www.gentoo.org) Linux has a 1CD-based image for a Linux Live-CD

  - Boots off the CD drive, and loads Linux without installing it – try it first

  - Excellent hardware detection

- There's Knoppix PPC, but Gentoo is more established and preferred

Useful Resources

- http://www.yellowdoglinux.com/

- http://www.bytebot.net/geekdocs/ibook/fedorappc.html

- http://www.yellowdoglinux.com/support/hardware/breakdown/index.php

- Various mailing lists at http://lists.ydl.net/, including the fedora-ppc one for help, discussion, etc...

- IRC: irc.freenode.net, #fedora-ppc/#yellowdog

Thank You!

Colin Charles
byte@aeon.com.my
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