



auto-building live-CDs with debian-live

Presentation at the debian miniconf at LCA 2007 in Sydney

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Outline

- a bit about me
- school specific needs
- a bit of history & statistics
- status of world-domination
- architecture & features
- development model & tools
- contributions to Debian
- challenges



Some bits about me

- running Debian stable as primary OS since 1996
- founded the Debconf video-team in 2005
- in NM queue since 2005
- FAI (fully automatic installation)
- Debian-QA / piuparts
- Debian-edu member, powerpc porter, ftpmaster
- don't know much about the interior of live-package



About

- guidelines for the package:
 - only unchanged, official packages
 - no configuration of the live system
 - no live system to harddisk installer
- available in etch, sid and sarge backports
- <http://live.debian.net> (alioth)
- <http://wiki.debian.org/DebianLive>
- #live-package on irc.debian.org



Features

- CD/DVD creation (with usplash! :)
- netboot and usb-stick support
- multi arch (i386 and amd64, partly on the rest)
- preseeding and hooks
- templates
- default tasks: standard, minimal, x11, x11-core, xfce, kde, kde-core, kde-full, gnome, gnome*
- custom (signed) apt-repositories possible
- unofficial: hd-installer and boot from hd



How (I think) it works :)

- creates chroot with cdebootstrap
- apt-get install kernel-image with squashfs & unionfs
- casper (from ubuntu, but modified in Debian) for generating the initramfs images
- install preseeded flavour packages
- run custom hooks (if any)
- compress rootfs as squashfs image
- assemble final iso / netboot image



Why auto-building

- to test development
- breakage easily detectable
- wider testing
- manual live-CD are a pain to maintain
- provide live-CDs for end-users (once they are stable)



autobuild setup

- dedicated, restricted vserver running etch
- live-package, casper & cdebootstrap from sid
- daily cronjob updates svn working copies and runs make-live
- trusted users (me plus one each) can trigger manual build
- sends build-logs via mail
- provides build-logs and generated .isos via http



autobuilding faicd

- faicd installs Debian with FAI (fully automatic installation)
- minimum install plus fai-package and config
- boots, runs FAIs, ends -> new system is installed
- currently a proof-of-concept
- to show that fai-kernels is not needed anymore
- <http://faicd.debian.net>
- <svn://svn.debian.org/fai/people/h01ger/faicd>
- works, but needs polishing



autobuilding for debian-edu

- live-CDs for debian-edu
- three different CDs:
 - standalone workstation
 - workstation & server, including LTSP server
 - firewall
- <http://edulive.debian.net>
- <svn://svn.debian.org/debian-edu/src/build/live-CD>
- currently only builds a non-customized workstation
no special users or edu-specific theming



Thanks

- Questions ?

