

The long road to

Skool!inux
aka Debian Edu

in Debian “Lenny” main



Outline

- Some bits about me
- Project goals, design & features
- Debian and Debian Edu
- Development model and tools
- Debian Edu Etch and our plans for Lenny
- Current and future challenges



Skolinux

aka Debian Edu

- ***sexy Debian desktop
for the masses!***



Some Debian bits about me

- running Debian stable as primary OS since 1996
- contributing since 2003
- Debian Developer, holger@debian.org since 2007
 - Debian Edu member, powerpc porter, ftpmaster
 - FAI (fully automatic installation) developer
 - Debian-QA / piuparts contributor
 - founded debian-community.org
- DebConf organizer
 - founded the DebConf video-team in 2005



Debian Edu project goals

- The original idea: provide a software distribution with a complete IT platform for primary schools.
- ethical goals:
 - teach kids that sharing software can be legal and good
 - teach kids how to tinker and improve the software they use
 - demonstrate the quality of free software
 - provide programs in (all) native languages



Project goals continued

- practical goals:
 - reduce the computer-related expences in schools
 - give schools a well-tested collection of services which reduce system administration needs
 - increase computer availability



About the two names...

- nowadays Debian Edu and Skolelinux are used as synonyms – it's the same project
- Skolelinux was started in 2001 in Norway, Debian Edu at around the same time in France
 - skole is Norwegian and means school
 - edu is short for education
- I tend to say that
 - Debian Edu is name of the project
 - Skolelinux is the name of the distribution



School specific needs

- low maintainance, out-of-the-box setup
- little ressources
- localisation – very important in schools
- learning to express, share & learn
- tools for making music, drawings & learning
- source code availability – to be able to understand whats going on and change it
- different tools for different kind of pupils
- office, java and flash :-)



not so very school specific at all! :-)



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Debian Edu and Debian

- official Debian sub-project (and another CDD (Custom Debian Distribution))
- more than 25 developer gatherings in Norway, Germany, Spain, Brazil, France – good to improve cooperation and to avoid flamewars
- approx. 30 Debian Edu developers, more than 150 translators and documentation writers
- >1000 debian developers :-)
- in Etch: 9 packages which are currently not in Debian, 16 packages which are modified in Edu
- goal for Lenny: 0 packages differ from debian



Contributions to Debian

- skilled and active developers :)
- participation in the CDD effort
- funded kickoff of debian-installer
- preseeding for d-i
- funded kickoff of testing-security
- LTSP
- support the free java and gnash efforts



Development model

- All code, translations and documentation have to be committed to our source code management system(s)
- Bugs have to be committed to the bug-tracking system(s)
- Commit everything upstream
- Follow the licence-terms, encourage GPL
- Help people to help themselves
- The person who does something decides



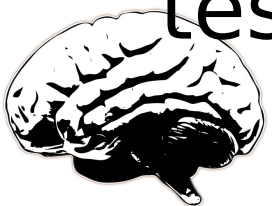
Development tools

- debian-edu@lists.debian.org
 - many more lists for support, read the manual
- wiki.debian.org/DebianEdu
- #debian-edu, monthly meetings
- frequent RL gatherings
- svn.debian.org/debian-edu on Alioth



Owned archive and cd-builds

- ftp.skolelinux.no
 - sarge, etch, etch-test, lenny, lenny-test
 - etch-test and lenny-test are autobuild
 - manual move from -test to etch/lenny
 - etch and sarge are untouchable now
- we give upload rights to non-DDs – within our policies
- svn-commit triggered builds of etch, etch-test, lenny and lenny-test CDs and DVDs



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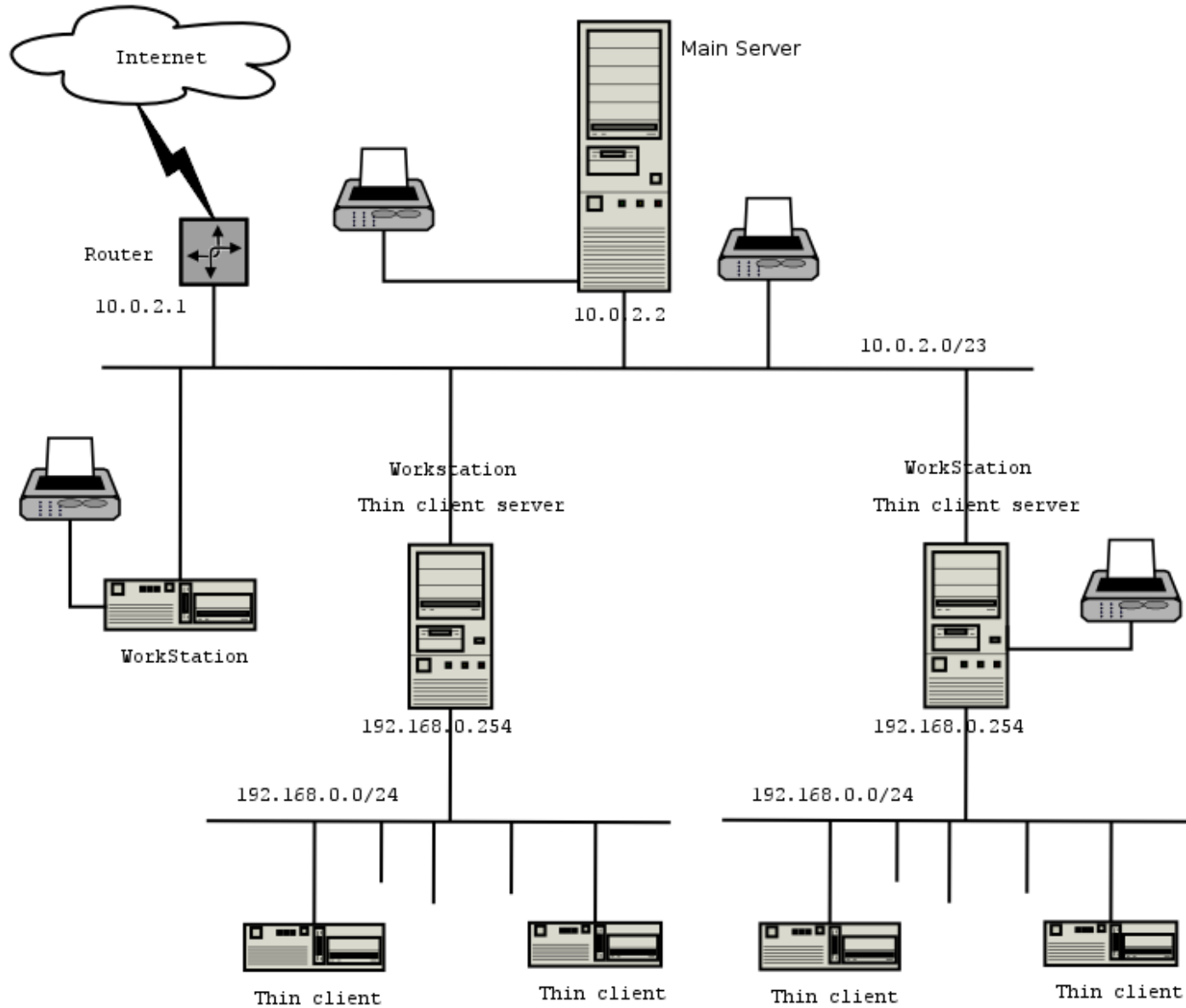


Debian Edu “terra 3.0” features

- Simplified debian-installer for i386, amd64 and powerpc
 - architecture specific installation CDs
 - multiarch DVD
- KDE based desktop with Java & flash and OpenOffice.org
 - KDE kiosk mode preconfigured
- live-CDs built with debian-live (see <http://live.debian.net>)



Network architecture



Works as designed

- LTSP server for thin-clients and diskless workstations with local device support
- Installed services: ldap (for users and machines), web, mail, remote syslog, munin, cups, ntp, dhcp, dns, home dirs via nfs
- Webbrowser based admintool Iwat



Works as designed

- LTSP server for thin-clients and diskless workstations with local device support – **with a predefined network setup**
- Installed services: ldap (for users and machines), web, mail, remote syslog, munin, cups, ntp, dhcp, dns, home dirs via nfs – **all working out of the box!**
- Webbrowser based admintool lwat



Write the fine manual!

- Complete end-user documentation
 - developed in a wiki
 - review of commit mails, sometimes editorial changes
 - translated with .po files
 - translated to Bokmål, Italian, German and Spanish
 - generates html and pdf versions
 - available through the `debian-edu-doc` package
 - uploaded monthly (since October 2007)



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Some more fancy details

- usplash
- dash
- etc-in-svk
- lvmautoresize



Debian Edu 3.0r1 pointrelease

- 3.0r0 in July 2007, 3.0r1 in December 2007
- ~40 bugs fixed (wishlist – critical)
- ~18 packages updated after manual review from ftpmaster
- new CD/DVD images
- lots of testing



ToDo for Etch

- Etch now in bugfix mode:
 - branched packages
 - manual review
- regular debian-edu-doc updates
- Development of a manual for etch and lenny, branch at some point just like the other packages



99,867% Etch

Packages not in debian-etch main

package	debian-edu/etch local	debian-edu/etch-test local
debian-edu-config	1.416+svn39964	1.416+svn39964
debian-edu-doc	0.9.20071204	1.0~20080215
debian-edu-install	0.667.1+svn39522	0.667.1+svn39522
flashplugin-nonfree		9.0.48.0.0.edu.etch1
flashplugin-nonfree-extrasound		0.0.svn2431-2.0.edu.etch.3
live-helper	1.0a19-1.0.edu.etch.1	1.0a36-1.0.edu.etch.1
live-initramfs	1.91.5-1.0.edu.etch.1	1.110.6-1
localization-config	1.02	1.02
ltsdfs	0.4.3+debian2+0.edu.0.etch.1	0.4.3+debian2+0.edu.0.etch.1
lwat	0.16-1	0.17-1
slbackup-php	0.3-1.edu.etch.1	0.3-1.edu.etch.1



99,867% Etch

Packages newer in debian-edu/etch than in debian/etch

package	debian-edu/etch local	debian/etch main
915resolution	0.5.3-0.0.edu.etch.1	0.5.2-9
console-tools	1:0.2.3dbs-65.0.0.edu.etch.3	1:0.2.3dbs-65
cpufrequtils	002-4.0.edu.etch.1	002-2
dbus	1.0.2-1.0.edu.etch.1	1.0.2-1
debian-edu	0.822.0.edu.etch.3	0.813
debian-edu-archive-keyring	2007.09.15	2006.09.17
debian-edu-artwork	0.0.23.0.edu.etch.1	0.0.17
discover	2.1.2-1.0.edu.etch.1	2.1.1-2.1
discover-data	2.2007.08.07-0.1.edu.etch.1	2.2007.02.02
hal	0.5.8.1-9.0.edu.etch.3	0.5.8.1-9
kde-i18n	4:3.5.5-1.0.edu.etch.3	4:3.5.5-1
libpam-foreground	0.4-0.0.edu.etch.1	0.2
ltsp	0.99debian12+0.0.edu.etch.8	0.99debian11
munin	1.2.5-2.0.edu.etch.4	1.2.5-1
sitesummary	0.0.35	0.0.22
xdebconfigurator	1.30.edu.etch.1	1.28



Why be 100% part of Debian?

- less work
- better results
- make one part of the many that form an universal operating system
- personally, I also see Debian Edu as a testbed for changes in Debian, e.g. for making the default desktop sexier



Challenges related to the Lenny release

- Integration of the LinEx customisations: LinEx plans to deploy a new version based on Debian Edu in spring/summer 2008
- release with Debian Lenny (end of 2008)
- after that *maybe* do pointreleases out of sync with Debian – needs to be discussed/seen
- our Etch was 3.0, Debians was 4.0 ...



Technical challenges

- LDAPify services
- configuration in a policy compliant way (#311188)
- make it easier to change the IP addresses
- properly support laptops as workstations
- the same desktop “experience” with gnome as with KDE, better menu system
- uploads to sid



Technical challenges cont.

- rsyslog
- readahead
- free flash and free Java



#311188

- <http://wiki.debian.org/DebianEdu/Bug311188>
- was RC for 2 years, recently downgraded
- we don't violate policy by the word
- but in effect, upgrades are/were partly painful



#311188 blockers

- 370324: Make /etc/courier/authdaemonrc automatically configurable
- 370332: keep server list separate from other ntp.conf settings
- 370337: Please remove bogus change of /etc/default/slapd
- 370343: Make /etc/ldap/ldap.conf automatically configurable
- 370339: syslogd: Make some conffiles automatically configurable



#311188 blockers

- 370342: Make `/etc/kde3/kdm/Xaccess` automatically configurable
- 370346: Make `/etc/security/group.conf` automatically configurable
- 370348: Make `/etc/skel/.bash_profile` automatically configurable
- 370351: Make `/etc/sysctl.conf` automatically configurable



#311188 conclusions

- maintainers, please use something like `/etc/apache2/conf.d/` or use hidden debconf questions (when sensible)



Wanna contribute?

- We're always in need of:
 - developers
 - testers
 - translators
 - documentation writers
 - artists
 - multipliers



Thank you for your attention!

- Questions ? Suggestions ? Anything else ?

