

The logo for Skolinux features the word "Skolinux" in a white, sans-serif font. The letter "o" is replaced by a red circular swirl. The text is set against a blue, hand-drawn, brush-stroke style background.

Skolinux

**aka Debian Edu**

***Lenny, Squeeze  
& how you can help***

# 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



# Outline

- Some bits about me
- What is Debian Edu
  - Project goals, design & features
- Debian and Debian Edu
- Debian Edu Lenny
- Plans for Squeeze
- How you can help
  - Testing & developing
  - Documentation & translations



# Some Debian bits about me

- running Debian stable as primary OS since 1996
- contributing since 2003
- DebConf organizer since 2005
  - founded the DebConf video-team in 2005
- Debian Developer, [holger@debian.org](mailto:holger@debian.org) since 2007
  - Debian Edu developer, mostly documentation and release-manager, ftpmaster
  - Debian-QA / [piuparts.debian.org](http://piuparts.debian.org)
  - FAI (fully automatic installation) developer



# Some Debian bits about you :-)

- Who is running/using Debian?



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- Who is running/using Debian Edu?



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- Who is running/using Debian?
- Who is running/using Debian Edu?
- Who would like to run/deploy Debian Edu?



# Some Debian bits about you :-)

- Who is running/using Debian?
- Who is running/using Debian Edu?
- Who would like to run/deploy Debian Edu?
- Who is running/using Ubuntu / Edubuntu ?





# Debian Edu project goals

- The original idea: provide a software distribution with a complete IT platform for primary schools.
- 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



# Project goals continued

- 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



# School specific needs

- low maintenance, out-of-the-box setup
- little resources
- localisation – very important in schools
- learning to express, share & learn
- tools for making music, drawings & learning
- source code availability – to be able to understand what's going on and change it
- different tools for different kind of pupils
- office, java, flash & multimedia support



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-> not so very school specific at all! :-)



# How does Debian Edu look at the surface

- Simplified debian-installer for i386, amd64 and powerpc
  - 4 installation options: main server, workstation, LTSP server, standalone
  - architecture specific installation CDs, multiarch DVD
- KDE based desktop, alternatives: Gnome, LXDE, Sugar
  - KDE kiosk mode preconfigured



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# Debian Edu is Debian

- official Debian sub-project (and another Debian (Pure) Blend)
- more than 30 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 not in Debian, 16 packages modified in Edu
  - Lenny: 13 packages differ from Debian
  - Squeeze: 0



# Why be 100% part of Debian?

- less work
- better results





# Why be 100% part of Debian?

- less work
- better results
- much better results! (reuse of knowledge & docs, etc)
- make one part of the many that form an universal operating system



# 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](mailto:debian-edu@lists.debian.org)
  - many more lists for support, read the manual
- [wiki.debian.org/DebianEdu](http://wiki.debian.org/DebianEdu)
- #debian-edu, monthly meetings
- frequent RL gatherings
- [svn.debian.org/debian-edu](http://svn.debian.org/debian-edu) on Alioth



# Contributions to Debian

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



# Our own archive and cd-builds

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



# We too release when it's ready!

- Debian Etch was released Easter 2007
  - Edu 3.0r0 in July 2007, 3.0r1 in December 2007
- Debian Lenny was released February, 15<sup>th</sup> 2009
  - Edu 5.0.4+edu0 on February, 9<sup>th</sup> 2010



# Debian Edu in use worldwide



<http://wiki.debian.org/DebianEdu/Documentation/Lenny/Contribute>



# Debian Edu in use worldwide

- all schools in Extremadura / Spain
- many many schools in Norway and Germany
  - Rheinland Pfalz (2008: 11 schools, 2009: 34)
  - Hamburg?! (50 servers?!)
- many schools throughout the world (France, Spain, Swiss, Japan, Brasil, Argentina, Danmark, lots of others)
- New initiatives in Taiwan, San Salvador and Nicaragua
- also used in universities and offices worldwide





# Debian Edu in use in Extremadura, Spain

- IIRC: 2000 servers
- IIRC: ~100000 clients
- IIRC: A desktop on every pupils desk from secondary school, one per every two people in primary school
- Deployed Lenny based Debian Edu in summer / autumn 2008(!)
- GNOME and some other minor diffs to (what was previously) a “standard Debian Edu setup”

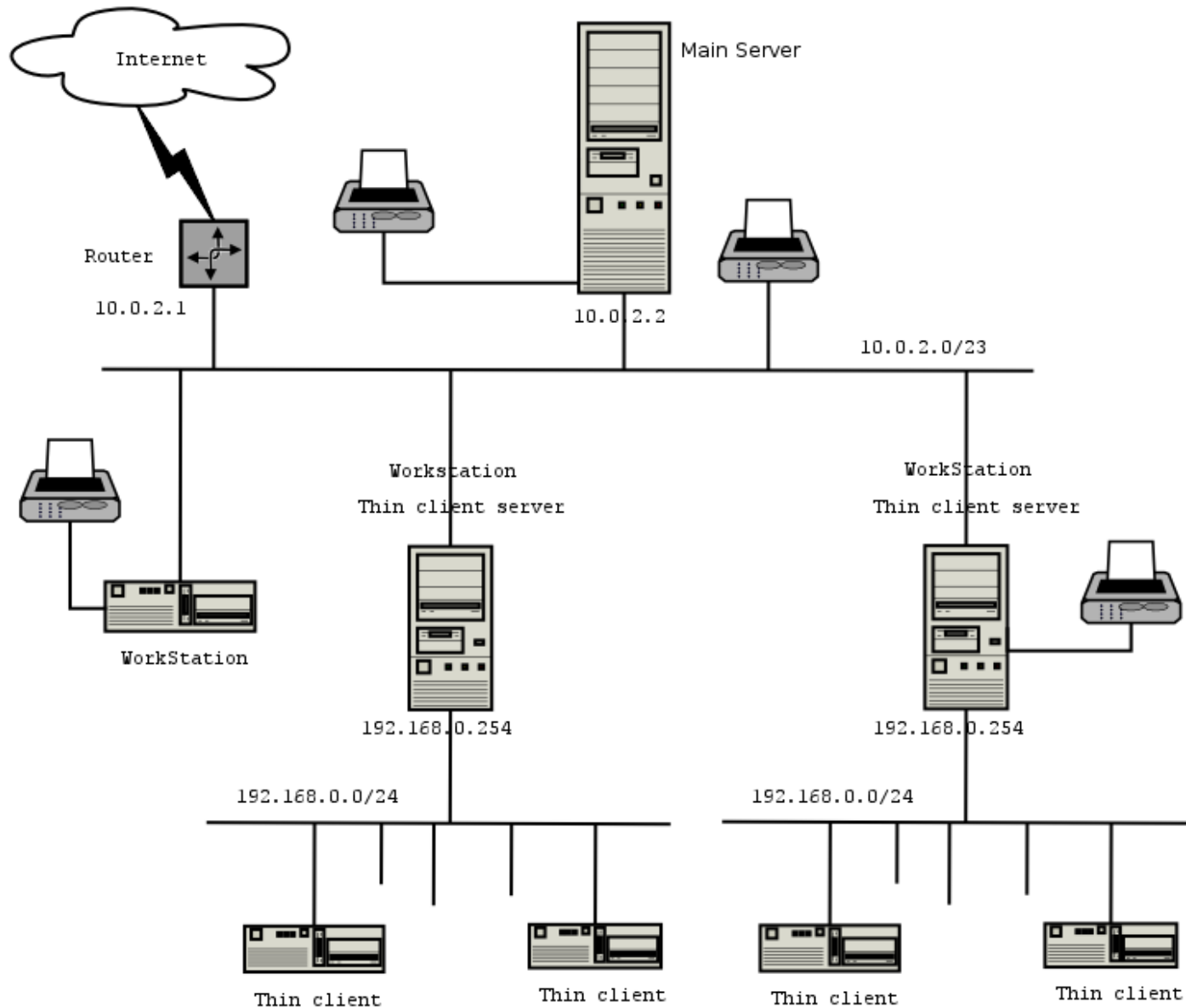


# Debian Edu in use in Rheinland-Pfalz, Germany

- 2008: 11 schools
- 2009: 34 schools
- Support certification, 2 days of training, 1 day exam
- Main server: etch, cipux (webadmin), moodle
- Workstations / Thinclients: lenny + KDE4, italc, Wine



# Network architecture



# Works as designed

- LTSP server for thin-clients and diskless workstations with local device support
- Installed and preconfigured 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



# Challenges related to the Lenny release

- Integration of the LinEx customisations: LinEx deployed a new version based on Debian Edu in spring/summer 2008
- Failed to release on the same date with Debian Lenny or even close.
- Decreased the diff to Debian!



# Technical challenges

- LDAPify services (DNS, DHCP, Samba)
  - For web-based admin tool(s)
  - make it easier to change the IP addresses
- configuration in a policy compliant way (#311188, failed)
- properly support laptops as workstations
  - Failed atm, but technically quite easy...
- the same desktop “experience” with gnome as with KDE, better menu system



# More challenges

- Debian Edu biggest problem related to development is the low number of active developers and testers
  - 3-7 core developers
  - plus 3-7 core testers





# More challenges

- Debian Edu biggest problem related to development is the low number of active developers and testers
  - 3-7 core developers
  - plus 3-7 core testers
- YOU can make a huge difference, as Stefano said: with computers a motivated individual can do wonders



# new Features in Lenny

- Gnome desktop, Sugar desktop
- dns + dhcp3 configs in LDAP, somewhat less hardcoded IP setup, powerDNS instead of bind9
- automated PXE setup
- some work on #311188
- free flash & free Java by default
- everything else which is new in Lenny
- everything else which we had in Edu Etch



# ToDo for Lenny

- Lenny now in bugfix mode:
  - branched packages
  - manual review
- regular debian-edu-doc updates
- installation media needs to be rebuild when Debian point-releases requiere it



# Current diff to Lenny

## Packages in our archive compared to the Debian archive

Packages newer in debian-edu/lenny-test than in debian/lenny

package	debian-edu/lenny-test local	debian/lenny main
debian-edu	0.838~svn58953	0.837
debian-edu-artwork	0.0.30-2	0.0.28
debian-edu-config	1.427~svn58966	1.423
debian-edu-doc	1.3~20090918~5.0.3+edu0~alpha	1.2~20080715
debian-edu-install	0.678~svn0	0.674
hal	0.5.11-8.0.edu.lenny.1	0.5.11-8
localization-config	1.06~svn55808	1.05
lwat	0.18~beta-2	0.17-4
sitesummary	0.0.49	0.0.47

## Packages not in debian-lenny main

package	debian-edu/lenny local	debian-edu/lenny-test local
dak	0edu2	0edu2
edu-ltsp-client-builder	5.1.69-1~edu.lenny+3	5.1.69-1~edu.lenny+5
host-policygroups	0.0.1~svn45004	0.0.1~svn45004
ltsp-docs		0.99+bzr91-1



# Differences to Lenny

- Source packages in Debian lenny main: 12121
- Source packages in Debian Edu lenny local: 13, number of identical packages in percent: 99.89%



# Differences to Lenny

- Upgrades are not officially supported (though we try our best to at least document problems in the manual for now)
  - In practice upgrades work and are done
- <http://wiki.debian.org/DebianEdu/Bug311188>
- This bug was filed as RC in 2005 and downgraded to important in February 2008
  - We don't violate policy - by the word
  - We want our packages to migrate to testing



# #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: sysklogd: 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)



# new and planned features in Squeeze

- new profile: roaming workstation (cached credentials and home directory syncing to local disk)
- Kerberos integration
- GOSA integration (instead of Iwat or webmin)
- dovecot instead of courier
- KDE4 migration
- LXDE
- etckeeper instead of etcinsvk
- 0 packages differ from Debian



# How YOU can help

- Join the mailinglist [debian-edu@lists.debian.org](mailto:debian-edu@lists.debian.org) and [#debian-edu](irc://irc.debian.org) on [irc.debian.org](irc://irc.debian.org) (both optional)
- Testing new installations from [squeeze\(-test\)](http://www.debian.org/try/)
- Reporting bugs and following up on them (=testing again)
- Fixing bugs :-)
- Writing documentation (look for `FIXME`)
- Translating documentation
- Did I mention testing and bug reporting?! :-)



# Testing / Bug reporting

- [wiki.debian.org/debian-edu/Status/Squeeze](http://wiki.debian.org/debian-edu/Status/Squeeze)
  - Explains how to test
  - Lists known issues (and possible workarounds)
  - Links to bug tracker and explains how to report bugs



# Testing / Bug reporting

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  - Links to bug tracker and explains how to report bugs
    - reporting bugs is *good!*
    - testing if bugs are still present or already fixed is also very *good!*



# 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, Spanish and French
  - generates html and pdf versions
  - available through the `debian-edu-doc` package
  - uploaded monthly (since October 2007)



# BTW: the new website needs help too

- [www.skolelinux.org](http://www.skolelinux.org)
  - build on joomla
  - new team formed, welcomes new members
  - still needs a bit polishing
  - more content editors wanted
  - more translators wanted (auch deutsch!)



# Thank you for your attention!

Questions ? Suggestions ? Anything else ?

- Want to contribute? We're always in need of developers, testers, translators, documentation writers, artists, multipliers!
  - Please contact me. I'm happy to help you to get started!
- Slides available at [layer-acht.org/talks](http://layer-acht.org/talks)

