Skolinux
aka Debian Edu

How it's used worldwide, Lenny & 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
• Project goals, design & features
• Debian Edu Etch
• Debian and Debian Edu
• Debian Edu Lenny
• How you can help
  – Testing & developing
  – Documentation & translations
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 developer, mostly documentation and release-manager, ftpmaster
  – FAI (fully automatic installation) developer
  – Debian-QA / piuparts.debian.org
  – founded debian-community.org
• DebConf organizer since 2005
  – founded the DebConf video-team in 2005
Some Debian bits about you :-)  

• Who is running/using Debian?
Some Debian bits about you :-)  

- Who is running/using Debian?  
- Who is running/using 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?
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 expenses 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 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 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! :-}
Debian Edu in use worldwide

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, 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

- A short clip which was shown in EuroNEWS (a commercial cable TV station) and which is available in several European languages
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
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)
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 lwat
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
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
  – though by now I think it's better to leave it like it is and concentrate on our Lenny doc instead

• 3.0r2 not formally released
  • today only security updates and severe bugfixes
**99,867% Etch**

### Packages not in debian-etch main

<table>
<thead>
<tr>
<th>package</th>
<th>debian-edu/etch local</th>
<th>debian-edu/etch-test local</th>
</tr>
</thead>
<tbody>
<tr>
<td>debian-edu-config</td>
<td>1.416+svn39964</td>
<td>1.416+svn39964</td>
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<tr>
<td>debian-edu-doc</td>
<td>0.9.20071204</td>
<td>1.0~20080215</td>
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<tr>
<td>debian-edu-install</td>
<td>0.667.1+svn39522</td>
<td>0.667.1+svn39522</td>
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<td>flashplugin-nonfree</td>
<td>9.0.48.0.0.edu.etch1</td>
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<td>flashplugin-nonfree-extrasound</td>
<td>0.0.svn2431-2.0.edu.etch.3</td>
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<tr>
<td>live-helper</td>
<td>1.0a19-1.0.edu.etch.1</td>
<td>1.0a36-1.0.edu.etch.1</td>
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<td>live-initramfs</td>
<td>1.91.5-1.0.edu.etch.1</td>
<td>1.110.6-1</td>
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<tr>
<td>localization-config</td>
<td>1.02</td>
<td>1.02</td>
</tr>
<tr>
<td>ltpfs</td>
<td>0.4.3+debian2+0.edu.0.etch.1</td>
<td>0.4.3+debian2+0.edu.0.etch.1</td>
</tr>
<tr>
<td>lwat</td>
<td>0.16-1</td>
<td>0.17-1</td>
</tr>
<tr>
<td>slbackup-php</td>
<td>0.3-1.edu.etch.1</td>
<td>0.3-1.edu.etch.1</td>
</tr>
</tbody>
</table>
99.867% Etch

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

<table>
<thead>
<tr>
<th>package</th>
<th>debian-edu/etch local</th>
<th>debian/etch main</th>
</tr>
</thead>
<tbody>
<tr>
<td>915resolution</td>
<td>0.5.3-0.0.edu.etch.1</td>
<td>0.5.2-9</td>
</tr>
<tr>
<td>console-tools</td>
<td>1:0.2.3dbs-65.0.0.edu.etch.3</td>
<td>1:0.2.3dbs-65</td>
</tr>
<tr>
<td>cpufrequtils</td>
<td>0.0.2-4.0.edu.etch.1</td>
<td>0.02-2</td>
</tr>
<tr>
<td>dbus</td>
<td>1.0.2-1.0.edu.etch.1</td>
<td>1.0.2-1</td>
</tr>
<tr>
<td>debian-edu</td>
<td>0.822.0.edu.etch.3</td>
<td>0.813</td>
</tr>
<tr>
<td>debian-edu-archive-keyring</td>
<td>2007.09.15</td>
<td>2006.09.17</td>
</tr>
<tr>
<td>debian-edu-artwork</td>
<td>0.0.23.0.edu.etch.1</td>
<td>0.0.17</td>
</tr>
<tr>
<td>discover</td>
<td>2.1.2-1.0.edu.etch.1</td>
<td>2.1.1-2.1</td>
</tr>
<tr>
<td>discover-data</td>
<td>2.2007.08.07-0.1.edu.etch.1</td>
<td>2.2007.02.02</td>
</tr>
<tr>
<td>hal</td>
<td>0.5.8.1-9.0.edu.etch.3</td>
<td>0.5.8.1-9</td>
</tr>
<tr>
<td>kde-i18n</td>
<td>4.3.5.5-1.0.edu.etch.3</td>
<td>4.3.5.5-1</td>
</tr>
<tr>
<td>libpam-foreground</td>
<td>0.4-0.0.edu.etch.1</td>
<td>0.2</td>
</tr>
<tr>
<td>ltsp</td>
<td>0.99debian12+0.0.edu.etch.8</td>
<td>0.99debian11</td>
</tr>
<tr>
<td>munin</td>
<td>1.2.5-2.0.edu.etch.4</td>
<td>1.2.5-1</td>
</tr>
<tr>
<td>sitesummary</td>
<td>0.0.35</td>
<td>0.0.22</td>
</tr>
<tr>
<td>xdebcfgurator</td>
<td>1.30.edu.etch.1</td>
<td>1.28</td>
</tr>
</tbody>
</table>
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
• personally, I also see Debian Edu as a testbed for changes in Debian, e.g. for making the default desktop “sexier”
Debian Edu and 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 which are currently not in Debian, 16 packages which are modified in Edu

  • Lenny: 13 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
Our own 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
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 ...
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
- We failed to release with Debian Lenny (it's now 7 months later...)
- Debian Lenny 5.0.3 and still no Debian Edu Lenny 5.0.3+edu0 released :-(

![ICOS logo]
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
new Features in Lenny

• Gnome desktop, Sugar desktop
• dns + dhcp3 configs in LDAP, automated PXE setup, somewhat less hardcoded IP set up
• some work on #311188
• Free flash (?) & free Java
• everything else which is new in Lenny
• everything else which we had in Edu Etch
## Current diff to Lenny

### Packages in our archive compared to the Debian archive

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

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

### Packages not in debian-lenny main

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<th>debian-edu/lenny-test local</th>
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</thead>
<tbody>
<tr>
<td>dak</td>
<td>0edu2</td>
<td>0edu2</td>
</tr>
<tr>
<td>edu-ltsp-client-builder</td>
<td>5.1.69-1~edu.lenny+3</td>
<td>5.1.69-1~edu.lenny+5</td>
</tr>
<tr>
<td>host-policygroups</td>
<td>0.0.1~svn45004</td>
<td>0.0.1~svn45004</td>
</tr>
<tr>
<td>ltsp-docs</td>
<td></td>
<td>0.99+bzr91-1</td>
</tr>
</tbody>
</table>
Current diff to Lenny

• Source packages in Debian lenny main: 12121

• Source packages in Debian Edu lenny local: 11, number of identical packages in percent: 99.91%

• Source packages in Debian Edu lenny-test local: 13, number of identical packages in percent: 99.89%
Current diff 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
- 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)
How YOU can help

- Join the mailinglist debian-edu@lists.debian.org and #debian-edu on irc.debian.org (both optional)
- Testing new installations from lenny(-test)
- 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?! :-)

[Image]
Testing / Bug reporting

- wiki.debian.org/debian-edu/Status/Lenny
  - Explains how to test
  - Lists known issues (and possible workarounds)
  - Links to bug tracker and explains how to report bugs
Testing / Bug reporting

- wiki.debian.org/debian-edu/Status/Lenny
  - Explains how to test
  - Lists known issues (and possible workarounds)
  - 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)
Write the fine manual!

- Who of you is able to speak/write (bad) english?
Write the fine manual!

- Who of you is able to speak/write (bad) english?
  - content is more important than grammar!
Write the fine manual!

- Who of you is able to speak/write (bad) English?
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- Who of you ever edited a wiki page?
Write the fine manual!

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- Who of you ever edited a wiki page?

=> You qualify for writing the fine manual!!!
Translate the fine manual!

- Who of you is able to understand written English?
Translate the fine manual!

- Who of you is able to understand written English?
- Who of you every translated software using .po files?
Translate the fine manual!

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- Who of you ever translated software using .po files?

=> You qualify for translating the fine manual! :-)

BTW: Wanted: a good intro how to edit .po files with kbabel or poedit... hints welcome.
WWWebseite

- www.skolelinux.org
  - outdated & ugly
  - hardly translated
- Neue Beta-Webseite:
  - joomla.slx.no
  - new team formed, welcomes new members
  - almost finished
  - still needs a bit polishing
  - and translations
Thank you for your attention!

Questions ? Suggestions ? Anything else ?

- Want to contribute? We're always in need of developers, testers, translators, documentation writers, artists, multiplicators!
  - Please contact me. I'm happy to help you to get started!

- Slides available at layer-acht.org/talks