Skolinux
aka Debian Edu

Lenny, Squeeze
& how you can help

Holger Levsen,
Debian MiniConf @ LinuxTag 2010
Berlin, Germany, June 10th 2010
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 since 2007
  – Debian Edu developer, mostly documentation and release-manager, ftpmaster
  – Debian-QA / piuparts.debian.org
  – FAI (fully automatic installation) developer
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?
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 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
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

-> 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
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
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
  – 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
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, 15th 2009
  – Edu 5.0.4+edu0 on February, 9th 2010
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, 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
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
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

<table>
<thead>
<tr>
<th>package</th>
<th>debian-edu/lenny-test local</th>
<th>debian/lenny main</th>
</tr>
</thead>
<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

<table>
<thead>
<tr>
<th>package</th>
<th>debian-edu/lenny local</th>
<th>debian-edu/lenny-test local</th>
</tr>
</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>
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
- 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 lwat 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 and #debian-edu on irc.debian.org (both optional)
- Testing new installations from squeeze(-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?! :-)

Testing / Bug reporting

- 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

- 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
    - 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
  - 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, multiplicators!
  – Please contact me. I'm happy to help you to get started!

• Slides available at layer-acht.org/talks