One Laptop per Child

XO Camp User Input and Roadmap Example

All Dates and Features Subject to Change
Agenda

1) Deployment and User Types
2) Synthesized Top Requirements
3) Possible 9.1 Roadmap
Types of Deployments

Small deployments 50 – 1000 XOs
- Often run solely on the documentation and possibly mailing lists.
- More deployments like this expected
- More flexible and able to deploy rapidly.

Large “trial” deployment 1K – 10K XOs
- High profile trials come up quickly and have tight time frames
- May engage via tech support e-mail and visits by OLPC staff
- After initial deployment, feedback can taper off

Mature deployment 11K – 300K XOs
- Usually some SI and extensive in country support system
- Regular meetings with 1CC, list and tech support engagements
Must succeed at each stage to move on

We don't hear details from all deployments
Some go on, some stop, some move to other platforms
New major trials start at least once a quarter
Watershed for success is to get XOs in the schools
Deployment Examples
Two Small deployments

• South Africa
Not many questions seen on the lists.

• Colombia
Several different deployments, one (Itagui) may become major trial. http://wiki.laptop.org/go/OLPC_Colombia
Some have engaged on Sur or Colombia lists, others are quieter.

• Dozens more with varying levels of communication
Deployment Example
Large Trial Deployments

• Nepal
Going from 100s to 1000s of XOs. Details from Bryan later.

• Haiti, Rwanda, Mongolia
~10K XOs each. Intermittent feedback. Upgrade, imaging, power, languages dominated early comments.
Mongolia on 8.2. Rwanda and Mongolia considering servers.

• Ethiopia
~4K XOs with custom applications and build 70x
Ongoing discussions re: servers and image customization

• Paraguay
Done teacher training, plan ~4K 8.2 XOs and XS in a few months
Super docs: http://wiki.paraguayeduca.org/index.php/Portada
Deployment Example
Mature countrywide deployments

• Uruguay
  100K+ XOs w/custom 656. ~100K more to deploy in 2009 with 8.2. Plan to upgrade all to 8.2 in mid-2009
  Customer school server
  Regular calls with 1CC, huge user support team, SI, active lists

• Peru
  Approaching 100K Xos with 70% in schools
  Plan to deploy 100K+ in 2009, plan to roll out XS
  Regular calls with 1CC, active community and support from Ministry of Education
Types of feedback

Systems integrators

Mostly technical comments. Want control over image and security
Challenge to get XOs and network deployed
Also driven by education requirements (e.g. book reader)

OLPC employees visiting countries

Varies, but similar to SI comments. Also requests for new activities or learning tools (e.g. sharing files)

Pedagogical, learning and ministry of education

Activity functionality issues and content requests.
Need XOs to work reliably in teacher trainings

Teachers and students

Feedback from lists or via channels above.
Questions on what is supposed to work and how.
Top 10 requests – Not in Priority Order

See: http://wiki.laptop.org/go/Feature_requests

1 - Activation lease management
   SIs in Uruguay, Peru, Ethiopia

2 - Longer battery life
   OLPCers and SIs: Rwanda, Haiti, Ethiopia

3 - Reliable synchronous collaboration
   Teachers, OLPCers: Uruguay, Peru, teacher trainings

4 - Reliable touchpad
   SI, Teachers OLPCers: Peru, Uruguay, Nepal etc.

5 - No lost files
   OLPCers, Teachers: Peru, Uruguay
Top 10 requests – Not in Priority Order
See: http://wiki.laptop.org/go/Feature_requests

6 - Performance improvements
   SIs, OLPCers: Peru, Uruguay

7 - Projects and asynchronous collaboration
   OLPCers, SI, MeD: Peru, South Africa

8 - Chinese, Nepali, Arabic and Amharic support
   SIs, OLPCers: Jordan, Palestine, Nepal, China

9 - More easily run any Linux application.
   MeD, Teachers, SIs: Ethiopia, Peru

10 - Full Flash and Youtube support
    Teachers: Peru, Uruguay
One Laptop per Child

Possible 9.1.0 Roadmap

Greg Smith OLPC Product Manager, greg@laptop.org
Top Priority
http://wiki.laptop.org/go/9.1.0#Top_Priority

1 – Rebase on F10 and allow "regular" Fedora window managers and applications.

2 – Activation/lease/signing/image customization.

3 – Power management. Some key features in Category:Power management

4 – Localization/translation: Arabic, Chinese, Amharic, Nepali
Standard Fedora, Part 1
Rebase on Fedora 10

Function
• Migrate base XO Software to Fedora 10
• Extend support time frame
• Take the latest security and network infrastructure
• Push as much XO software upstream as possible

Benefit
• XO code in Fedora provides more efficient engineering in future
• Opens XO development to 100s more developers

Challenges
• Potentially large engineering effort
• Little user visible benefit
• Not all XO code upstream. Sets the stage for that in late 2009

Feature definition:
http://wiki.laptop.org/go/Feature_roadmap/Rebase_on_Fedora_10
Standard Fedora, Part 2
Fedora Desktop and Applications

Function

- Boot to Fedora desktop (e.g. Gnome) or boot to sugar, both loaded from NAND Flash
- Run any Fedora Linux apps that fit in HW (Flash, RAM, CPU, Video)
- May be two SKUs: 1 - Fedora Desktop + Sugar. 2 – Sugar only.

Benefit

- Uses well tested and reliable operating system
- Easy access to many more applications!

Challenges

See: http://wiki.laptop.org/go/Feature_roadmap/Run_Fedora_applications_on_XO
Deployment Control of Customization and Security

Function
- Time based lease management controlled in country.
- Self signing of SW with activities, languages and customizations.
- Faster upgrade of XOs in “warehouse”

Benefit
- Deployment controls security and image customization
- Fewer delays on initial roll out

Challenges

Feature definition:
http://wiki.laptop.org/go/Feature_roadmap/Faster_imaging
http://wiki.laptop.org/go/Feature_roadmap/Activation_lease_security
http://wiki.laptop.org/go/Feature_roadmap/Image_signing_key_delegation
Longer Battery Life

Function
• Sleeps modes on by default

Benefit
• Extends battery life and lowers cost for power hardware in schools

Challenges

Feature definition: http://wiki.laptop.org/go/Feature_roadmap/Improved_battery_life
Translation Updates

Function

• Enabling Chinese, Amharic, Nepali in Sugar
• Update to latest translations

Benefit

• Enables deployments in those countries

Challenges

Feature definition: http://wiki.laptop.org/go/Feature_roadmap/SCIM
Second Priority

1. Performance
2. Synchronous collaboration (reliability)
3. Asynchronous collaboration (server side and XO to XO file transfer)
4. Flash support
Example Response to top priorities from deployments

1 -- Power
   · High priority for 9.1
   · Need feedback from deployments on 8.2 implementation

2 -- Touchpad still jumpy on some XOs
   · May be better in 8.2. Need more feedback from deployments
   · New touchpad hardware coming. That should be much better

3 -- Asynchronous collaboration and building projects
   · Need more discussion possible XS solution in the future
   · Moodle will be available but not sure if this addresses learning needs.

4 -- Lost files
   · Should be much better in 8.2. Need more feedback from learning on 8.2.
   · May do additional work to make journal more reliable in 9.1
Example Response to top priorities from deployments

5 -- Server (updates, backups prevent lost work)
   • Backups available in 0.5 (just released)
   • May make restore more elegant.
   • Can do presentation on server capabilities and roadmap when needed.

6 -- Synchronous Collaboration
   • Many bug fixes and improved scale in 8.2
   • Presence (seeing all Xos reliably) is still inconsistent. May be able to improve this when using an XS
   • Some bug fixes possible in 9.1 but not top priority.

7 -- Application to sugarize activities and more activities including development environments
   • Top priority in 9.1 to run standard Fedora
   • Could make “sugarization” easier but not planned for 9.1 right now.
   • Need a list of priority applications from learning team
Example Response to top priorities from deployments

8 – Improve PDF book experience
  · Small change to make it easy to open PDF directly in browser planned.
  · May make 8.2.1 or 9.1

9 -- Translations
  · More translations in 9.1
  · Easier inclusion of latest translations under image customization feature
What's missing?

1 – Activities and pedagogical break-through ideas
   Worked on outside core OLPC team, aside from run Fedora apps.

2 – Integrated solutions with XS
   Underway (e.g. Moodle plans) but needs better coordination.

3 – Reliability
   To be addressed in bug prioritize/triage process

4 – Updated journal and any other “sugar” items

5 – Datastore rework

6 – Other?