

Community News

A weekly update of One Laptop per Child October 26, 2008

From the field...

Note from the editor: more field reports are always welcome for community news! - Jim

Twenty-five XO's apiece were distributed last week at the SAM bin Noah and Ghamdan Schools in Sana'a, Yemen. The donor was Mövenpick Hotels & Resorts. "The laptops are a creative way for children to learn through discovery, exploration and independent interaction," said Mövenpick Hotel Sana'a General Manager Mr. Nasir W. Saudi. "Not only that, children will be able, through the laptops, to expand their horizons beyond that of their immediate environment"



Fritz Hoff reports: "In the Netherlands, since November 2007 a grassroots group is active: OLPC NL. Since May 2008, there is also a foundation OpenWijs.nl (OpenWise.nl) that helps organizations to start and implement OLPC projects. Two projects are underway and 15 projects are in preparation (Aruba, the Netherlands Antilles, Suriname, Ghana, Tanzania, Sierra Leone, Kenya).

This week we will receive the first 72 XO's for the Netherlands and 15 XO's for Nicaragua. In Nicaragua 2 other projects are being prepared and through a network of Dutch sistercities perhaps another 10 cities with more than 50 schools will start projects. Therefore the Ministry of Education of Nicaragua is already involved.

In addition to projects in primary education, we are also working with illiteracy, blind and visually impaired (translated text-to-speech, braille), tele-health / telemedicine, adult education, technical education, elearning (Moodle and Dokeos) and websites (communities with Drupal).

As you can imagine we have an urgent need for people who can help us, although we have already some very good volunteers.

More information: www.openwijs.nl

Technology

Support:

1. Reuben Caron worked with the deployments in Birmingham, Paraguay, and Haiti this week. He continued work on jabber.laptop.org, installed XS 0.5-dev7 and began testing the installation. Ed McNierney, Kim Quirk, Michael Stone, and Chris Ball have been involved in discussions of Uruguay's field issues and preparations for a developer visit. Everyone benefited from detailed presentations and discussions with learning team members recently returned from Rwanda, Haiti, Ethiopia, and Perú.

2. For the G1G1 program, Kim Quirk and Aaron Royer were able to review the first draft of the Amazon storefront this week. We have first draft of the returns and refund policies as well as revenue and settlement report information from Amazon. Most of the community media, magazine, newspaper ads, TV commercials, and billboards are well underway.

3. This week Seth Woodworth worked on media for the community, including posters, banners for blogs and flyers for volunteers/contributors to distribute. Seth has also been working with our new Google advertising grant and establishing OLPC presence at DailyMotion/YouTube.

Updates from the Web: A growing number of people are blogging about the upcoming g1g1. Very little of the conversation lately has been negative, but people are still looking for more specifics about what we're doing in specific countries.

Stats for en.forums.laptop.org: ~300 hits a day;~8000 unique visits a month; Most hits come from the US, followed by the UK, Canada, India, Austria, Germany, and China

Stats for wiki.laptop.org (previous week): 76,000 unique visits last week; one of the most popular pages was Greg's Release notes: (Release_notes/8.2.0). After search engines <http://distrowatch.org> directed the largest amount of traffic to the wiki

Testing:

4. Joe Feinstein reports that the QA team conducted a large school environment simulation test, with 59 laptops connected to a school server and ten people using the Write activity simultaneously. The team tested various access points attached to a school server with the purpose of developing recommendations for field use. We also started testing the backup/restore feature of a school server, and continued working on approaches to automate testing.

5. Mel Chua is organizing some community testing: <http://wiki.laptop.org/go/Analyze> by Eduardo Silva (User: Edsiper), which has been chosen as the first community test activity of the week. We need help finishing the test cases at <http://wiki.laptop.org/go/Tests/Activity/Analyze> and facilitating community testing of this activity over the next week. Join the <http://wiki.laptop.org/go/testing> mailing list to participate, or if you have an activity you'd like to have tested as activity of the week.

Mel is also looking for volunteers to develop a community testing portal on the wiki. Email to the mailing list if you're interested. Mel also rediscovered the [http://wiki.laptop.org/go/XO Monitor](http://wiki.laptop.org/go/XO_Monitor) activity, which is similar to what Joe wants for multi-XO monitoring/testing. We're working towards using it to oversee a multi-XO test bed now.

Sysadmin:

6. Henry Edward Hardy reports that the group has made some progress in setting up mirror servers for dev and pedal. An experimental mirror of dev is now up and running. There are still a few technical issues to resolve but progress is being made.

Software Development:

7. Many G1G1 users and country technical leads are now downloading and evaluating release 8.2. So far, most reviews are very positive.

8. Future release planning is now focused on the Feature Roadmap page - http://wiki.laptop.org/go/Feature_roadmap - which tracks all the main features under consideration by the OLPC community for development.

The entire software development group continued with preparations for the technical mini-conference to be held in mid November. The call for proposals has gone out. See the planning page for this event and submit proposals at http://wiki.laptop.org/go/XOcamp_2

9. Chris Ball worked on adding feature specifications to Trac. We now have a "specification" ticket type alongside defect/task/enhancement, and a specification ticket contains fields that the other ticket types don't (and vice versa). My first pass at a set of specification fields is:

- Spec reviewer (text)
- Spec reviewed? (checkbox)
- Spec current milestone (draft/submitted for review/approved/first milestone/second milestone/third milestone/reviewer signoff/finalize)

Chris expects these fields will be refined before we start using them to hold the specifications that result from the planning meeting. The goal is for the release manager(s) to have an overview available as a Trac report that shows the state of the path through design and implementation for each proposed feature -- which ones are progressing steadily, and which are blocked or insufficiently described. Having us create specs for proposed features should ensure that a round of review on proposed designs takes place, and also help to guard against feature creep near the end of the release.

XO OS Software:

10. C. Scott Ananian spent the week in Perú with SJ Klein, and will bring back a better understanding of the in-country issues we can address in future software development work. Erik Garrison continued getting feedback about the use of compcache and issues encountered with xcompmgr.

11. Paul Fox now has a working version of the merged EC firmware, building under wine, and incorporating all of the changes made during his initial sdcc porting attempt. This should eliminate Paul and Richard's need for Windows during EC development. Paul has also been looking at the touchpad issue again, and proposed a button-triggered shutdown menu for discussion for release 9.1. Paul also thoroughly appreciated the several presentations made by the deployment/learning teams.

12. Michael Stone began to address some important gaps in his education by practicing collaborative resumable graphical app design and by reviewing some important documents like the Cerebro thesis, the DNS RFCs (1034,1035), Reed's dissertation, and the GPLv3. He also participated in conversations with the deployment folks and made some preparations to visit Uruguay with Chris in a week and a half..

XS School Server Software:

13. This week Douglas Bagnall worked on tidying things up for the XS 0.5 release. That involved quite a lot of work on the XS-OTP package, which is finally out, some repackaging of pam_sotp and ejabberd, and tweaks to quite a number of other XS packages.

Sugar / Activity Software:

14. Morgan Collett worked on ejabberd on jabber.laptop.org to try and resolve the issues we are seeing. He wrote up instructions on deploying ejabberd on Ubuntu Intrepid and Debian, which ship our shared roster patches, at http://wiki.laptop.org/go/Installing_ejabberd/deb. This should make it much easier to set up school or community jabber servers, for those not using the XS.

15. Marco Pesenti Gritti spent most of the week working with Simon on porting Sugar to NetworkManager 0.7. we made a lot of progress and we have something partially functional. We need to get security handling in shape (only WEP works at the moment and just as bad hack), implement settings persistence, re-implement frame devices. He fixed the annoying flickering when switching between activity and home view, spent some time on release automation and build system and submitted three proposal for XOCamp, about performance, compatibility with desktop applications and web based activities. Finally he did some investigation of Browse and Firefox usage, results are posted on the mailing lists.

16. Tomeu Vizoso worked this week mainly in performance, preparing the work for the next weeks and already landing some fixes in startup performance. He also

modularized global keybindings so that by dropping a single python file like the following in a predefined directory, actions in response to key combinations can be defined:

<http://dev.laptop.org/~tomeu/viewsource.py>

Based on this last feature, proposed a solution to extend the "View source" key to all installed activities:

<http://dev.laptop.org/~tomeu/viewsource.png>

17. Sayamindu Dasgupta continued his work on the multilanguage support in Sugar, and came up with patches for Sugar, Rainbow and olpc-utils to implement the feature (trac ticket #8875). He also investigated a possible upgrade of the Pootle server to version 1.2.0.

18. Faisal Anwar of Media Modifications integrated community suggestions into the Sugar Almanac of best practices for developing Sugar Activities. He also further documented how to use Stream Tubes in activities and how to use unique inputs such as the game buttons. Please contribute and refine the Sugar Almanac with your contributions at http://wiki.laptop.org/go/Sugar_Almanac

19. Walter Bender's Sugar Digest can be found at: <http://lists.laptop.org/pipermail/sugar/2008-October/009426.html>

Multicast Update:

20. Mitch Bradley got the multicast updater working via the mesh at a high data rate, with an XO as the sender. The sender can be running either Linux or OFW. The latter case is interesting because the setup effort is virtually nil and it lets you "clone" one XO's OS installation onto a bunch of other XOs. In the process of developing this capability, Mitch managed to achieve a mesh throughput of twice that provided by our current Linux builds, which suggests a possible performance improvement for the Linux driver.

New Touchpad:

21. Pre-build laptops with the new touchpad have arrived at 1CC and are being tested. There are mechanical problems with the touchpad buttons. Quanta assures us they have already been redesigned to correct this issue. A late-breaking report from the QA team implies other issues, as well, but tickets have not yet been filed.

Future Hardware:

22. There was a Gen2 design meeting at 1CC this week. Fuse Project and Gecko Design have been refining both the hinge and ways of carrying the next generation XO. The proposed hinge would be very robust and low cost, but it leaves a "speed bump" between the two screens. An alternative (and less robust) design eliminated the speed bump but increased the separation between the screens. It was discarded. Fuse and

Gecko will continue to refine the design to minimize the bump. While an externally removable battery was proposed, it was rejected as unduly compromising the machine's environmental integrity, without providing a battery that could be swapped on a daily basis.

23. Jim Gettys met with a possible Gen2 CPU vendor to scope the effort required for X Window System and OpenGL support. He also attended the UIST conference <http://www.acm.org/uist/uist2008/>. A fundamental issue with touch base interfaces has been that they are not "discoverable." Many of you will remember the problems presented by systems such as Graffiti on the Palm. Such large gesture command requires "cheat sheets" and lots of practice for effective use. The presentation on "OctoPocus: A Dynamic Guide for Learning Gesture-Based Command Sets" by Olivier Bau, INRIA Saclay / LRI Wendy Mackay, INRIA Saclay / LRI shows a solution to this dilemma. A video of this in action should be available soon.

24. NAND device management testing continues. This week one of the LBA devices failed catastrophically - they have performed about 1.1 TB of writes, and 5 TB of reads at this point. Mitch and John Watlington are working with the vendor to determine the cause. Dave Woodhouse generated a patch to JFFS2, which should eliminate the crashing problems encountered by the tests. It should enter testing next week. We are still awaiting a patch fixing the problems with UbiFS.

Networking:

25. Deepak Saxena worked primarily on moving the OLPC kernel forward to the latest 2.6.27 stable release.

26. Ricardo Carrano continued testing the XO running as an Access Point. He has encountered some minor issues with XOs disconnecting after long periods of operation and he is working with Cozybit to resolve them. Ricardo also added more nodes, and trained engineers at UFF (in Brazil) to do testing and reserach in the Sparse Network Test bed. http://wiki.laptop.org/go/Wireless_Sparse_Testbed

27. Javier, aided by Colin at Cozybit, is digging deeper into the sporadic WPA association failures. Since the low level stack (driver and firmware) doesn't produce any association failures when tested by itself, they have shifted attention to wpa_supplicant and Network Manager. They have already found that wpa_supplicant tries to reset the association state machine by issuing an association to an all-zeros BSSID (which is wrong and seems to correlate strongly with subsequent failed associations) and that Network Manager calls wpa_supplicant with arguments different from the ones that we have found to produce 100 percent successful association attempts in our testing.

28. Guillaume Desmottes spend most of the week integrating Gadget into Sugar and merging all the long standing pending branches. Sugar HEAD is now able to detect the presence of Gadget on Gabble connections, publish user's information according his sugar settings, request random buddies/activities and display them on the mesh view.

This need the newly released telepathy-gabble 0.7.12 and telepathy-python 0.15.3. A last minute bug was found in Gabble and will release a new Gabble next week. A small modification has been made to the presence-service too which has the nice side effect to close #8444 as well.