

Community News

A weekly update of One Laptop per Child, August 17, 2008



It was a proud moment for OLPC as tiny Uruguay rolled out its 100,000th computer - almost all of which are Internet enabled. The scene was the Villa García Elementary School near Montevideo. With more than a thousand pupils, it is one of the country's largest primary schools. Chuck Kane, Claudia Urrea and Antonio Battro all looked on as President Tabaré Vázquez presented the 100,000th XO to a six-year-old student. Miguel Blechner of CEIBAL spoke briefly, too. The news media were everywhere. Many of the children captured the moment by turning their XOs around to take their own still pictures or video.





In the afternoon, Claudia and Antonio accompanied Mónica Baez and Graciela Rabajoli of CEIBAL on a visit to a school near Colonia. Over the next few days, CEIBAL presented several anti-smoking school initiatives, showing the work done by students and teachers with their laptops in their communities. The children discussed their work in a workshop. David Cavallo arrived from a long trip to Asia and Africa to participate in these meetings.

OLPC looks forward to the next wave of rollouts in Uruguay, which continues as a great example of a successful deployment. Sincere congratulations to the people of Uruguay from everyone at OLPC.

CEIBAL maintains an excellent Spanish-language website at: http://www.ladiaria.com.uy/files/ladiaria_20080814web.pdf . Also Carla Gómez Monroy has documented the Uruguay deployment at: http://wiki.laptop.org/go/OLPC_Uruguay/Ceibal

Learning

Haiti: The team was busy with teacher reports, the operations manual and Kreyol translation. They also worked on their practical guide for trainers and on some hand-outs for trainees, as well as designs for a few pedagogical activities and projects with and around the XO, trying to integrate existing curriculum when it makes sense.

All translations are complete, except eToys (65 percent) and Scratch (15 percent), which require special care. Next step is a linguistic review.

Mongolia: Teachers continue to create curriculum material online. Work continues to solidify local partnerships with both NGOs and governmental agencies.

The XO was featured in *Mongolian Computer Times* magazine this month. The article was generally positive although the writer questioned how Mongolia could afford to support the initiative. Elana Langer was interviewed on Eagle TV, a popular TV station. The questions reflected a concern from the Mongolian people about the criteria and process by which the government will choose to distribute the laptops.

Lastly, a Mongolian athlete has just won the country's very first Olympic gold medal, in judo. There were street celebrations in UB. Many hope this sudden

boost to national pride might galvanize the government into a functional organization.

Rwanda: The team is refining their strategic plan, looking past the initial rollout of 5000 laptops to create both a vision and a plan for a national laptops project.

Monday and Tuesday they participated in a series of meetings with Richard Niyonkuru, the project coordinator, and representatives of several other governmental agencies. During the rest of the week, a team formed by representatives of the main governmental agencies visited the three schools selected to receive the first 5000 machines in the provinces of Rwamagana, Gasabo and Kycukyro.



The visit was received enthusiastically by the students and teachers. The team did a basic site survey to isolate the main initial challenges. One will be the size of the schools and classrooms. The average Rwandan school is large, with 1500 students, and so are classrooms, which range to 70 students or more.

The Kagugu school in Gasabo province has 3105 students, and some classes with more than 100 children. Usually the classrooms have only one power outlet, which will make laptop charging a challenge. The sheer size of the schools and classes will also make for networking issues. Kagugu staff also raised interesting questions over how to define and implement the project policies, and ownership of the Xos.

Birmingham: This week the team worked with the instructional technology staff member who will be in charge of this project everyday to try to prepare documents requested by the executive director of IT. This included a learning manual that is briefer than the online version, and will help with the Just In Time Learning sessions to begin before teachers get the laptops. The team also worked with headquarters staff from the music, PE and Special Ed departments to introduce the laptops. The music department LOVED Tam Tam.

An XO eXpO is scheduled for August 23. There will be attendees from many stakeholders in the community, so it should be an exciting event.

Technology

Software Development for 8.2 Release:

1. Many people have joined the daily effort to triage “must fix” bugs for 8.2. Formal testing has begun as well. If you are interested in helping, please go to http://wiki.laptop.org/go/Friends_in_testing
2. Chris Ball improved the failsafe "disk full" recovery script by adding an option to continue booting without attempting recovery. The script is now present in Joyride builds.
3. Simon Schampijer is polishing the latest Sugar release. He reviewed patches and fixed a bug to correctly set the time zone from the control panel, show an alert if software updates are available, as well as an alert when available space is below 50MB. The fix also encourages the user to remove journal entries to free up space.
4. Morgan Collett adopted the Read activity and started on its blocker and high priority bugs, reviewing existing patches. Morgan continued surveying activity authors on improving communication for them, asking which mailing lists they are subscribed to, when last they tested their activities and asking for suggestions. He will post a report as soon as he has a significant number of responses.
5. Daniel Drake continued fixing bugs in audio performance, Gstreamer and the Record activity, automated school server backup. He also addressed a networking issue with the activity updater.
6. Faisal Anwar further documented the best software development practices for Sugar, focusing this week on the presence service. Testing and documentation of the presence service requires multiple XO laptops. Information on how you can develop your own activities with this API are available at http://wiki.laptop.org/go/Sugar_Almanac
7. Deepak Saxena continued to focus on the 8.2 release, trying to reproduce and root out bugs. Deepak also is looking into new build infrastructure for the kernel. Chris Ball and Deepak had a talk on OLPC Power Management accepted into the Linux Plumbers Conference.

Software Development, Future Release:

8. Daniel and Bobby Powers started investigating the procedure needed to install regular Linux distributions on SD cards and the modifications necessary to boot them on the XO. Bobby has been working on all fronts of his activity Model. He did work on reliability, error reporting, performance and UI.

9. Guillaume Desmottes rebased the XS ejabberd package on top of the F-9 one in order to use ejabberd 2.0.1. That involved manual re-application of most of the shared roster patch as some pieces of it were merged upstream. Guillaume also improved his Gadget branches and fixed review comments from Daf.

10. Elliot Fairweather worked on the Cerebro activities API, filing bugs and writing patches to fix those problems blocking his progress. He also made further progress with telepathy-synapse's activity interfaces. Elliot believes he will complete this part of the task next week.

11. Sayamindu Dasgupta spent most of the week rearranging and reconfiguring Pootle according to the conventions of the Sugar release process. This will make it easier for translators to follow the Sugar release schedule, and prioritize their work. He also landed a patch in olpc-utils which should fix all the keyboard layout related regressions from the 8.1 release. Sayamindu also started work in defining a keyboard for Dzongkha (ticket #7899). This week also saw the start of two new language projects in Pootle, one for Nauruan and the other for Bislama.

12. Seth Woodworth worked on various open wiki-issues. Google Analytics is now installed on the wiki, providing large amounts of very useful data (expect a report early next week). The wiki also now has support for TeX math. Semantic aggregation of activities for various pages is progressing.

School Server:

13. Martin Langhoff held the 2nd school server meeting over IRC - with the Nepal pilot team as the main participants. They covered a lot around upcoming XS-0.4 and XS-0.5 releases, F9 rebase and how the Nepal team can work ahead and feed back into the main XS efforts. Thanks to all involved. Agenda, minutes, and IRC logs at http://wiki.laptop.org/go/XS_Conf_08_AUG_07_Meeting

14. Douglas Bagnall worked on password schemes for the XS, and testing DS-backup. Douglas and Martin are doing a lot of work to fix how we deal with configurations on the school server. The current configuration scheme breaks upgrades and blocks the path to a Fedora 9 rebase.

Support and Testing:

15. Welcome Reuben Caron as our Country Support Engineer. This week, Reuben set up an RT Queue to allow country technical contacts and learning team members to report escalated technical issues that arise from the field. He will be helping out with some testing while learning the XO and XS as well as attending tech and learning team meetings to see where he can help out.

16. Joe Feinstein and Charlie Murphy have tested two Joyride builds – 2294 and 2301 - in the last week, and requested turning off automatic suspend and resume

as it seemed to be causing some crash or WLAN crash problems. In build 2301 this is off so we should be able to isolate the problem more carefully.

17. Twenty-one XOs are now connected to a school server at 1CC, always difficult to do in a very noisy RF environment. We await word on when we will be able to rebuild the 100 laptop testbed in the low noise Cameron Ave facility. Joe, Michael Stone, and Kim Quirk are also working on ideas and plans for getting the community more involved with testing.

18. Mitch Bradley is investigating LBA-NAND as a possible technology for boosting XO's storage. LBA-NAND is a NAND FLASH device that is pin-compatible with our current raw NAND chip, but it comes in larger sizes and has an internal microcontroller that handles error correction, bad-block management and wear-leveling. LBA-NAND would let us use a conventional filesystem instead of a NAND-specific one. Mitch added LBA-NAND support to the Open Firmware CaFe NAND driver and tested it on an XO board that Quanta's Gary Chiang fitted with a 4GB LBA-NAND, verifying that it works with a conventional disk filesystem. He is starting work on a Linux LBA-NAND "block" driver to evaluate the overall system performance.

The Watlington Report:

19. Perú has received the first shipment of the next purchase of 100,000 laptops, and is preparing for the process of upgrading, distributing, and activating them. Erik Garrison, with the help of SJ Klein, Scott Ananian, and John Watlington, spent a few days rebuilding the library content bundle for Perú to include the new and improved user's guide and almost double the number of texts. This was integrated with the latest 8.1.1 build (711) to produce the final image. Erik will be improving the scripts and documentation of this process, as we expect countries to prepare these themselves.

A new release, incorporating q2e13 or later firmware (needed as some of Perú's shipment will be C3 mother boards) will be made after q2e13 has passed QA testing. The activation server will require changes to minimize the effort required by OLPC to support each shipment, as we currently duplicate the inventory system maintained by Peru. Scott Ananian manually performed the database update required to activate this shipment.

Erik Garrison will spend the next week in Perú to help with any further problems arising as they start the upgrading and activation. More importantly, he will teach developers from the education ministry how to create their own library bundles and to build images. Erik will also work with a local developer to improve the software used with optical scanning for inventory of the laptops and batteries. Changes are required to improve the success rate of the activation process.

Embedded Controller:

21. Richard spent most of the week back porting what he felt were the most useful fixes from his master EC code branch into the release tree. A nasty bug in how the EC determines the motherboard version was found and fixed before causing problems in production (it only affects the upcoming C3 motherboards). Richard released firmware q2e13 containing those fixes. The proposed firmware for the 8.2.0 release is q2e13.

22. Paul Fox worked further on the SDCC port of the EC code. Some unexpected compiler bugs have been found which may explain some of the current issues.

Progress on the New Touch pad:

23. Quanta has begun the tooling change to support the migration to a new, capacitive-only touch pad from the current resistive/capacitive one. This migration could happen as early as the end of October, but might be pushed out farther due to supply chain inertia. Quanta has sent in some preliminary documentation for the new touch pad (from Synaptics) and keyboard controller (EnE) for replacement of the ALPS device.

Richard and John reviewed the documentation and requested further info. They specifically want to see information on what type of testing has been done in humid environments and with children's fingers. So far, Richard is quite pleased with the quality of the documentation from Synaptics. OLPC will be receiving samples in Cambridge shortly for testing and software integration.

The new EnE keyboard matrix controller appears to handle many of the keyboard commands more directly, instead of relying on the EC. New EC firmware will be required to accompany the new touchpad/controller, although there is still some question as to the magnitude of the changes required.

24. AMD is building boards to test auxiliary circuitry allowing the Geode LX to support higher performance DDR2 SDRAM chips. We eagerly anticipate the results of their tests.

25. Reuben Caron is new at OLPC and has spent the week meeting with people, testing, and learning as much about the different aspects of the project as possible. Reuben has setup an RT Queue to allow country technical contacts and learning team members to report escalated technical issues that arise from the field.

Support

26. Adam Holt:discussed extensive RT improvements beginning soon, with Adric and FSF's Josh Gay (RT14244 etc); approved bulk XO parts sales to finally ship

out next week to <http://xoexplosion.com> and <http://ilovemyxo.com> (from Brightstar/Miami); trained several new volunteers, including Hironori Mitsuishi working towards establishing a new Miami repair center: http://wiki.laptop.org/go/Sunshine_Repair; began extensive cleanup of the support FAQ and support gang pages, welcomed Rachel Kropa, who presented a fantastic talk on her 200-XO Mozambique pilot deployment: <http://flickr.com/photos/12312003@N07/sets/72157606618160452/> recruited Daniel Drake to speak to our Support Gang 4PM SUN AUG 17, discussing 8.2.0 and Fedora/Ubuntu on XO.

27. Sean Hooly processed refunds, submitted RMAs for shipping and updated excel files accordingly; took new tickets, followed up to replies to existing ones; updated xls stats file and gathered statistics on donations, refunds, reships and replacements for last week with Frances

28. Greg Smith read all major open bugs in the 8.2.0 pre-release image and triaged them to find the must fix list.

29. Walter Bender's Sugar Digest can be found at:
<http://lists.sugarlabs.org/archive/iaep/2008-August/001525.html>