Community News

A weekly update of One Laptop per Child   August 24, 2008

Learning

Haiti: This week was spent in planning recruitment of the core staff members, the 5 x 2 teams (with one educator and one IT in each) that will be in charge of the five schools/training centers, or EFACAPs. Each EFACAP in turn will oversee another team of 12, scaling the project to about 60 schools. The examination for the core staff will take place next week.

The team has been finalizing a practical guide for the trainers. "We also designed a few projects and activities," they report. "Medly translated the Scratch Reference Guide into French. And since everything wasn't clear when she was translating it, Bastien insisted that we should explore Scratch interactively as soon as possible. We eventually did, having a lot of fun together showing off our crazy sprites. This was also a way to build confidence in the way we conduct the training sessions.

"On the technical side, the team continued to work on the translation. They are all familiar with Pootle, and some of the team knows how to handle the administrative tasks. As Bastien was busy installing the latest version of Sugar (Joyride) the team wanted to do the same, so we requested developer keys and started to upgrade their XOs. There is a webpage explaining how to do this with a USB drive (see the link below).

"We continued to work on the online support. The website offers a very simple interface to submit bugs, questions, problems, suggestions, etc. When someone fills in an online form, an email is sent to the person in charge of pedagogy/software/hardware, and a wikipage is automagically created for further references. Part of the team is now familiar with the wiki and we're in the

process of moving documentation there. Some were concerned about publishing something that wasn't perfect, but they were convinced that going collaborative is also a way of putting the burden of perfectibility on everyone's shoulders.

"The building that houses the laptop team improves with each day. We now have a steady Internet connection, desks and a fan."

Guy Serge Pompilus and Bastien were invited to talk on a program at Radio Métropole, the largest station in Haiti. The discussion was very engaging, and focused on education, rather than on technology.

- Description of the deployment:
  http://olpchaiti.org/interne/olpc_deployment.php

- Easy install of Sugar with a USB key:
  http://lumiere.ens.fr/~guerry/olpc_install_sugar_activities_usb.php

- More pics of the summer camp:
  http://olpchaiti.org/interne/images_receiving_unpacking.php

Mongolia: The Educational TV station is now committed to partnering with OLPC to produce an ongoing series of shows that will inspire more effective learning. Elana will supervise the production of three, five-minute proof of concept segments. The segments will feature footage from their experience with workshops in the countryside, kids working on the XO and core team teachers giving brief introductions to various applications. The segments will be aired during September.

On the first, the president will appear on the station, where he'll discuss the laptop initiative with the core team teachers and Elena. The segment will be broadcast nationally.

The Mongolian Linux community will support schools in UB, and introduce linux and programming concepts to certain classes. Some members will also create introductory videos for Linux terms, as well as other hello world introductory videos. They are currently looking for ways to support the IT needs of the project and are generating a list of low-cost technical solutions that would suit Mongolia. Their participation will be key for long term sustainability and success.

The core team teachers planned and led a training session for 120 teachers. They were able to introduce the idea of programmable objects, project-based learning and troubleshooting in 4 days. The UB teachers were skeptical of the XO on the first day but by the end of the fourth day they refused to return their computers! Next week they will work with teachers from the countryside as well as teacher trainers from Project Read.

The minister of education has committed to having the computers in schools by September 1st.

There was a fair in Sukhbataar Square, held by the educational television station. Everyone in the education sector, including schools and businesses, was invited to show their achievements. School 51 chose to feature the XO computer as a display of the good work done at their school. The students and core team teachers introduced the XOs on stage. There was a lot of enthusiasm from the crowd.

Minister of Education Bolermaa visiting School 51 booth

Core team teacher showing Turtle Art-related exercise on paper.

The last of the amazing interns went home on Tuesday. They were a tremendous asset to OLPC and we could never have achieved all that we did on the learning and tech side without their hard work and dedication. I hope that they will continue to stay involved with OLPC and help us design a strong internship program for next year. Thanks to all of you!

Rwanda: Planning continues by the Rwandan coordinator, Richard, and Juliano, representing OLPC, and the Rwandan working group. The team prepared for the distribution of the laptops on September 2nd and also the OLPC Regional Workshop that will be held in Kigali from Sept. 29 to Oct. 2nd. The project team is very excited and every day dedicating more time and resources for it, since now it is clear that the laptop initiative is fully supported by high levels of the

government. This Ministries of Finance and Education are currently working on a budget to order 50, 000 laptops next year.

Birmingham: On Saturday Birmingham held its XO eXpO to commemorate the accomplishments of the children and teachers working with XO laptops over the summer. A full report will appear next week.

Coming Events: Rwanda will host a regional laptop event in Kigali, September 29 through October 2. The beginning of the week will provide a practical approach to learning and laptops for country teams, teacher developers, educational ministry teams, NGO and other partner organizations, university researchers, free software practitioners and other volunteers. We will work with the Rwandan team, teachers and children with laptops with a focus on powerful uses for learning.

On October 1 the Rwandan government and OLPC will host a major regional event on laptops, learning and development. In addition to Rwandan government officials, Nicholas Negroponte and others from OLPC, Miguel Brechner of Uruguay, and others will attend.

Development

Brussels: Walter, Isobel and Justyna discussed possible XO deployments with representatives from Uganda, Namibia, Gambia and East Timor. AMD's Jens Drews visited the office to plan cooperation for an event in Dresden, which twins with Brazzaville in Congo. Also, Walter and Philippe van Cauteren, a director of the City Museum for Contemporary Art (S.M.A.K.) in Ghent, discussed a "One Artist Per Child" project in association with Sotheby's.

Technology

Hardware:

1. Synaptics qualified a touchpad of the size we want for +3.3V operation. We will receive samples at 1CC late next week. The keyboard controller and its circuit board will be changed to use a more standard IC. Samples of the new board should be available at the end of September. Tooling changes have started, with first plastic available around the middle of September. We could have complete laptops with the new touchpad in early October.

Firmware:

2. The EC code in firmware Q2E13 had timing issues and broke the mouse on system software builds <=711 (690 included). Richard Smith removed it from the Joyride builds and marked it as bad on the wiki.

3. Mitch Bradley released OFW Q2E14, a test candidate for the 8.2.0 release. It contains numerous bug fixes and Richard's new faster EC code. Q2E14 is built from top-of-tree, so it has the latest and greatest versions of everything, including dual-boot support. Mitch is also working on a Linux driver for LBA-NAND.

4. Richard spend many hours in the lab figuring out why a supposedly small timing change in the EC main loop broke the mouse on any build that was running the older driver. He fixed all the issues and released a new EC code for use in the Q2E14 firmware release. Although Q2E14 EC code timing is now in much better shape, there are a lot of timing changes to the main loop. It now runs quite a bit faster, and many other parts have been streamlined. Richard is cautious and would like to see a lot of testing on his changes.

Multi Battery Charger:

5. The first prototypes arrived, broken, due to faulty packing. Three replacement units are due to arrive at 1CC this week.

6. A note from John Watlington: *Thanks for the great response to my request for examples of small keyboards. However, two small organizers - the Fujitsu Poqet PC (1989) and the Psion Series 3 (1991) - appear to meet the requirements. If anybody has one of these OLPC can borrow for a few days, please contact me.*

Software Development:

7. Chris Ball worked on wireless bugs, helping Ashish Shukla from Marvell to debug a wireless crash that recently has afflicted 1CC. He also worked on NetworkManager bugs around reconnection to the network after suspend, and helped Scott Ananian and Paul Fox to start contributing tests to the Tinderbox scripts.

8. Michael Stone wrote several documents to help with getting to the 8.2.0 release:

- the detailed 8.2.0 release roadmap: http://wiki.laptop.org/go/8.2.0
- a plan for systematic testing of 8.2.0 (to be published soon), to complement the wonderful exploratory testing contributed on devel@
- new Trac reports for 8.2.0 "proposed blockers" and "polish" tickets. See http://wiki.laptop.org/go/Trac_queries .

Next week, we hope to publish an unsigned 8.2.0 Alpha release candidate for widespread exploratory and systematic testing. Please be prepared to assist in this effort and please see the roadmap for more details.

(Note: We didn't have a weekly build this week due to both Koji's downtime and due to our transition between build streams. Apologies about that. See: http://lwn.net/Articles/295134/)

9. Morgan Collett worked on Read, and found that most of the open bugs relate to Read's use of the datastore when saving documents received in a shared session. He expects to have a new release out to fix the outstanding blockers in 8.2.He assisted with a fix for Measure and Speak, and released Speak-7 as the author was away.

10. Jim Gettys worked this week with Sebastian Dziallas on the Fedora spin for the XO.

11. Daniel Drake worked on 8.2 licensing, and diagnosis of wireless/audio issues. He found a solution to the regressions related to the Record activities, which soon will be included in the builds.

Daniel Drake and Bobby Powers completed their work on getting Fedora and Ubuntu running on the XO, and received coverage from OSNews.com and Linux.com.

12. Faisal Anwar researched and documented how activity developers can use Tubes to create their own sharable activities. Please follow and expand on his progress at http://wiki.laptop.org/go/Sugar_Almanac

13. Paul Fox rewrote some EC routines to help with performance issues related to battery monitoring. He also contributed Tinderbox tests (automated testing), diagnosed a failure of the on-screen battery monitor to update after some suspend/resume cycles, and spent further time looking into touchpad jumpiness.

14. Eben Eliason tidied up some visuals, including work on a dedicated icon for the Control Panel. He also thoroughly tested the new launcher.

15. This was Bobby Power's last week as an intern at 1CC. He spent most of the time working on his Physics Activity in preparation for the physics game jam next weekend. He also worked with Daniel Drake on finishing and documenting the work to get regular distributions on the XO. Thanks for all your work, Bobby!

16. Sayamindu Dasgupta created a patch to completely fix the Amharic Compose key issue. He also worked with Bastien to create a data file for Haitian Kreyol, which should be integrated into the Fedora 9 package soon. He updated the Pootle helper scripts to work with the new layout. Sayamindu also started to test the newest beta version of Pootle.

School Server:

17. Martin Langhoff polished the XS-0.4 release candidate OLPC_XS_169. This work included finishing off the new configuration scheme, hunting down bugs in Anaconda and rssh, plus extensive testing of fresh installs and upgrades. Douglas Bagnal helped with the testing and fixing issues, and created a proper install CD. Jerry Vonau made progress on network config on the F9 track, too.

Support/SysAdmin:

18. As we reported last week, Erik Garrison is in Lima where he worked with members of the Ministry of Education to prepare for the installation of 8.1.2 (an unscheduled release which contains bugfixes for some critical issues) on the laptops they currently are activating and distributing. Erik connected with local staff and is building relationships to support the Peruvian deployment as it becomes more self-sufficient in software development, customization, distribution and support efforts.

19. Reuben Caron continued to make contacts both at OLPC and on the ground at various deployments and has begun to provide support to Rwanda, Mongolia, and Haiti. He is answering questions on a daily basis from the ticket tracking system. He also helped with system testing of the 20-laptop test bed.

20. Henry Edward Hardy reports that the OLPC Volunteer Infrastructure Group held its third meeting. These volunteers' assistance includes maintenance and upgrades to the Trac development ticket system, git code repository, rt support ticket system, and the OLPC wiki. Thanks to Greg DeKoenigsburg and Adam Holt for their help and advice. More information at: http://wiki.laptop.org/go/OLPC:Volunteer_Infrastructure_Group .

Testing:

21. Joe Feinstein, Charlie Murphy, Reuben Caron, and Kim Quirk tested Joyride builds 2301 and 2311 this week in small groups as well as a 20+ laptop testbed. After replacing the wireless firmware and running Joyride-2301, the stability of

laptops improved. Areas of instability persist; to wit, the quick reset of Sugar, and one case of a "frozen" laptop, with network lights still "on." Joe also has been working with Michael Stone on approaches to organizing "community testing" of XOs.

Joe and Charlie discussed the maintenance issue of the test case infrastructure system, developed by Charlie with other interns. Joe has also been working with Michael Stone on approaches to organizing "community testing" of XOs.

Charlie continued writing test cases; started writing stub test cases for others to fill in at a later date. While testing the 8.2-754, he found a (temporary) fix with Daniel Drake for ticket #8072, by turning shared memory back on (it had been disabled in the build to solve some issues with Browse and Etoys). He also made a few minor changes to the test case template regarding how some properties were used.

This was Charlie's last week. We would like to thank him for his substantial help in creating the systematic QA approach and test case infrastructure tools, as well as for his testing efforts that resulted in improvement of XO's software. Good luck at WPI!

Networking:

22. Marvell plans to release the first version of the wireless firmware SDK for the 8682 (our new wireless chip) at the end of September.

As we move into enabling more aggressive suspend/resume operation on the XO, debugging the wireless subsystem will require concentrated effort. Most of the bugs that we see can be at least partially attributed to the distributed nature of our wireless stack. The busy spectrum at 1CC works to our advantage, since it quickly exposes situations where the host can't deal with delays in the wireless processor. One example is bug #7973, which was addressed this week by new firmware. Thanks to Chris Ball and Ashish Shukla for nailing this quickly.

23. Collabora has released the first version of Gadget, which is a collaboration server component that replaces ejabberd on the school server. They also focused on Read as well as Measure and Speak bugs.

24. Elliot Fairweather continued working on Synapse, the interface between Cerebro and the Telepathy framework, and has a working implementation for the BuddyInfo and ActivityInformation interfaces. http://people.collabora.co.uk/~elliot/synapse_activity.png

He has done further work upon Cerebro to achieve this end and will start work on implementing channels as of next week.

Sugar

Simon Schampijer worked on 0.82. The sugar team made the official announcement of the final Sucrose release. The release notes can be found here: http://sugarlabs.org/go/ReleaseTeam/Releases/Sucrose/0.82

From the Field

A garlanded Barry Vercoe observes the Niue deployment

Oceania: Barry Vercoe traveled to the middle of the Pacific Ocean last week to take part in OLPC's first countrywide saturation deployment of XOs, to the children of Niue - all 500 of them. OLPC has donated 5000 machines for pilot deployments throughout Oceania (Weekend, July 13, 2008), including Papua New Guinea, the Solomon Islands, Palau, Samoa and elsewhere, as a first step toward equipping all of the vast region's 1.7 million school children with laptops.

Turkey: The Turkish translation was finished in an impressive way, thanks especially to Ebru Kahraman. Akin Ceylan and Ariun Sarwal also installed the Turkish keyboard in a laptop for evaluation. Carla helped test the procedures.

And in Other News…

Seth Woodworth has been analyzing our wiki traffic via Google Analytics over the past 11 days. Some of his results:

- We received an average of 18000 unique visits every weekday; half as many on Saturdays and Sundays.
- The visits originated from 185 countries and territories.
- More than one third of the visitors browsed our Activities page.
- Two thirds visited more than once over the past week.
- More than half of all traffic came from Uruguay (a total of 17000 unique visitors over ten days). The vast majority browsed with an XO. (We need a much richer set of Spanish pages!)
- After English and Spanish, the next most common language was Portuguese. See early contributions such as: http://wiki.laptop.org/go/Atividades_de_Arte_para_1%C2%BA_e_2%C2%BA_ciclos
- Peak visiting time was 7am to 5pm EDT.