Community News

A weekly update of One Laptop per Child December 8, 2008

Development

Nicholas with the children of La Macarena

For decades a stronghold of the FARC guerrillas. La Macarena had no TV, no roads and, until recently, no Internet access. Now, thanks to a collaborative effort among OLPC, the ministry of defense and the ministry of telecommunications, there are 700 XOs in the hands of La Macarena's school children, and the town is fully connected to the world. Children who once knew only killings, kidnappings, land mines, extortion and death can see a ray of hope in their lives.

Nicholas gave several TV and other media interviews, met with civic leaders and NGOs and was accompanied by Jason Wishnow from TED, who is going to produce a video of the visit.

Europe: The grassroot groups all gathered in Brussels for the weekend to make plans for G1G1 across the continent. OLPC France has produced a video featuring the French TV star Gérard Klein to promote the OLPC project and the G1G1 in France. See it here: http://www.dailymotion.com/video/k3BzeizM7iZn6ARUiF . They also sent out a promotional press announcement: http://olpc-france.org/xo .

The Brussels office began this week to contact the 150 largest European companies with a special offer for G100(0) http://www.olpceu.org/content/initiatives/g100g1000.html Before the end of the year, the 500 biggest corporations in Europe will have been contacted.

Walter gave a talk at the European Commission's Inclusion Days in Vienna entitled "Lessons in educational terrorism."

http://ec.europa.eu/information_society/events/cf/person.cfm?personid=16051&eventId=einc08

Nirj Deva addressed the parliament in PNG about the XO, and together with Michael and Barry successfully persuaded the government to make the XO a priority (Community News, November 30).

Learning

Brazil: Juliano Bittencourt participated in a São Paulo meeting of the five Brazilian 1:1 schools. In the spring of last year, the Brazilian government selected five schools in the country to test different models of educational laptops donated by three vendors. OLPC donated laptops to two schools; one in São Paulo and other in Porto Alegre. Intel donated Classmates to one school in the city of Piraí and another in Palmas. An Asian vendor, Encore, donated 40 laptops to a single classroom in a school in Brasilia.

The three-day meeting included the teachers, principals and students of the five schools, plus representatives from the ministry of education, President Lula's office and several universities involved in the Brazilian 1:1 initiative. The meeting's purpose was to promote useful interaction among teachers and principals of the schools. It also provided a good opportunity to see how the various deployments were progressing.

Juliano reports that the schools that used the XO were more advanced towards building an innovative environment than the other three schools. This fact can be credited to several variables. However, the powerful key ideas behind the OLPC philosophy helped these schools move well beyond a digital literacy initiative to the creation of a new, more progressive, learning environment, the essence of constructionism.

The XO schools were the only ones among the five where saturation deployment and child ownership of the machines were strongly advocated. A shortage of laptops meant that the students in São Paulo had to share their XOs, four to a machine. However, the teachers from this school argued most eloquently that each child must have his or her own laptop and must take it home. The school at Porto Alegre is the only school in Brazil where this is true.

Juliano found the children's level of comfort with their XOs astonishing, as was the way they expressed their opinions about the project. The children self-organized and defined their presentation topics, and talked about the things they are doing, and the problems they are facing with the laptops. They even made demands of the politicians who were present.

In a private conversation, the São Paulo teachers complained over the lack of activities on XOs that enable the students to express themselves and be creative. They explained that some of the machines in their school's computer lab have a configuration similar to the XO, but offer more opportunities for the development of projects and to engage children in creative activities. Simple tasks like basic photo editing, sound mixing and

web page development can't be done on the XO. The teachers' criticism was for the most part very constructive and mature.

The government intends to open a new bid for the purchase of laptops for schools in December. However, many of the issues that compromised the bid last year still remain.

Perú: Carla Gòmez Monroy spent the week in country. She planned on working with teachers and students on community-based projects at a secondary school in Tarapoto City. She also visited schools, met with teachers, advised the locals on technical issues and helped with the repair of machines.

As parents in San Pedro de Cumbaza, Perú, held a meeting, their children shot video of the proceedings with their XOs.

Paraguay: Vicenta Cano, the pedagogical advisor to Paraguay Educa, reports that they are putting the teacher training and the pedagogical vision of the project in sync. The workshops for Caacupé's teachers will happen during the vacation period; the first from December 9th to the 23rd, and the second from February 9th to the 16th.

Cambridge: Cynthia Solomon, Brian Jordan, Nia Lewis and Julia Reynolds assembled photos from the laptop countries for tailor-made presentations to last year's G1G1 donors. The hope is that the real images and stories will help inspire people to donate again this year - despite the sour economic climate - as they see the incredibly positive results already achieved.

Claudia, Julia, Cynthia, Brian, and Barbara met with David Sengeh to a discuss a 30-machine deployment in Sierra Leone that will begin in a few weeks. Literacy is a key issue and they will work on ways for using laptops to help develop different literacies among the participants. They brainstormed with David the possibilities for the project in terms of saturation, target population, high school students/tutors and possible activities

(applications) for the students. They also discussed what data David needs to gather in order to measure impact.

Technology

Testing:

1. The QA team (Joe Feinstein, Frances Hopkins, Reuben Caron and Mel Chua) has experimented with different access point setups with so far inconclusive results due to the currently extremely poor RF environment at 1CC.

Mel continues to work with the community testing team on infrastructure/tools. Ben Knowles set up a Litmus demo and Carl crafted a next-gen smoke test to be trialed for the G1G1 Activity test sprint. The team also released a first-draft report of progress toward their goal of testing all G1G1 Activities by December 25. Special thanks to Skierpage, Gary C. Martin, Marco Pesenti Gritti, and Caryl Bigenho for their work on http://wiki.laptop.org/go/G1G1_Activity_testing .

2. Reuben worked on upgrading the test bed XS to 0.5 and is continuing to troubleshoot a bonding issue with both an upgrade install and a fresh install. He and Greg Smith worked on installing and testing new libabiword rpms for Arabic Support. Reuben also worked with deployments in Uruguay, Colombia, Lebanon and Nepal this week.

Support:

3. Frances Hopkins worked on the new Give Many/Change the World program. Frances, Darah and the Give Many team have put together a preliminary wiki to help support pilot programs: http://wiki.laptop.org/go/Change_the_world

4. Bernie Innocenti of the OLPC Volunteer Infrastructure Group and Henry Hardy upgraded all wikis to semantic mediawiki 1.13.3. In addition to security and bug fixes, this included a number of features. They also added support for the OpenID secure login protocol. For the month of December thus far, the awstats program reports that the laptop.org website received 12,482 visits per day to 62,587 pages, yielding an average of 238,956 hits per day. In the first five days of December www.laptop.org had visitors from more than 140 top-level domains, including more than 130 country domains.

5. John Watlington spent the latter part of the week working with the technical services team in Uruguay to determine the causes of the laptop failures they are seeing. There has been a return of the RTC battery holder problem that plagued early production, causing about 1% of delivered laptops to refuse to activate. They are also seeing what appears to be an excessive number of SPI flash errors. The SPI flash holds the firmware. If it fails the laptops will not boot. John is returning to Cambridge with motherboards for further analysis. While in Uruguay, he attended Plan Ceibal's year-end celebration (see below), and was impressed by the spirit and achievements of the students, teachers, and staff of Plan Ceibal.

Software Development:

6. Eben Eliason researched various forms of media that could be added to the forthcoming "grassroots" page of laptop.org. He also drafted a layout for a grassroots flier, matching the form and aesthetic of the other inserts which ship with the laptops. Additionally, Eben created a brand new insert for the EU launch, incorporating four languages into the same four- page folded insert which we've been shipping to U.S. donors. Paul Fox assisted with OLPC's mail outreach efforts, aimed at getting the G1G1 message out to our supporters and their friends. He also helped answer some of the user questions on #OLPC-help on IRC.

Eben also pulled together a plan for the month of December, and issued a call for others working on projects in need of design considerations to notify him in order to amend or append to these plans. In terms of UI design, he put together a brief set of sketches for a ubiquitous chat layer in all activities, which was discussed productively at the open design meeting. Those participating agreed that we'll meet again next week to discuss a more complete mockup of the feature, incorporating the feedback given thus far.

7. XO-inspired songs were posted out of Uruguay (by Jorge Drexler) and Peru (by kids) at http://www.montevideo.com.uy/notvideos_73359_1.htm and http://www.youtube.com/watch?v=QQiA5F6AJcQ

XO OS Software:

8. 9.1.0 planning proceeds (http://wiki.laptop.org/go/9.1.0). Just 90 days until release! The focus is on deployment and maintenance. The four main areas of work are (1) rebasing the release on Fedora 10 and making it easy to run standard Fedora applications, (2) enhancements in activation, lease management, image customization and signing, (3) improved power management for longer battery life, and (4) new translations and better software support for Nepali, Amharic and Chinese.

In addition, the release will include many other bug fixes and features. To kick off the important power management work, Greg Smith initiated a planning discussion. Chris Ball prepared a December plan for power management, and worked with Greg, Paul Fox, Joe Feinstein, Deepak Saxena and Mitch Bradley to turn it into a set of fifteen 9.1 requirements (many of which are already satisfied) with Trac bugs and owners. He also worked on implementing a more efficient mechanism for the kernel to use when querying the EC for battery parameters, tidied up some kernel patches which may improve the user experience when the touchpad needs to recalibrate, attended a discussion surrounding the power feature roadmap for 9.1, and tried to help answer some of the questions endless user questions on #olpc-help on IRC.

XS School Server Software:

9. Martin Langhoff reviewed various aspects of the lease and activation infrastructure, requirements and existing constraints in support of our 9.1 release goals. With help from Michael Stone, he studied the existing code on the XO and alternatives for the server side.

Sugar / Activity Software:

10. Sayamindu Dasgupta made more progress on SCIM, including testing of the traditional Nepali layout, as well as completion of the first version of the Amharic keyboard. He also helped set up Pootle for the new Hebrew and Hungarian translation teams. Many thanks to Guy Sheffer and Simon Wood for taking the initiative. He also fixed a number of errors in the Nepali translations of Calculate activity, and addressed some issues affecting the ability of translators to effectively translate Calculate activity via Pootle. While working on this, Sayamindu also added the Imageviewer activity and Jukebox activity to Pootle, so that they can be translated by our localization community. Towards the end of the week, Sayamindu also started working on packaging the embedded PDF viewer (for Browse) he has been working on for sometime.

11. Tomeu Vizoso worked this week in the Journal, restoring functionality to removable devices, though it's still very preliminary work. Tomeu also started work on sending journal entries across the network. Morgan Collett continued work on Sugar-presence-service and collaboration. Collabora has implemented file transfer in the latest release of Telepathy-Salut, which should make it much easier to send files around in shared activities. They are working on file transfer and other enhancements in Telepathy-Gabble. Marco returned from vacation to investigate some collaboration problems while planning his December projects.

NAND Blaster:

12. Mitch released a test version of OFW with full NANDblaster (multicast NAND updater) support. It handles partitioned/unpartitioned images, signed/unsigned images, cloning/sending-from-files, and secure/unsecure reception. The performance is excellent in Mitch's quiet RF environment, and there are preliminary reports that it works reasonably well even in One Cambridge Center's notorious RF environment.

Future Hardware:

13. Tests of possible storage devices for future hardware are continuing, with current results available at http://dev.laptop.org/~wad/nand/

14. So far, three out of eight of the LBA-NAND devices have failed disastrously (in the field, they would require reformatting, with a complete loss of user data. Mitch Bradley identified a problem with the partition layout on the LBA-NAND test setup that likely ontributed to these failures, and they will be reformatted and restarted next week to see if they perform better. Naive OS installers are likely to trigger this problem. UbiFS has now been in testing for over a week, with good results so far. While occasional

transient errors are seen on the SD cards, their performance is impressive. SD cards from manufacturers other than Sandisk have been ordered, and will begin testing next week.

Certifications of Conformance:

15. Richard worked with John to verify what safety and EMC certification marks the XO and its AC power adapters currently have, and what is going to be required to obtain approval for the rest of them. The goal is to have the XO approved for all the new areas for which the G1G1 and Give Many machines are destined, and ultimately every country possible. In most countries, this is a four-part process. 1) Establish an authorized agent in the country. 2) Take existing test reports and file for certification. 3) Add a certification mark and authorized agent information to the labeling. 4) Finally, identify a power adapter which conforms with the country's requirements.

Networking:

16. Marvell released wireless firmware version 5.110.22.p23. It fixes a boundary condition in the wakeup rules where if a rule's offset exceeded the frame size the rule was still considered valid.

17. Javier and Ricardo worked on a problem reported from Australia where scanning for Access Points causes some mesh frames to be dropped. A driver workaround was produced. It was found that in recent builds NM is issuing scan commands for four channels at once, increasing the probability that an incoming frame will be dropped during the scan process.

18. Deepak Saxena worked on understanding where time is spent during the resume process by using the in-kernel trace tool to get a millisecond scale function call trace.

From the Field:

Uruguay: Antonio Battro spent a week in country helping to organize a working collaboration among Argentina (Province of Santa Fe), Paraguay and Uruguay.

Ceibal organized a great festival in Montevideo. Some 500 children and adults participated in several workshops. The media gave blanket coverage to the occasion. Ceibal has so far deployed more than 170,000 XOs. A similar number will be deployed next year in Montevideo. Several ministers and important community leaders attended. See and hear all at www.ceibal.edu.uy .

Argentina: Elida Rasino, Santa Fe's minister of education, attended the festival with David Asteggiano, Santa Fe's secretary of state for technology. Miguel Brechner invited them to the Ceibal board meeting at LATU, where first steps of the OLPC collaboration were discussed. Miguel Mariatti will go soon to Santa Fe. Rasino

confirmed that the Governor Binner has firmly decided to saturate the province, starting in March.

Paraguay: Luis Alberto Riart, the Paraguayan vice minister of education, and Lilia Peña, assistant to the education minister, Horacio Galeano Perrone, also visited Ceibal for a day. A collaboration agreement between the Paraguayan Government and Paraguay Educa has been signed to start the OLPC deployment in the city of Caacupé and the department of Cordillera. This is very important step for the future of OLPC in Paraguay.

Riart and Peña held several meetings with Ceibal experts to discuss logistics, technological support and education. Antonio, Graciela Rabajoli, Mónica Baez and Shirley Siri from Ceibal visited also three schools in Maldonado which received their XOs in the last month. One of the three was a special school. They also met with Günther Cyranek, the UNESCO delegate to the Mercosur, who is willing to support a Ceibal regional conference in 2009, as well as publish a new edition of the Ceibal book.

Pakistan: Kn Islamabad, Anwar Hussain Siddiqui, the president of International Islamic University, invited children from the Atlas School, OLPC Pakistan's slum district pilot, to visit the university. Fifteen of the children, along with three teachers and the principal, were given a tour of IIU's central library and the school's media lab.

The Atlas kids and officials on their big day at the university.

Later, the children gathered in the media lab to demonstrate their OLPC skills. President Siddiqui was so impressed with what he saw that he promised a free IIU education to any of the Atlas School kids who successfully completes high school. This was an unprecedented gesture, Habib reports, which will go a long way toward keeping these desperately poor kids motivated to pursue their education.