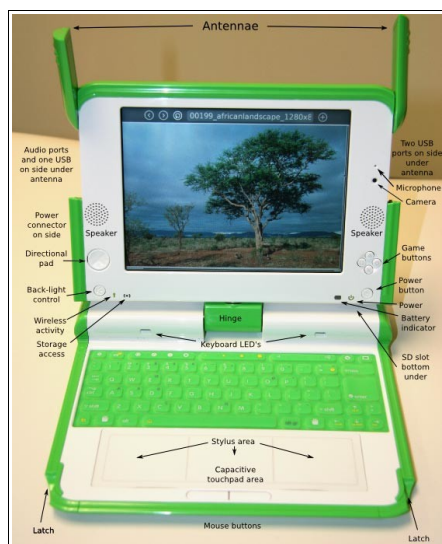


Three XO Laptops Added To Hybrid Computing Lab Inventory For 2008

From: Office of Program Director, Operations and Technology, Rogers Communications Centre



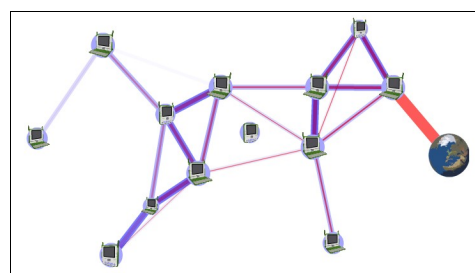
The Rogers Communications Centre has added three XO Laptops to its inventory of experimental technology. Known as the One Laptop Per Child (OLPC) computer, the XO was developed through the efforts of Nicholas Negroponte, a core of Massachusetts Institute of Technology Media Lab personnel and a wide range of people from academia, industry, the arts, business, and the open-source community. Developed as an education project, the purpose of the laptop program is to provide children around the world with new opportunities to explore, experiment and express themselves. The laptop has been designed to a low cost point and has been extensively field-tested and validated among some of the poorest and most remote populations on the planet.

A key feature of the XO is that it creates its own mesh network making each machine a wireless router. It features a 7.5 inch, 1200×900 pixel, TFT screen that displays its colour or sunlight

readable black and white at 200 DPI. That resolution outperforms 95 percent of the laptops on the market today. The unit consumes very little power --as little as one watt—and nominally consumes less than two watts. That's less than one tenth of what a standard laptop consumes.

The XO uses components from Red Hat's Fedora Core 6 version of the Linux operating system. It supports five programming environments, [Python](#), [Javascript](#), [Csound](#), [Squeak](#) and [Logo](#). The XO also supports Java and Flash. Applications on the unit include a web browser based on [Xulrunner](#), a document viewer based upon [Evince](#); the [AbiWord](#) wordprocessor, an [RSS reader](#), an email client, chat client, VOIP client; a [journal](#); a multimedia authoring and playback environment; a music composition toolkit, graphics toolkits, games, a shell, and a debugger. Libraries and plugins used by OLPC include [Xul](#), [GTK+](#), [Matchbox](#), [Sugar](#), [Pango](#), [ATK](#), [Cairo](#), [X Window System](#), [Avahi](#), and [gstreamer](#).

In obtaining the XO laptops the Faculty involved with the Hybrid Computing Lab were specifically interested in the MESH networking function associated with these computers. This function allows XO laptops within range of one another to automatically interconnect with one another and, if one is in range of a wireless Internet connection, the network shares the connection amongst all computers connected to the MESH. The XO's will be used as part of the mobile and physical computing classes that are taught in the lab.



The XO laptops were purchased as part a limited-time “Give One Get One” program in the United States and Canada. In association with Ryerson's purchase of these three computers, three XO laptops were provided to children in developing nations.

More information on the Rogers Communications Centre and the shared FCAD facilities it offers can be found at www.rcc.ryerson.ca/technology/index.htm

Information on the XO laptop and the One Laptop Per Child Program can be found at <http://laptop.org/>