

LCA 2011

The linux.conf.au conference (LCA) [1] runs for six days, with two days allotted for mini-conferences, three days for the main event, and one open day. The mini-conferences allow folks interested in a particular area to get together, and this year, the topics included multimedia, cloud, mobile, and parallel computing; Arduino hardware; and an inaugural rocketry mini-conf.

The rocketry mini-conference was officially a one-day event to build a rocket from components using a custom bay and fin design. Although building rockets by itself is cool enough, this mini-conference also included hacking on electronics for telemetry. And, unlike the other minis, the rocket track was limited to 24 folks who prebooked a place for a modest additional fee to cover hardware. Most of the 24 participants launched their creations on the Sunday after the conference and saw the organizers' "Or-ange you glad we came?" rocket speed toward the sky.

The main conference started with a one-hour keynote speech each day followed by four talk streams running in parallel, often with a tutorial session running, too. With all these choices, I often found myself having to miss an interesting talk. The consolation is that LCA makes videos of each presentation available for download [2]. Happy viewing, virtual attendee!

A major takeaway from the multimedia mini-conference was that enough of the real-time patch has gone into the mainline Linux kernel that you should try to use that first and resort to the real-time patch only if you have problems. This directive is in contrast to a few years ago, when the first recommendation was to apply the real-time patch before starting.

Less kernel compiling is probably good news for those folks who only want to play with 64 channels of sound with their GNU/Linux machine. According to Jonathan Corbet, the main interest in the real-time patch these days comes from large financial institutions who de-

mand known time frames for transactions.

The talk by Theodore Ts'o on ext4 scalability shed some light on running Linux on 50-core machines. The talk examined the evolution of desktop CPUs from dual to quad core and discussed how well the Linux kernel was keeping up with the new SMP power on offer. With dozens of cores, the filesystem code potentially can become a major bottleneck in squeezing all the cycles from all the cores. Luckily, in a few years time when a 64-core machine becomes available, the kernel filesystem code will be optimized already.

Plenty of conference talks discussed things other than the kernel, too. For example, a few talks described the fun new things you can expect from HTML5 audio and video. These features include some very good access from JavaScript – for example, grabbing each sample of audio as it is played or decoded images from video.

The talk on “pixels from a distance” presented ways to have applications run on a server and be controlled on a desktop. Two examples are remote X applications and VNC. People using VNC because it lets them disconnect and reconnect while applications are running might want to consider Xpra [3], which lets you reattach to running X applications or move them to other desktops.

LCA was thrown a curve ball this year, with the Brisbane floods just a few weeks before the conference. And, although much of the city was dry again at the time of the conference, the flood had taken its toll, and some buildings were still being cleaned. The conference organizers heroically regrouped, moving the body of the conference to a difference campus on higher ground.

The best point for LCA is also its worst: There are many interesting people to meet and “hallway chats” to be had, but with the large number of attendees, I always feel like I get to meet only a small fraction of my fellow open source colleagues. ■■■



LCA is what you get when you bring together hundreds of Linux and open source enthusiasts for six days.

By Ben Martin

INFO

- [1] LCA: <http://conf.linux.org.au/>
- [2] Video download page: <http://conf.linux.org.au/wiki/Videos>
- [3] Xpra: <http://code.google.com/p/partiwm/wiki/xpra>