POLITICS AND METADATA

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January was a busy start to the new year in the Linux community. Filled with the first conferences of 2006 – such as the widely acclaimed LinuxConf AU (more on that later) – it was also a time to begin planning many of the other events coming up later this year. 2006 promises to bring many interesting technological developments, but also, hopefully, this year will prove to be yet another important year for Linux advocacy and a time to "make the switch" for many more people around the world.

My sister is one person who made the switch to Linux a year or so ago. Having come from a mostly Windows background, she found using Ubuntu surprisingly straightforward. Of course, she just happens to have my brother-in-law (a python developer working on Linux) to help out when things break. Still, I'm encouraged by how far we've already come with a great set of alternatives for those just starting out – especially the much improved Open Office 2.0 and an ever improving general desktop experience. I'm not going to say this year will be a breakthrough for Linux on the desktop (it's probably not quite at that point yet), but we're getting close.

Let's take a look at what's been happening so far in 2006 at a Linux User Group near you.

Politics in North America

Several conferences took place throughout the USA and Canada during January, including the ShmooCon black/whitehat security conference in Washington D.C., the O'Reilly Emerging Telephony conference in San Francisco, and the X.Org Developer's Conference in Santa Clara. This author hopes to see from the proceedings that many of the exciting new X features and extensions are discussed at the X.Org conference this year.

Last year, I hooked up with some of the X developers and got to see some of the work on cool new X features, such as improved GL support and compositing. Some of this stuff is seriously neat. For example, you can now have the content of individual application windows used as textures on 3 dimensional OpenGL objects – just like Apple does for some of their effects. It won't be long before Linux desktops become much more aesthetically pleasing. But it would also be good to see the X folks co-ordinating their efforts on device support and the more mundane boring issues of real life. Having just exerted effort trying to convince an xorg build to use a PCI-E card, I know this needs to get better.

You'll find Canada Election coverage on discuss@linux.ca and elsewhere.

While there's quite often a perception of Linux geeks as being unwashed tree hugging liberals with one-sided views, the truth is that Linux users cover the whole political spectrum. This being said, politics is traditionally an area that is deliberately downplayed on Linux discussion lists. Alongside religion, there are some areas you just don't want to get into for fear of having massively off-topic discussions that bore – or worse, actively put off – those who just wanted to discuss purely Linux-related issues. But in today's world, just what's purely Linux related isn't quite so clear cut.

We as a community have discovered that we need to take collective interest in the wider issues going on around us if we are to take proactive steps against invasive legislation and digital rights restrictions. This is something that has been very apparent on the Canadian "discuss" list (discuss@linux.ca) over the past month. For a group devoted to "open, general discussion about the Canadian Linux Users Exchange, Linux in Canada, Open Source Solutions in Canada, etc." it's been filled with a surprising amount of Canadian election coverage (on IRC as well) with the goal of educating future Canadian political leaders about technology issues.

Politics took on another level in the US this month too, with the launch of the iPods for senators project. This effort (which has EFF backing) aims to buy an iPod for the campaign of each US Senator involved with technology issues. The whole thing came about after one Senator suddenly began to show greater understanding following his daughter purchasing him an iPod.

Boston Talk

Bill Horne wrote the Boston Linux Users (BLU) with the following question:

Figure 1: Canadian politics has been a topic on the Canadian Linux lists.

"Below is the partial output from an *ls -lh* command run on a directory in my server. It shows a number of files, named *Scan<nn>.jpg*.

However, each of the *.jpg* files has either brought with it, or Samba has created, two other files: one is apparently a thumbnail image, and the other a zero-length file, both starting with the same name as the associated *.jpg* image."

Apparently, Bill had been using Samba (the Windows filesharing implementation for Linux) to copy images from a Windows computer when, alongside his regular files with names like *Scan1.jpg*, additional unexplained filenames such as *Scan1.jpg:Q3 0lsldxJoudresxAaaqpcawXc: $DATA* started to show up. Interestingly, this is related to a little known feature offered for years by Windows NT-based systems running the NTFS filesystem. They support a concept of Alternate Data Streams (ADS) – a means to associate additional metadata with files, allowing author information or thumbnails to be stored seemingly within the original file, but in a space that is logically distinct. It wasn't long before this was pointed out by fellow LUG member

Tom Metro and a small discussion started to take place on the topic.

I'm interested in this, because I've been playing around with Samba and features like ADS and Access Control Lists (ACLs) for a few years now. Initially this was as a result of a painful Active Directory integration which I did to help out a local high school that wanted to cure a nasty Windows infection (not the virus kind: the using Windows kind). In doing that, I come to discover that some of these Windows features can be more generally interesting to Linux Users. Being able to store metadata about files and applications is a very useful feature that has existed on Microsoft NT platforms for too many years now and we need similar technology on the Linux desktop.

Not only do ADS files allow users to associate additional author meta data with their files in a way that it won't easily get separated (until you try to find some ADS aware backup software), but it also allows indexing services to create optimized search data or thumbnails for files as they are created and edited (and stored with the file) to make life a little easier (and faster) when it's necessary to search or view thumbnails later. Indeed, the Project Beagle folks over at Novell and elsewhere have been debating for some time how to handle meta data on Linux. Do we want to have a generic ADS approach over and above features

already offered in some filesystems (for example in various reiserfs experiments)? I think the answer is "yes" and hope that the appropriate technological solutions will be advanced.

San Francisco – "Beer Google!"

In response to the recent refusal by Google to willingly hand over search results to the US government, Karsten M. Self sent the following to the SVLUG list:

"Google's defiance of law and order is _not_ the sort of thing we can allow to pass without mention. Any right (or left, or strange)-minded, self-respecting geek MUST respond appropriately.

I think in the long tradition of geek favor recognition everywhere, we owe Google a beer. While others have criticized Google's seemingly hypocritical self censorship in China recently, it is indeed pleasing to see that they are trying to live up to their "not evil" philosophy."

Incidentally, I recently visited the Computer History Museum in Mountain View, California (*http://www. computerhistory.org/*) and saw the first Google "cluster," which is now on permanent display. If you're in the area, it's worth checking this out for yourself (don't forget to volunteer!).

Europe

Many Linux User Groups are gearing up for the forthcoming FOSDEM (Free and

Figure 2: Mountain View is just an easy drive from San Francisco.
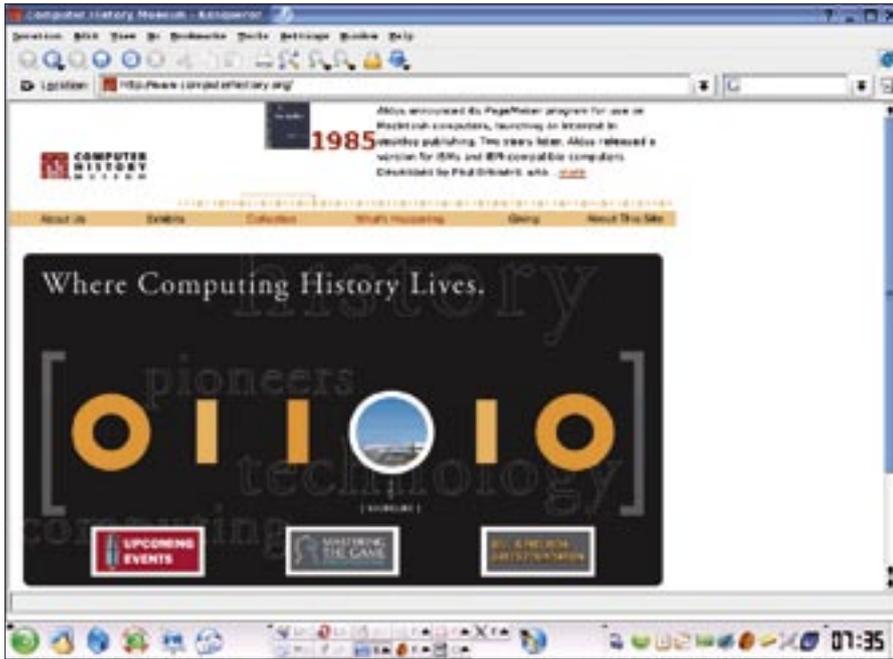
Figure 3: Check out the Computer History Museum website for more on exhibits and events.

Open Source Developer's European Meeting) to be held in Brussels at the end of February. This event, which has been held for quite a few years, typically draws large crowds and contributes to cultural interchange between different European (and some further afield) Free and Open Source developers. This author has been going along for a couple of years now and has found the whole event to be great fun – well worth the 50 Euro voluntary donation that the organisers ask for to help pay their costs *http://www.fosdem.org/*.

At last year's conference, I crashed with the folks at Mind *http://www.mind. be/* in Leuven (home to Stella Artois – you can smell beer almost everywhere you go) and took the train into town for the conference each day. Having missed out on making the mistake that there are two ULB University campuses in the area for the 2004 FOSDEM, I made up for this fantastically by getting very lost in 2005 as I tried to find the conference. Still, once there, I was able to hook up with many developers that I only ever get to talk to on IRC or via mailing lists. 2005 wasn't as enjoyable as 2004 – there weren't as many drunken excursions into central Brussels – but I did get to meet some fun people nonetheless. One of the people I met offered to let me crash at his place in Portland over in the US. When I actually did do that a month later, that started a friendship which has

lead to some pretty crazy adventures since.

The most recent LUG Radio *http:// www.lugradio.org/* episode features an interview with Jeremy White of Code-Weavers. These are the folks who are transforming the Linux adoption process by facilitating those who wish to run Microsoft Windows applications. Rather than constantly fighting Microsoft, it can be a great boost to the cause if we can allow users of existing productivity applications like Office to make the switch without losing their use of Word. Despite the alternatives, this author is one such user of the CodeWeavers CrossOver of-

fice product. Sometimes you just need to know what a document will look like for the vast majority of people who will choose to open it in Microsoft Word, whether you happen to personally like that or not.

Asia-PAC

By far and above the major topic of Linux interest this month in the Pacific region seems to have been the Linux Conf AU conference held in Dunedin, New Zealand. LinuxConf has been taking place for eight years now and was originally known as the CALU Conference of Australian Linux Users. They soon outgrew that name and have since become internationally recognized as a major conference no self respecting Linux geek wouldn't want to be seen at. Along with the Ottawa Linux Symposium (OLS), which is held around six months later in July, these two conferences are creative outlets for a lot of developing technologies.

At this year's LinuxConf, conference tracks included Linux distributions, programming, education, digital arts, embedded concerns and, of course, Linux kernel technology improvements. My friend Deepak Saxena was among those giving papers on interesting Linux kernel technology. His paper, "Porting the Linux Kernel to a New ARM Platform" covers the whole issue of making Linux run on an interesting but unsupported target device. Check out the full range of material over at *http://www.linux. conf.au/*. ∎

Figure 4: A night on the town at FOSDEM 2005.