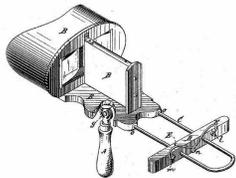


MUUGlines

The Manitoba UNIX User Group Newsletter

Next Meeting: April 12, 2005: Digital Stereo Photography and Phantograms



Stereoscopic (3D) photography is almost as old as photography itself. However, when working with film and photo-chemical processing, getting good results was tricky and time-consuming.

Digital cameras and computer-based processing have made the task much easier, and have also opened up the field to interesting new possibilities. The phantogram (technically a stereoscopic anamorphosis) is a relatively new form of stereo photograph, which makes use of the latest image manipulation tools, but is based on techniques and principles that have been around for centuries. The results can be quite impressive, and lifelike.

In this presentation, Gilbert Detillieux will describe some of the principles of stereo photography and phantogram production, as well as demonstrating this using open-source tools such as The GIMP, and freeware such as AnaBuilder (which is Java-based, and platform independent). The presentation will also discuss some of the legal issues facing those working in this medium, due to two US patents that have been granted recently, which cover some of the fundamental processes involved.

Where to find the Meeting

Meetings are held at the IBM offices at 400 Ellice Ave. (between Edmonton and Kennedy). When you arrive, you will have to sign in at the reception desk, and then wait for someone to take you up (in groups) to the meeting room. Please try to arrive by about 7:15pm, so the meeting can start promptly at 7:30pm. Don't be late or you may not get in.

Limited parking is available for free on the street, or in a lot across Ellice from IBM, for \$1.00 for the evening. Indoor parking is also available nearby, at Portage Place, for \$2.00 for the evening.

Shawn's 5 minute guide to SSH port forwarding

Here is a quick guide on how to use SSH to tunnel traffic over an encrypted connection. I am going to use an example that I use a lot.

I am at work (behind a firewall) and I want to VNC into a machine (192.168.1.100) running at home (behind a firewall). I have an account on my firewall at home (the remote machine, 10.0.0.1). So, here is the command I would use on my machine at work.

```
ssh shawn@10.0.0.1 -L 5900:192.168.1.100:5900
```

So, what does all that mean. The first bit is the username and host I am connecting to (I am using 10.0.0.1 as an example, that is a non routable address). The `-L` says to forward a local port to the remote port. The `5900:` part is the port I want on the local machine to be forwarded, the `192.168.1.100` is the IP I want the port forwarded to, and the `:5900` is the port on the remote machine.

So, now I will be able to connect via VNC to `localhost:5900` and the connection will be forwarded in an encrypted SSH tunnel to the machine at home, completely transparent to any applications.

You can also forward multiple ports, so if you wanted to forward both VNC and `http`, you could with this command:

```
ssh shawn@10.0.0.1 -L 5900:192.168.1.100:5900 \
-L 80:192.168.1.100:80
```

Since you are forwarding a port below 1024, you will need root access, but you could substitute the first 80: with 8080: if you don't have root access.

```
ssh shawn@10.0.0.1 -L 5900:192.168.1.100:5900 \
-L 8080:192.168.1.100:80
```

You can also forward to different machines, say I wanted to use my own SMTP server as well...

```
ssh shawn@10.0.0.1 -L 5900:192.168.1.100:5900 \
-L 8080:192.168.1.100:80 -L 2525:192.168.1.50:25
```

That will forward all traffic to port 2525 on my local machine to port 25 on 192.168.1.50 on my home network.

You can also do reverse port forwards with -R, but I will leave that up to you to look up with man ssh.

PearPC raising funds to sue CherryOS maker

The PearPC project is raising funds to hire a lawyer to file a lawsuit against Maui-X Stream 'makers' of CherryOS a commercial emulator that allows you to run Mac OS on x86. They claim that CherryOS is really just PearPC with some changes to the source code, which would be in violation of the GPL.

Hacker gets RFID chip implant

Amal Graafstra recently had an 12mm x 2mm RFID chip implanted into his hand. He has started writing some applications that will allow him to unlock his doors, and his computer. BME has an interview with him here (<http://shorterlink.org/169>) is personal site is <http://amal.net/rfid.html>.

BSD Certification Group Takes Initiative

(March 15, 2005) Today, the BSD Certification Group officially announces their website and group

focused in the creation of BSD certification. The public website is at <http://www.bsdcertification.org/>.

A number of BSD developers, systems administrators and advocates have come together to begin the first steps in the creation of a standard BSD certification. Today marks the official launch of their public website at <http://www.bsdcertification.org/>.

The BSDs, including FreeBSD, NetBSD, OpenBSD and DragonflyBSD, are mature operating systems based on the original Unix developed at University of Berkeley, California. BSD powers global Internet service provider infrastructures, and BSD userland applications are familiar to those running Apple's OS X operating system. BSD tools like OpenSSH are used to securely access remote systems, and many TCP/IP stacks are derived from BSD.

"While some may feel that a BSD certification would just replicate the problems that other certifications have created, namely lack of experience masked by a piece of paper, the committee is convinced that with the proper preparation and testing criteria, a tiered BSD certification process can demonstrate real-world proficiency as well as provide a goal for those just beginning their systems and network administration career," said Dru Lavigne, networking and Unix instructor and the chair for the group.

The BSD Certification Group looks to bring together the BSD projects, important vendors, educational institutions and beyond to work to make this project a success.

Pioneer Petroleum moves to Linux

Pioneer Petroleum is the largest independent gasoline retailer in Ontario, with 150 retail locations spread throughout the province. Twenty-five of those locations are running Red Hat Linux Workstation 3.0. The other 125 stores are expected to be rid of Windows by the end of 2005.

White Box Enterprise Linux 4 Preview released

(March 31, 2005) A preview of WBEL4 is currently available via BitTorrent (<http://www.whiteboxlinux.org/manifestdestiny-rc1-binary-i386.torrent>). It is believed to be feature complete except for the inclusion of the yum config info to allow updating. Since there isn't yet a download tree for 4 on the mirrors this isn't really an issue for testing yet. This release is i386 only because the x86_64 building has only just begun.

NNSA Supercomputer Breaks Computing Record: Exceeds 100 TERAFLUPS

(March 23, 2005) DOE/NNSA and IBM partnership on BlueGene/L, a tool for national security

WASHINGTON, D.C- National Nuclear Security Administration (NNSA) Administrator Linton F. Brooks announced today that a supercomputer developed through the Advanced Simulation and Computing program for NNSA's Stockpile Stewardship efforts has performed 135.3 trillion floating point operations per second (teraFLOP/s) on the industry standard LINPACK benchmark, making it the fastest supercomputer in the world. By performing computations at these rates, BlueGene/L helps maintain the U.S. nuclear weapons stockpile without nuclear testing.

Release Announcement: Gentoo Linux 2005.0

March 27, 2005 by Jeffrey Forman

Gentoo Linux is proud to bring you the long awaited Gentoo Linux 2005.0 release!

This release has had a few setbacks including a complete security rebuild, but with the help of the many teams within the Gentoo developer community, we believe that this release will be one of the best that we have ever had.

This release includes new installation media from Alpha, AMD64, PPC, PPC64, SPARC, and x86 and includes stages for IA64 and SPARC32. Please check out our mirrors to find the closest one to you. As with 2004.3, you will be able to download optimized PackageCD images for x86 and PPC via our bittorrent server, and also our "unofficial" secondary bittorrent server, provided by Friends of Gentoo e.V. in Germany.

Novell to Ship Linux Suite for the Small Business Market

SALT LAKE CITY (BrainShare® 2005) — March 21, 2005 — Novell today announced the upcoming availability of Novell® Linux Small Business Suite 9, the first end-to-end, server-to-desktop Linux solution that offers a clear alternative for small businesses. Novell Linux Small Business Suite is comprised of industry-leading Linux server and desktop software along with powerful collaboration, security and management products, all engineered specifically for Linux*. As a result, small businesses receive a secure, reliable and complete solution that provides them with big-business benefits on small-business budgets.

“The availability of Novell Linux Small Business Suite and the advantages of open source software will give our customers even more options for improving their business,” said Bill Long, owner of Integrated Network Systems, a Novell channel partner in New Orleans. “And because it's backed by Novell, they can deploy it with confidence.”

According to a recent survey by Forrester Research, small businesses are spending on IT systems at an increasing rate, closing in on half of total U.S. tech spending at 44 percent in 2004. Many small businesses are turning to Linux for the cost savings and security benefits it provides. Novell has prepared an extensive software, channel, training and technical support ecosystem necessary to effectively serve small businesses who are seeking to diversify their IT portfolios away from traditional operating systems. To accommodate growing businesses, Novell's Linux

suite features support for up to three servers and 100 users.

Novell Linux Small Business Suite 9 will be available March 31 through Novell channel partners for a suggested \$475 per five new user licenses or \$252 per five users upgrading from qualifying Novell or competitive products. See

<http://www.novell.com/products/linuxsmallbiz/pricing.html> for details. The suite includes support for up to 100 licensed users and three servers, plus five free technical support incidents.

Fedora Core 4 test 1 Available!

The first test release of Fedora Core 4 is now available

(<http://fedora.redhat.com/download/test.html>) from Red Hat and at distinguished mirror sites near you, and is also available in the torrent

(<http://torrent.linux.duke.edu/>). New features in Fedora Core 4 test 1 include previews of GCC 4.0, GNOME 2.10, and KDE 3.4, as well as support for the PowerPC architecture. Please file bugs via Bugzilla, Product Fedora Core, Version fc4test1, so that they are noticed and appropriately classified.

Discuss this release on `fedora-test-list` (<http://www.redhat.com/mailman/listinfo/fedora-test-list>).

FreeBSD 5.4-BETA1 Released



20 March: The FreeBSD 5.4-BETA1 release is now available. This is the first BETA release for the FreeBSD 5.4 release cycle and the Release Engineering

Team encourages people to help with testing so that any final bugs can be identified and worked out before the actual release. The BETA1 ISO images and FTP based install support are available on most of the FreeBSD Mirror sites

(http://www.FreeBSD.org/doc/en_US.ISO8859-1/books/handbook/mirrors-ftp.html).

New OpenBSD Port

Initial work has started on the hppa64 port of OpenBSD. This will allow OpenBSD to run on 64-bit HP PA-RISC machines like the following:

- PA8500-based: A400/rp24x0, B1000/B2000, C3000, J5000/J7000, L1000/L2000
- PA8600-based: A400/rp2450, B2000/B2600, C3600, J5600, J6000, L3000/rp5400
- PA8700-based: A500/rp2470, C3700, J6700/J6750, N4000/rp74x0, rp8400
- PA8800-based: A500-9x, C8000, rp3410, rp3440, rp4440, rp7420, rp84x0

The following machines are 64-bit, but are currently supported by the hppa port in 32bit mode:

- PA8000-based: C160, C180
- PA8200-based: C200, C230, C240
- PA8500-based: C360

Sending Us E-Mail?

Due to the amount of e-mail MUUG receives, we've set up an auto-reply to give you immediate feedback, and redirect some of the e-mail to the appropriate places. Why not look at <http://www.muug.mb.ca/about.html#contacts> first?

Share Your Thoughts

E-mail us with your comments on the newsletter, whether it's criticisms or commendations, and continue to send in articles or ideas for the same. Specifically, what sort of material you would rather see: Announcements, technical articles, new products, or...?

If you have a How-To or other idea, and aren't ready to give a presentation at MUUG, an article is a great alternative! If you can write better than the editor, that's terrific; if you can't, submit it anyway and we'll get it into shape for publication. We know that many of you have some great ideas and lots of knowledge. Why not share? Send Mail to: editor@muug.mb.ca.