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The History of The Oregon State Open Source Lab

On August 25th, 1991, Linus Torvalds changed the world with one email.

> Hello everybody out there using minix - I'm doing a (free) operating system (just a hobby, won't be big and professional like gnu) for 386(486) AT clones. This has been brewing since april, and is starting to get ready. I'd like any feedback on things people like/dislike in minix, as my OS resembles it somewhat (same physical layout of the file-system (due to practical reasons) among other things). (Torvalds).

As those at *Linux Weekly News* know, Linus had began working on a free operating system which would be known today as GNU/Linux. It served as a catalyst for the open source movement. Without GNU/Linux, or the open source movement, we wouldn't have some of the most widely used and know software projects in the world: Mozilla Firefox, Gentoo, the Apache Web Server, Debian, and Drupal.

Where do all these globally known open source project reside today? Corvallis, OR. Wait. It's not Cupertino, CA, home of Apple; Redmond, WA, home of Microsoft; or Mountain View, CA, home of Google? Nope! All of them, with the exception of Firefox, reside in Corvallis, OR, home of the Oregon State Open Source Lab (OSUOSL). The OSUOSL hosts the largest collection of high impact open source software in the world. Though a lot of people don't know this because they do not directly interact with the OSUOSL to download Drupal or the Apache Web Server.

The Open Source Lab did not evolve overnight night, but through a series of interrelated events. Founded in late 2003, the Oregon State Open Source Lab came about due to the hosting needs of the Gentoo community, a financial disaster in the Oregon State Information Services department, a large increase of available network bandwidth, and a domain name for the worst education.

For those who are unaware of what the open source movement here is a brief overview of it's inception. Steven Weber explains in his book how Richard Stallman started the open source movement. "He founded the Free Software Foundation as a non-profit organization to support the work. The goal was the produce an entirely free operating system that anyone could download, use, modify, and distribute freely ." Back in the 1990's there were no free operating systems available. GNU/Linux was the first free and open source operating system. It was based on MINIX, which was created by Professor Andrew Tanenbaum of Vrije Universitait, Amsterdam as a teaching tool to understand how the UNIX operating system worked. At the same time Linus was creating GNU/Linux, the GNU Project, out of the Free Software Foundation, had the same goal in mind: to developing a free and open source operating system. Richard Stallman released the GNU Project's source code under the GNU General Public License, the first open source license. Now with a full operating system and public license which helped frame their ideals, the open source movement was well underway.

One of the projects that came out of the open source movement was the Gentoo linux distribution. Unlike other GNU/Linux distributions, Gentoo is special because of it's involvement in the creation of the Oregon State Open Source Lab. "It's not an overstatement to say that Gentoo was integral to the Open Source Labs foundation. The Linux-based operating system was one of the OSUOSL's first projects it even preceded the existence of the lab and was instrumental in building the buzz that put open source at OSU on the map." (Reciprocity and Gentoo). As Gentoo

began to grow it needed more hosting. The Gentoo community reached out to Oregon State and a partnership was formed that laid a foundation for the mission of the OSUOSL. But before it was hosted by the OSUOSL it was originally hosted by Oregon State's Information Services department (IS), which after a series of events underwent some economic strees.

Scott Kventon, one of the founders of the OSUOSL, explained this stress to a member of the KernelTrap project in a blog post in 2005. "'OSU's information services group had a bit of a financial disaster 8 years ago [1997]; our former CIO went a little crazy writing checks, etc. After the dust settled, we were left with a huge debt, and increasing user base and the need to provide a lot more with a lot less. We had no choice but to turn to open source."' (Andrews). When Curt Pederson came to Oregon State University as the new Chief Information Officer he had no idea that the IS deparment was $6,000,000 in debt. He set up a six year plan that would cut $1,000,000 every year. A large part of this plan involved leveraging open source software over proprietary software which costs a large amount due to licensing fees. Once Information Services was back in the black, and with the the goal of enabling open source to grow at Oregon State, Pederson reinvested some of the money into increasing the network bandwidth available to the university. (Pederson).

With the extra money available from the cuts, Pederson funded the laying of unused, also know as 'dark', fiber optic cable to Interstate 5. Having been around at the time, Scott Kventon told Kernel Trap: "'Our CIO (Curt Pederson) chose to fund a fiber build-out to I-5 and the Open Source Lab. The strategic funds are seed money to get the OSL off the ground and we're well on our way to cost recovery."' (Andrews). The laying of this dark fiber was key to the OSL success. TDS Telecom saw that The Open Source Lab was putting out a lot of bandwidth, and wanted to partner with them to save money. With funding from TDS Telecom and Oregon State University,

21 miles of fiber optic cable were laid between OSU and Interstate 5. This construction cost the university $500,000, but provided them with 2 Gibibytes of bandwidth from TDS at no charge; that amount of bandwidth is worth $300,000 a year. TDS also provided the OSUOSL with three mirror hosting sites for downloads.

Not too long after this extra bandwidth was available, the former Oregon State University President Paul Risser saw a sign on the highway advertising Oregon State's website at 'www.orst.edu'. He didn't want Oregon State to be know as the University with the 'worst' education website. (Pederson). Read that domain name again: 'ww-worst-edu'. To fix that problem Risser hired Scott Kventon to change the domain name. When Kventon came to Oregon State, Pederson had just requesitioned a server room in the Kerr Administration building from holding Banner, Oregon State's administrative website, to be used as the home of the Oregon State Open Source Lab.

It would be wrong to say that a single event was responsible for the creation of the Oregon State Open Source Lab. Gentoo's need for hosting, the financial mishaps of the Oregon State University Information Services department, the laying of fiber to Interstate 5, and a domain name for the 'worst' education, all contributed to the creation of the OSUOSL. As supporters of the open source community at large, the lab has helped to filled a gap in the needs of open source projects all over the world. Without Richard Stallman creation of the Free Software Foundation and GPL, or Linus' work on the GNU/Linux operating system, open source software and the open source movement would exist today. But without the Oregon State Open Source Lab, that open source software would not continue to be free to download, use, or modify.

Rhetorical Analysis

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