



The Linux Effect: 20th Anniversary

Linux - Open Source Software

BLAINE:

Linux is Free Open Source Software. When the open source community use the word free they mean freedom. When Linus Torvalds released the Linux kernel he made a pivotal decision, he chose the GNU Public license.

Bruce Perrens: "Linus uses a GPL..."

He chose freedom.

Bruce Perrens: "... and I agree with the kind of philosophy behind the GPL. It's one of the few software licences that was written from the standpoint of the community rather than from the standpoint of protecting the company"

Bruce Perens is a leader in the Free Software and Open Source community.

Bruce Perrens: "And the GPL is really unique in that. It's not just a license; it's a whole philosophy that I think motivated the Open Source definition."

The GPL, written by visionary Richard Stallman, binds the user to freedom. The freedom to use the software in any way that they want, the freedom to alter it and to give it away. But here's the kicker, any piece of software written under the GPL has itself to be released under the GPL. And so wherever the software goes the freedom goes.

Richard Stallman: "We use a technique called copyleft. The idea of copyleft is that its copyright flipped over"

Richard Stallman

Richard Stallman: "... and what we do is we say this software is copyrighted and we that authors give you permission to redistribute copies, we give you permission to change it we give you permission to add to it but when you redistribute it, it has to be under these terms no more and no less. So that whoever get it from you also gets the freedom to cooperate with other people and it becomes an inalienable right to cooperate with other people and form a community."

BLAINE:

This all sounds wonderfully idealistic but is it realistic. Yes it is. Freedom works as my colleague at the Open University, Andrew Smith explains.

Andrew Smith:

"As you can tell by my hushed tones I'm in a cathedral at the moment. What has this got to do with Linux? A few years ago a author Eric Raymond wrote a text on the "The Cathedral and the Bazaar", where he looked at two different ways of developing software called Open Source"

Eric S Raymond:

"We didn't call it that then were still using the term free software primarily. In that paper I was setting up a contrast between two different styles of development, two opposed styles of development: The Cathedral and the Bazaar."

Andrew Smith: "In the Cathedral he talks about a closed community of Open Source developers that all work together so for a Cathedral they need to know that you are a Christian to be a member of that community."

Eric S Raymond: "On the other hand what I identified as happening in the Linux world was a much more peer to peer decentralised market or bizarre."

Andrew Smith:

"In the Open Source community they're very interested in the Bazaar because that's where new ideas are constantly being developed and everybody is getting involved in these new ideas. Some will take off and become very successful. Some like some market stalls will probably now last for very long because they're not the idea that the whole community want. With that you've got a vibrant, interesting and dynamic community taking place developing what people actually want in the long term."

Eric S Raymond:

"In spite of constantly violating all of the standard rules of software engineering we were able to produce extremely high quality software so as my observation of what made the free software world work."

BLAINE:

This radical idea of free meaning freedom meant that Linux spread very quickly around the world. But why would anyone bother to develop software that they were bound to give away?
Jon "maddog" Hall: "As a software developer I just don't understand how somebody can live with closed source proprietary software. It drives me crazy."

BLAINE:

Jon "maddog" Hall is the Executive Director of Linux International.

Jon "maddog" Hall :

"Most software should be Open Source so that people can fix the bugs when they get them. And it's not that companies don't want to fix the bugs or don't want to give you extensions it's that they can't do that. There's just too many people have too many needs with too few engineers and you can't just add more engineers to the project because number one, you will very rapidly become unprofitable for the company to do that, and number two there's certain rules and computer scientists say just by adding new engineers to the project doesn't mean it's gonna be done any faster or any better."

BLAINE:

Linux has always been there for hobbyists and people who just had to have a tinker with an OS to suite their own needs. But before long people realized that just because the software was free didn't mean you couldn't make money out of it.

Jon "maddog" Hall:

"I was one of the first people to actually look at Linux and see a commercial value to it."

BLAINE:

Linux is like free speech, not free beer.

Jon "maddog" Hall:

"With free software you can have the choice, a business choice or the personal choice of using the software the way it is or finding somebody who can make the changes for you. It could be a university student you find a university student who knows something about the software and say hey I'll give you a couple of six packs beer to fix this or it could be a professional consultant. But because that consultant has the source code for the software they can actually change it to meet your needs."

BLAINE:

Linux is for everyone. There are hundreds of different Linux distributions or distros out there. Chances are there is a flavor of Linux that's just right for you. And if there isn't...well you can make your own.

Jon "maddog" Hall: "Do I think it's the best approach for creating software? I've been doing it my whole life so I obviously think it is."