

It's Been a Great Ten Years

# TED TS'O ON KERNEL HACKING

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Theodore Ts'o is a friendly and modest chap who can tell you everything or just about everything that is to do with GNU/Linux. His passion for open source software is very much in evidence when you have a conversation with him. Theodore is the principal programmer at VA Linux Systems. He says that this allows him to be paid for the kind of things that he used to do for fun. He is currently part of the technical advisory board of Linux International. He is also an MIT graduate, the same place where Richard Stallman did his original work in artificial intelligence and where just about any sort of esoteric project can be funded and put together. Theodore worked on kerberos at MIT as well. His other work involves the internet engineering task force and works with many people that are to do with internet security. He is the author and maintainer of e2fsprog.

Recently he visited London and gave a few public lectures which were basically about his work with Linux over the years. He has been something of a prolific worker within the world of Linux and open source software. He understands many things that most of us never will.

He explained quite a lot to us over the few days that he was here. He showed us that some very big companies are now taking Linux very seriously. Good examples are IBM with their investment in Linux on a planet wide scale of hundreds of millions of pounds. Other companies he talked about were Compaq and Oracle. He also says that with the present economic downturn other companies such as VA Linux aren't doing so well just now. His explanation of how the open source business model is taking a long time to work

out was really worth listening to. He went into some simple detail about how Microsoft was attacking open source software which as he did explain was more than slightly sad considering the kind of people who are working on it. In contrast with this there is the extremely rapid development cycle that is a common feature of the open source model.

After his somewhat in depth explanation of all that has taken place and just how good things have been, he began to explain some simple facts of life to us about present day issues. The potential problems in intellectual property law are not the least of the problems that may come along next and something that may also be related to this are copyright issues. Perhaps this is only something that affects legal affairs in the States but there is also the consideration that the internet allows for the rapid deployment of information and some of that may not be good. He also spent some time discussing the thorny subject of DMCA which whether we like it or not may well become an integral part of our every day life. Many people from outside the United States have criticised this law and some think that they have every right to do that. He expressed concern about trade secrets and similar problems. Microsoft kerberos

PAC was also mentioned as something that could be a woeful subject. He went on to bemoan the only too well known situation to do with patent law and software. Something that even RMS has done some campaigning over himself. As Theodore says there have to be some programmers that are involved in the political process so that the views of



## A man for all seasons

Ted Ts'o has a fantastic CV. He is a systems programmer who is working at Information Systems (I/S) at MIT. There he is currently a member of the Integration Team, which is tasked to promote an effective computing infrastructure for MIT.

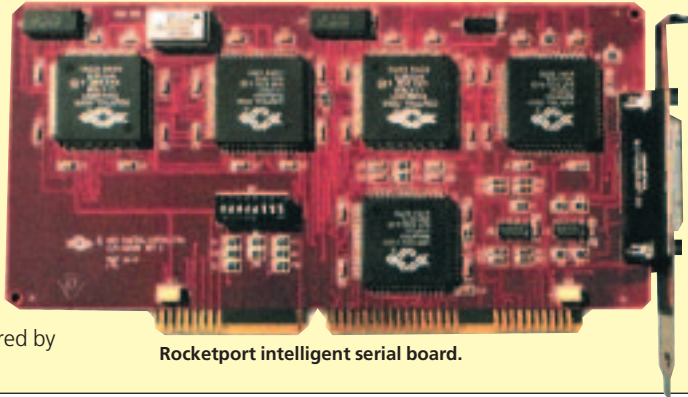
Formerly, a member of the Distributed Computing and Network Services department, until it got re-engineered. While the DCNS was in existence, he was a member of the Network Operations Group and the DCNS Development Team.

He is currently the team leader for the Kerberos V5 development effort at MIT. Which has recently released version 1.0.5 of Kerberos V5. Kerberos is a network authentication protocol. It is designed to provide strong authentication for client/server applications by using secret-key cryptography. A member of the Internet Engineering Task Force, and currently serving on the Security Area Directorate of the IETF. Serving as a working group co-chair for the ONC RPC and IP Security working groups. He also spend a lot of time working as a member of the Common Authentication Technology working group.

He acts as one of the core Linux kernel developers, and serves on the technical board of Linux International. Currently getting around to working on getting the Telnet Encryption Specifications published as RFC's, after close to a five year hiatus.

Graduated from MIT in 1990, with a degree in Computer Science.

He is the author and maintainer of the e2fsprogs package, the ext2 filesystem utilities. If all that is not enough he is the author and maintainer of the Rocketport intelligent serial board, which is manufactured by Control, Inc.



Rocketport intelligent serial board.

their colleagues can be properly represented. If you feel that you are someone who can be both a political person as well as a programmer then please do join in with the European Free Software Foundation and the campaign to remove software patents from Europe. Make your views known to your own Member of Parliament and your Euro MP.

Theodore finished off his lectures with a mention of the fact that Microsoft haven't rolled out an new technologies for a long time now. The next twelve months will probably see some new technologies from Redmond. He repeated some of the things that Miguel de Icaza has been heard to say in the past few months. Such as can my great Auntie Emma use a Linux desktop and can anyone near you use an open source desktop without being told or shown how to. The companies that produce what is often referred to as proprietary software spend millions of dollars on that kind of thing. Open source developers should be aware of that. Proprietary software will always be with us in the shape of tax and finance packages. If you feel that you disagree with this then please feel free to rise to the challenge of adding to Linux packages like Jalia which is one of the better financial packages that is just becoming available. As an example of something that may not be too good he explained his recent problems with compiling a Debian kernel.

Theodore is a great fan of the Debian distribution. He said that he thought the man pages were great but it could take weeks to find some basic information from fellow developers and maintainers. We should aspire to a higher standard and above all else please don't try to mess up the work of the programmers who work on proprietary software.

Theodore closed his last lecture in England with the words .... "It's been a great ten years". We do hope that he will continue to experience another ten years of enjoyable and creative hacking in spite of his concerns with present day issues. The recent tenth anniversary of the birth of Linux was something that we shouldn't forget about right away.■

## The author

Richard is the Chairman and organiser for Sheffield Linux User's Group. You can view their web site at <http://www.sheflug.co.uk>

## Useful URLs

Theodore's home page

<http://web.mit.edu/tytso/www/home.html>

Eben Moglen

<http://web.mit.edu/Kerberos/www/papers.html>

European Free Software Foundation

<http://emoglen.law.columbia.edu/>

Free Software Foundation

<http://fsfeurope.org/>

Linux International

<http://www.fsf.org>

VA Linux

<http://www.li.org>

Jalia Accounting

<http://www.valinux.com>

[http://homepages.tesco.net/~cdmediaeuroltd/html/products/linux\\_accounting.htm](http://homepages.tesco.net/~cdmediaeuroltd/html/products/linux_accounting.htm)