Thomas Petazzoni

21, allée de Bréhat 31770 Colomiers France Phone : +33 5 61 30 04 42 E-mail : thomas.petazzoni@enix.org

Linux system engineer

Professionnal experience

Date of Birth: July, 22nd 1983 Nationality: French Driving licence Marital Status: single

Since March 2005 Research and development engineer and technical leader at *Seanodes*, Toulouse, France. Seanodes develops Exanodes, a Linux software for clusters that allows to create a performant, fault-tolerant and scalable virtual storage using the disks of all nodes of a cluster.

Design and implementation of Linux kernel modules and associated user-space applications. In particular, in charge of the in-kernel storage virtualization technology, which includes data striping, data replication, fault-tolerance, and distributed snapshots.

Technologies: C, Linux kernel, GNU toolchain. Seanodes: http://www.seanodes.com

Sep. 2004 - Feb 2005 Six month final training period at *Mitsubishi Electric ITE TCL*, a telecom research laboratory in Rennes, France.

In the context of a internaly-developed platform for high-performance network filtering, set-up of crosscompilation toolchains and filesystem images for embedded systems, port of Linux 2.6 to the platform, based on MIPS processor, and development of bootstrap code and kernel module to control the second core of the MIPS processor.

Technologies: C, Linux kernel, GNU toolchain, MIPS assembly, JTAG. Mitsubishi Electric ITE TCL: http://www.mitsubishi-electric-itce.fr/

Feb. - Jul. 2003 Six month training period at *Nexwave Solutions*, Montpellier, France. Nexwave Solutions develops a component-based operating system for embedded devices for various architectures.

Development of a block device buffer cache to optimise access latency and major rewriting and improvement of the device driver layer of the operating system.

Technologies: C, GNU toolchain. Nexwave Solutions: http://www.nexwave-solutions.com

July 2002 Three weeks employment at *Hewlett Packard* in Stuttgart, Germany. Migration of customer database, design and implementation of web user interface.

Technologies: PHP, MySQL, Perl. Hewlett-Packard: http://www.hp.com

Education

- **2000-2005** Master's degree in Computer Science, from the Universitory of Technology of Belfort-Montbéliard, after a five-year course.
- June 2000 Baccalaureat with honours (equivalent to a High School Leaving Certificate) in Mathematics and Sciences.

Skills

System	From 1998 to 2005, coordinator and core developer of the KOS project (http://kos.enix.org). Active contribution to the design and implementation. Proficient in operating system theory and practise, excellent knowledge of system programming and of the Intel 486/Pentium architectures. In 2004-2005, active participation to the SOS project (http://sos.enix.org).
Linux	Extensive knowledge of the GNU/Linux system (used daily), mainly the Debian distribution, either on clients or servers. Deep knowledge of the Unix programming environment, of the GNU development toolkit.
Windows	Good knowledge of Microsoft Windows. Database development with Access.
Languages	Deep knowledge of C, x86 assembler, Java . Good knowledge of shell and Perl scripts, C++, Lisp, Caml, SQL and ARM assembler. Basic knowledge of TCL/TK, VHDL and Texas Instrument TMS320 assembler.
Internet	Good knownledge of PHP, HTML, CSS, XML and XSLT.
Network	Good knowledge of hardware and software components of TCP/IP based networks. Installation and configuration of Web servers (<i>Apache</i>), database servers (<i>MySQL</i>), firewalls (<i>Netfilter</i>), secure shell (<i>SSH</i>), FTP and mail servers, CVS, Subversion, DNS, <i>Samba</i> and Microsoft networks.

Associative experience

2005-now	Founder, president and active member of Toulibre (http://www.toulibre.org), a free software user group of Toulouse, France. Organization of events such as conferences, workshops, trainings for free software promotion and advocacy. Given dozens of speeches about free software.
2007-now	Member of the governing board of APRIL (http://www.april.org), the major association for free software promotion and protection in France.
since 2002	Participation to the Libre Software Meeting, an international free software related conference that takes place in France every year, and that gather from 1500 to 2000 users and developers from the world.
	In 2002, 2003 and 2005, chairman of the operating system and kernel development topic. In 2007, co-chairman of the free software communities topic.
2001-2004	Leader of Lolut (http://lolut.utbm.info), the free software user group of the UTBM engineering school. Organization of events related to free software promotion and advocacy.
2004	Involved in the creations of an autonomous robot for the french robotics $\sup E=M6$. Developed the embedded software in C that drove the robot. Ended 32 on around 200 teams.

Conferences and publications

2000-now Various speeches and workshops concerning GNU/Linux and free software, in the context of several associations and user groups.
July 2005 Presentation of the Sos project at *Libre Software Meeting 2005* 2004-2006 Publication in the french Linux Magazine of aticles describing the step-by-step implementation of a simple operating system. Co-authored with David Decotigny.
April 2004 Presentation of the internals of an operating system and of KOS at Libr'East 2004 (Marne la Vallée, France)

September 2003 Publication of two articles, "Fundamental concepts and structure of the Linux kernel" and "Trip to kernel boundaries" in the french Linux Magazine. Co-authored with David Decotigny.

July 2003, 2005 Presentation on the internals of an operating system at the Libre Software Meeting.

July 2001, 2002, 2004 Presentation of the Kos project at the Libre Software Meeting (Bordeaux).

Languages

English	Three stays of three weeks in complete immersion in the U.S.A (California, Colorado). Participation to english-speaking events. Ability to communicate effectively in a professional environment.
German	Three weeks training period in Germany. Award $Good$ at the Zertifikat Deutsch of the Goethe Institut.
Spanish	Notions.
Esperanto	Notions.
Hobbies	
Enjoyment	Confirmed cello player (12 years)

Travels United States, Canada, England, Swiss, Germany, Nederlands