

# SENIOR ENGINEER/ARCHITECT INFRASTRUCTURES – OPEN SOURCE – LINUX/UNIX – POSTGRESQL/NoSQL – SECURITY

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## CONTENTS:

*Professional resume, pages 1 to 7*

*Personal and Open source projects, page 7*

*First missions of my career, page 8*

*Tables (skills, diplomas, trainings, languages, URLs, emails, hobbies), pages 8 to 9*

## MISSIONS AND RESULTS:

### United Nations International Computing Center, from December 2011 to April 2014:

#### **As SMTP Relays / RDBMS / Open Source Architect for a United Nations organization:**

- ❖ Consulting mission renewed 4 times already (six months periods), made with my self-employed Swiss company: Erios Conseil Sarl.
- ❖ Conception of all the SMTP relays architecture and infrastructure. Recreated from scratch, using Open Source solutions, and integration to commercial and proprietary messaging solutions (Microsoft Exchange 2010/2013, Lotus Domino), integration with Active Directory LDAP. The solution is designed on 3 different data-centers, the new architecture is working in ACTIVE/ACTIVE mode. It can supports a load in the order of magnitude of 3 millions emails a day.
- ❖ Migration of United Nations internal customer organizations from Sendmail to the new Postfix infrastructure. Migration of big and small customers (UNDP, WIPO, WTO, OHCHR, UNHCR, ITU, ITC, IFAD, UNICEF, WFP, ...)
- ❖ Management of Google Postini for anti-spam and anti-virus, management of 70000+ user accounts. Implementation of SPF.
- ❖ Conception and architecture of the associated monitoring solution, based on Open Source technologies (Nagios, Nagvis, Cacti), introduction of the modules of my own Sourceforge Open Source project, the X-Tools ELSE, having and not limited to following features : real time attacks detection, real time parsing of Postfix and Microsoft Exchange Server logs, correlation, reactions against attacks, generation of customer reports, real time statistics. The ELSE is now used by UNICC customers and by UNICC staff at the same time, and its role is qualified of vital and major.
- ❖ Expert about any internal or external attack against messaging systems, pro-active detection and advisor for the different United Nations organizations.
- ❖ **As PostgreSQL 9.x Architect:** design, installation and management of PostgreSQL databases, data volume is around 1.2 Tbytes for the ELSE. OS, Storage, Database tuning. SQL stored procedures coding. Interfaced with JSON (Big data, NoSQL), via PHP, EtxJS.
- ❖ Provided trainings to the ELSE users, and also on practical cases of attacks against messaging systems.
- ❖ Drastically increased the quality of service, and consequently the level of internal staff and customer satisfaction, after the first 6 months. Number of tickets drastically decreased from several tens a day, to something like one or two a week, over two years effort.

- ❖ **Technical environment:** 3 data-centers (2 in Geneva, 1 in New York), 30+ Linux RHEL 5.x and 6.x servers virtualized under HyperV and VmWare Infrastructure, Load balancers BigIP F5, firewalls CheckPoint, Microsoft Exchange Server 2010/2013, Lotus Domino, Sendmail + SmSwitch, Postfix 2.8+, LDAP Active Directory, Google Postini, big Linux RHEL 6.x physical servers for the ELSE, Net-SNMP Read/Write, PostgreSQL 9.2, NoSQL, SAN, Nagios, Nagvis, Cacti, X-Ittools ELSE (<http://sourceforge.net/p/x-itools/wiki/Home/>), HTML, PHP, JSON, ExtJS 4.x, C/C++, shell scripting, Rsyslog 7.x with compression and RELP module.

## **Infitec SA, SUN, Luxembourg, from December 2008 to September 2011:**

**As UNIX / LDAP / Monitoring / Open Source Architect for a 25 employees engineering company, in delegation to SUN Microsystems/Oracle:**

### **European Investment Bank – SUN JES and Open Source Expert:**

**As Open Source Monitoring Solutions Architect (more than 2 years):**

- ❖ Project study to merge all monitoring softwares in use (Centauri, SUNMC, Patrol, Vantage, Omnivision, existing Nagios instances, “home-made” monitoring tools, ...) in only one using latest clustered Open Source like Nagios / Cacti with their plug ins. Project presented to the Direction Committee. Implementation and migration of all existing monitoring solutions on the new Nagios/Cacti based one. Large-scale money savings.
- ❖ Specific creation and coding of monitoring scripts for Nagios, and creation of new templates for Cacti.
- ❖ Description of “the perimeter”: monitoring of both EIB data-centers, monitoring of the EIB remote offices across the world. More than 1000 servers and various devices, more than 13000 monitored services and increasing permanently. Monitored devices are important: clock-in/out devices, printers with their ink levels, Linux servers, Solaris 8 to 10 servers, logical Solaris and Linux servers, virtualized servers, Solaris zones, security devices, VOIP devices and peripherals (Alcatel), Blackberry infrastructure, Windows 2003/2008 servers, global network infrastructure, electricity management devices from Raritan, IPTRADE devices of the trading room, etc. Monitoring of hardware components, of the OS and of all EIB made applications by the creation and coding of a lot of different specific monitoring scripts. Monitoring all Oracle, Sybase, MySQL databases. Specific monitoring for all the special clustered applications made by the bank, as well as for SWIFT.
- ❖ Creation of interactive dashboards at the destination of the different departments of EIB (network maps with real time status, real time SLA statistics dashboards, even made dashboards showing a deeper and deeper view of smaller and smaller elements: from the earth seen from space until any single monitored device in EIB, with the inside details of what is monitored), management of monitoring user profiles with their associated permissions.
- ❖ Made documentation, and validation of the goals and achievements in EIB Direction Committee every quarter.
- ❖ **Technical environment:** Solaris 8 to 10 Sparc and x86\_64, Solaris zones, JES 4, SUN Directory Server 5.2p4 and 6.3, Linux Redhat Enterprise 5.x, Windows server 2003/2008, virtualization, CUPS, SAMBA, Nagios, Nagvis, Cacti, mklivestatus, SNMP, SNMPtrapd, SNMPtt, NSClient++, MySQL, Oracle, Raritan Dominion, VOIP Alcatel, Blackberry, Checkpoint FW, juniper FW, IPTRADE, SWIFT.

**As JES expert, SAMBA, CUPS and Open Source Expert (9 months):**

- ❖ Level 3 maintenance and support for SUN JES products (messaging server, calendar server, ...)
- ❖ Management of all EIB printers (350+ printers), made a CUPS/SAMBA POC, use of CUPS universal drivers, contribution made to CUPS source code. Implement all in production following the POC.
- ❖ **Technical environment:** Solaris 8 to 10 Sparc and x86\_64, JES 4, SUN Directory Server 5.2p4 and 6.3, Linux Redhat Enterprise 5.x, virtualization, CUPS, SAMBA.

### **Crédit Suisse Luxembourg – Monitoring Expert:**

### **As Open Source Monitoring Solutions Expert:**

- ❖ three days mission to update their NAGIOS monitoring solution and add SNMP support

### **ADS-Click, Geneva, from October 2007 to November 2008:**

**As head and manager of UNIX, systems and networks department, in a 40 employees Startup context:**

- ❖ Management of a small team composed of two people
- ❖ First mission: manage all users (around 40 people) and manage company information infrastructure. Provide support. Study, configuration and installation of information services, non-existent at the beginning (all laptops directly connected to the net via an ADSL modem). Main problem is that everybody love this giant space of freedom: no rules!
- ❖ Second mission: manage and maintain production infrastructure, for the company, or for customers. Main company activity is on line advertisement. This infrastructure is composed of DEV, STAGE, PREPROD, and PROD networks and servers. All is entirely based on Linux based servers, for all kind of services (including iptables based firewalls). All applications running under Apache and Tomcat. Implemented all needed monitoring systems (nagios, cacti, snmp).
- ❖ Implemented identity management system, and LDAP based access to all servers.
- ❖ **Technical production environment:** x86 DELL servers or IBM blades with storage on EMC SAN, Linux CentOS 3.x, 4.x, and 5.x, CISCO PIX firewall, iptables under Linux, JAVA with Tomcat 5.0 to 5.5, Load balancer ZEUS or LVS under Linux, DNS Bind, Apache HTTP, MySQL, Postfix, Sun Directory Server 5.2 with Multi-Master Replication, OpenVPN, Raccoon, Xen Virtualisation, Nagios, Cacti + plugins, JIRA
- ❖ **office environment:** x86 DELL servers, Linux CentOS 5.x, heterogeneous user workstations with Mac OS X, Any versions of Linux, Windows XP and Vista, on SAMBA servers. Iptables Firewall under Linux, DNS Bind, Apache HTTP, Tomcat, MySQL, Postfix + Amavis + ClamAV + SpamAssassin + Cyrus-imapd + Horde/IMP, Jabber on LDAP with MSN gateway, Sun Directory Server 5.2 with Multi-Master Replication, Nagios, Cacti + plugins, JIRA

### **SmartWave S.A., Geneva, from January 2005 to September 2007:**

**Important experience mainly in Identity Management, SAMBA, network design and infrastructure, security, mainly on customer side:**

#### **EFG Bank – LDAP expertise**

**As UNIX / Identity management expert:**

- ❖ Installation and configuration of LDAP servers with Multi-Master Replication in DEV and PROD environments
- ❖ SUN Directory Server 6.1 deployment
- ❖ Implementation of SSL LDAP based authentication for Solaris servers
- ❖ **Technical environment:** Solaris 10 Sparc and Solaris 10 zones, SUN Directory Server 6.1, DNS

#### **European Investment Bank (Luxembourg) – SAMBA expertise**

**As UNIX / Open Source / SAMBA expert for SUN Luxembourg:**

- ❖ For a SAMBA POC running on SUN SPARC Solaris 10:
- ❖ Compilation, configuration and installation of SAMBA in a PDC / BDC configuration, with databases running under LDAP Sun One Directory Server 5.2
- ❖ Installation and configuration of ISC BIND DNS in a master-slave configuration under Solaris 10
- ❖ Installation and configuration of ISC DHCPD in a multi-master configuration under Solaris 10, with dynamic DNS automatic updates

- ❖ Implementation of LDAP based authentication for Solaris servers
- ❖ Wrote compilation / installation / configuration / recommended network architectures documents
- ❖ **Technical environment:** Linux RHEL 5.x, Solaris 10 Sparc, ISC DHCPD, ISC BIND, SAMBA, NAS, NT4, LDAP. The goal of this project, successfully realized, was to migrate all 2000 EIB users in the world, on SAMBA, as well as completely redesign EIB network topologies.

### **BROLLIET – Oracle Content Services**

#### **As LINUX expert:**

- ❖ Advices in the installation of Linux systems and servers with Oracle Content Services 10g
- ❖ Diagnostic and expertise regarding potential Linux system oriented problems, in link with OCS 10g

### **SUISSE ATLANTIQUE – NIS to LDAP migration, SAMBA expertise**

#### **As UNIX / LDAP / Open Source / Security expert:**

- ❖ Overview of the existing network and services in order to prepare the migration of user accounts and their other information in a LDAP directory
- ❖ Installation and configuration of LDAP Sun Directory Server 5.2
- ❖ Migration from the NIS environment to LDAP, configuration of all Solaris servers and workstations to be authenticated on the LDAP directory
- ❖ SAMBA compilation and Windows Operating Systems expertise, naming systems, Terminal services. Installation of a SAMBA server running on a LDAP repository, in order to prepare the upcoming migration from the Microsoft server environment to the Open Source world.
- ❖ Migration of user accounts database, migration of windows shares previously on Active Directory and PCLink to SAMBA.
- ❖ Other: network and security expertise, Firewall Checkpoint NG AI expertise, DNS service and messaging systems expertise. Plan migration from Microsoft Office Suite to OpenOffice.
- ❖ **Technical environment:** Active Directory, OS Windows, SUN Solaris 8, 9, 10, LDAP, PCLink, NFS, NIS, SAMBA, DNS, messaging services, OpenOffice

### **REUTERS – LDAP directory monitoring**

#### **As UNIX / LDAP / Open Source RDBMS expert:**

- ❖ **Phase 2:** migration of the monitoring software created in Phase 1 from KSH scripting to a C++ standalone software in order to get much more performances
- ❖ Transferred knowledge to the REUTERS development and support team in Bangkok
- ❖ **Phase 1:** Design and coding of an advanced LDAP monitoring application, interface with existing monitoring applications, data repository on MySQL
- ❖ LDAP expertise on Sun One Directory Server, and DBA with MySQL / PostgreSQL
- ❖ **Technical environment:** LDAP, OpenLDAP SDK, Sun Solaris 9 and 10, MySQL, PostgreSQL, Oracle 10g, Oracle 10g SDK, Bash scripting, NFS, Reuters internal monitoring systems

### **EIF – POC Authentication of Solaris servers on LDAP, Open Source expertise, Ipv6 – From january 2005**

#### **As UNIX / LDAP / Open Source / Security consultant :**

- ❖ Implement UNIX authentication on Sun One Directory Server 5.2 LDAP server

- ❖ Expertise in the implementation of BIND DNS on Solaris 9 and 10 and security of the DNS servers, management of both IPV4 and IPV6 zones.
- ❖ **Technical environment:** LDAP, Sun Solaris all versions, BIND

### **ORANGE – POC Authentication of Solaris and HP-UX servers on LDAP, NIS2LDAP gateway – From January 2005**

As UNIX / LDAP / Open Source / Security consultant:

- ❖ Proof of concept about NIS client and server authentication on LDAP directory across a NIS2LDAP gateway
- ❖ Implement UNIX authentication on Sun One Directory Server 5.2 LDAP server
- ❖ Authentication of Open Source products on LDAP directory
- ❖ Expertise in the implementation of secured LDAP connections, and in the configuration of the corresponding client-server LDAP environment, included the implementation of a CA with certificate management
- ❖ **Technical environment:** LDAP, SUN Solaris all versions, Sudo, OpenSSH, OpenSSL, HP-UX, NIS

### **Swiss Federal Court of Justice – NIS2LDAP authentication – Windows to Samba migration – Network architecture, SQL engineering – From January 2005**

As UNIX / LDAP / Network / Security / RDBMS / Open Source consultant :

- ❖ **Phase 2:** installation and configuration of PostgreSQL and MySQL clustered databases for IDM projects
- ❖ Advisor on Apache web server and Nagios monitoring solutions
- ❖ Installation and configuration of BIND DNS on Solaris 10 master and slave servers
- ❖ Installation and configuration of ISC DHCPD on Solaris 10 master and slave servers, including dynamic DNS update
- ❖ Implemented LDAP based authentication for Solaris servers
- ❖ **Phase 1:** To replace NIS based UNIX authentication, implement Unix users authentication on LDAP Directory, across a NIS2LDAP gateway
- ❖ Expertise and technical support for the Unix operation and administration team for the management of the Identity management infrastructure
- ❖ Project extended to allow a single and centralized authentication of windows based computers and users, over SAMBA across LDAP Directory
- ❖ Global expertise on customer network to be implemented in order to centralize all the authentications of the different environments on LDAP Directory. Audit.
- ❖ **Technical environment:** Solaris 10 Sparc, PostgreSQL, MySQL, Apache 2, NAGIOS, LDAP, Sun Solaris, VMS, SAMBA, réseau, ISC BIND, ISC DHCPD, Windows toutes versions, firewalls CHECKPOINT, NIS, NFS

### **NOVARTIS PHARMA – GAAS project (Global authentication & authorization Services) – From Janvier 2005**

As UNIX / LDAP consultant:

- ❖ Implement UNIX authentication on Sun One Directory Server 5.2 LDAP server, in GAAS project
- ❖ **Technical environment:** LDAP, Linux, SUN Solaris, IRIX, AIX

## **GIVAUDAN – AIX users Authentication on LDAP enterprise Directory - From December 2004**

### **As UNIX / LDAP consultant:**

- ❖ Proof of concept for AIX users Authentication on LDAP enterprise Directory.
- ❖ Expertise and technical support for the Unix operation and administration team for the management of the Identity management infrastructure
- ❖ Authentication via plug-in pass through from Microsoft (Kerberos)
- ❖ Provided advices for SAMBA
- ❖ **Technical environment** : LDAP Sun one Directory server 5.2, AIX, SAMBA
- ❖ Other: reseller for Damarys Archive Solution

## **HEI – SAMBA Authencation on LDAP directory – December 2004 to January 2005**

### **As UNIX / LDAP consultant:**

- ❖ Implement Samba users (windows XP and Solaris users Unix) authentication on LDAP
- ❖ **Technical environment** : LDAP Sun one Directory server 5.2, SAMBA, Solaris, Windows XP

## **Dimension Data, Lausanne (from February 2003 to end of 2004) :**

### **As SOC (Security Operating Center) engineer, in a company of 40+ employees:**

- ❖ Work nights and days in a security operating center.
- ❖ Management of security devices in all the world on a 24 hours basis under Microsoft and UNIX environment
- ❖ Design and coding of solutions in order to improve the way information flows are processed (with the X-Ittools project)
- ❖ **Technical environment:** Nokia Ip series, Sun Solaris all versions, Linux, Checkpoint 4.1 to NG AI R55, Netcool, Cisco PIX and routers, Ticketing systems (Siebel)

## **PSINet Datacenter Switzerland, Geneva (from October 2000 to end January 2003):**

### **As UNIX engineer, Linux expert for a worldwide chain of data centers, more than 800 employees:**

- ❖ Design, deployment, administration and maintenance of ISP projects, and of networks of UNIX/Linux computers.
- ❖ Management of the PSINet most important banking project (5 racks, 40 servers, complex and highly secure architecture).
- ❖ Management of the PSINet most important Oracle centric project.
- ❖ Responsible for computers and networks security, intrusion (IDS) and management of security oriented projects.
- ❖ Design and coding of solutions on Open Source based products (for example: X-Ittools, see below).
- ❖ Consultant about OS and Network topologies for the customers, and organization of trainings.
- ❖ Trainer for PSINet engineers, on Linux oriented and security oriented subjects.
- ❖ Took the responsibility of 80% of the datacenter (because 80% of it were UNIX/LINUX boxes) during the last year
- ❖ **Technical environment:** Sun Solaris all versions, Veritas file systems and volumes, Big Ip F5 load balancer, Radware load balancer, Linux (Intel / Alpha based), Radguard / Nokia VPN, Checkpoint /

Gauntlet firewalls, RealSecure IDS, Bind DNS all versions, Apache, Snort, Iptables, Ipchains, Tripwire, Sendmail, Qmail, Postfix, Mailman, Web technologies, C/C++, Javascript..., Micromuse, Remedy products

### **ACDM Concept, Nancy (France) (From 1999 to September 2000):**

**As Linux / Security expert in a small company of 20 employees:**

- ❖ Expert in the design and management of remote services solutions, based on web technologies under Linux (Cyberviseur EDF project). Project manager.
- ❖ Integration in an environment of remote management.
- ❖ Integration in a heterogeneous network (UNIX / Linux / MS Windows all versions).
- ❖ System and network administrator: introduction of computers in the company, deployment of X-Ittools in order to give shared and collaborative tools to employees, training of the users on Microsoft products.
- ❖ Design and deployment of the security policy, definition and deployment of the firewalls, training of the users to this security policy.
- ❖ **Technical environment:** Linux (Intel based), SCO UNIX, Microsoft Windows NT 4.0, Windows 95/98, Apache, Bind, Sendmail, PostgreSQL, Microsoft SQL server 7.0, Netscape Calendar Server, Netscape Directory Server 4, C/C++, HTML, Javascript, Java, Macromedia Dreamweaver, Fireworks

### **DECAN, Grenoble (France) (From September 1997 to end of 1998):**

**As developer and system / network administrator:**

- ❖ Involved on various missions, mainly on Hyperviseur EDF project, and system / network / messaging administrator of the Grenoble premises information systems.
- ❖ **Technical environment:** HP-UX, Microsoft Windows NT 4.0, Microsoft Exchange 5.5, SQL Server, Visual C++

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## **PERSONAL PROJECTS:**

### **Smartwave SA, Geneva (2001 to 2004):**

**As networking solutions / Open Source security consultant (freelance activity):**

- ❖ Expert for the design, the deployment and the management of Smartwave SA public networks (SMTP relay, firewalls, web servers, DNS, Databases, X-Ittools, administration tools, etc...).
- ❖ Case study, definition of the topologies, design of the security policy.
- ❖ Deployment of a complete anti-virus and anti-spam messaging solution under Linux, as well as iptables based firewalls, Apache web servers, DNS, X-Ittools, ...
- ❖ Remote management of the complete network and information infrastructure.
- ❖ **Technical environment:** Linux (CentOS and Fedora core), ADSL Gateway, Iptables Firewalls, SNORT intrusion detection system, Integration in a Microsoft based environment, Apache, Cocoon, Bind DNS, Sendmail, FTP servers, PostgreSQL, MySQL servers, Postfix, ClamAV, Spamassassin, Razor, DCC, ...

### **Projects for the Open Source community (since 1998):**

**X-Ittools:** <https://sourceforge.net/p/x-itools/wiki/Home/>

About my freelance projects and as a proactive member of the Linux community: design and coding of the X-Ittools product under GPL license. The purpose is to offer to the Linux Community a collaboration suite including a shared agenda, a shared contacts manager, a visitor's and badge's manager, a knowledge base, an

extended job and task manager, a holiday manager, an incoming and outgoing phone calls manager, a password generator and manager, a network monitoring tool, and much more...

X-Tools E-mail management module (log analysis) initiated in 2004 with Web 1.0 technologies (private SVN server).

**X-Tools development restarted since 2011, on the basis of a unique module: E-mail management module (log analysis).** It is now based on web 2.0 technologies (ExtJS 4.1) and has been restarted because of a particular interest given to it by a world wide Non Profit Organization (UN). Module renamed "X-Tools E-LSE", for "**X-Tools E-mail Log Search Engine**". Some features: Log analysis and correlation of Postfix and Exchange servers, statistics, policy manager, in-deep analysis, automated network graphs for e-mail tracing, CSV export... The Swiss knife of Messaging Admins!

**Technical environment:** Linux RHEL 6.x / CentoOS 6.x, LDAP (Open LDAP), Apache, ExtJS framework, Postfix, Postgrey, PostgreSQL 9.x, NoSQL, PHP, JSON, Rsyslog 7.x + RELP, GCC

### **OTHER OLDER MISSIONS:**

- ❖ Planning and management of system migrations, Microsoft on Linux for example.
- ❖ Integrations in heterogeneous environment (Windows, Linux).
- ❖ Case study, development, test, installation and management of global Intranet/Extranet systems (across a partnership with CRITT).
- ❖ Installation of complete messaging systems on Linux platform.
- ❖ Project manager, analysis and recommendation of network architectures, procedures and security policies.
- ❖ Trainer for Microsoft products (Word, Excel, Outlook...), for Linux products, for X-Tools, for computer and network security, teacher in primary and secondary schools (when I was something like 16 years old).
- ❖ Technical support for professionals and home users.

### **COMPUTER RELATED SKILLS:**

<i>Programming languages</i>	C, C++, Motorola assembly language, ExtJS, PHP, Java (a little), Java Script (a little), shell scripts, PERL (a little)
<i>Hardware</i>	PC, industrial PC, Terminals, IBM, Compaq and HP Intel based servers, StorageTek storage robots, Cisco switches, F5 Load balancers, Radguard and Nokia VPN, Checkpoint and Gauntlet firewalls
<i>Operating Systems</i>	Linux (RedHat, RHEL 5.x/6.x, Fedora, Suse, Mandriva, CentOS 5.x/6.x, ...), Sun Solaris 6 to 10, Windows NT, XP, 2000, 98, Me
<i>Groupware</i>	X-Tools, Horde / IMP, Zimbra, Oracle Content Services, SUN JES 4, 5
<i>Network &amp; Monitoring</i>	Heterogeneous network, wireless network, LAN, WAN, ISP networks, bank networks, network security, Netcool monitoring, Nagios / Nagvis / Cacti / RRDtool / SNMP monitoring
<i>Messaging systems</i>	MS Mail, MS Exchange 5.x, "webmail" based, Sendmail, Postfix, ClamAV, Amavis, Qmail, Hylafax, Zimbra, Horde/IMP
<i>Applications</i>	MS Office (Word, Excel, Powerpoint, Outlook), StarOffice, OpenOffice, LibreOffice
<i>Internet - Intranet</i>	HTML, ExtJS 4.x, Javascript, Java, CGI coding, Apache, Tomcat, Cocoon, Dreamweaver, Fireworks, all standard daemons (DHCP, DNS, FTP, SMTP, SNMP, POP3, IMAP4, ...) and secured ones (SSH, OpenSSL, HTTPS, FTPS, ...)
<i>Databases &amp; LDAP</i>	PostgreSQL (from 7 to 9.3), MySQL, MS Access, MS SQL, Oracle, Sun One Directory Server 5.2, OpenLDAP
<i>Security</i>	IDS, Firewalls (Iptables, Checkpoint, Cisco PIX, ...), OS Hardening, training of the users, security policies, signature systems (Samhain), VPNs, Snort, SpamAssassin, ClamAV,



	Amavis, ...
<i>Virtualization Remote control</i>	Vmware, VNC server and client
<i>Backup</i>	Arkeia backup solutions

## **DIPLOMAS AND TRAININGS:**

<i>Diplomas</i>	2000: IFG (French Management Institute) training: project management 1996: Brevet de Technicien Supérieur en informatique industrielle 1994: Baccalauréat technologique F3 (électrotechnique)
<i>Trainings</i>	<b>10/2014 : RedHat Training RH200</b> <b>02/2014 : Advanced PostgreSQL Administration 9.3</b> <b>12/2013 : Introduction to PostgreSQL Administration 9.3</b> ITIL v2/v3 foundation (Feb. 2009) BigIp Load balancers RadGuard VPNs Solaris SA-238 and SA-288 Checkpoint NG FP3
<i>Certifications</i>	<b>17/10/2014 : « RedHat Certified System Administrator » (RHCSA)</b> <b>10/02/2014 : « Postgres Plus 9 Associate »</b>

## **LANGUAGES:**

<i>French</i>	Mother tongue
<i>English</i>	Working language

## **SOME WEB SITES OR OTHER URLS :**

<i>My Sourceforge project</i>	<a href="http://sourceforge.net/p/x-itools/wiki/Home/">http://sourceforge.net/p/x-itools/wiki/Home/</a>
<i>My blog (new, and mainly in french)</i>	<a href="http://blog.erios.org">http://blog.erios.org</a>
<i>ERIOS CONSEIL web site</i>	<a href="http://www.erios.ch">http://www.erios.ch</a>
<i>LinkedIn</i>	<a href="http://www.linkedin.com/in/nicolashahn">http://www.linkedin.com/in/nicolashahn</a>
<i>My emails</i>	<a href="mailto:hahnn@erios.org">hahnn@erios.org</a> ( <a href="mailto:hahnn@erios.ch">hahnn@erios.ch</a> , <a href="mailto:hahnn@erios.eu">hahnn@erios.eu</a> ) <a href="mailto:hahnn@x-itools.com">hahnn@x-itools.com</a> <a href="mailto:n_hahn@yahoo.com">n_hahn@yahoo.com</a> (in case anything above have an issue)

## **SOME OF MY HOBBIES:**

- ❖ Pianist
- ❖ Computer related pictures, 2D, 3D, raytracing
- ❖ Home theaters designer and installer
- ❖ Trading of binary options

❖ Sustainable development