

Network engineer Devops

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Skills and abilities

Network	<p>Excellent knowledge of IP networks. Important experience of day-to-day network management. Good knowledge of security best practices.</p> <ul style="list-style-type: none">• Ethernet. IPv4, IPv6 and upper layers.• Redundancy and high availability.• Routing protocols like OSPF, BGP and PIM-SM.• VPN IPsec, L2TP/IPsec, PKI.• Wireless networks.• Cisco (6500, 7200, CSS). Nortel (55x0, 8610), Radware (Alteon), F5 (BigIP LTM et GTM), Spirent (Avalanche), Juniper (EX, SRX, ISG), Extreme (Black Diamond). Linux (Netfilter, Quagga, Keepalived, tc).
Programming	<p>Two favourite languages: C and Python.</p> <ul style="list-style-type: none">• C, Objective-C, Java.• Python (Twisted), Perl, shell.• Javascript (JSON, Ajax, jQuery), HTML, CSS.• SQL (MySQL and PostgreSQL).• Software configuration management using Git, SVN and CVS.
System	<p>GNU/Linux expert.</p> <ul style="list-style-type: none">• Debian and RHEL distributions.• Centralized configuration management with CFEngine or Puppet.• Virtualization: Xen, KVM, VirtualBox, LXC, VServers.• Applications: OpenLDAP, Apache, nginx, Postfix, Dovecot (POP+IMAP), OpenSSH, PostgreSQL, MySQL, Bind (DNS), FreeRadius, Squid, Zabbix and many others.
Misc	<ul style="list-style-type: none">• ITIL certification (ITIL® version 3 Foundation)• French (native)• English (fluent, including technical)• German (basic)

Experience

Since 2008	Orange Portails Network engineer <p>Member of the network team in the entity hosting the Orange web portal. Orange is the leading telecom and Internet operator in France. Three datacenters. Multi-layer redundancy. Heterogenous environment. Some achievements:</p> <ul style="list-style-type: none">• Many VPN setups including redundant IPsec VPN using BGP for communication between datacenters as well as L2TP/IPsec VPN for roadwarrior access.• Development of numerous tools to help day-to-day management like a layer-2 network cartography tool.• Maintenance and development of various needed Linux software components. Monitoring.• Network architecture evolutions. For example, setup of IPv6 or design of new routing solutions.
2006 — 2008	Wallix System and network engineer <p>Wallix is a French security editor. IT consultant. Product development. Pre-sales engineering. Some achievements:</p> <ul style="list-style-type: none">• Log concentrator and analyzer Wallix Logbox. Conception and development of the second version. Modular architecture. Support of most logging solutions.• Monitoring with Zabbix. Adaptation and installation of the solution for an important client in real estate industry.• Access control through a mandatory server for equipment administration with Wallix Adminbastion. RDP protocol implementation (client and server).

2006	DSI - ÉNS de Cachan	System and network administrator	Head of network. Responsable réseau à l' École Normale Supérieure de Cachan . CISO. Administration of a NEC TX 7 supercomputer.
2001 — 2006	CRANS - ÉNS de Cachan	System and network administrator	Technical advisor at CRANS , a non-profit organization managing the student network at École Normale Supérieure de Cachan . <ul style="list-style-type: none"> • Network management. • Large wireless network roll-out based on OpenWRT. • IP television service roll-out.
2002 — 2006	Computer science department - ÉNS de Cachan	Teaching assistant	C++, C. Network programming. Compilation and static analysis.

Personnel projects

Since 2009	GNU/Linux Magazine France	Auhor	Occasional author. <ul style="list-style-type: none"> • « Python et le C » (Python and C), Novembre 2010 • « La séparation de privilèges en C » (privilege separation with C), Septembre 2009 • « Python et le réseau » (Python and network) Janvier 2009
Since 2007	Opensource projects	Developer	Various opensource projects available on GitHub . Mostly C or Python. A few examples: <ul style="list-style-type: none"> • lldpd, a 802.1ab daemon with SNMP support. • Wiremaps, a layer-2 network discovery application. • snimpy, an interactive SNMP tool with Python. • Keepalived, healthchecking and high-availability (VRRP).
Since 2007	Debian	Developer	Official maintainer of various packages in Debian GNU/Linux distribution.

Education

2002 — 2006	LSV - ÉNS de Cachan	PhD in computer science	Intruder theories for the verification of cryptographic protocols . With highest honors.
2001 — 2002	ÉNS de Cachan / Université Paris VII	Master's degree in computer science	Vérification. Cryptography. Automata. Complexity. With highest honors.