

# ARCHITECT/ENGINEER NETWORK DATACENTER



♦ High level technical expertise ♦ Looking for technological challenges
 ♦ Curious, great aptitude to learn ♦ Freelance

## **EDUCATION**

2006 : **Ph.D.** in nanotechnology (CNRS – passed with highest honours).

2003 : Master's degree I in geology (University Joseph Fourier of Grenoble, with honours).

1995: Master's degree II in computer science (CNAM, University of Montpellier II, with honours).

1994 : **Master's degree II** in microbiology (University of Montpellier II, with honours).

**Engineer in Agronomy** from National Agronomy School of Montpellier.

1989 : Baccalauréat **F7** in biological science, option biochemistry (with honours).

1<sup>er</sup> Price in Olympic National Chemistry, 1<sup>er</sup> Price in National Competition in Biochemistry.

#### **HIGHLIGHTS**

- ♦ Broad range of technical and scientific training (Ph.D/Engineer degree), resulting in a significant openmindedness and real analytical capabilities. CCNP/CCDP.
- ♦ Strong technical background in Network and Security, acquired during ten years of experience.
- ♦ Natural aptitude in knowledge transfer and scientific/technical writing.

#### LASTEST WORK EXPERIENCE

Defence & Space, creation of a securized communication infrastructure for a integrated border security system, Paris (1 year and 5 months).

#### **Architecture**

- IP addressing plan for all different kinds of subnets (data, interconnection, administration).
- Design of the Joint Operations Center (JOC) Datacenter, with Cisco Catalyst 6500 in VSS mode and Cisco Nexus 5000 in vPC mode.
- Design of the Quality of Service (QoS).
- Writing of the Low Level Design (LLD) document.

#### **Engineering**

- Technical lead for the integration, securitization and optimization of a global prototype (with all different types of LAN sites).
- Engineering of multicast routing for the forwarding of the video flows: IGMP, IGMP snooping, PIM dense mode (Stub), PIM sparse mode, MSDP (anycast).
- Engineering of the Quality of Service (all Cisco platforms, scheduling, queueing, shaping, policing, marking, congestion management).
- Technical lead for the follow-up and resolution of technical nonconformity (NC).
- Writing of tests sheets, technical support during the acceptance tests.

<u>Environment</u>: Cisco Nexus (5548, 2248) and Catalyst (6506, 4506, 4503, 3750X, 2960S/G), Cisco ASA (5520, 5540, 5585, AIP-SSM/SSP), Cisco ISR (3945), Cisco ASR (1004), TCP/IP, STP, etherchannel, VSS, vPC, FEX, HSRP, EIGRP, BFD, PIM dense/sparse mode, MSDP (anycast), SNMP v2, encryptor Crypto AG HC 7825/7845, unidirectional diode device.

## **EXPERIENCE**

05/2012: IBM Global Services, IT Datacenter Specialist, Lille (1 year and 4 months)

02/2011 Architecture

- Consulting during the writing of the HLD (urbanization, interconnection with the existing network, design of the OOB network, design of a frame capture network).
- Lead redactor for the writing of the LLD: production network, non-production network, administration and backup network, OOB network, LAN campus, interconnection with existing MAN/WAN, access control (AAA), frame capture.
- Technical animation during client workshops.

## **Engineering**

- Leader for the implementation of prototype in final configuration: Cisco Nexus 7000, 5000, 2000, Cisco Catalyst 6500 to 4500, service module Cisco ACE and Cisco NAM.
- Implementation of AAA access control: Cisco ACE 5.2, TACACS+ (authentication, authorization per shell profiles and command sets, accounting of commands) and RADIUS (authentication, authorization per VSA attributs, accounting).
- Field qualification of the prototype: writing of the tests procedures, running of the tests with the final client, implementation of changes and optimization.
- Writing of technical procedures for exploitation team. Knowledge transfer to IBM team, final client, exploitation team.

<u>Environment</u>: Cisco Nexus (7010, 5010, 2248) and Catalyst (6504, 4507, 3750X, 2960S, 2960), LAN Datacenter/Campus, TCP/IP, spanning-tree, flex-link, etherchannel, SSO, vPC, VDC, FEX, HSRP, OSPF multi-area, VRF-lite, load-balancing (Cisco ACE 20, One-Arm L3, multi-contexts), Cisco ACS 5.2 (AAA radius/tacacs+), frames capture (SPAN/RSPAN/ERSPAN Cisco NAM-2), Netflow, SNMP v3/v2c, Gigastor/Observer.

12/2010 : **Group AG2R/La Mondiale**, DSI, Chartres (4 years)

## 01/2007 Network Architect/Engineer

- Technical leadership (design, implementation and support) for massive 802.1x deployment on all sites: authentication of workstations, printers (MAB), IP phones with dynamic assignment of data and voice vlan, enforcement.
- Design and implementation of a campus site in Lille. 5 buildings, 800 users.
- Design, implementation and optimisation of a metropolitan area network (MAN) in Paris with high availability. VRF lite, OSPF multi-area, redundant inter-VRF routing.
- Writing of technical documents: architecture design, technical specifications, migration plan, prototyping reports. 3<sup>nd</sup> level Network Support.
- Team training in routing & switching.

## **Security Engineer**

- Design and implementation of a high availability security platform (Cisco ASA in A/A mode, multi-context, asymmetric routing) for the messaging system (8500 mailbox).
- Technical expertise on a VPN security platform. Filtering, installation of site-to-site (L2L) VPN extranet/internet and client-to-LAN (C2L) VPN (IPSEC and SSL portal).
- 3<sup>nd</sup> level support for the group's Internet platform (6000 users).
- Prototyping of a NAC solution for LAN and VPN access (Cisco NAC/Macfee PE).

<u>Environment</u>: Cisco, LAN/MAN/WAN, TCP/IP, switching, spanning-tree, etherchannel, 802.1x, DHCP snooping, DHCP, DAI, IP source guard, POE, HSRP, advanced routing, OSPF multi-area, VRF-lite, IP SLA, firewall ASA/PIX/Checkpoint, large ACL management, Cisco ACS 4.1 (radius/tacacs), VPN IPSEC, ToIP (Avaya, Alcatel), virtualization.

#### EXPERIENCE

12/2006 : CNRS (National Center for Scientific Research), Orléans (3 years and 3 months)

10/2003 **Ph.D.** (nanotechnology/ precambrian micropaleontology)

- Advanced imaging techniques (AFM, MEB, TEM, FIB, Raman, SXM, Optical).
- Presentation of work in front of international audiences during workshops.
- Publications in peer-review journals (Organic Geochemistry, Surface Science).
- Stanley L. Miller Award for outstanding contributions to origins of life research.

08/2002: **Hewlett-Packard**, Grenoble (1 year and 3 months)

06/2001 Network engineer

- 2<sup>nd</sup> network support in operational and international environment (HP EMEA network, business partners and outsourcing customers).
- Network security (firewall PIX, Nokia, Checkpoint).
- Writing of technical documents and incidents reports.

<u>Environment</u>: Routers Cisco (760 to 7500), switchs (Cisco, HP), firewall Cisco PIX (506 to 535), Nokia (IP440 to IP650) and Checkpoint, ARS Remedy, HP-UX.

05/2001: **Geoman.Net**, Quimper (1 year and 2 months)

04/2000 Webmaster

- Design and implementation of two outreach Internet website.
- Scientific writer: writing of scientific articles and documents.

**Environment**: NT4 Server and Workstation, LAN, Internet.

03/2000: **BNP Paribas**, Paris (3 years and 1 month)

03/1997 Systems engineer

- Design, validation and deployment of software packages with incidents follow-up and resolution. Writing of technical reference documents.
- System administration, management of the antivirus solution. 2<sup>nd</sup> level support.
   Development of various automation scripts (VBS, Perl, SQL).

Environment: NT4 Server and Workstation, SMS, InstallShield, Macfee.

12/1996: Airbase of Nancy-Ochey, fighting squadron 2/3 Champagne (1 year and 2 months)

11/1995 **Military Officer** (computer specialist)

Systems and Network administration. Design of databases.

Environment: Netware, Windows 95, Access.

#### Personal interests

Languages: English, French (native).

Hobbies: Creative writing, gemmology, scientific outreach, movies.

Traveling: Patagonia (Chile/Argentina), Atacama (Chile/Bolivia), Tanzania (Kilimandjaro), Indonesia,

Iceland, Reunion isle, Sahara, Oman, Sicily, Finland, Scotland, South Africa, United Arab

Emirates, Guyana, United States. Desert exploration and Andinism.