

29 years old  
Maried  
One child  
Driving licence

Guillaume BARROT

## Network and Security Architect

Datacenter and Virtualisation Expert

Datacenter Interconnects and Disaster Recovery Expert

**ENSAM 2005**

**Fluent in English  
(TOEIC = 925)**

### Formations :

- March 2011 : **VMware** vSphere 4.0 (VCIM)
- February 2011 : Cisco Datacenter **DCNI2** (Nexus)
- July 2009 : "**Implementing Cisco MPLS**"
- May 2009 : **CCIE-SP** certification pending (Written exam passed with a score of 951)
- September 2006 : **Cisco ICND** Formation
- Septembre 2005 : **HP-UX administration** Formation

### Scholar formation :

- 2002 – 2005 : **BCEE/BSCS** at ENSAM / specialization in Virtual Reality and Parallel Computing
- 1999 – 2002 : Orsay, Blaise Pascal high school, engineer school preparatory classes
- 1999 : Scientist bachelor degree, cum laude

## Skills

■■■ Regular practice in professional context
■■■ Occasionnal practice in professional context
■■□ Regular practice in lab environnement, increasing competences
■□□ Theorical knowledges, increasing competences

# Datacenter and Virtualisation

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## Design

### ■■■ Datacenter design

- Cisco Datacenter (65xx, 45xx, Nexus 7k et 5k)
- networking virtualisation : VDC (Nexus), VRF/VRF-Lite, Vdom, Vsys
- Remote Access : VPN-T ASA 55xx, Juniper, Fortinet
- Load Balancing : ACE, Alteon, F5
- Automatisation (PHP/Pearl, outils HP, Cisco)

### ■■■ Campus design

- Fast Convergence (tunning OSPF/ISIS)
  - intégration ToIP (LLDP, vlan trunking, QoS)
  - WiFi
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## Protocols

- IPv4
  - IPv6
  - OSPF, IS-IS, RIP, IGRP, EIGRP
  - Multicast (IGMP, PIM-SM, PIM-SSM, PIM Bidir)
  - QoS (DiffServe, RSVP)
  - Stockage SAN, FCoE
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## Hypervisors

- VMware Vcenter/ESX
- KVM
- XEN

## Guest OS

- Windows
- Linux (Fedora, Ubuntu server)
- Linux (Gentoo)
- BSD

## Applications

- Apache
  - Bind / DHCPd
  - Samba
  - IIS
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# ***Datacenter InterConnect et Disaster Recovery***

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## **Design**

### ■■■ Datacenter InterConnect

- BGP, MP-BGP
- MPLS, L3VPN
- VPLS, L2VPN
- Gamme Cisco Backbone (6k, 7k, Nexus 7k, ASR1K et 9K, CRS)
- Gamme Juniper Backbone (MX Series, T Series)
- L2TP, PPP
- FR, ATM, POS
- GSM, 3GPP

### ■■■ Disaster Recovery

- Anycast
  - GSLB
  - L2VPN / Vlan étendu
  - Automatisation
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## **Protocols**

- Dual Stacking IPv4/v6
  - IPv6 tunneling (6to4, 6to4RD, 6PE, 6VPE)
  - IPv4 tunneling over IPv6 (DS-Lite)
  - Multicast over MPLS (mVRF, mVPN)
  - IPv4 exhaustion (DS-Lite, CGN, Nat444)
  - MPLS (I3 VPN, Traffic Engineering)
  - QoS (DiffServe, RSVP)
  - MPLS (I2 VPN, VPLS, ATOM)
  - L2TP, PPP
  - FR, ATM, POS
  - GSM, 3GPP
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## PROFESSIONAL EXPERIENCES

### BOUYGUES TELECOM

Velizy

From October 2008

Nationwide Cellular phone operator, and Internet Service Provider / fixed phone operator

**Network and Security Architect. Datacenter Expert**

#### Missions:

- **Audit**
- **Optimization**
- **Process Optimization**
- **Architecture**

#### Main realisations:

- **Campus:** new corporate HQ (3000 users, ToIP, Multicast video, Wifi et 802.1X).
- **Datacenter:** New Green-IT Datacenter. Cisco VSS architecture, and draft of the architecture with Cisco Nexus. Introduction of a service oriented architecture (Cisco 6500 with FWSM and ACE, iBGP, IPv6 ready)
- **DMZ "next gen"** : new security architecture based on Cisco 6500, ACE card and Juniper ISG2000.
- **Backbone MPLS:** Migration of the internal IT backbone on MPLS VPN (Cisco based) with multicast support (mVRF). Introduction of Traffic Engineering and VPLS
- **Cloud Computing:** Study of the necessary evolution of internal tools and process, linked with the introduction of virtualisation technologies (VMWare ESX, XEN, KVM), upgrade of the existing architecture, anticipating the migration on internal Cloud, and private cloud for external clients.

### OBS/NIS

Guyancourt

July 2007 – September 2008

OBS/NIS (Orange Business Services / Network Integration Services) a France Telecom trademark.

**Pre-sale, integration & support: LAN, WAN, Wireless, Security engineer  
Project Team Leader. Trainer.**

#### Main realizations:

- **Caisse d Epargne** : Design (3 x Datacenter, Datacenter Interconnect backbone), deployment (lab & integration), documents and formations
- **DGAC** : Design (highly critical LAN & WLAN for the Airport of Orly), MAN interconnexion, deployment (lab & integration), documents and formations
- **AG2R** : Cisco Works (LMS) deployment and formation
- **EGIS** : Audit & Troubleshooting of the former LAN Network. Global design of the Corporate HQ (LAN, WLAN). Deployment, documents and formation.
- **Crédit Logement** : Design and deployment of a highly secured LAN (802.1x, dynamic firewall rules, WIFI, Secured ToIP etc.)

<b>DATAVANCE</b> May 2006 – July 2007	<b>TDF</b> Montigny le Bretonneux  June 2007	<b>Routers migration technical leader</b>
	<b>NOKIA</b> Saint Ouen  March – April 2007	<b>Level2/3 support engineer</b>
	<b>PSA</b> Achères, Poissy factory  September 2005 – January 2007  Achères Datacenter: over 800 switches, 20000 users, 250Km of optical fibers, 45000 connection points.	<b>Network administrator</b>  <b>In charge of the network of PSA main datacenter in Achères (+2000 servers, 80 C-class network, 8 DMZ, 80 switches/routers with redundant architecture and load-sharing/load-balancing)</b>
<b>BEIJAFLORE</b> September 2005-April 2006		

### **INTERNSHIP**

**End of studies Project**  
**Chalon/Saône**  
Institut Image

6 months  
February to June 2005

**Software development engineer**

**R&D for an interactive « virtual cockpit » software**

## Special Skills

### Langage :

- English: **TOEIC = 925**. London University Exam : « Level 3 », « Level 4» passed
- Three year of advanced English (High School)

	<b>English</b>		<b>German</b>
Read	★★★★	Read	★☆☆☆
Written	★★★★	Written	★☆☆☆
Spoken	★★★☆☆	Spoken	★☆☆☆

### Miscellaneous :

- *Sport* : Basket, natation, streching, snow board, kendo
- *Computer science* : Security, Graphics, Web Design, Massively multiplayer game
- *Hobbies* : Cooking, Drawing and reading, Cinema with friends