# Romain Boissat | Network Engineer

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Router# sh running-config | section ip engineer rboissat description "\sqrt{BGP}, IPv6 and KISS"

## **Experience**

**OVH** 

Vocational

Backbone Network engineer

**Roubaix, France** 05/2016 - 09/2016

Key projects and tasks, mostly with peer review:

- Backbone network upgrade project
  - Enabling BGP optimizations on all route-reflector routers: Route Selective Download, slow peer detection.
  - Building the fiscal year budget for backbone operation and growth (hardware, optical modules, PoP).
  - Planning operations according to the budget, including internal and external logistic challenges.
- NOC & Backbone operations
  - Backbone links turn up and troubleshooting, involving traffic isolation and rerouting.
  - Routing optimizations to keep the best quality/capacity ratio.

Keywords: BGP, Cisco ASR 9k, IOS-XR RPL, Cisco Nexus 7k, on-a-stick architecture, LACP + ECMP.

TRINAPS SAS Belfort, France

Network Engineer

2011–2016

Principal engineer, working on backbone, border, customer access and server access networks and on the system infrastructure (OS, services management, virtualization, storage) in a regional ISP operator.

Key projects (design, lab testing, operation, documentation):

- Operator backbone network
  - Nation-wide ring backbone network based on Cisco REP (Resilient Ethernet Protocol);
  - Dual stack IP network using OSPFv2/v3 with route redistribution into iBGP;
  - ExaBGP deployment to enable anycast reachability for critical ISP services (DNS, SMTP NTP).

Keywords: Cisco ME3400E, REP, route redistribution, OSPF, RFC 6598, RFC 3021, IPv6.

- BGP border network: from stub AS to multihomed AS with GIX presence
  - External and Internal routing policy design and RIPE DB maintenance;
  - Peering management: about forty eBGP peerings (50% of ingress and egress traffic through peering);
  - Management of peeringdb, radar by Qrator, BGPMon and Andrisoft WANSight (Flexible Netflow collector).

Cisco NPE-G2, prefix/as-path lists, peer-session/peer-policy templates, RPSL, looking glass.

- M3V Infrastructure: Monitoring, Metrology, Management, VPN
  - Secure and mobility-ready management of the whole network and system infrastructure (IPv4 and IPv6);
  - Isolation of private addresses (RFC 1918) from the global routing table;
  - Virtual machines: Icinga (monitoring), Observium (SNMP metrology + central syslog) and admin VPN.

Keywords: Cisco ME3400E, VRF-lite+GRE+OSPFv2, Quagga, Proxmox VE, OpenVPN, IPv6, Serial OOB.

 Multiple secondary missions: System architecture (virtualization cluster and storage units), contribution to design and validation of backhaul architectures (DSL, Ethernet, Public Fibre networks), HR technical interviews and strong involvement in most company matters in a small business environment.

**Technical environnement:** Cisco (ASR1k, NPE-G1/G2, ISR G2, ME3400E, Catalyst, SG300), Juniper (SSG, SRX), IP services (ISC Bind9, Knot, Unbound, rsyslog, ferm/ufw, ISC dhcpd), Debian GNU/Linux, Proxmox VE, Ansible, Icinga, Observium, Rancid, iSCSI, NFS.

Internships.....

TRINAPS SAS Belfort. France

Final Internship. 2011

IPv6 expertise, allocation and addressing scheme, testing, hardware compliance and operational IPv6 World Day.

2009

Intermediate Internship.

GNU/Linux expertise, Python development and system and security audit for the OECD.

#### Education

University of Technology of Belfort-Montbéliard

Belfort, France

Engineering degree in Computer Science, Emphasis on Networking and Telco.

2012

Services, Networks and Communication

Saint-Raphaël, France

Technical degree, Obtained with honors.

2008

#### **Technical skills and interests**

Network protocols: Comprehensive OSI/TCP-IP knowledge and great troubleshooting and audit skills. Extensive IPv6 knowledge. GNU/Linux networking expertise (netfilter, quagga, iproute2, misc. utilities). Good skills of protocol or configuration experimental evaluation. Good theoretical basics of MPLS/MP-BGP architectures and associated protocols and basic knowledge of MPLS enabled services. Recent interest in Carrier Ethernet (EVC), PBB/EVPN and resulting services (E-LAN, E-LINE, E-TREE).

Network hardware: Eight year of IOS experience, first on switching then on routing, one year on IOS-XE and JunOS (SRX and vSRX) and several months on IOS-XR and NX-OS. OSPFv2/v3, IS-IS (lab only), iBGP/eBGP and filtering on all platforms. Strong interest in pre-production tests and hardware qualification. Hands-on experience with 100G Ethernet technology (QSFP28/CPAK - LR4 - SR10). Very good empirical knowledge of 802.11 Wi-Fi technologies.

GNU/Linux: Daily server and desktop usage, 10 years experience. Debian & Arch/Antergos.

Others Unixes: Advanced knowledge of OS X. Basics on BSD and Solaris.

Windows: Good general and network troubleshooting knowledge.

**Software development**: Bash / Python scripting. GIT, Subversion. XHTML/CSS basics.

Project Management: Daily use of XMind (mental maps) and Gantt charts.

### Languages

French: Native language

English: Advanced Very good oral and reading comprehension. Good written and oral expression TOEIC 965/990.

Spanish: Basics

#### **Hobbies**

Personal infrastructure: https://glanet.org (eBGP over OpenVPN/IPSec between friends)

https://chroot-me.in/ (personal homepage, blog and wiki)

Music: \M/etal, classical (Bach, Tchaïkovski), jazz (John Scofield), electronic.

Mountain Bike: Intermediate amateur level, seeking technical and performance improvements.

Hiking, Tree climbing "accrobranche", swimming. Outside activities: Singleplayer and cooperative games. Free and opensource software. Leisure computing:

Overclocking, but without the bling:)