# Arnaud Fenioux

System and Network Engineer



## Good knowledge of the Internet Peering Community BGP Speaker

### Work Experience

Jan. 2018 Network engineer, HopUs.net, remote work, France.

- Now The HOPUS transit service fills the gap between IP networks that matter.

Lots of stuff.

Sept. 2014 Network engineer, FrancelX.net, Paris, France.

- Dec. 2017 FrancelX is an IXP that aims to federate all French and international operators in Paris.

- Deployment, configuration and maintenance of the MPLS/VPLS platform (10 POPs).
  - Juniper EX9200, Brocade SLX, Brocade MLX and Coriant Groove G30.
- Design, configuration and deployment of the OOB network (ISIS on Cisco 3845 & Force10 S4810).
- o Implemented IRR and RPKI/ROA route validation on FranceIX Route Servers (results).
- Deployment in Paris of a RIS collector, an ATLAS Anchor and a k.root-serveurs.org DNS instance, in collaboration with the RIPE NCC.
- Automation of customer provisioning and network wide deployments with Junos PyEZ and Ansible.
- Day to day system administration with Promox and Ubuntu (and FreeBSD for personal use).
- Dec. 2011 Network engineer, Rezopole.net (LyonIX), Lyon, France.
- Sept. 2014 Rezopole manages Internet eXchange Points in several cities of the Rhône-Alpes region.
  - Deployment, configuration and maintenance of the Cisco platform: 25 switches / 5 BGP & OSPF routers.
    - Catalyst 6500, Catalyst 3750, ME4924 switches and ASR1k routers.
  - System administration : KVM, Debian, CentOS, FreeBSD and open-source softwares.
  - Deployment of the LISP-Lab testbed, i.e. connectivity with the Internet (http://lisplab.openlisp.org)
  - O Design and deployment of a Trill Fabric on the Core Network (3 POPs, with Brocade VDX)
  - o Technical Manager since September 2013 (managing a team of 5 persons).
- Dec. 2008 System and network administrator, Artprice.com, Lyon, France.
- Dec. 2011 Artprice is the world leader in art market information.
  - o Announce of AS20672 with 2 BGP peers on Cisco 7200 and OpenBGPd.
  - Private cloud with Xen3 and Pillar SAN on CentOS hypervisors and 200 Debian VM.
  - o DNS platform with Bind9 and OpenLDAP to manage zones.
  - NAS : Nexenta OS, 72TB, zfs snapshots, nfs export.
- Feb. 2008 End of studies internship, SysArch team, Clara.net, London, UK.
- Aug. 2008 Claranet is an ISP and Managed services provider.
  - Setting up a RIPE Mirror server to manage public IP assignments delegated to Claranet.
  - Writing a web interface in Perl to manage customers IP assignments.
  - Perl scripts to import assignments and customers information from previous systems.

#### Talks, writings and contributions

January 2017 Writer, MISC magazine 89, miscmag.com.

Co-author of the article " $\underline{\text{IP}}$  squatting and spam " with J. NICOLLE.

Oct. 2016 Coder, RIPE Hackathon 73, PeerMe project, Madrid, Spain.

Tool to discover and generate configuration from PeeringDB for possible peerings between ASN.

May 2016 Speaker, RIPE Meeting 72, Connect Working Group, Copenhagen, Denmark.

Route Servers, features and security.

March 2016 Writer, MISC magazine 84, miscmag.com.

Co-author of the article "Extension of LAN: MPLS/VPLS/VXLAN and LISP" with F. VINCENT and S. SECCI.

Aug. 2015 **Speaker**, *AfPIF*, African Peering and Interconnection Forum, Maputo, Mozambique. IXP Interconnection: Why? How? Pros and cons.

2015 – 2020 **Speaker**, *University of Reims*, Master "Service Provider network", Reims, France.

lecture and practicals (Backhaul/IGP/BGP/IXP/Peering).

- 2015 2017 **Speaker**, *University Pierre and Marie Curie*, Master "Service Provider network", Paris, France. lecture (BGP/IXP/Peering).
- 2013 2015 **Facilitator**, *AXIS Project*, in collaboration with the Internet Society. Facilitator to support the establishment of IXP in Africa (Burundi, Ivory Coast, Algeria).
- Talks, Writings and Workshops I made (French and English): http://www.afenioux.fr/doc/presentations

#### Computer skills

Operating Linux (Debian/Ubuntu), FreeBSD Network VLAN, STP, OSPF, IS-IS, BGP, MPLS/VPLS,

Systems VRF, C/DWDM

Languages Shell, C, Python, Perl, Python, PHP, Software Bird, GoBGP, Quagga, KVM, Apache2, Nginx,

XHTML/CSS, SQL... MySQL, Bind, Postfix, haproxy...

Readings MISC (miscmag.com), Meetings NANOG, RIPE meetings, Euro-IX, FRnOG.org Linux-Mag (gnulinuxmag.com)

Education

2003 – 2008 Master of Science, Computer Science, ESEO, Angers.

Networks and telecommunications engineer

Languages

French Mother tongue

German Intermediate level

Interets and hobbies

Sport Kitesurfing, Snowboarding, Diving, sailing instructor.

Music Synthesiers (electronic music) with Nord Lead keyboard and an Arduino with midi shield.

Photography Nikon D5300, long exposure.