

FOSDEM infrastructure review

Things work, and we got to sleep a few hours

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Physical setup (same as last year)

- Access controller, pre-installed cabling, and Access Points are from ULB
- Upstream sponsored by CoLT
- ASR1006 and half a dozen switches sponsored by Cisco
- All custom cabling for network and video is done on Friday

What's new?

- Even more people!
- Installed server & router in December
- Network worked Friday, 16:00 (last year, it was 19:00)
- Monitoring worked Saturday, 09:00 (last year, it was Saturday noon-ish)
- Video worked Saturday, 09:30 (last year, it was worse)

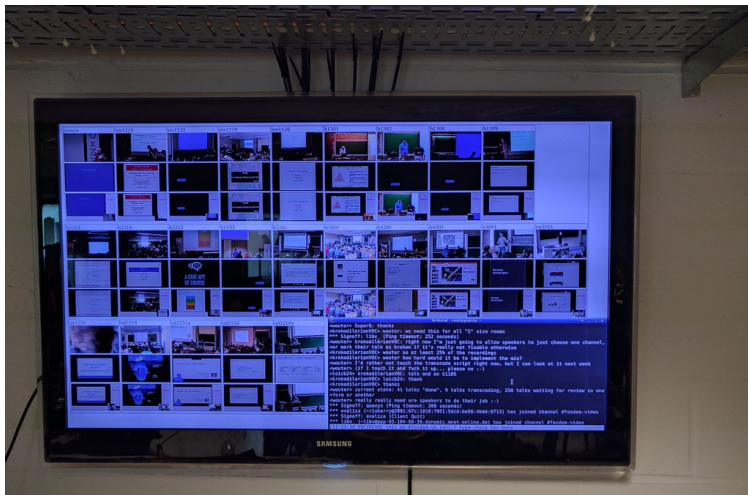
Services on-site 1/2

- Most of this invisible to visitors, as it should be
- We are now a LIR!
 - Since 2016
 - Our own, permanent, AS number, IPv4 /22, IPv6 /29
 - ...and the temp PI IPv4 /17 from RIPE NCC
- NAT64 on the ASR
- DNS64 on Bind

Services on site 2/2

- Cisco Backup:
`https://github.com/ytti/oxidized`
- Config management & deployment:
`https://github.com/ansible/ansible`
- Monitoring, data collection and analysis:
`https://github.com/prometheus/prometheus`
- Monitoring, visualization:
`http://grafana.org`
- IP Management:
`http://spritelink.github.io/NIPAP/`

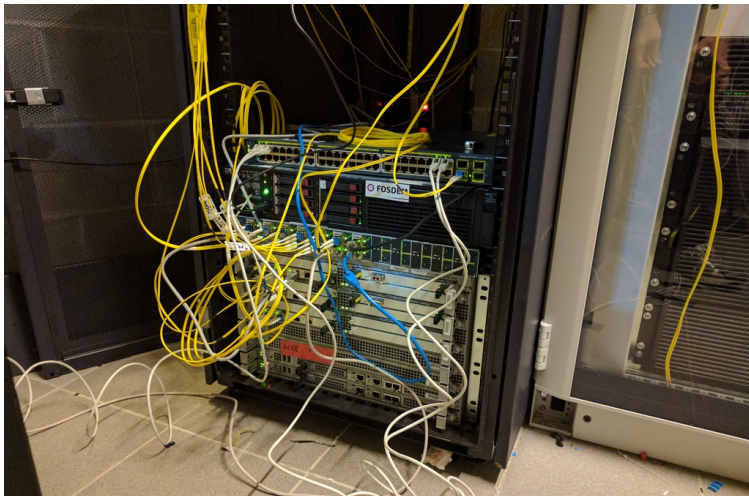
Video dashboard



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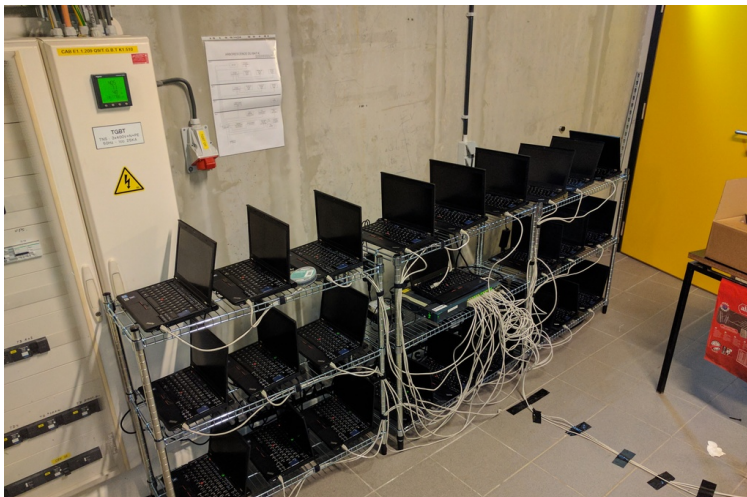
Router & Server



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Video converter farm



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Outlook from 2016

- Even more preparation over the year (MOAR Ansible)
- Migrate all off-site infrastructure to the new model (no progress)
- We will become a LIR with RIPE NCC so we can get our own IPv4 /22 on top of the IPv6 space we have (done)
- Off-site infra with its own /24 and /48; and the same for on-site (half done)
- Our goal is to have a conference-in-a-box (not there yet)

Conference-in-a-box

- Not there yet
- Everything prepared in advance
 - Clone Ansible config
 - Deploy it onto a few bare-metal machines
 - All services spin up in their own VM/container
 - All config changes go through Ansible
- We will refine this over the next year, poke me if you can sponsor some hardware
- On site, we only spin this up and look at our dashboard to see what we need to fix

It's open

- If you know of a decent CMDB, let me know!
- Try our monitoring:
`http://prometheus.conference.fosdem.net/`
- Clone our conference:
`https://github.com/FOSDEM/infrastructure`