

FOSDEM infrastructure review

Things work, and we got to sleep a few hours

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‘whoami’

- Richard "RichiH" Hartmann
- System architect at SpaceNet AG
- Always looking for nice co-workers in the Munich area ;)
- FOSDEM, DebConf, DENOGx staff
- Debian Developer
- Author of <https://github.com/RichiH/vcsh>

Physical setup

- 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?

- More people!
- Existing team: Peter van Eynde, Richard Hartmann, Irina Ilina-Sidorova, Wouter Simmons, Murali Suriar
- New: Brian Brazil, Wilco Baan Hofman, Ben Kochie, Arjan Koopen, Fabian Reinartz, Julius Volz
- Even more preparation in the weeks leading up to FOSDEM
- We got to leave before 04:00 and we had sleep!

Services on-site 1/2

- Most of this invisible to visitors, as it should be
- We have a IPv4 /17 temp PI from RIPE NCC and our own IPv6 /48 PI
- 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/`

Outlook

- Even more preparation over the year
- Migrate all off-site infrastructure to the new model
- We will become a LIR with RIPE NCC so we can get our own IPv4 /22 on top of the IPv6 space we have
- Off-site infra with its own /24 and /48; and the same for on-site
- Our goal is to have a conference-in-a-box

Conference-in-a-box?

- 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`