

Infrastructure at Arch

Making servers go *brrrrr*

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Agenda

- 1. About me
- 2. DevOps team
- 3. Overview
- 4. The past
- 5. The present
- 6. The future
- 7. Get involved





• Freelance DevOps consultant and software architect



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- Now Trusted User, Developer, DevOps



DevOps team

Current full members

- Evangelos Foutras (foutrelis)
- Frederik Schwan (freswa)
- Giancarlo Razzolini (grazzolini)
- Jan Alexander Steffens (heftig)
- Jelle von der Waa (jelle)
- Levente Polyak (anthraxx)
- Sven-Hendrik Haase (svenstaro)





Servers

Mostly hosted at Hetzner



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- 6 Hetzner bare-metal servers
- 17 Hetzner cloud servers



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- 5 sponsored servers by Kape (thanks guys)



Services



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15 public services

- Accounts (SSO/Keycloak)
- Archive
- AUR (aurweb)
- BBS (fluxbb)
- bug tracker (flyspray)
- GitLab
- cgit
- IRC bot (Phrik)
- Mailing lists (mailman)
- main page (archweb)
- mirrorlist (archweb)
- Packages (rsync)
- patch tracker (patchwork)
- security tracker



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Code

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 - Terraform where we can
 - Ansible where we must



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- 8000 lines of YAML (mostly Ansible)
- 2000 lines of HCL (Terraform)
- 63 Ansible roles





Dark times

• Everything was manually managed



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- No centralized server management



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Road to enlightenment



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- Documented stuff



The past

Road to enlightenment

- First Ansible git commit in May 2016
- Steady stream of migrations towards Ansible
- Started using Terraform in Feb 2019
- Documented stuff
- Formation of a DevOps team





General

Proper DevOps team with consistent access



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- Automations, Cl





GitLab

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Arch Linux SSO

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- Keycloak





Migrations

• Allow everyone to register on SSO



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- Connecting most services to SSO



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- Connecting most services to SSO
- Finish migration to GitLab
- Migrate from mailman 2 to mailman 3
- Automate all the things
- Get rid of most bare-metal servers





Known issues

• BBS software (fluxbb) is basically unmaintained



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- GDPR compliance automation





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Thanks

Some links:

- gitlab.archlinux.org
- gitlab.archlinux.org/archlinux/infrastructure
- lists.archlinux.org/listinfo/arch-devops
- svenstaro.org