Don't fear the devops

Taming servers infrastructure with



Michał Ostruszka I enjoy **building stuff*** at **SoftwareMill**

* Scala, JavaScript, TypeScript, Node.js, some Clojure



Devops

development and operations

It is a **culture**, **movement or practice** that emphasizes the collaboration and communication of both software developers and other IT professionals while **automating the process of software delivery and infrastructure changes**. It aims at establishing a culture and environment where **building**, **testing**, **and releasing software**, **can happen rapidly**, **frequently**, **and more reliably**.

https://en.wikipedia.org/wiki/DevOps



AUTOMATION FOR EVERYONE

App deployment, configuration management and orchestration - all from one system.

Powerful automation that you can learn quickly.

Automation with Ansible

- Infrastructure as code
- Reliable and repeatable provisioning
- Quick envs setup (prod, staging, perftest)
- Serverless, agentless (just SSH)
- Really easy start (just an inventory file)
- Fully declarative, readable YAML code

Talk is **cheap** show me the **code** _

* no devops were harmed while preparing the demo

Ansible building blocks

```
----
- hosts: app
tasks:
- name: ensure wget is installed
    apt: name=nginx state=present
- hosts: monitoring
    tasks:
- name: ensure logging.conf is in place
    copy: src=logging.conf dest=/opt/logging
```

Ansible built-in modules

Module Index

- All Modules
- Cloud Modules
- Clustering Modules
- Commands Modules
- Crypto Modules
- Database Modules
- Files Modules
- Identity Modules
- Infrastructure Modules
- Inventory Modules
- Messaging Modules
- Monitoring Modules
- Network Modules
- Notification Modules
- Packaging Modules
- Remote Management Modules
- Source Control Modules
- Storage Modules
- System Modules
- Univention Modules
- Utilities Modules
- Web Infrastructure Modules
- Windows Modules

800+ built-in modules

Not all is well - pain points

- Ansible-galaxy, not the best registry I've seen in my career
- Community roles and their quality
- Advanced debugging and testing roles, heavy dry-run
- You may need some Python eventually
- Community extensions may be buggy (e.g. docker)
- Variables "cognitive overload"

Give it a try

- Predictability via automation
- Infrastructure as code, you can't beat it
- Availability every single *nix machine with SSH
- Tons of built-in modules and community roles
- Easy to start with
- Readable even after long time

Seriously. 5 minutes.

* 5 minutes represent "think" not "react"

https://signalvnoise.com/posts/3124-give-it-five-minutes

FIN

PLAY RECAP

BuildStuff: ok=1 changed=1 unreachable=0 failed=0