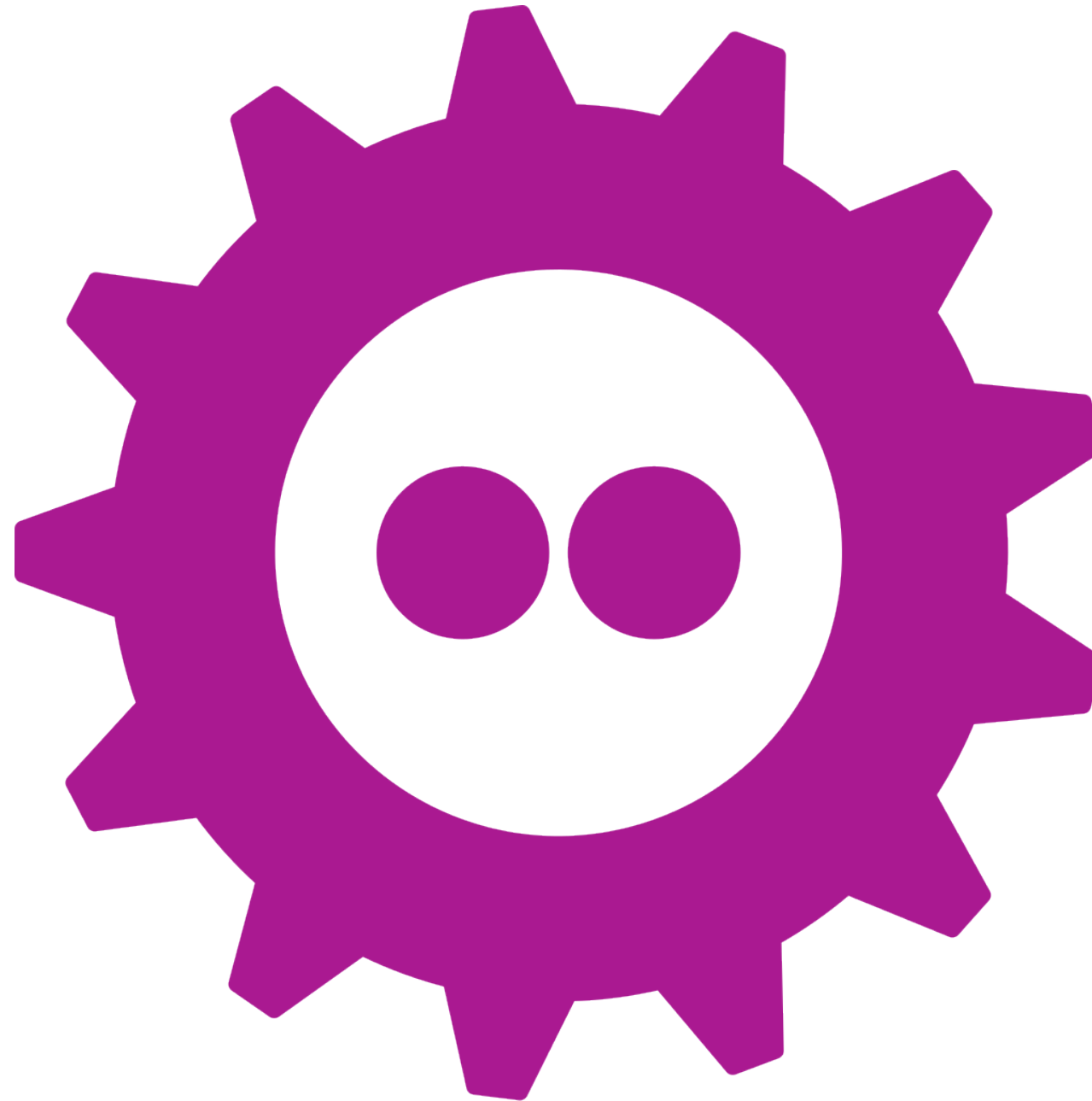


# FOSDEM 2020



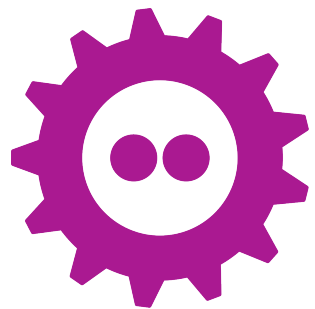
**Creating  
possibilities  
together**

Jonas Linde <[jonas.linde@b3.se](mailto:jonas.linde@b3.se)>



# Day 1

- 2020-02-01



# How Containers and Kubernetes re-defined GNU/Linux

- Cloud computing with vertical lock-in is undermining software freedom
- But Docker and Kubernetes is changing the way we deliver software
- Docker for packaging
- Kubernetes for orchestration
- Kubernetes Operators for full service delivery



# Fixing the Kubernetes clusterfuck

- Falco - Wireshark for kernel packages
- Built on top on IPF
- Can monitor and prevent malicious behaviour
- Demo - privilege escalation in Kubernetes



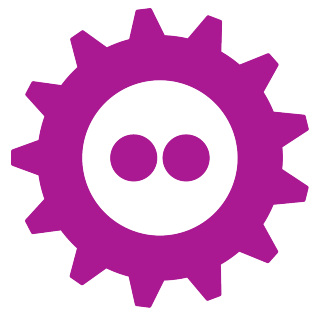
# Google vs Oracle

- US Supreme Court case about Java2 SE in Android
- Google took a bunch of declarations
  - there is only one way to do this so copyright can't cover that
  - it's fair use
- Oracle
  - the API is a creative literary work
  - fair use is not allowed to displace market shares
- Google won twice in district court and lost twice in appellate court
- Supreme Court Final decision in June



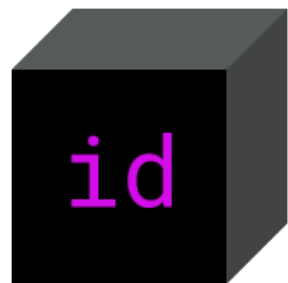
# Day 2

- 2020-02-01



# Identity box

- Public key  $\approx$  identity but not enough
- A decentralized ID resolver must be built on a decentralized network
- A decentralized network need static nodes
- Identity Box is a small device that can be such a node
- It can also handle one or more Self-sovereign ID:s



# SCION

- People often try to solve internet on top of internet
- Routing is hard
- SCION has decentralized routing
- The end host defines the path
- It can coexist with IP
- **Scalability, Control and Isolation on next-generation Networks**



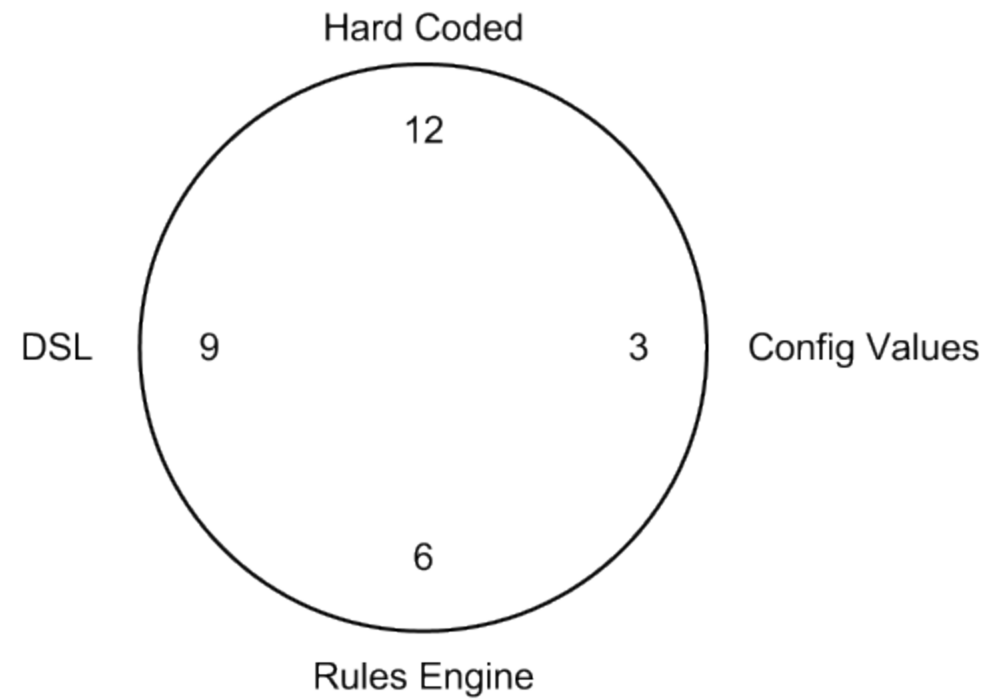
# CfgMgmtCamp

- 2020-02-03 – 04
- aka Days 5 – 7
- @HoGent - Hogeschool Gent



# The Configuration Complexity Clock

1. Scripts
2. Config Values
3. Rules Engine
4. DSL
5. GOTO 1



# Pulumi

- Orchestrating Cloud infrastructure is complex
- Using YAML doesn't make it less so
- Programming languages are better at handling complexity
- Pulumi is a cross cloud **infrastructure as code** tool
- It supports Node and Python
- and .NET and Go in beta



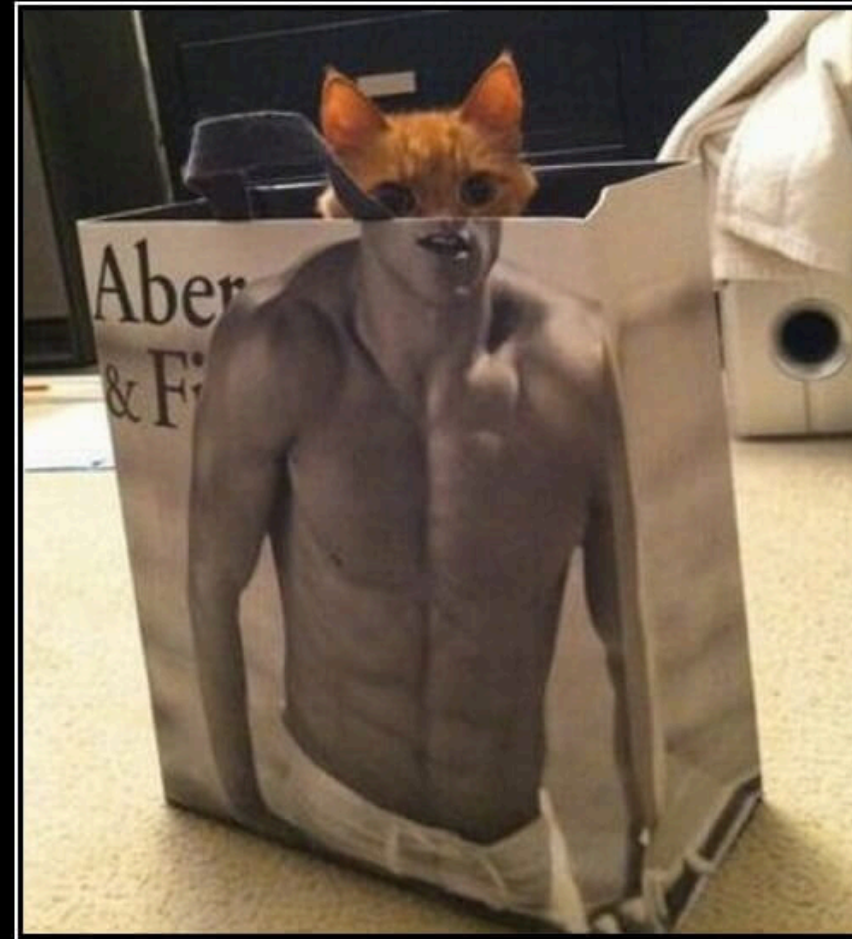
# Nomad

- Container orchestration without the K8s complexity
- Only cluster management and scheduling
- Add other components as needed
  - service discovery
  - monitoring
  - secrets management
  - ...
- By HashiCorp



# See you there next time!

- FOSDEM: 2021-01-30 – 31
- CfgMgmtCamp: 2020-02-01 – 03



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Partial Content