HSR
HOCHSCHULE FÜR TECHNIK
RAPPERSWIL

FHO Fachhochschule Ostschweiz

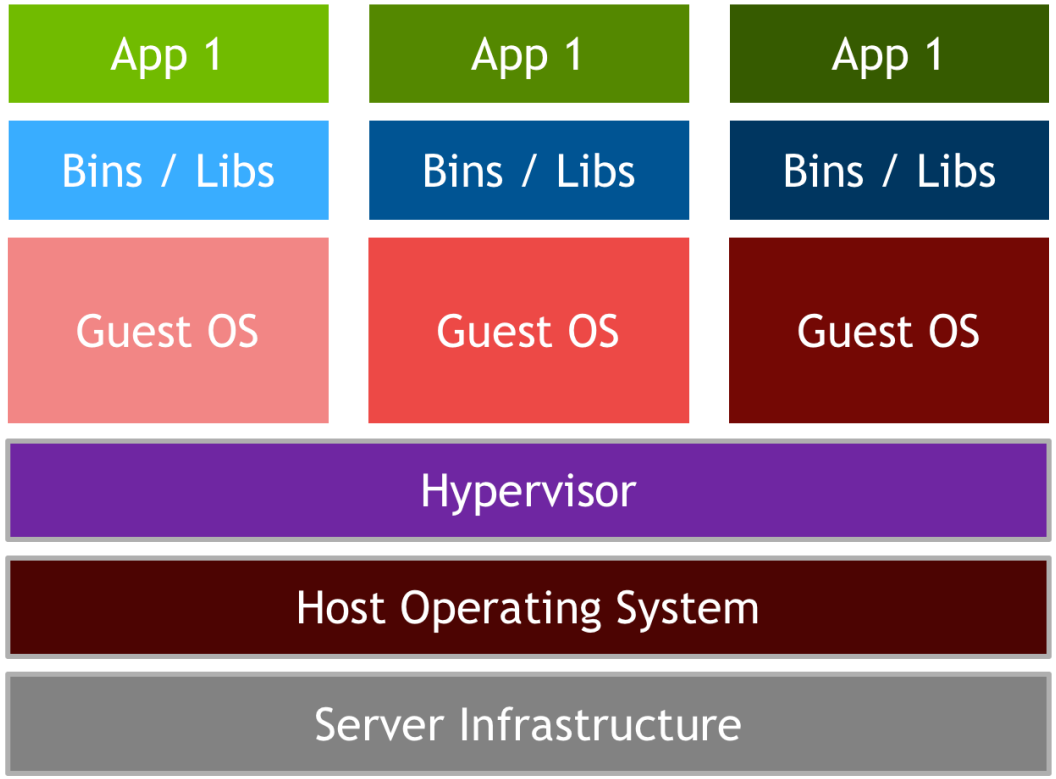
COMPASS SECURITY

# Docker Einführung

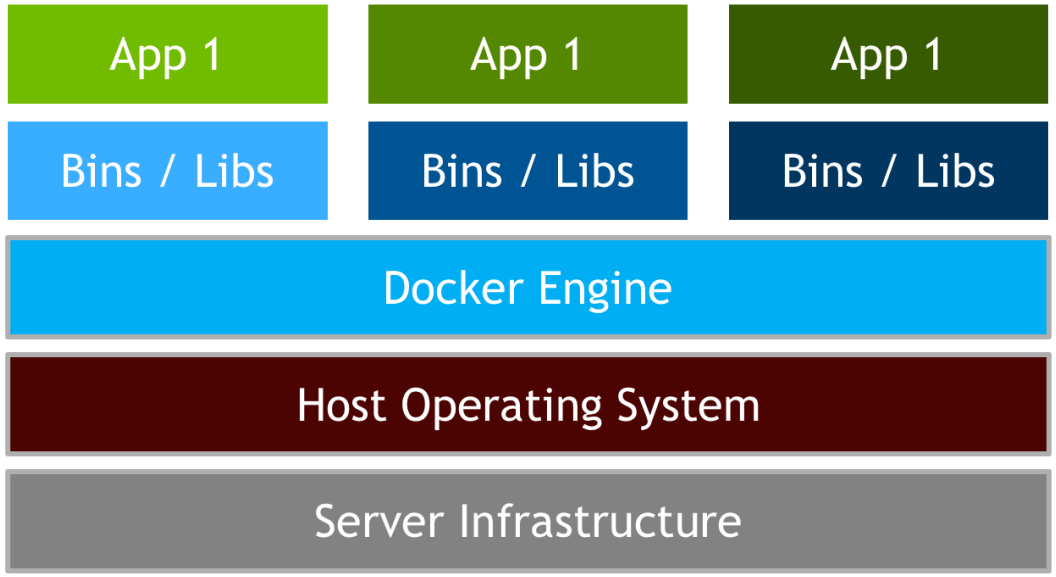
Compass Security
ivan.buetler@compass-security.com

# Docker Eco System

# Virtual Machines versus Containers

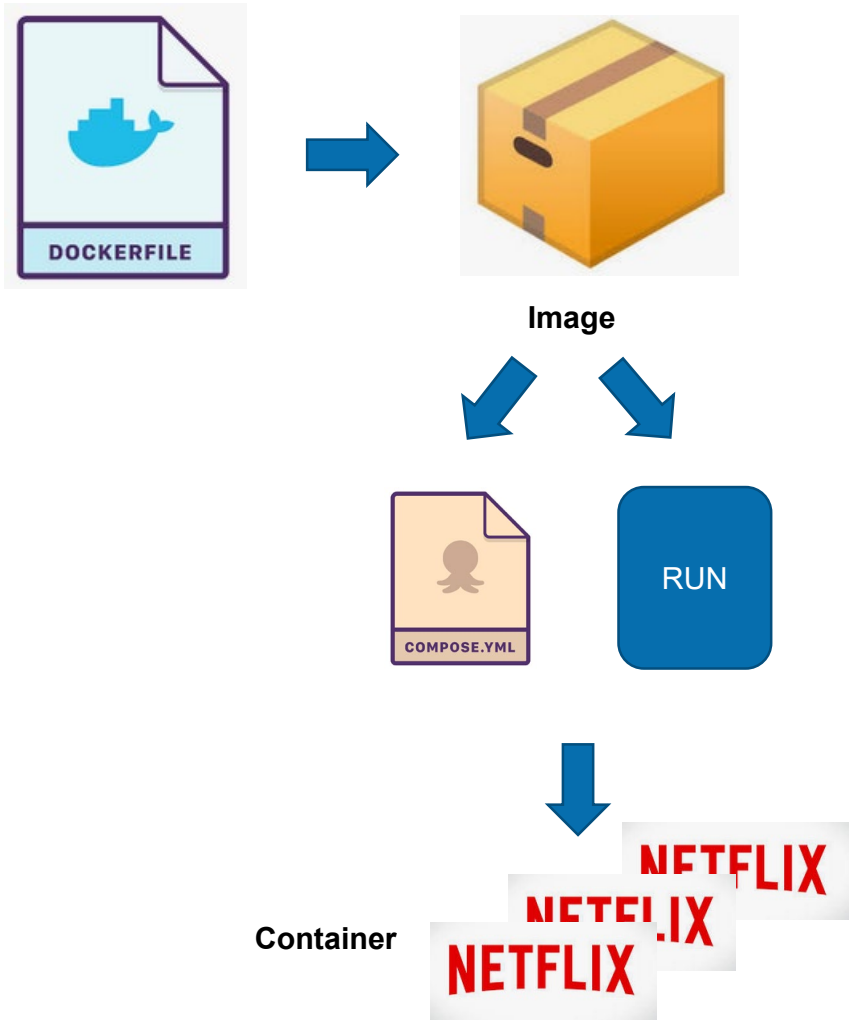



**VIRTUAL MACHINES**




**CONTAINERS**

# Dockerfile => Docker Image => Docker Container




Entwickler erstellt ein Dockerfile (oftmals Dockerfile und einige dazugehörige Dateiene)

- `docker build -t hackinglab/alpine-gotty-root`

Mit «docker build» wird aus einem Dockerfile ein Image

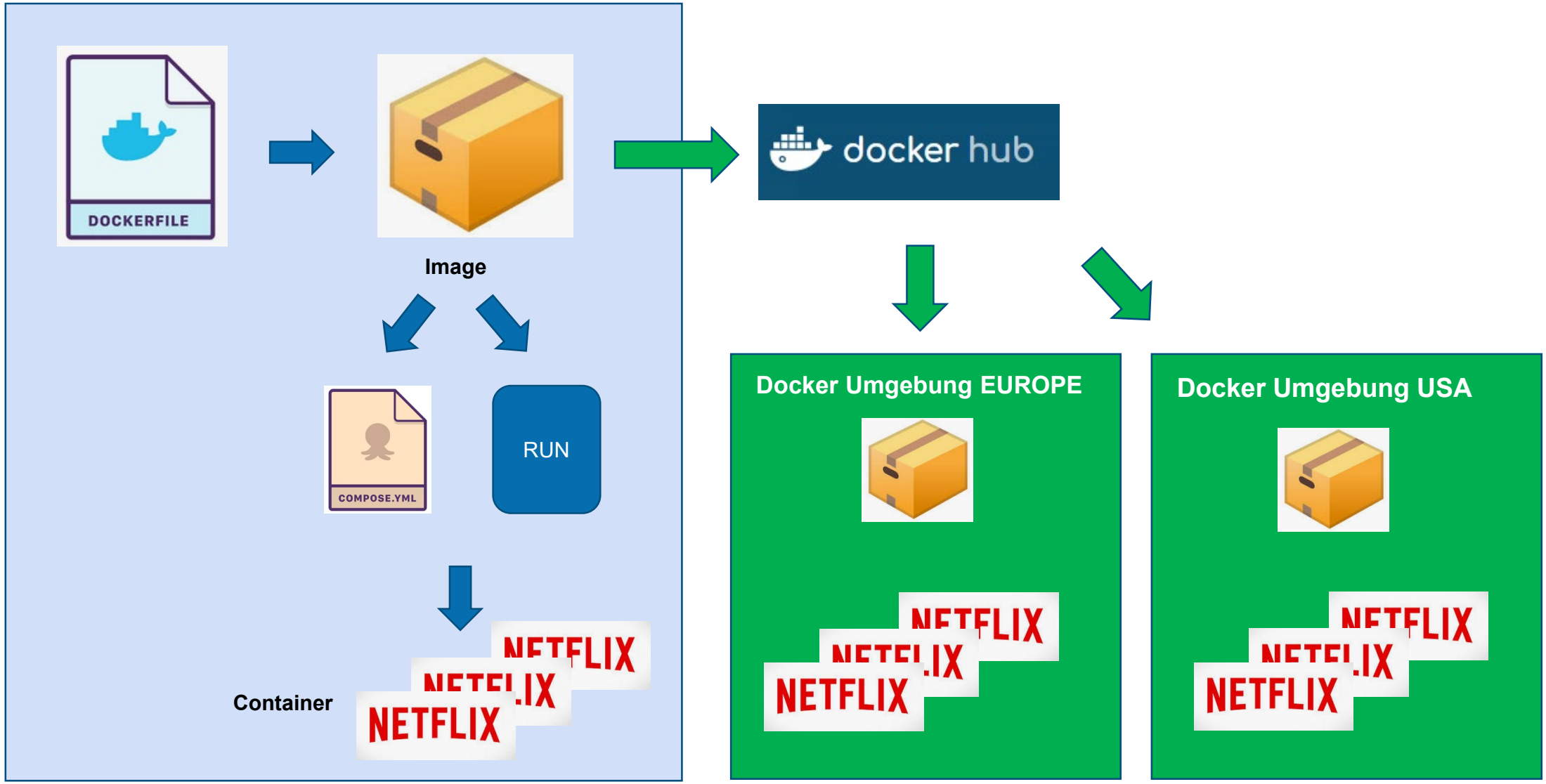
Ein Image das «gebootet» wird, nennt man Container

Es gibt viele Wege um eine Image zu booten

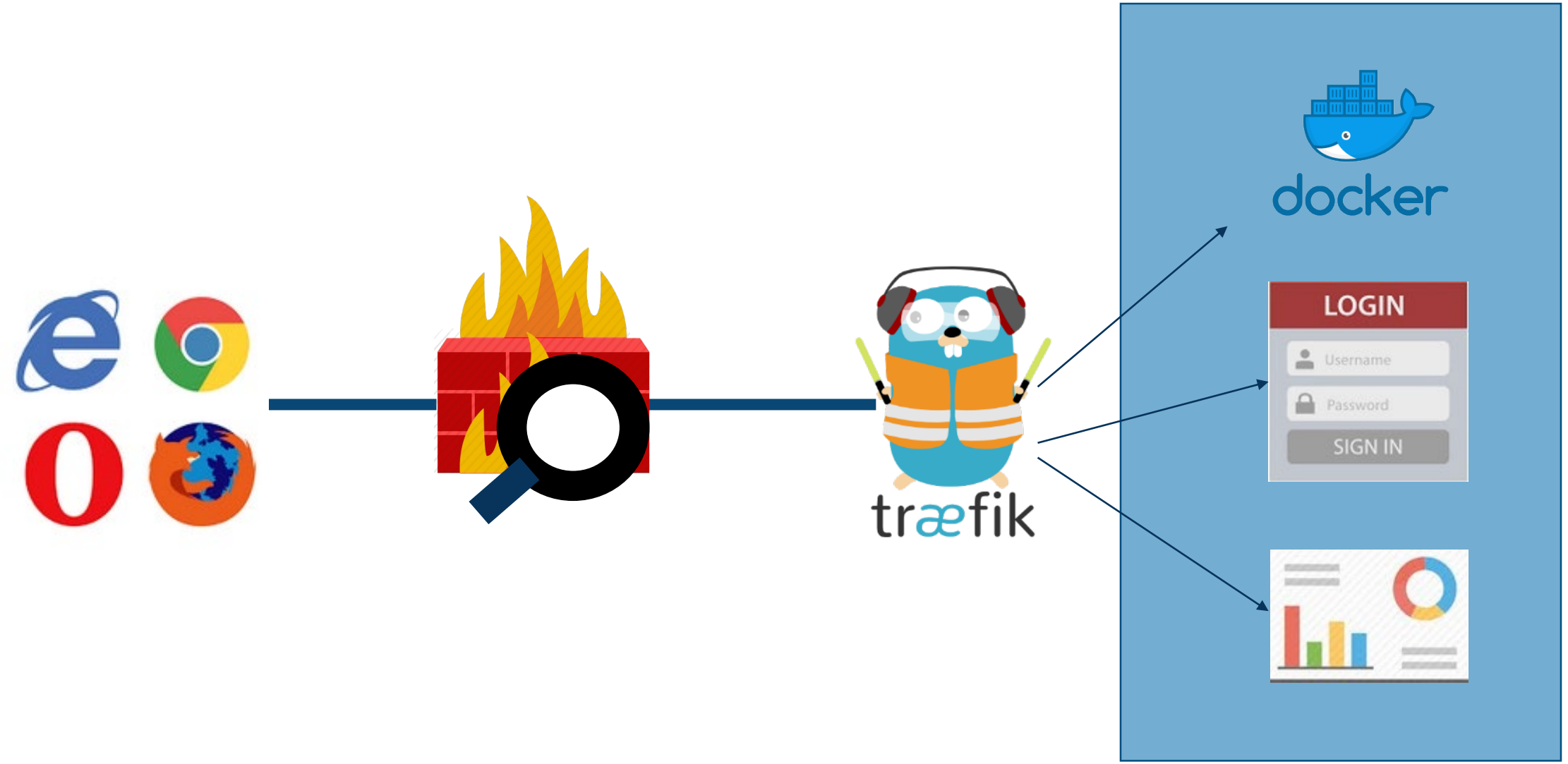
Die einfachsten 2 Varianten für das «booten»

- `docker run hackinglab/alpine-gotty-root`
- `docker-compose up -d`

# Dockerfile => Docker Image => Docker Container

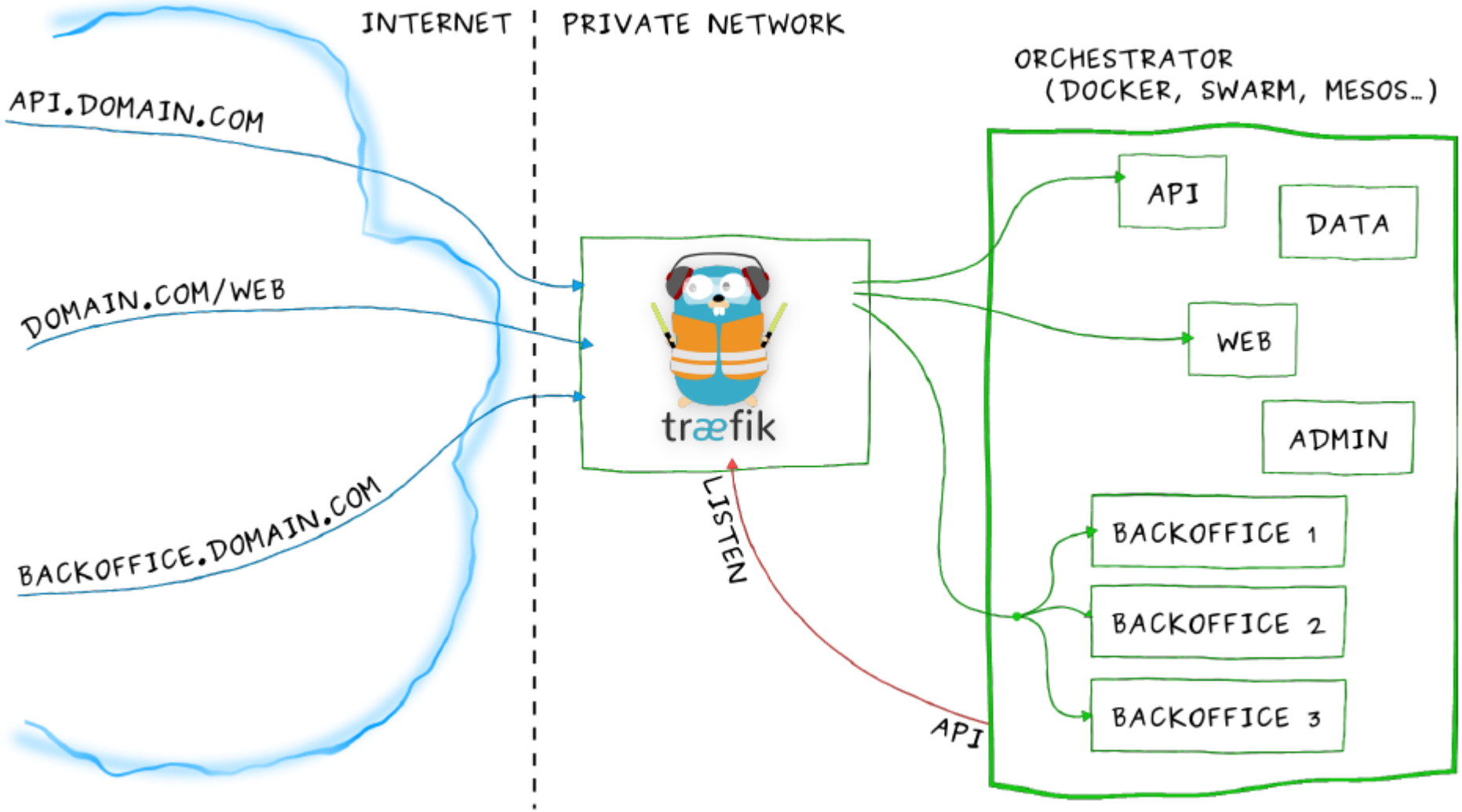


# OnDemand Docker Services



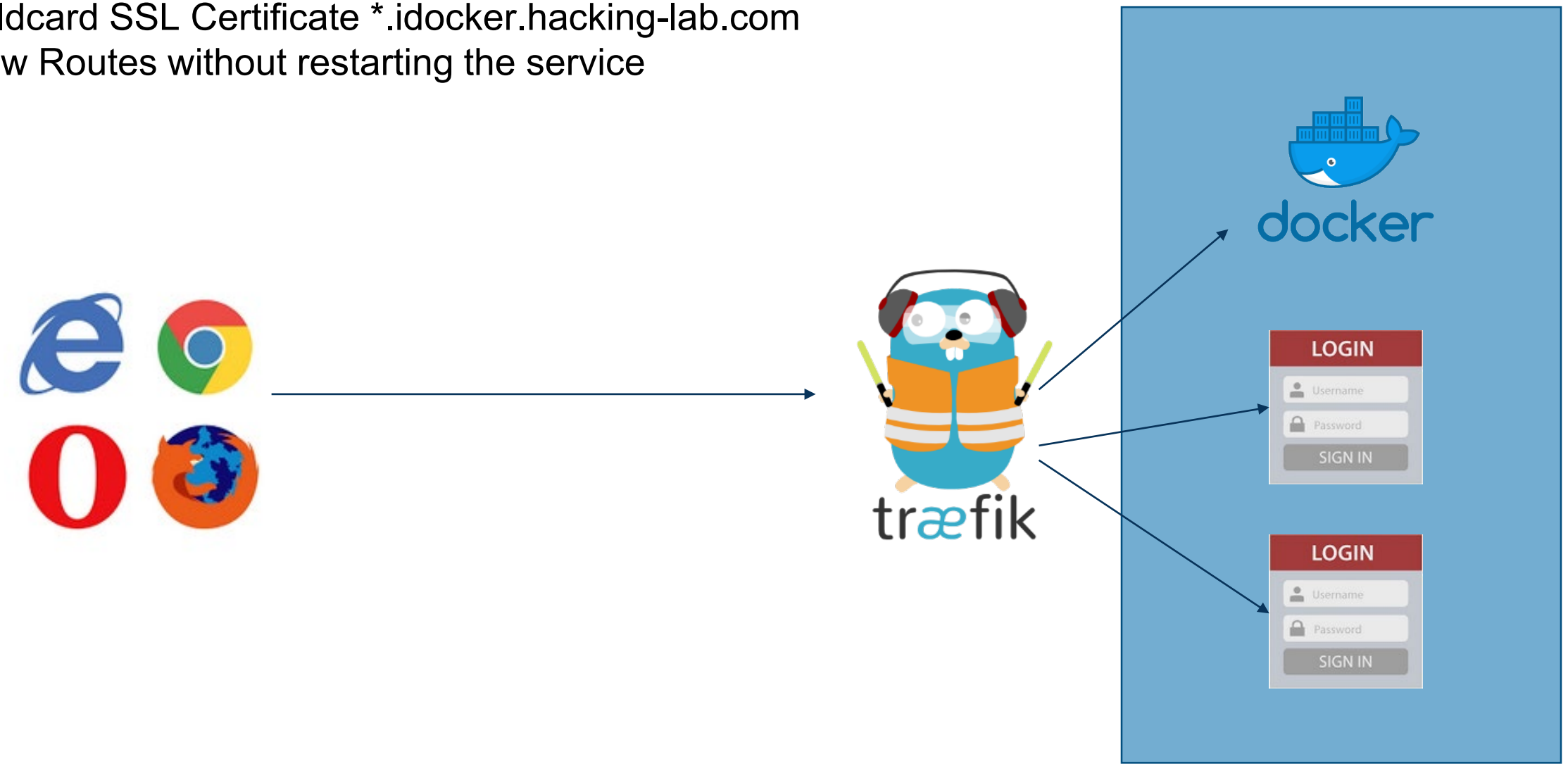
# Traefik Load Balancer

# Microservice Architecture

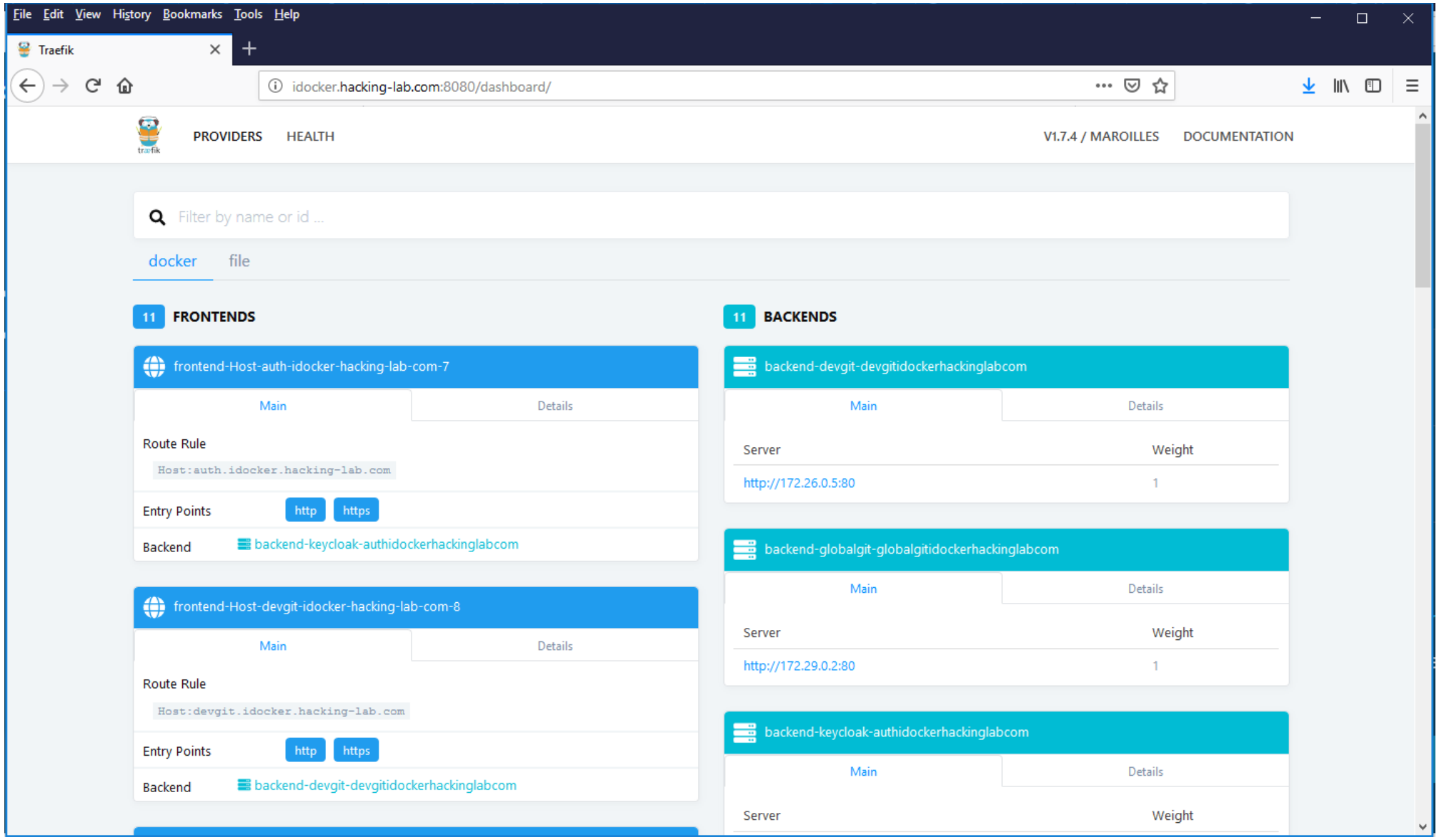


# Hacking-Lab Test Suite

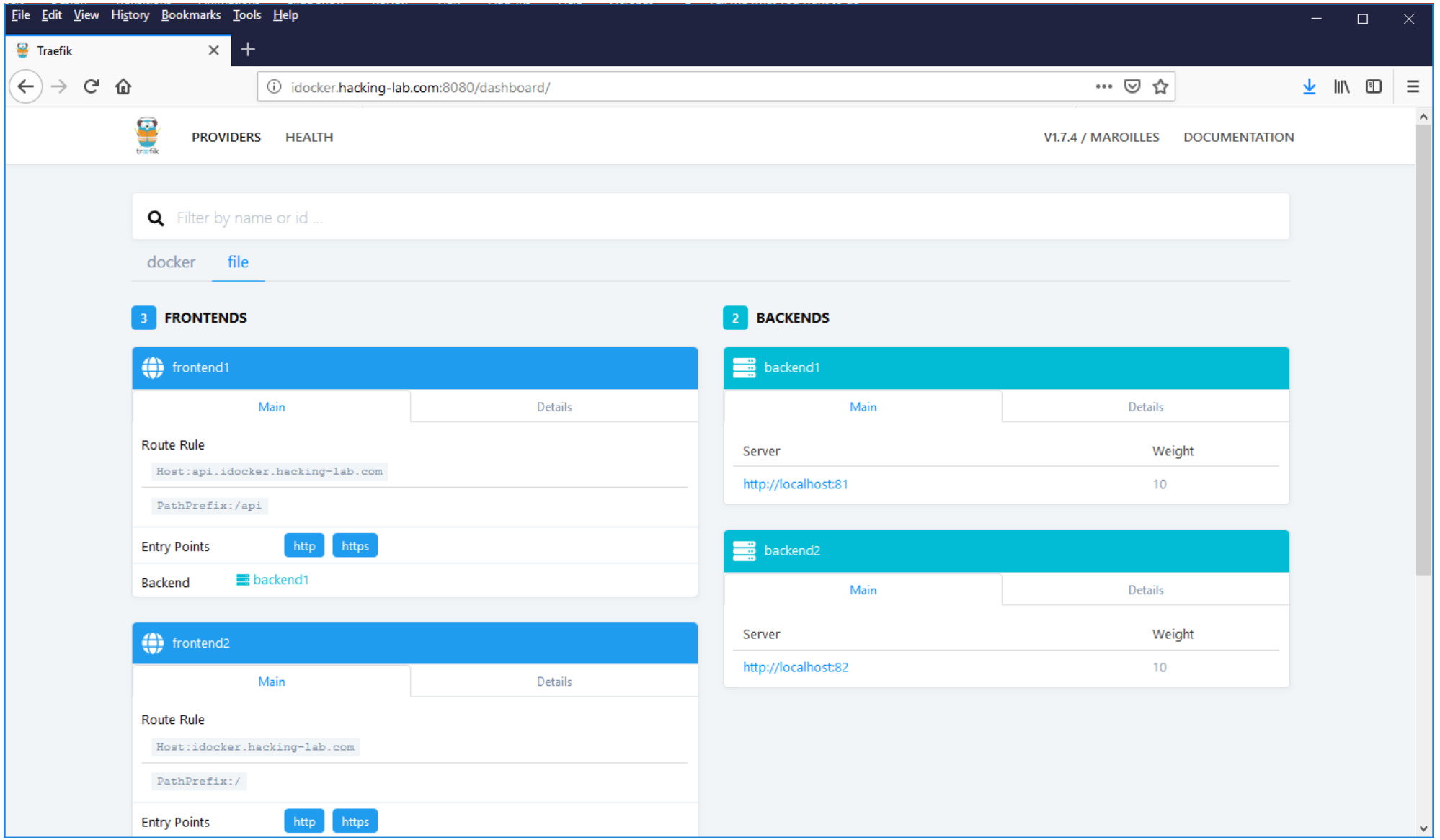
Wildcard SSL Certificate *.idocker.hacking-lab.com
New Routes without restarting the service



# Traefik Status Page - DOCKER



# Traefik Status Page - FILE



# Conclusion

Paradigm shift into the direction of “Microservice Architectures”

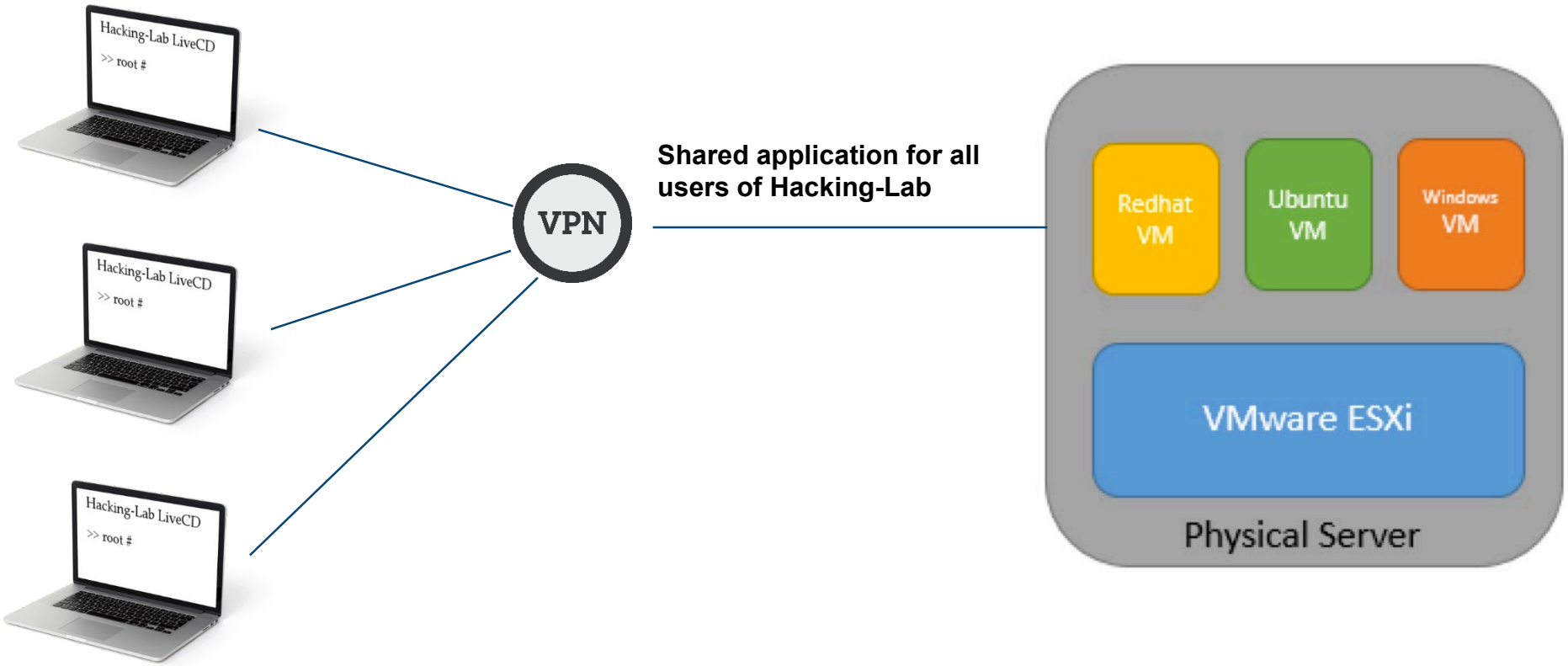
Small apps together shape the big application

We will face more and more RESTful service architectures

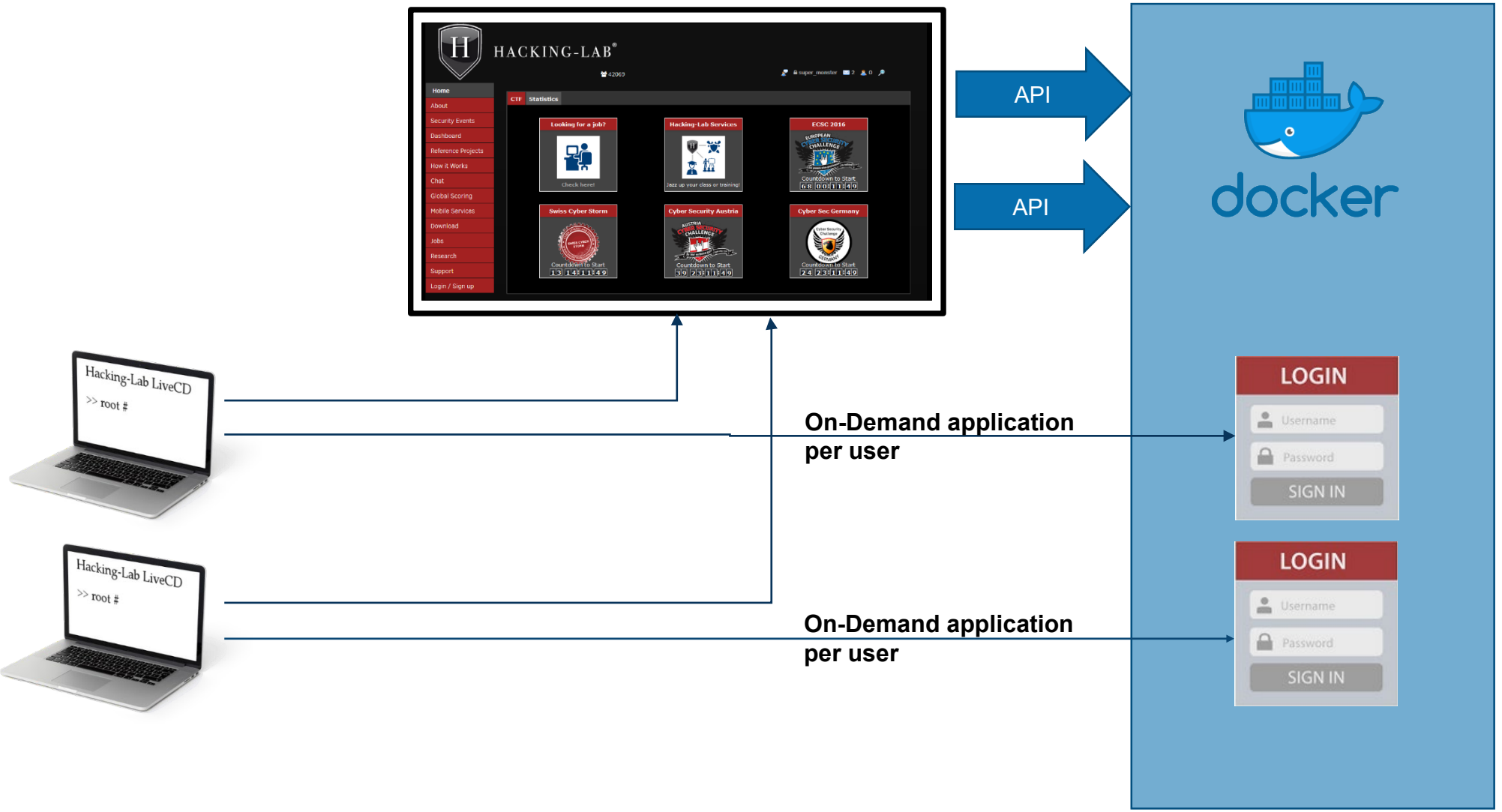
# Docker & Hacking-Lab 1.0

Appendix

# How we deployed vulnerable services in the past (and still do...)



# How we deploy vulnerable services today




COMPASS
SECURITY