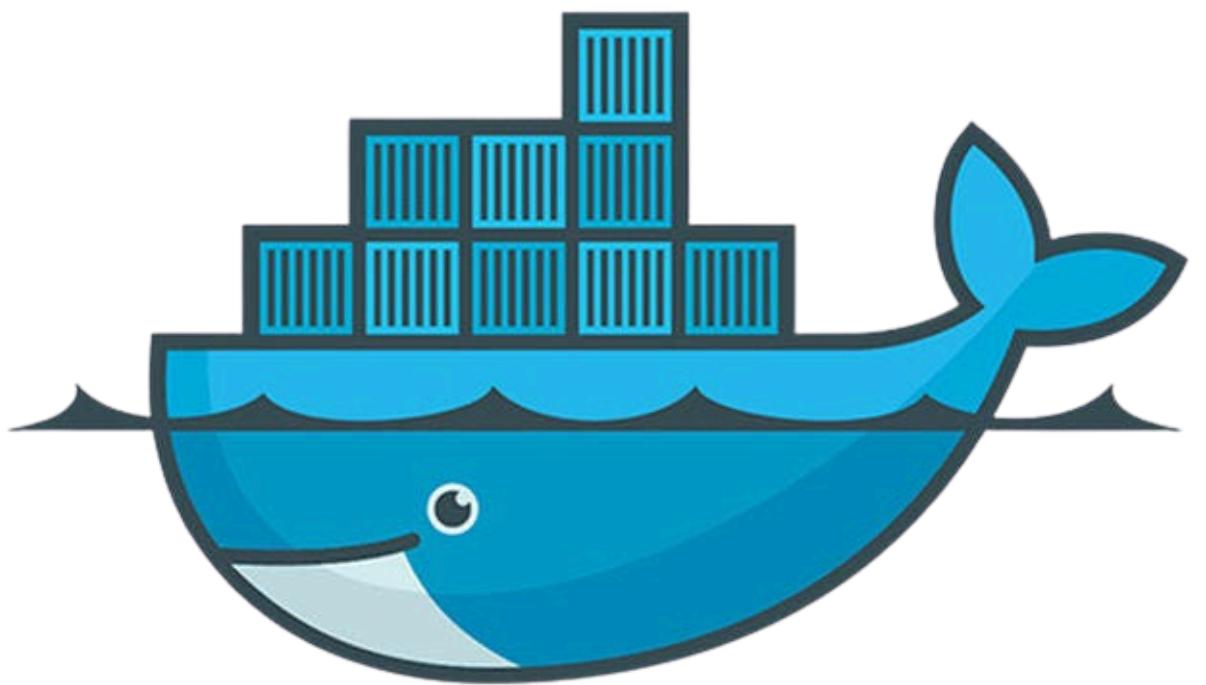




Video zu den Uebungen



# docker

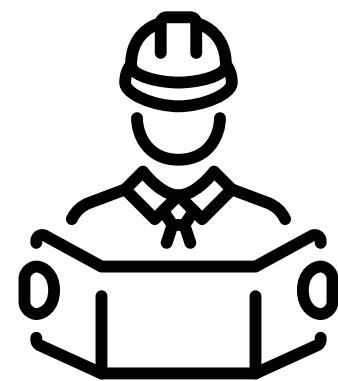
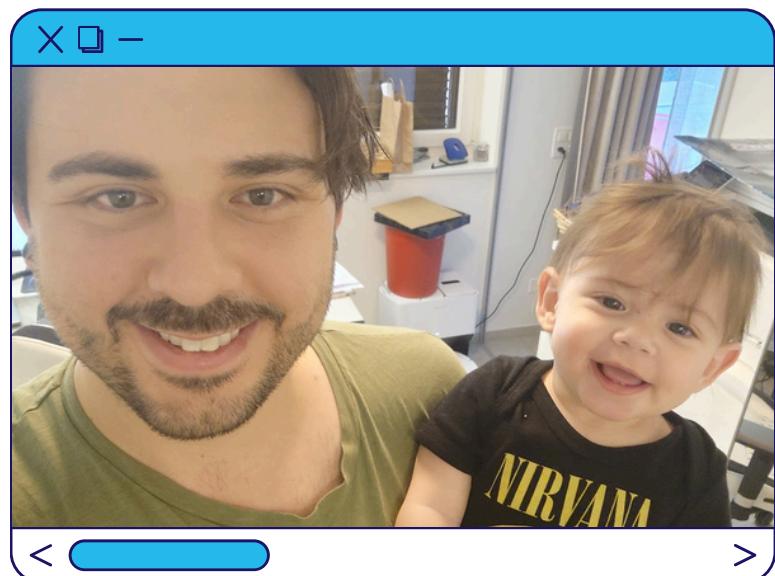


Scan mich!

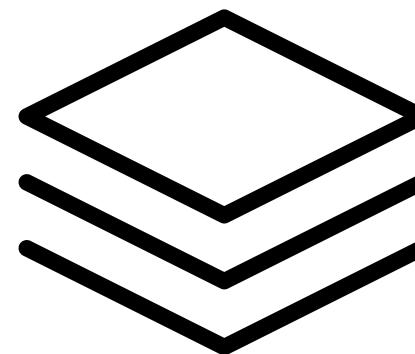


GitHub

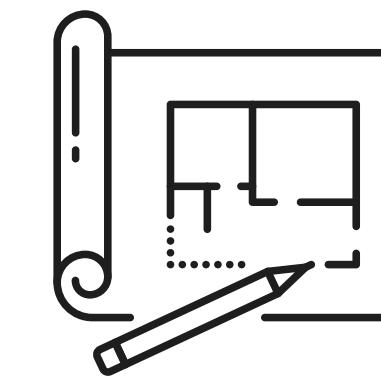
# Andreas Deicha - Vadozner und Balzner



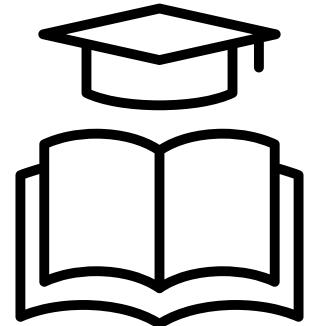
Software Entwickler  
seit 2017 (erster Job)



**Fullstack**  
.Net Core  
Spring Boot  
Ruby on Rails  
Vue.js  
Angular  
WPF



Architekt

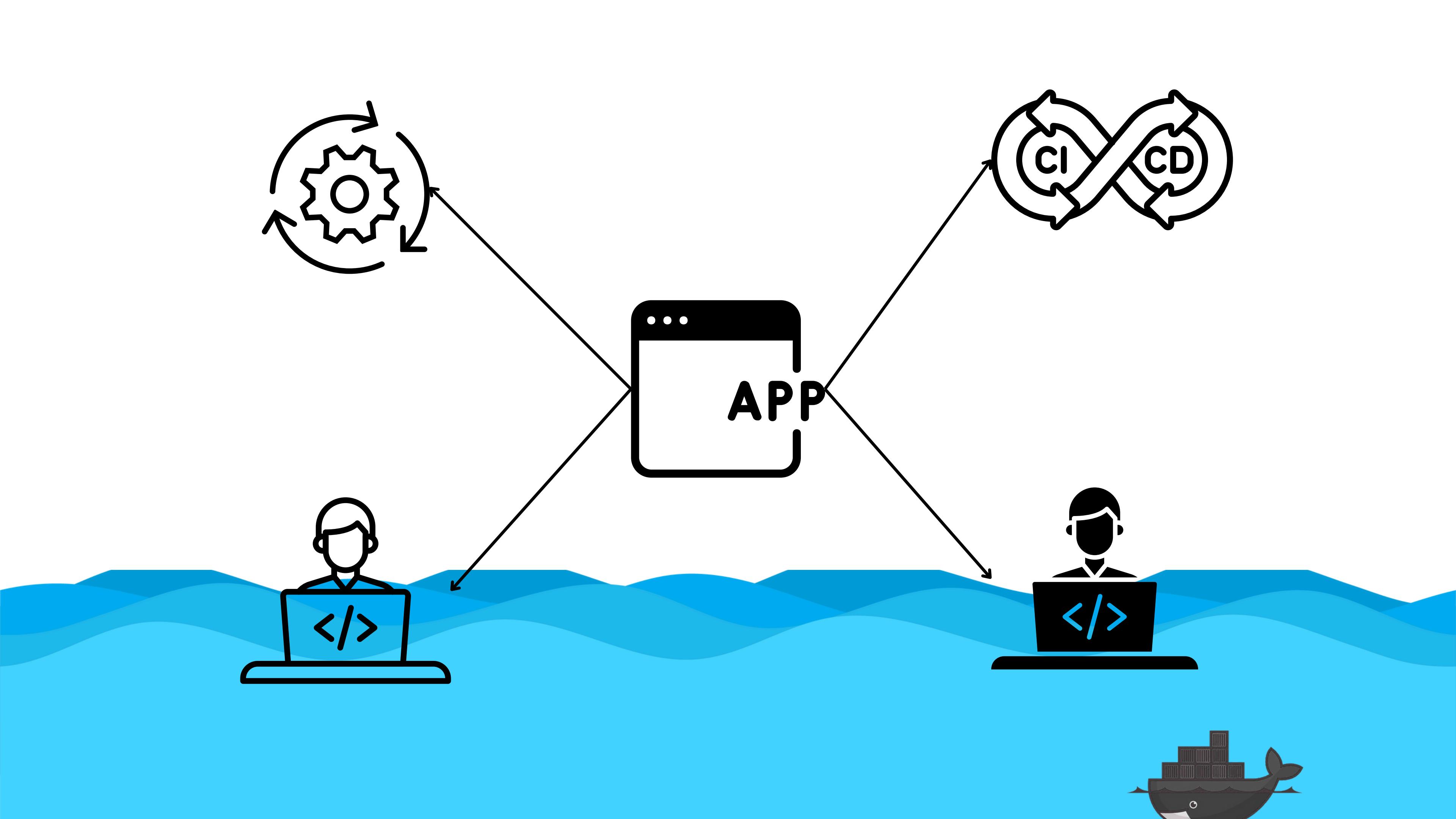


Studium HSR

## Codespaces.

Gründer von Codespaces GmbH

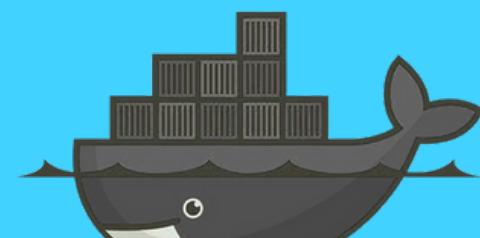




## Die Lösung ist Docker

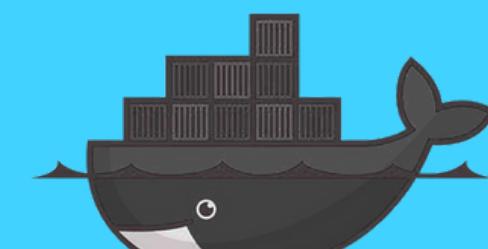
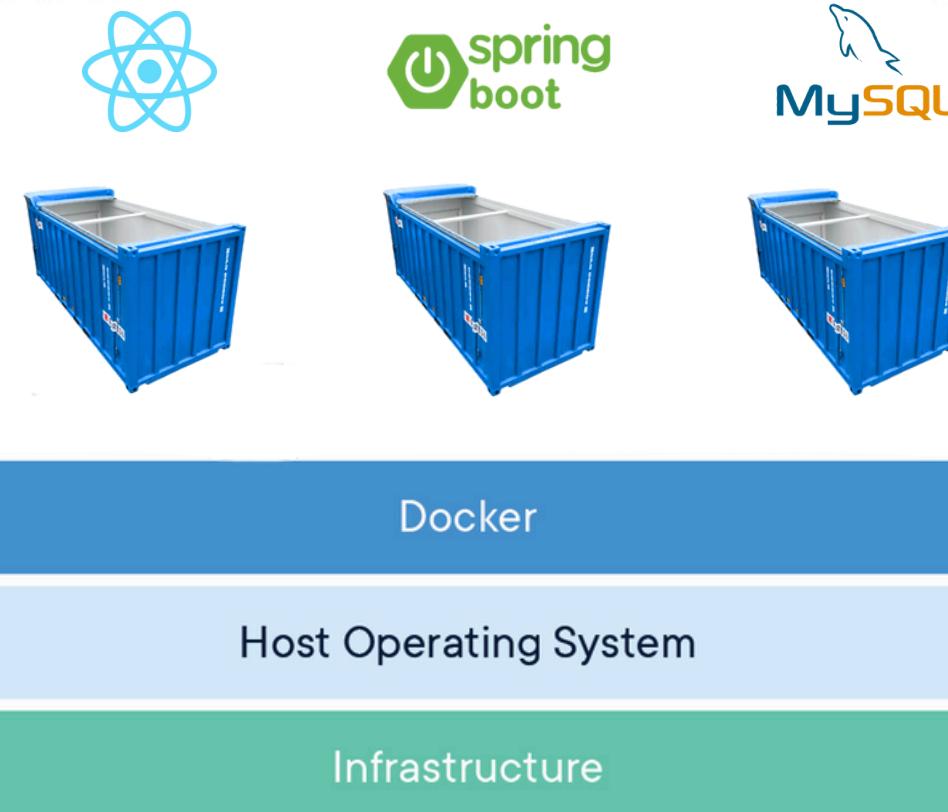
Docker ist eine offene Plattform, die zum Entwickeln, Versenden und Ausführen von Anwendungen dient. Es ermöglicht, Anwendungen von der zugrunde liegenden Infrastruktur zu trennen, sodass Software schnell ausgeliefert werden kann.

Docker erlaubt es Software und ihre Abhängigkeiten zu Paketen zu schnüren.

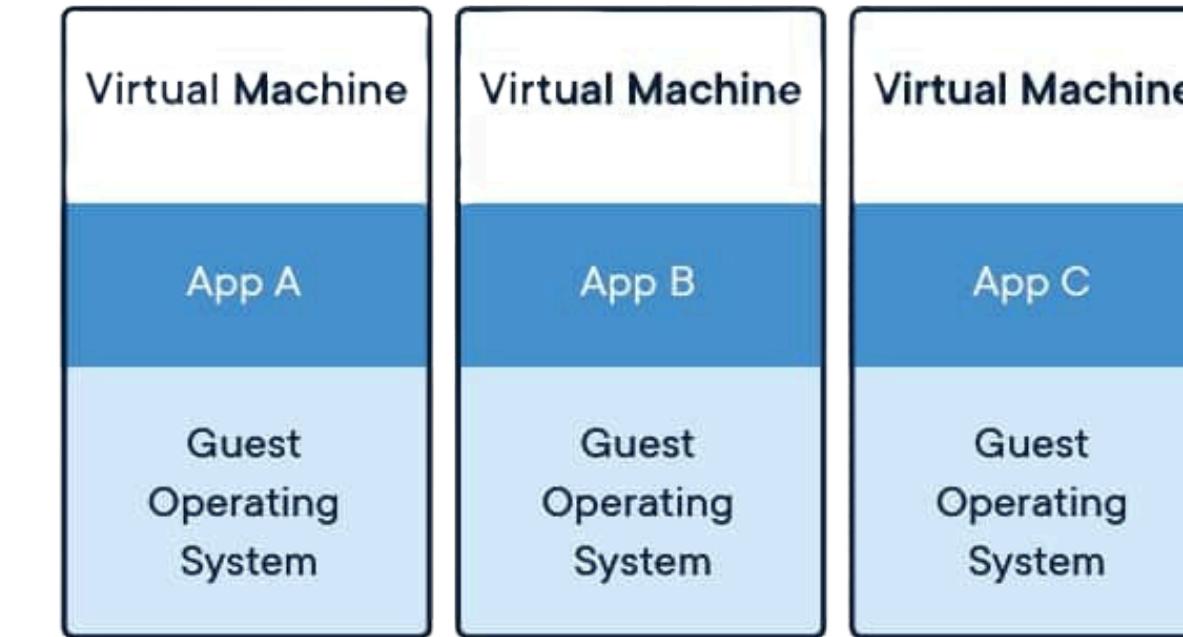
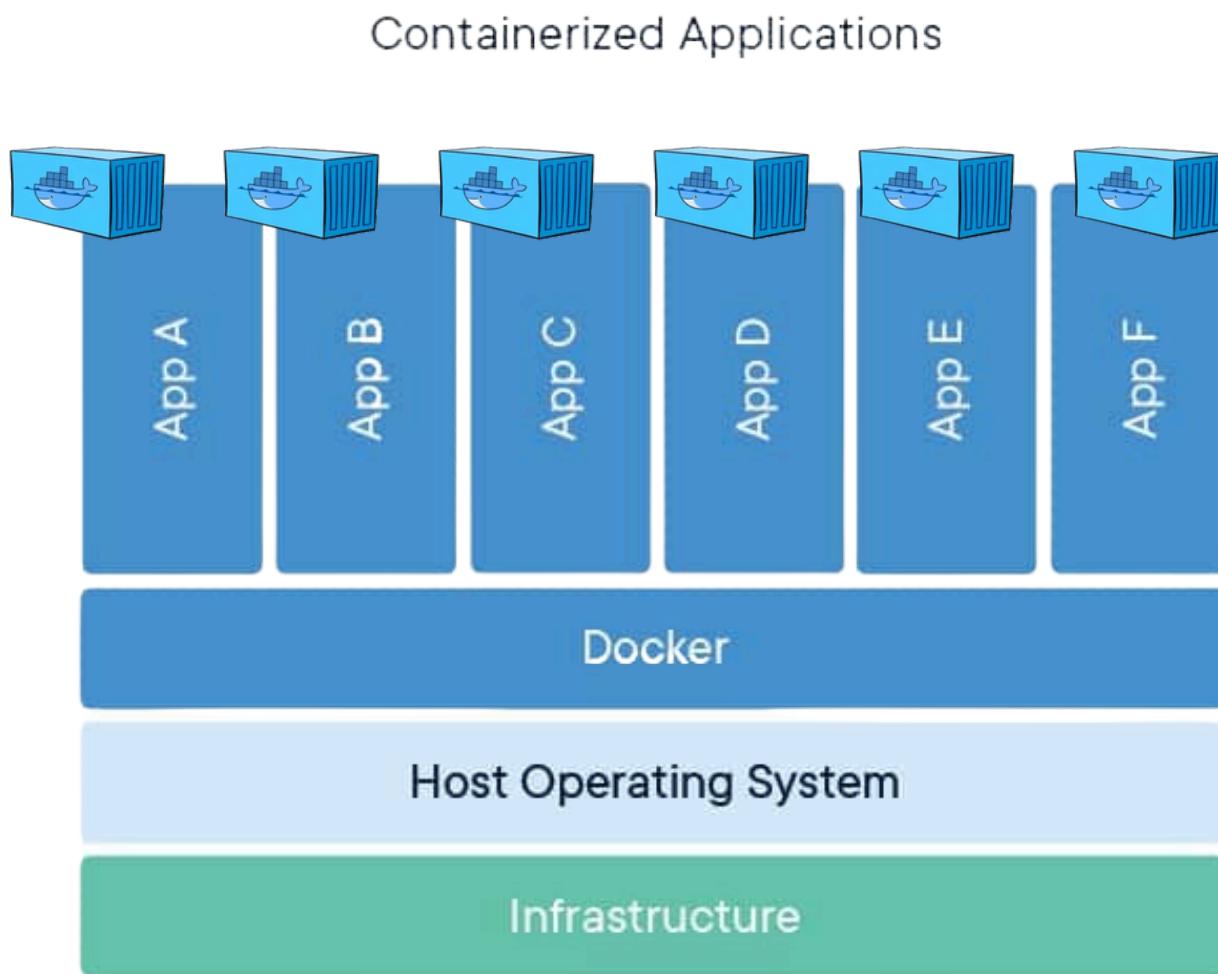


# Was ist ein Container?

Anwendungen und Abhängigkeiten werden in Container verpackt



# Unterschied Virtualisierung & Containerisierung



- **Typ 1 (Bare-Metal)**
- Typ 2 (Hosted)



# Containerisierung

Ressourcen

Startzeit

Portabilität

Skalierung

# Virtualisierung

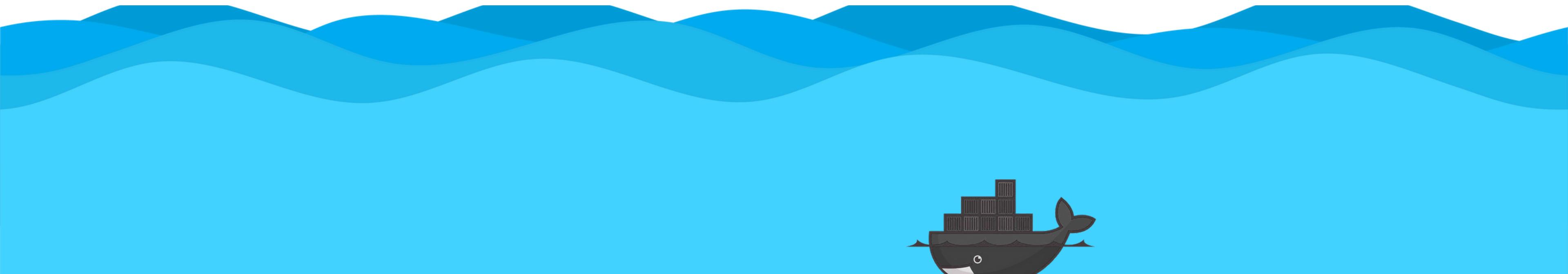
Isolation

Sicherheit

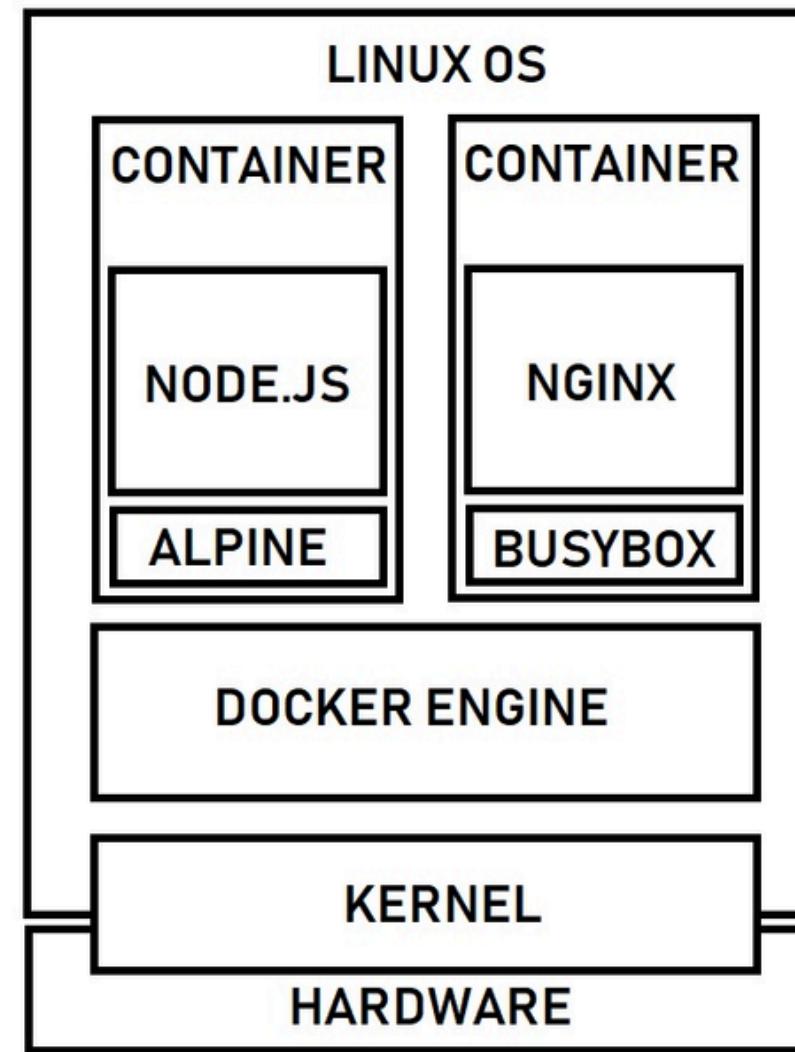
Verwaltung

Stabilität

**VS**



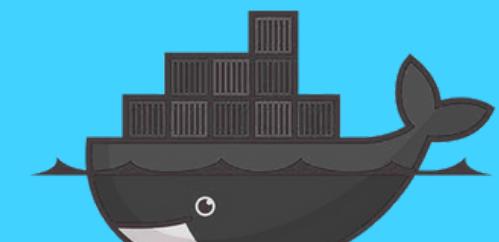
# Wie funktioniert Container (Docker)?



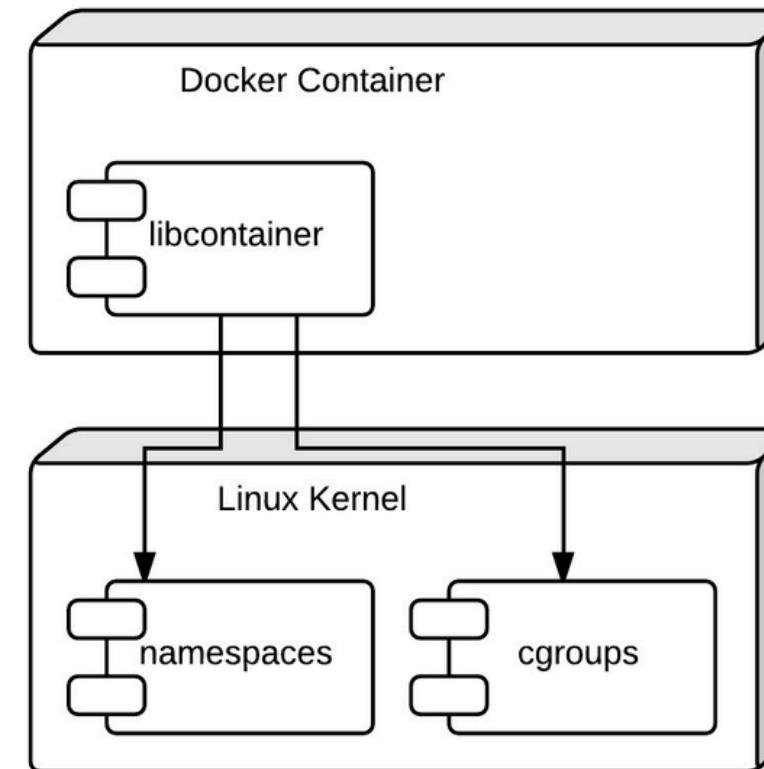
Alpine ca. 5MB  
installiert ca. 130MB

**VS**

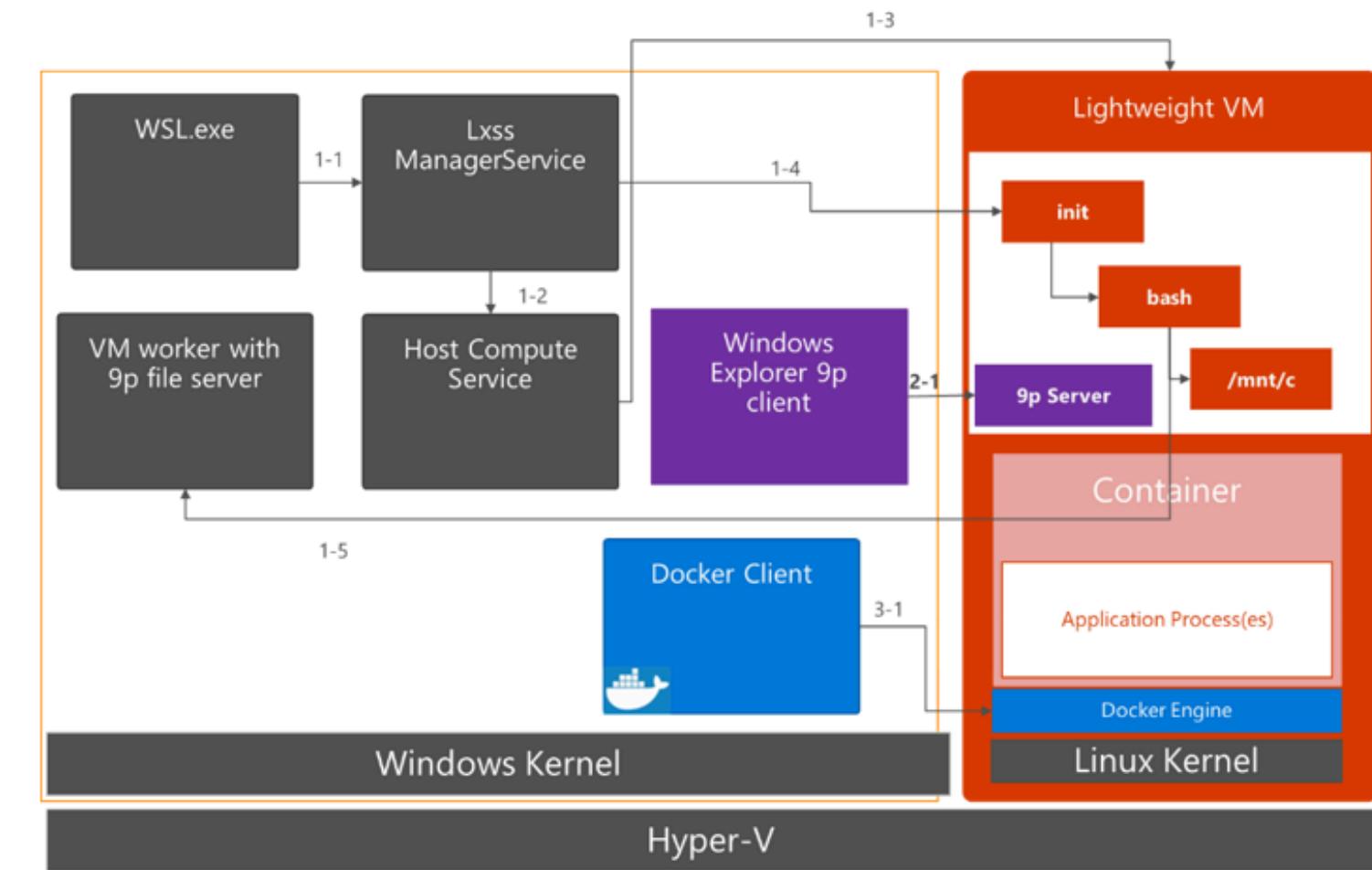
Ubuntu Server ohne GUI ca. 2GB



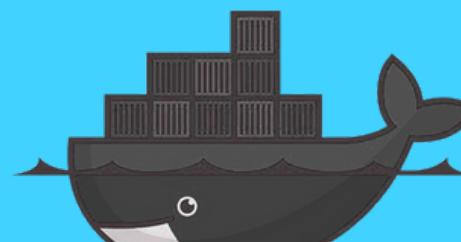
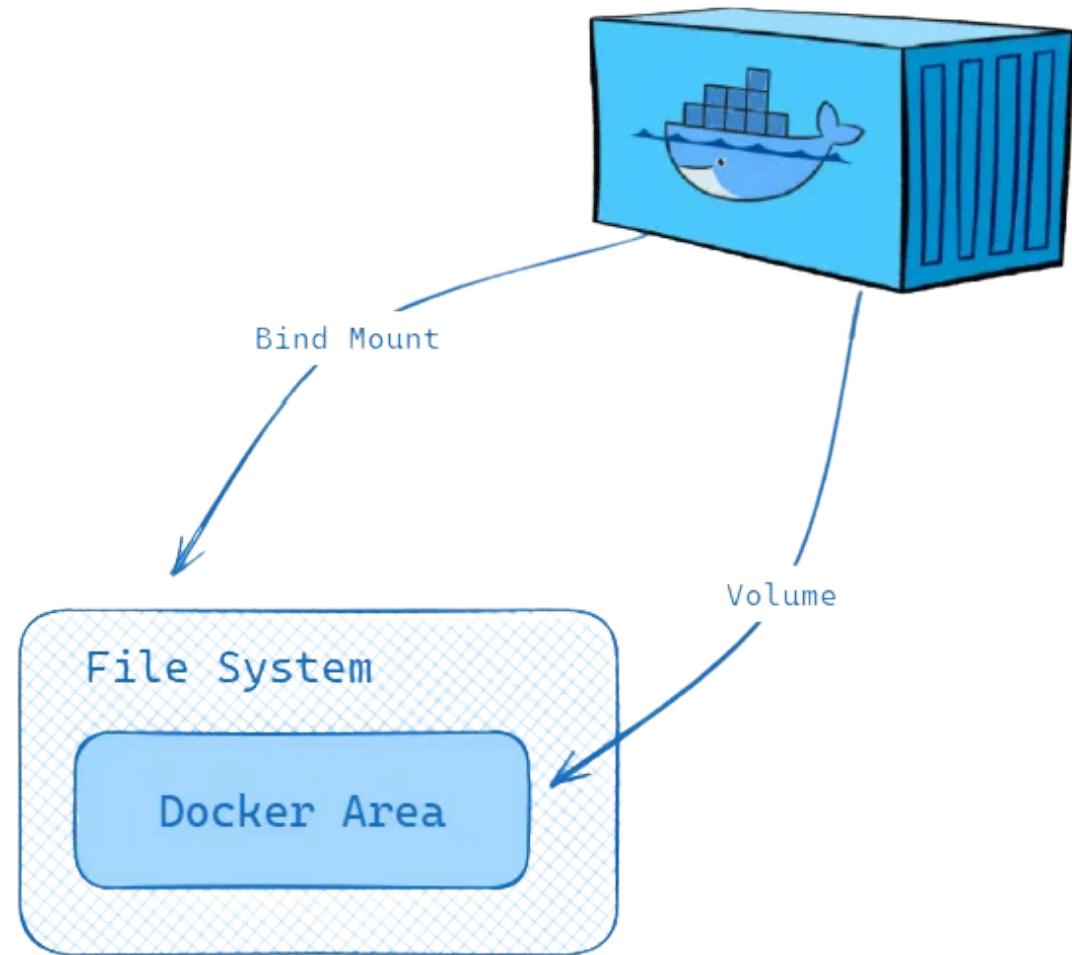
# Proxy Library



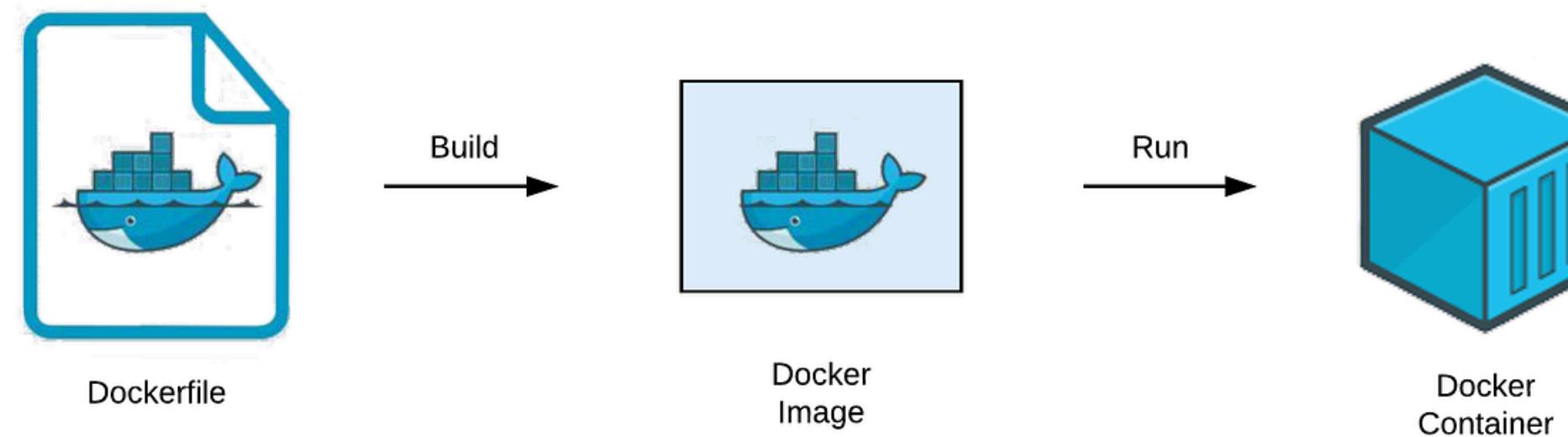
# Wie funktioniert Docker unter Windows?



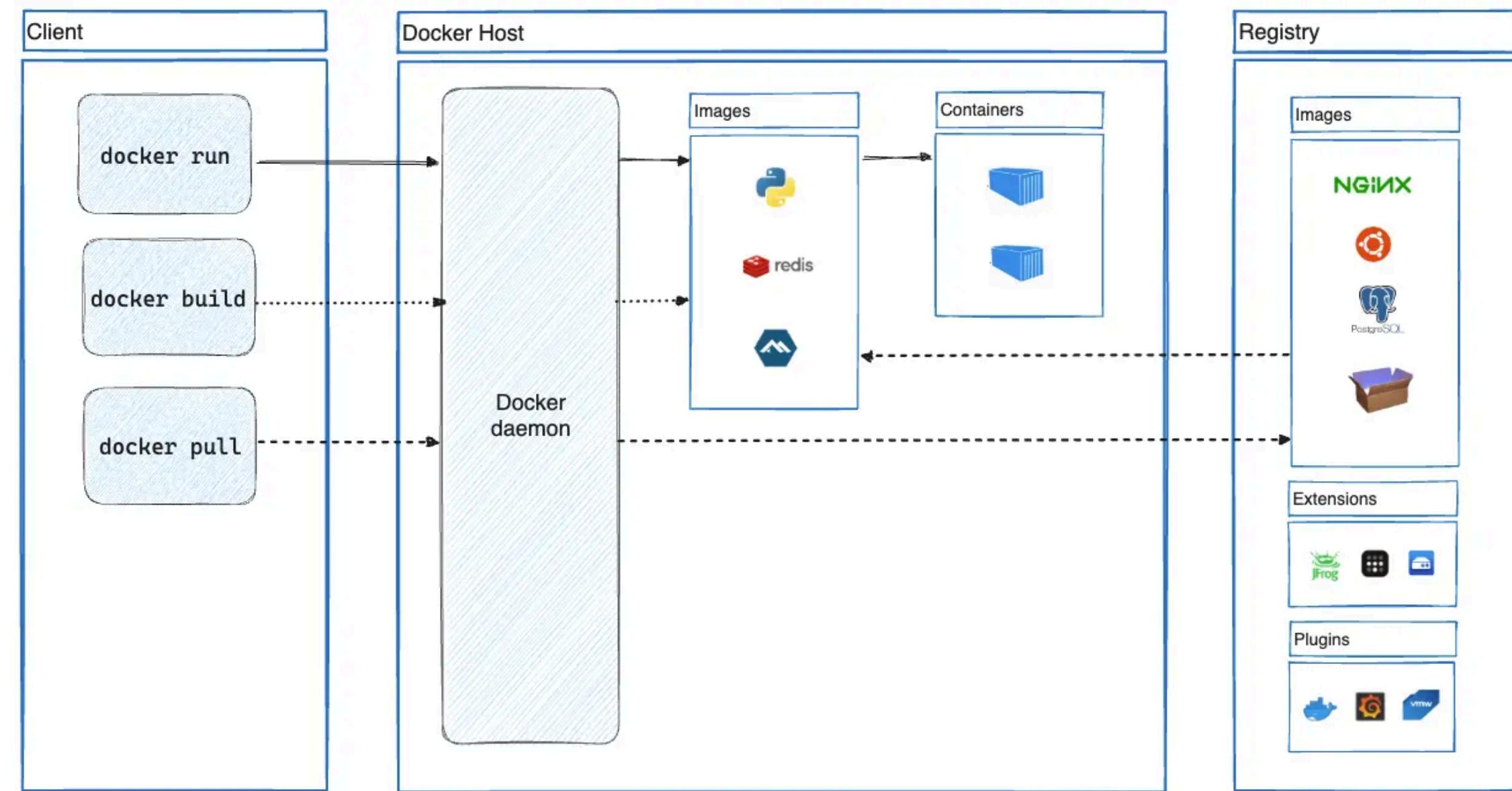
# Data Persistieren



# Die Welt von Docker



# Docker Architektur

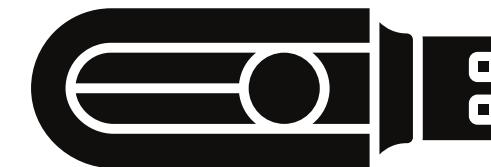


# Was macht die Container so grossartig?

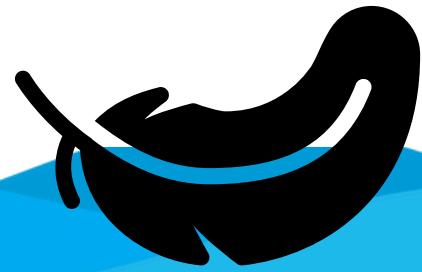
unabhängig



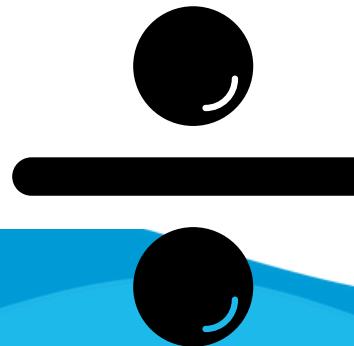
portabel



leichtgewicht

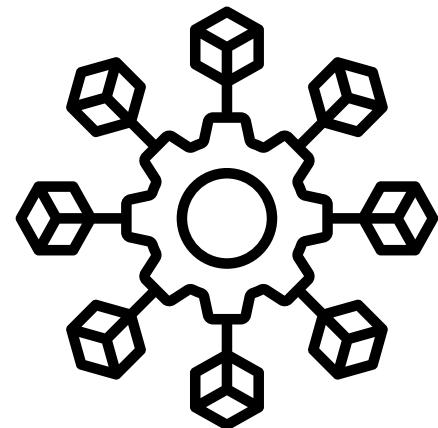


teilbar

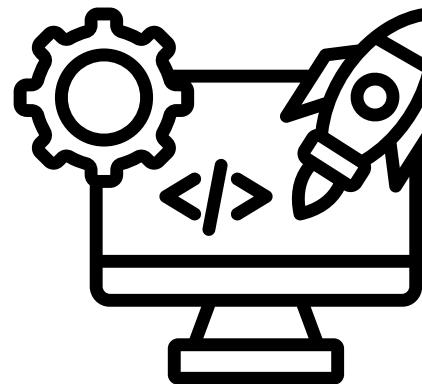


# Use Case

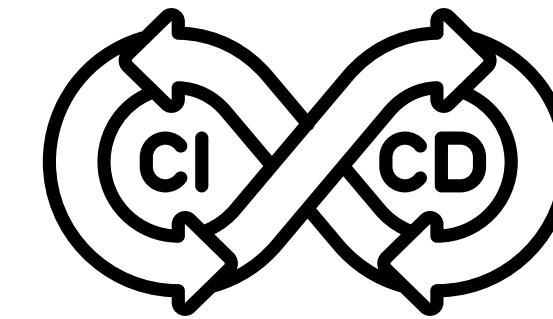
Microservices



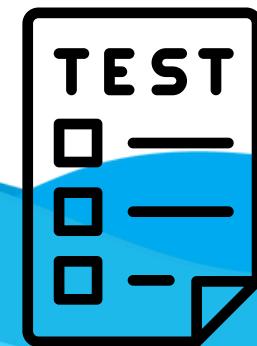
Deployment (+Versionierung)



CI/CD



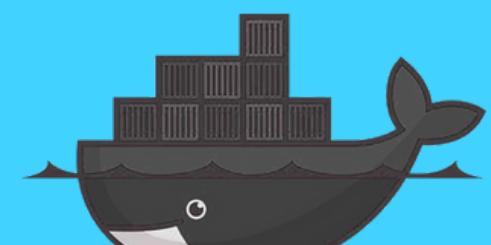
Testumgebung



Legacy-Applikation

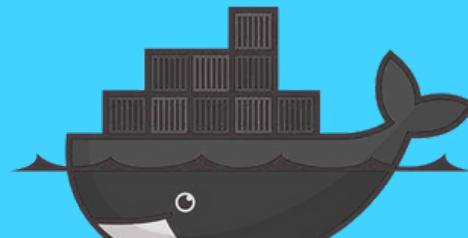


Entwicklung



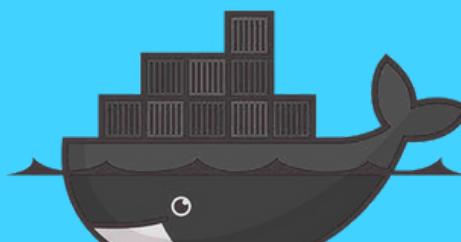
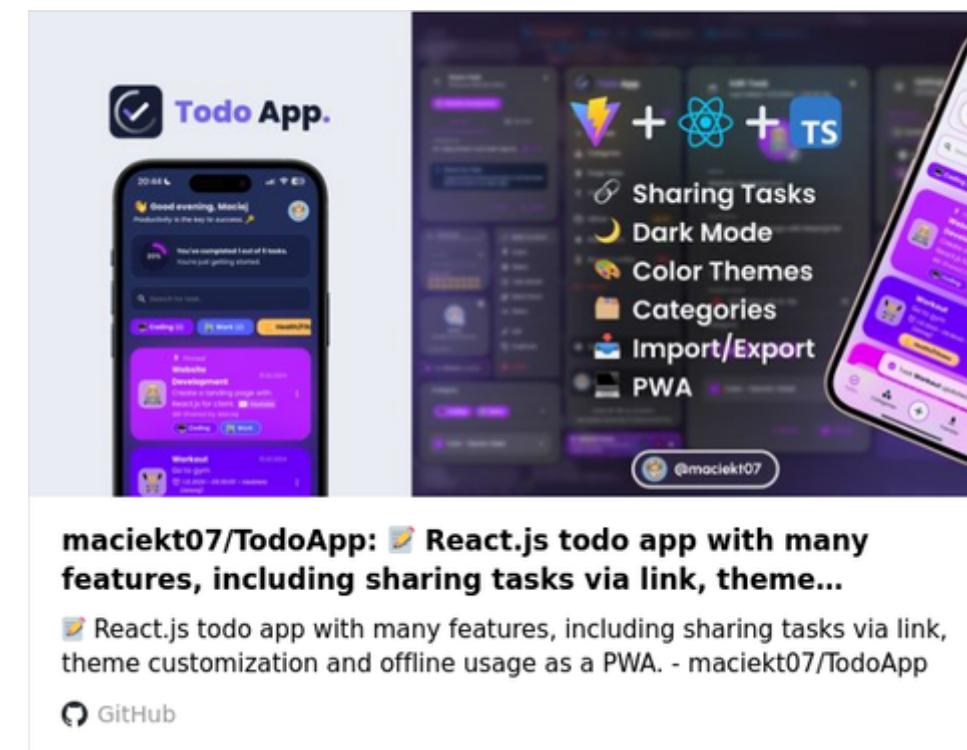
# Hnands On 1.0

## Run OwnCloud



# Hnands On 2.0

## Create a Dockerfile



# Hands On 3.0

## Create a Devcontainer

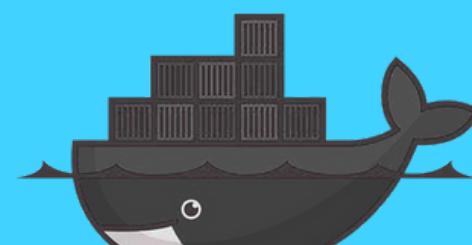
<https://code.visualstudio.com/docs/devcontainers/tutorial>



# Hands On 4.0

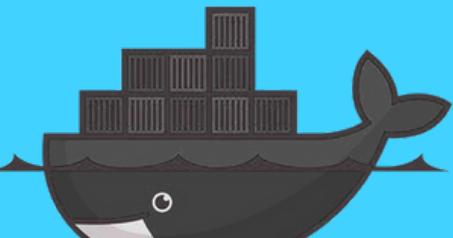
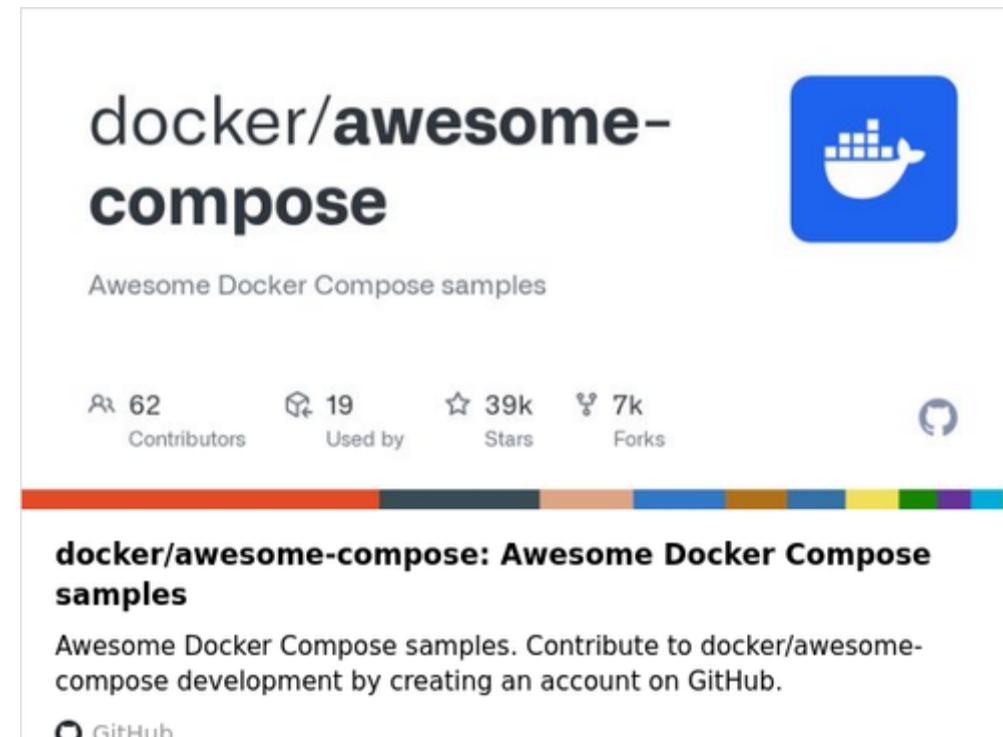
## Push to Registry

<https://hub.docker.com/repositories/dockerblocker2000>



# Hnands On 5.0

## Create Docker Compose



# Danke



Video zu den Uebungen



Scan mich!



GitHub