



Rancher in der Mobiliar Erfahrungsbericht

Daniel Strohecker

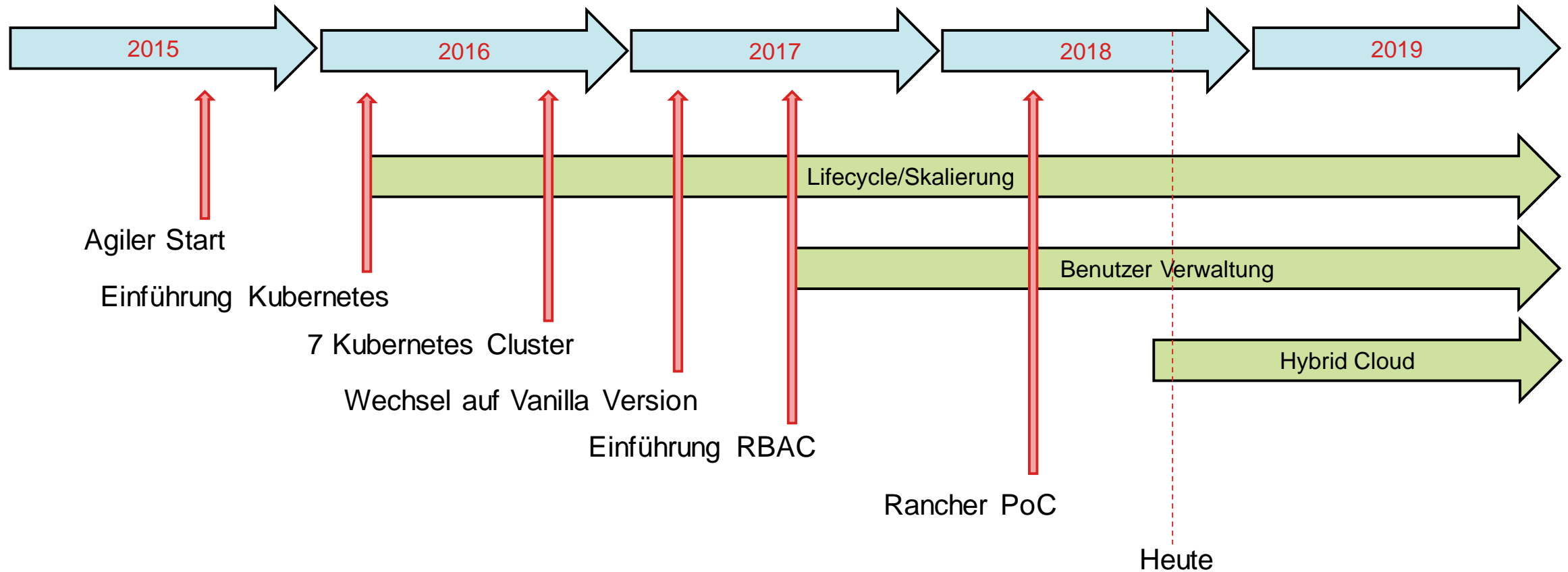
Über mich



- Daniel Strohecker
- Seit 5 Jahren in der Mobiliar
- Bereiche:
 - Linux, Automatisierung, UI, Docker, Kubernetes, Cloud



Aktueller Stand - Kubernetes



Aktueller Stand – Hybrid Cloud



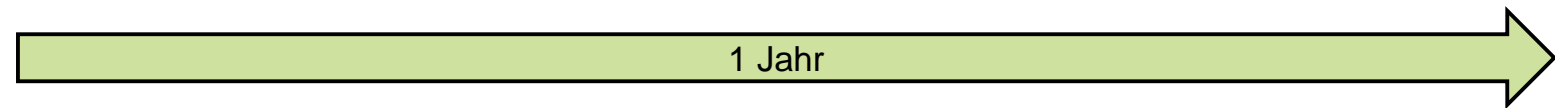
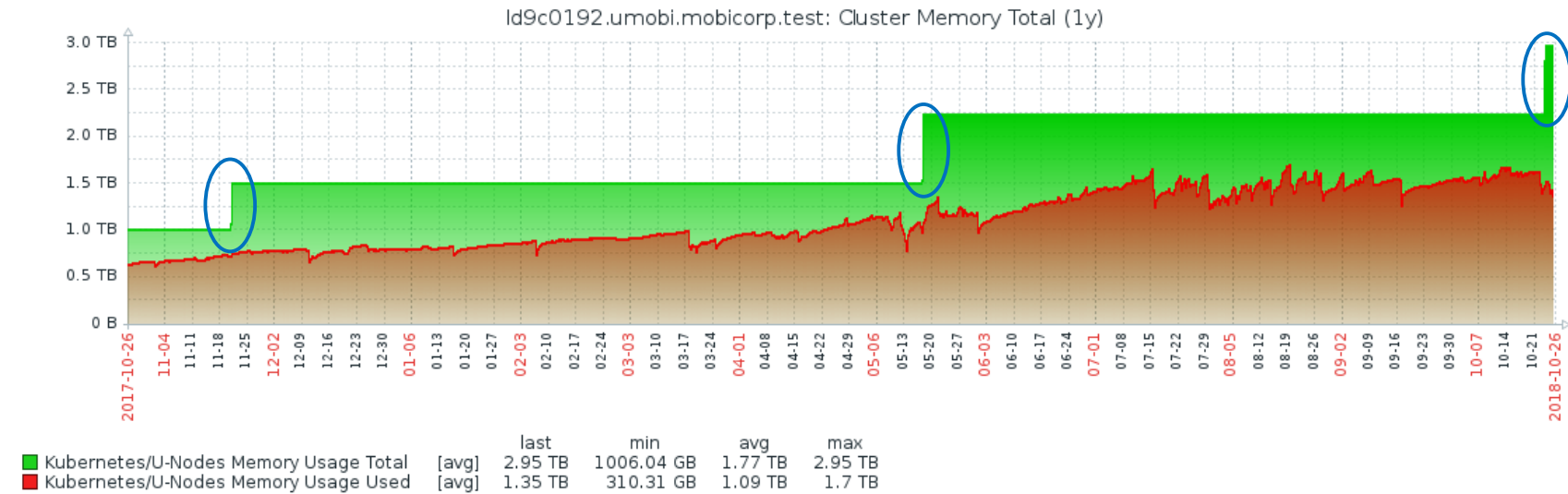
- +
 - Party
 - Lecker
 - Hübsch
 - Stillt verlangen
- -
 - Giftig Grün
 - Ungesund
 - Kalorien
 - Zucker
 - Wunsch nach mehr

Warum Rancher?

- Skalierung

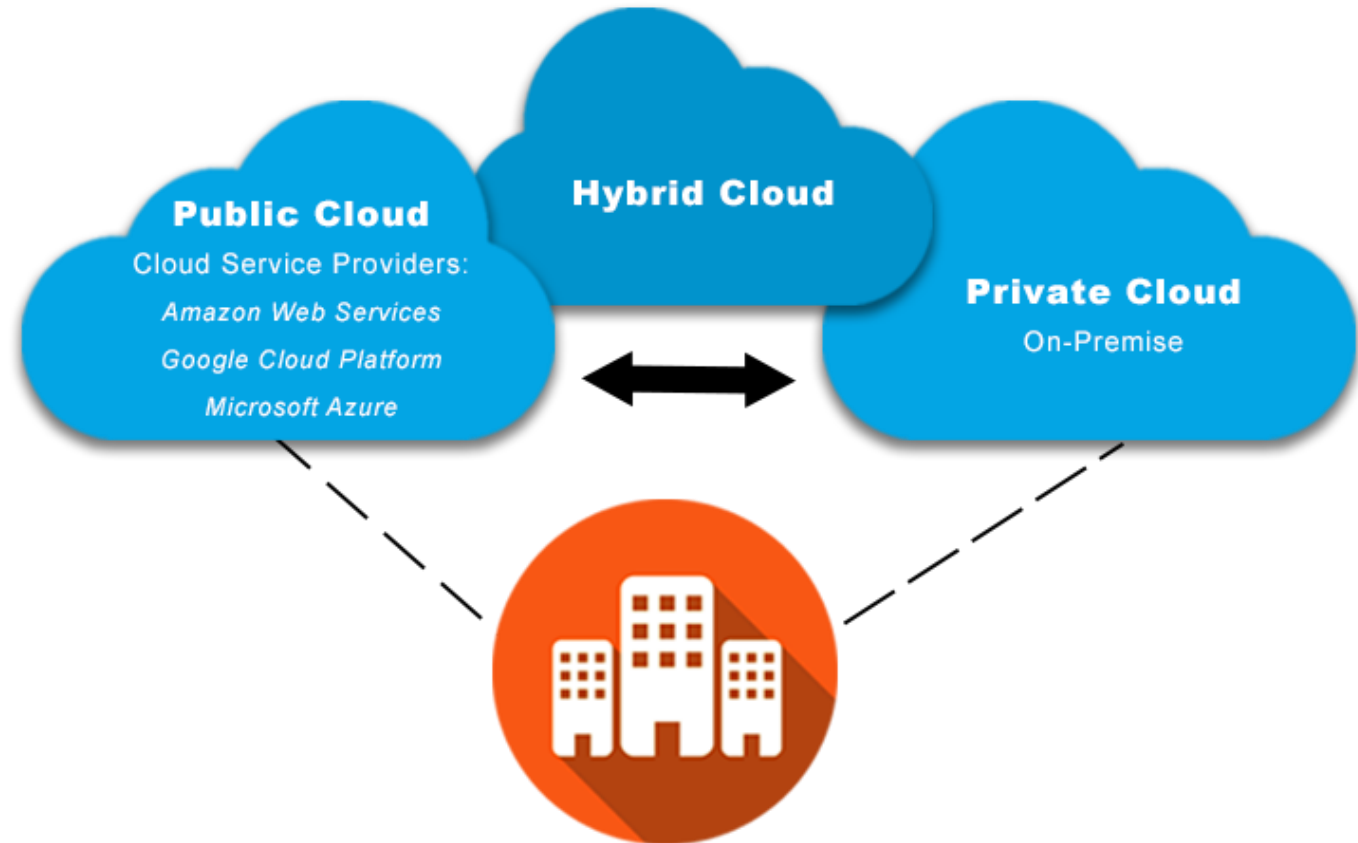
– Dev:

- 24 Nodes
- 480 CPUs
- 3072 GB RAM



Warum Rancher?

- Hybrid Cloud
 - Zusätzliche ...
 - Portale
 - Zugänge
 - Netzwerke



<https://avinetworks.com/glossary/hybrid-cloud/>

Warum Rancher?

- Lifecycle
 - Eigene RPM Builds mit Vanilla Kubernetes
 - Cluster Update per Skript pro Cluster

Kubernetes Status						
Lab	Development	Integration	Production	Admin	Integration Pub	Production Pub
v1.12.1	v1.11.4	v1.11.4	v1.11.2	v1.11.2	v1.11.2	v1.11.2

Warum Rancher?

- Benutzerverwaltung auf
ebene Namespaces
– LDAP Integration
- OIDC Anbindung
- Quota Kontrolle

Namespace Tool

Namespace

Order ...

Clusters

Kube-Admin

Kube-Dev

Kube-Int

Kube-Int-Public

Kube-Lab

Kube-Prod

Kube-Public

Order a new namespace

Namespace

Cluster:

--- Cluster ---

Name of the namespace

project-env

Profiles:

--- Profiles ---

AD Login

AD username

Uxxxxxx

AD password

Optional

Administrator of the namespaces

Uxxxxxx

Administrators of the namespace (AD group)

AFT_xxxxxx_KUBE

☒ Pullsecret for the Mobi docker registry

Submit

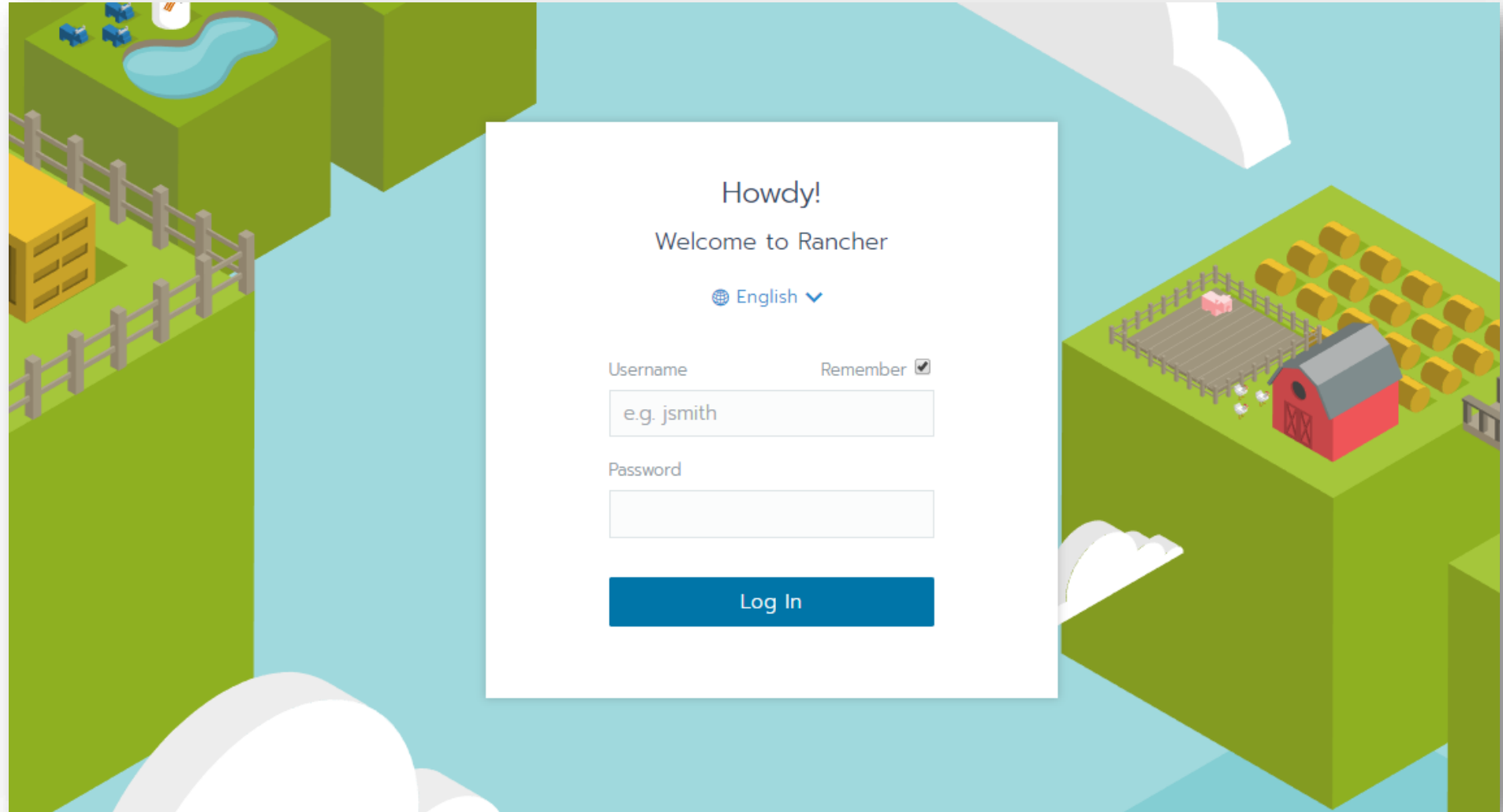
Legend

Profile	Sizes
tiny	"2 CPUs & 4GB RAM, too small for one JBoss"
small	"6 CPUs & 6GB RAM, max. 2 JBoss"
medium	"20 CPUs & 20GB RAM, max. 8 JBoss"
large	"40 CPUs & 40GB RAM, max. 16 JBoss"
xlarge	"80 CPUs & 80GB RAM, max. 34 JBoss"
xxlarge	"120 CPUs & 120GB RAM, max. 54 JBoss"

Was ist Rancher?

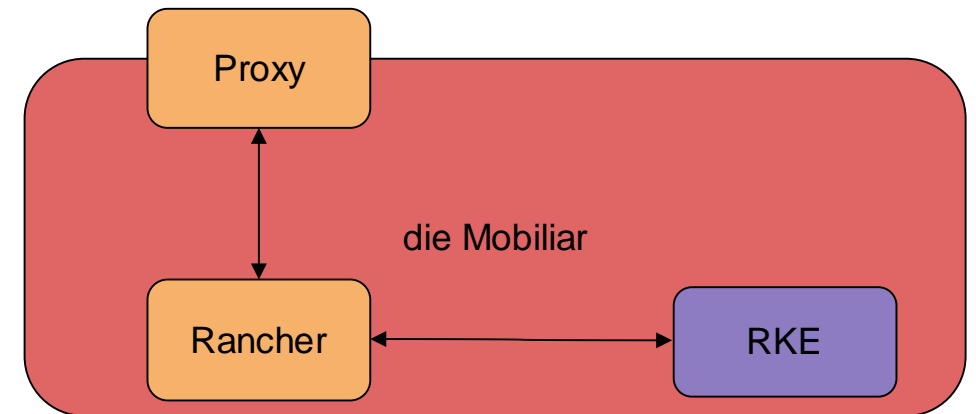


DEMO TIME



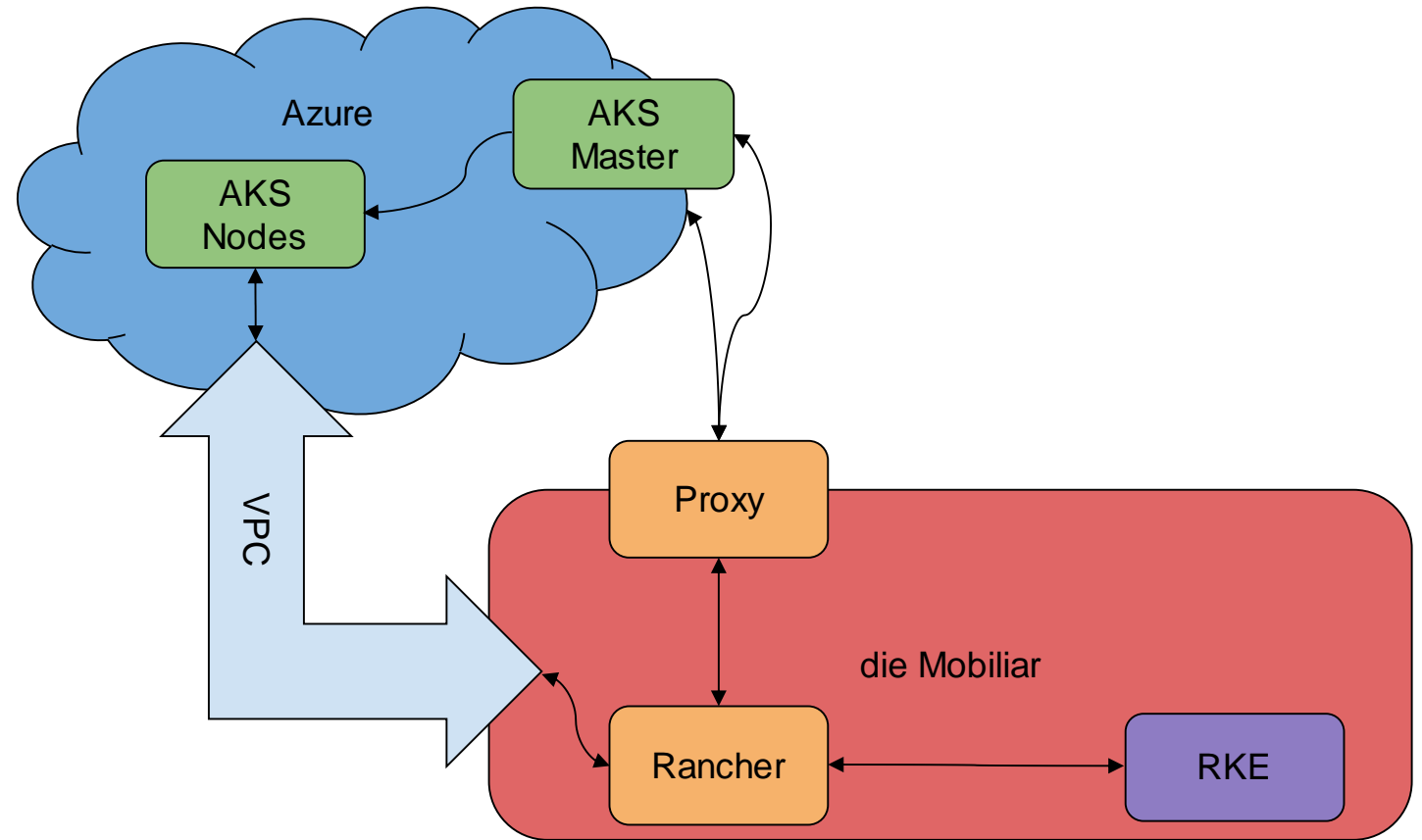
Wie geht Rancher? – Mobiliar Integration

- RKE – Rancher Kubernetes Engine
- Rancher HA
 - Setup mit Helm und RKE in eigenem Kubernetes Cluster
- AirGap
 - Offline Installation Scripts
 - Insecure Docker Registry



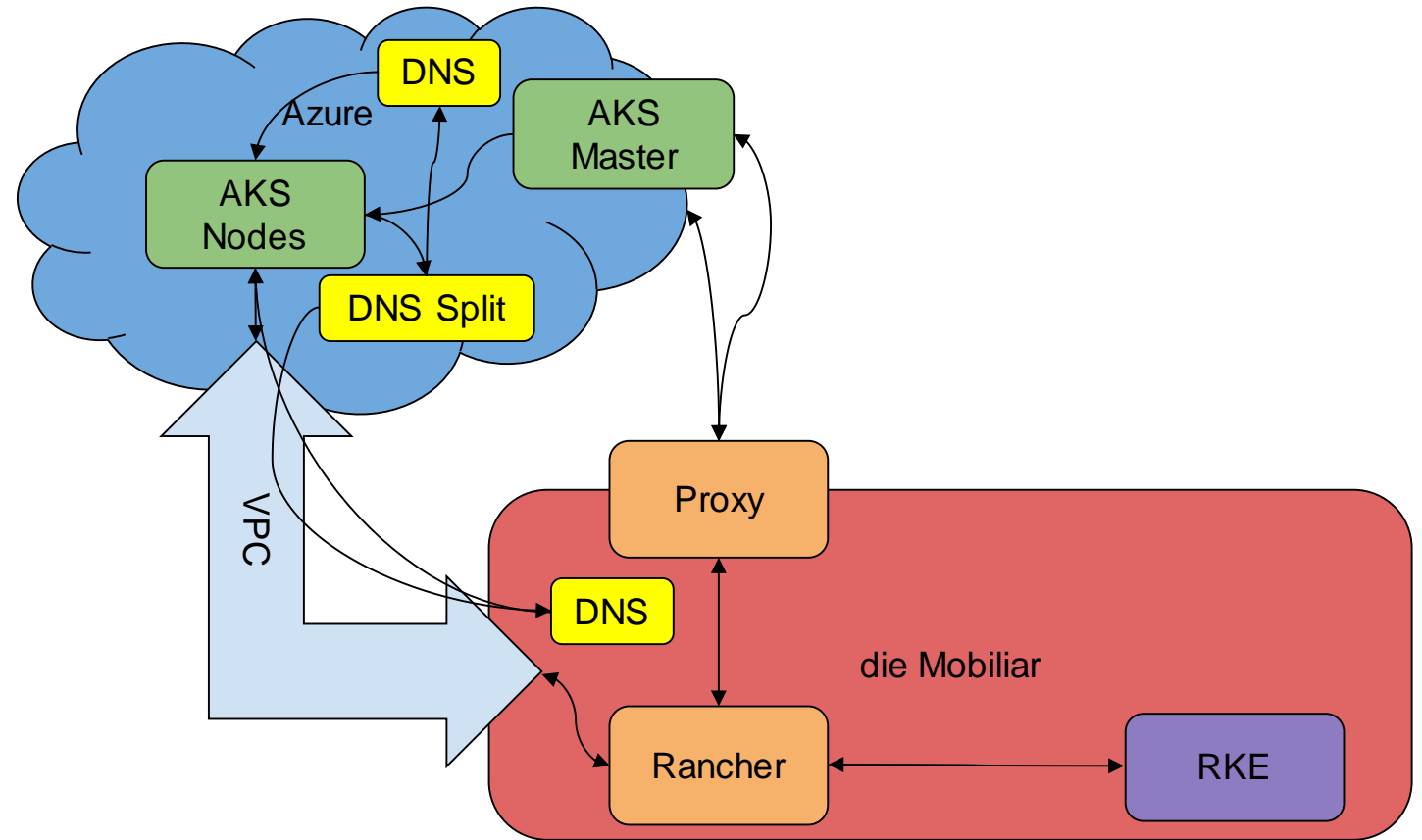
Wie geht Rancher? – Cloud Architektur

- AKS – Azure Kubernetes Service
 - Master => Public IP
 - Nodes Vnet



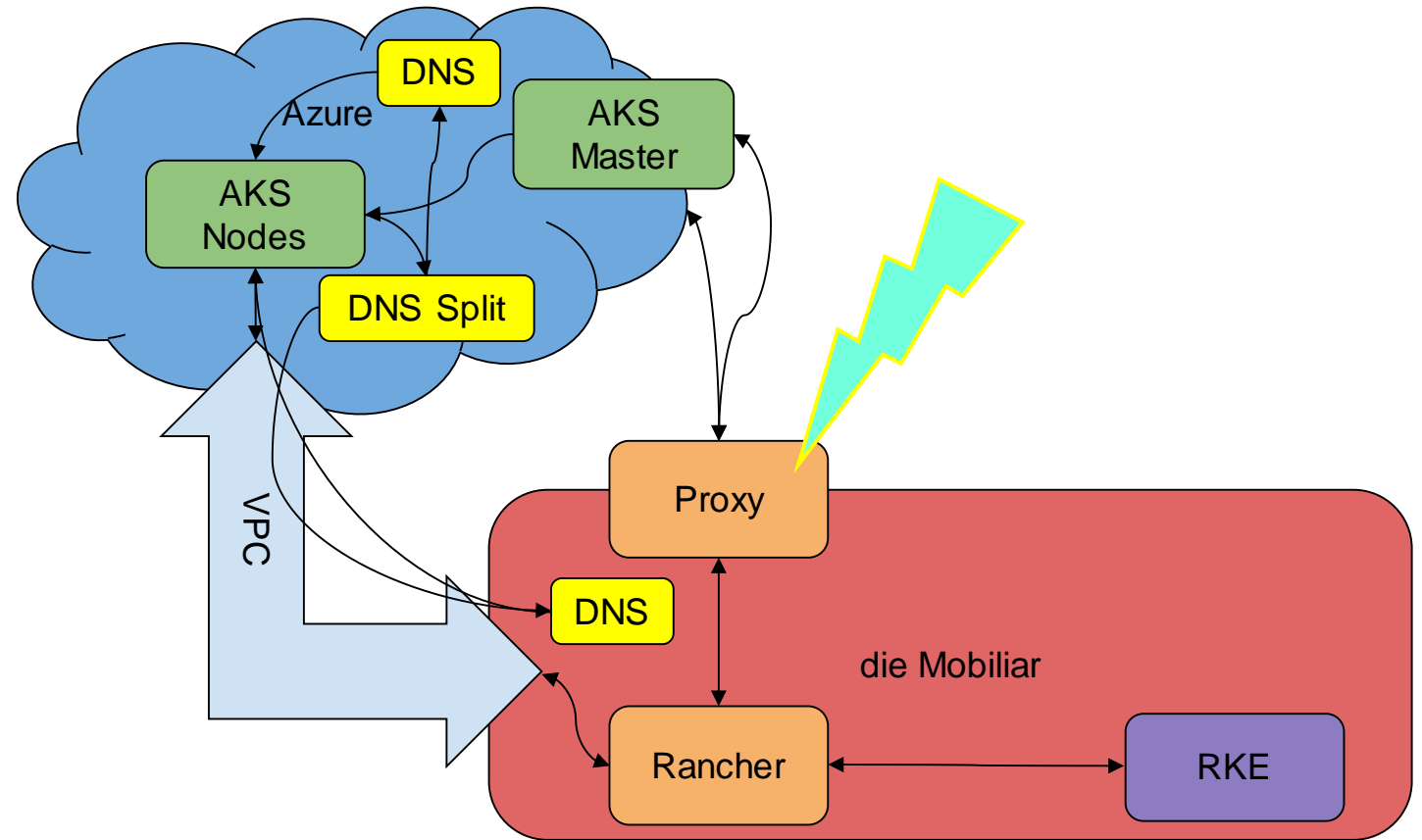
Was geht nicht in Rancher? – DNS Zones

- DNS Zones
 - AKS Master Public DNS
 - Mobi Private DNS



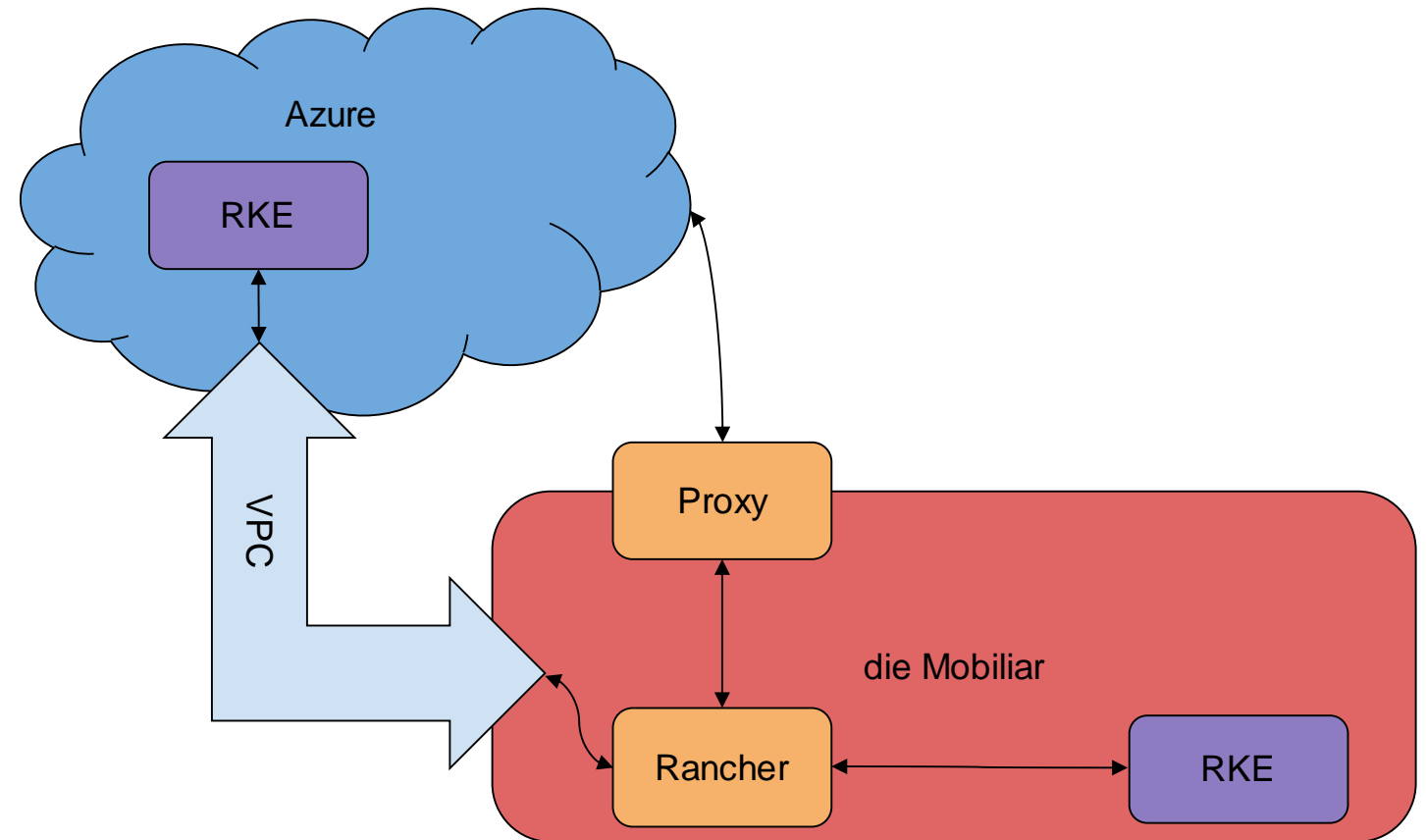
Was geht nicht in Rancher? – HTTP Proxy /Virtual Private Cloud

- AKS
 - Self Signed Zertifikat
- Proxy
 - White Lists
 - SSL Interception



Was geht denn jetzt in Rancher?

- RKE
 - Basiert auf IaaS
 - Skalierung ✓
 - Hybrid Cloud ✓
 - Lifecycle ✓
 - Benutzerverwaltung ✓

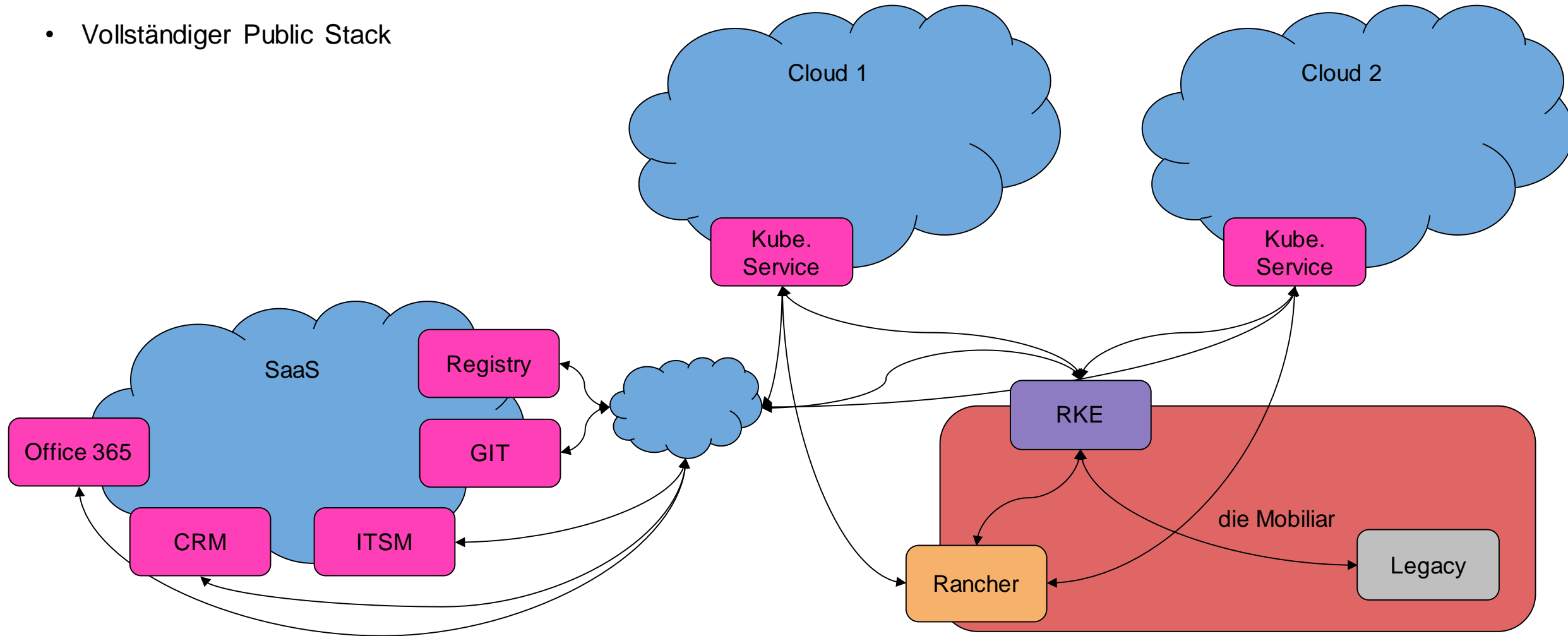


Ausblick



Public Cloud

- Vollständiger Public Stack



Fragen?

