

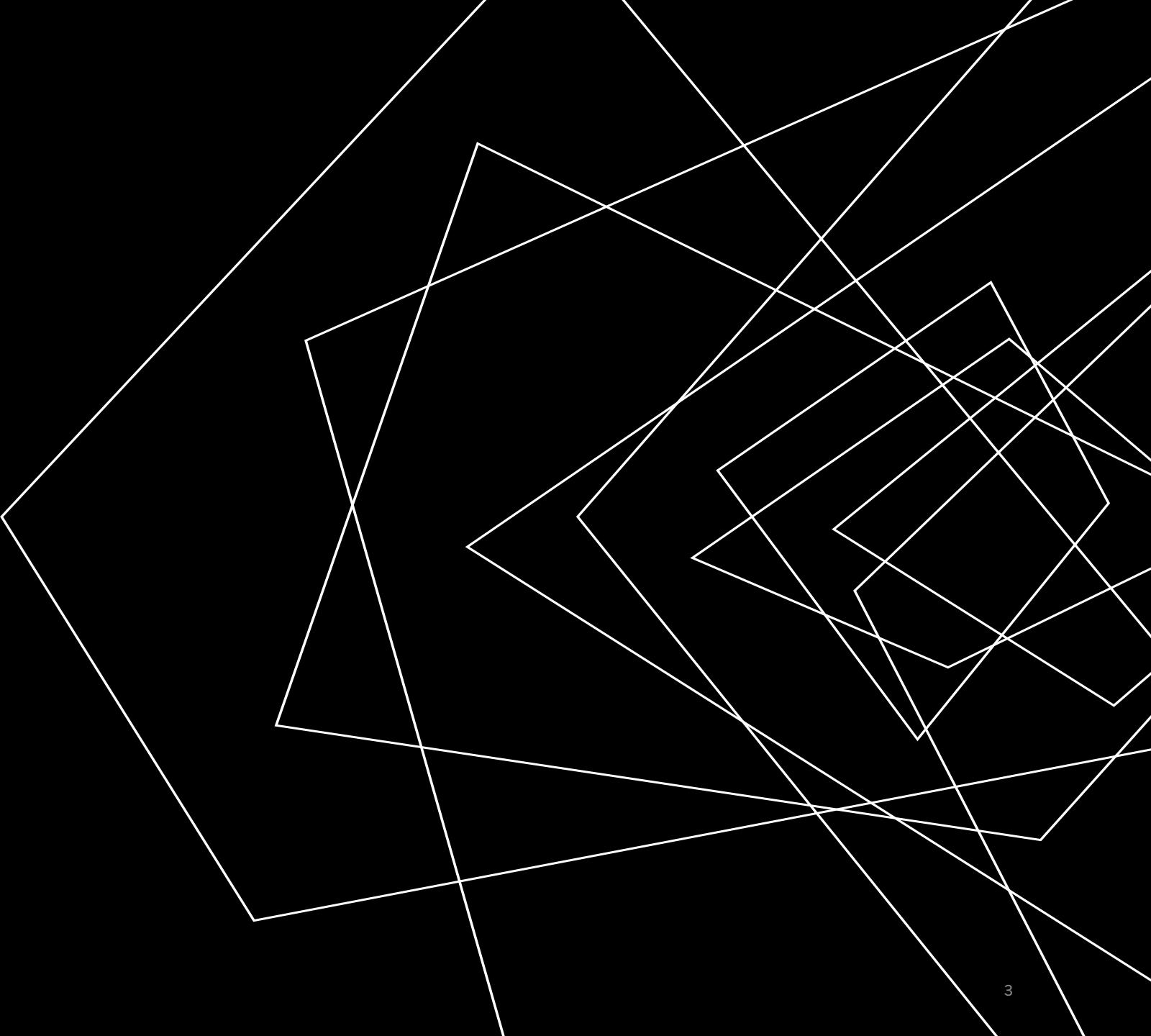
**- TRAINY (KBS610)-  
NON-AI-PRO  
CLOUD SERVICES**

# **GLIEDERUNG**

- 1. Was ist Trainy**
- 2. Vorgehensweise**
- 3. Unsere Infrastruktur**
- 4. Probleme und Entscheidungen**
- 5. Live Demo**

# TRAINY

Was ist Trainy?





## TRAINY

- Check-in-Dienst für ÖP(N)V
- Fahrten loggen, z.B. für Dienstreisen oder persönliche Statistiken
- Globaler Feed mit allen öffentlichen Check-Ins

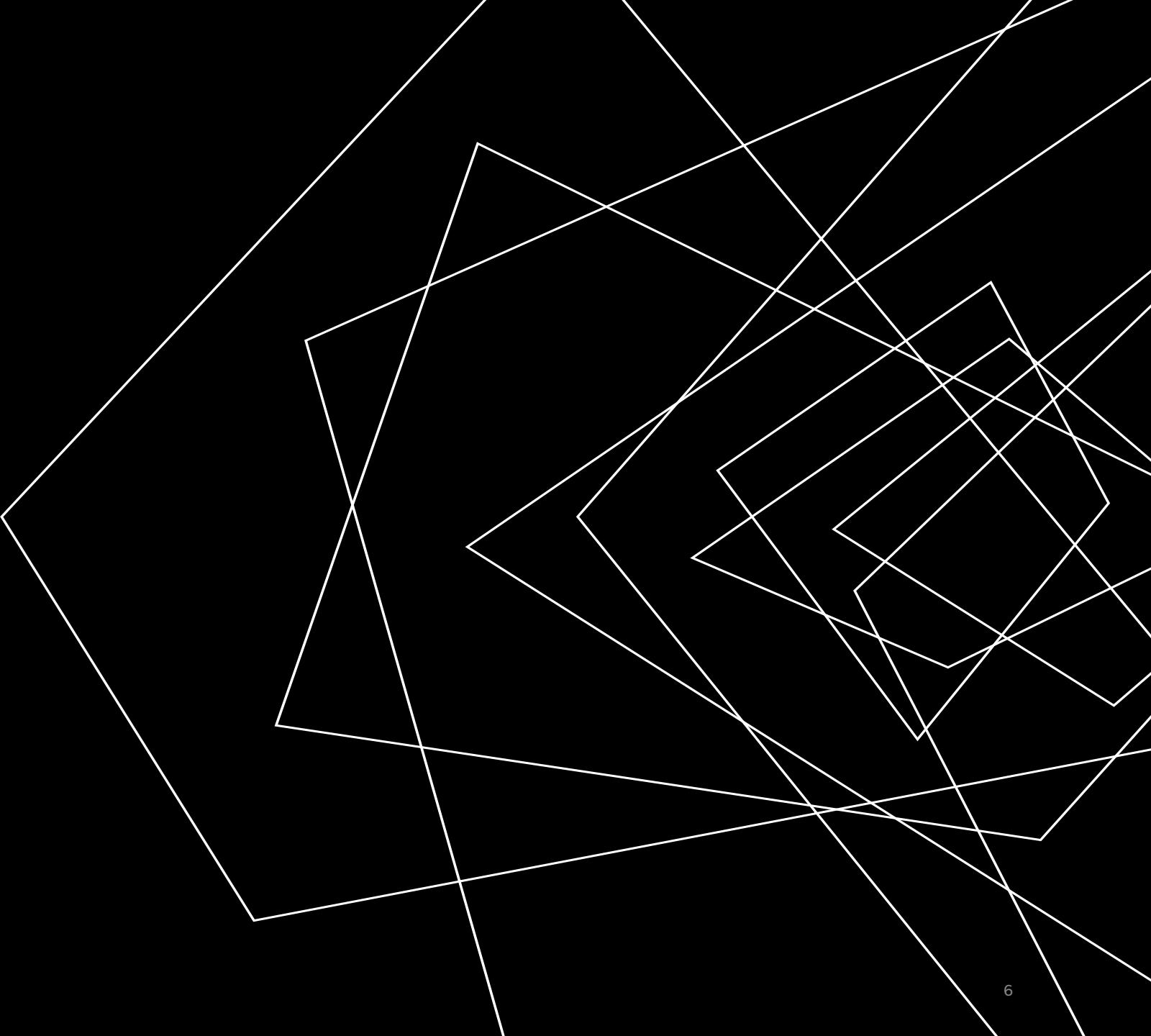


## TRAINY

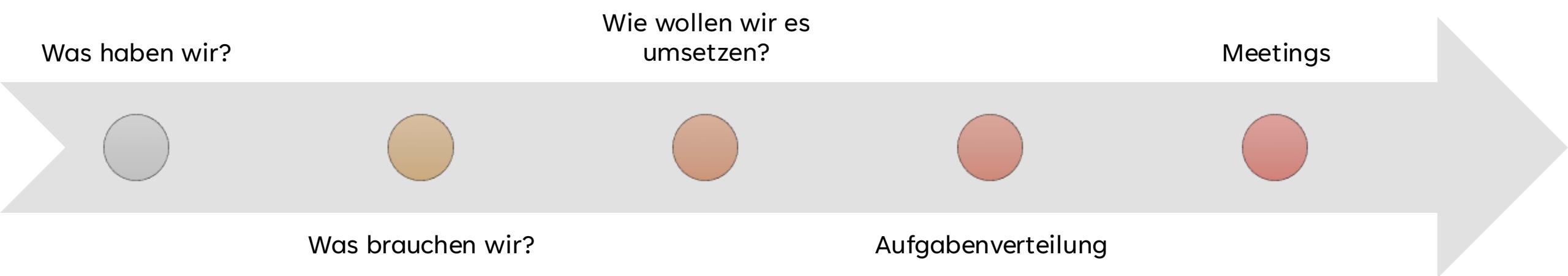
- Custom Backend
- Custom Worker
- Postgres
- Dragenfly (Redis)
- MongoDB
- RabbitMQ

# VORGEHENSWEISE

Welche Gedanken haben  
wir uns gemacht?



# VORGEHENSWEISE



# INFRASTRUKTUR

Welche Besonderheiten hat  
unsere Infrastruktur

# Talos

```
[talos-controlplane-0 (v1.12.Z): uptime 96h13m15s, 2x2.5GHz, 3.8 GiB RAM, PROCS 34, CPU 24.2%, RAM 52.9%]
  UUID      82445e55-2702-4513-a163-f97bb7a0b681  TYPE      controlplane  HOST      talos-controlplane-0
  CLUSTER   talos-controlplane-0 (6 machines)    KUBERNETES  v1.35.0    IP        192.168.2.97/24
  SIDEROLINK n/a                                KUBELET     J Healthy  GW        192.168.2.1
  STAGE     J Running                           APISERVER   J Healthy  CONNECTIVITY J OK
  READY     J True                             CONTROLLER-MANAGER J Healthy  DNS        8.8.8.8, 8.8.4.4
  SECUREBOOT x False                          SCHEDULER   J Healthy  NTP        time.cloudflare.com

  Logs
user: warning: [2026-02-06T20:08:39.2838062592]: [talos] service[trustd](Running): Health check successful
user: warning: [2026-02-06T20:08:39.3220272592]: [talos] service[cri](Running): Health check successful
user: warning: [2026-02-06T20:08:39.3245962592]: [talos] service[etcd](Preparing): Running pre state
user: warning: [2026-02-06T20:08:39.3256072592]: [talos] service[ext-cloudflared](Preparing): Running pre state
user: warning: [2026-02-06T20:08:39.3287442592]: [talos] service[kubelet](Preparing): Running pre state
user: warning: [2026-02-06T20:08:39.3299392592]: [talos] service[ext-cloudflared](Preparing): Creating service runner
user: warning: [2026-02-06T20:08:39.3819712592]: [talos] service[kubelet](Preparing): Creating service runner
user: warning: [2026-02-06T20:08:39.3848312592]: [talos] service[etcd](Preparing): Creating service runner
user: warning: [2026-02-06T20:08:39.5020862592]: [talos] service[ext-cloudflared](Running): Started task ext-cloudflared (PID 2208) for container ext-cloudflared
kern: notice: [2026-02-06T20:08:39.5135902592]: XFS (uda1): Mounting V5 Filesystem 16309966-831b-4fd5-b411-d8ba7fc8e925
kern: info: [2026-02-06T20:08:39.5318152592]: XFS (uda1): Ending clean mount
user: warning: [2026-02-06T20:08:39.5375402592]: [talos] volume mount {"component": "controller-runtime", "controller": "block.MountController", "volume": "STATE", "source": "/dev/uda1", "target": "/system/state", "filesystem": "xfs", "read_only": false, "detached": true}
kern: notice: [2026-02-06T20:08:39.5647902592]: XFS (uda1): Unmounting Filesystem 16309966-831b-4fd5-b411-d8ba7fc8e925
user: warning: [2026-02-06T20:08:39.5970342592]: [talos] volume unmount {"component": "controller-runtime", "controller": "block.MountController", "volume": "STATE", "source": "/dev/uda1", "target": "/system/state", "filesystem": "xfs"}
user: warning: [2026-02-06T20:08:39.6972842592]: [talos] service[etcd](Running): Started task etcd (PID 2302) for container etcd
user: warning: [2026-02-06T20:08:39.7252772592]: [talos] service[kubelet](Running): Started task kubelet (PID 2301) for container kubelet
user: warning: [2026-02-06T20:08:41.3875202592]: [talos] service[kubelet](Running): Health check successful
user: warning: [2026-02-06T20:08:46.4524292592]: [talos] service[etcd](Running): Health check successful
user: warning: [2026-02-06T20:08:46.4536112592]: [talos] task startAllServices (1/1): done, 8.366818231s
user: warning: [2026-02-06T20:08:46.4592252592]: [talos] phase startEverything (9/9): done, 8.368682748s
user: warning: [2026-02-06T20:08:46.4677562592]: [talos] boot sequence: done: 8.82249034s
user: warning: [2026-02-06T20:08:46.4684692592]: [talos] rendered new static pod {"component": "controller-runtime", "controller": "k8s.StaticPodServerController", "id": "kube-apiserver"}
user: warning: [2026-02-06T20:08:46.4710612592]: [talos] rendered new static pod {"component": "controller-runtime", "controller": "k8s.StaticPodServerController", "id": "kube-controller-manager"}
user: warning: [2026-02-06T20:08:46.4726712592]: [talos] rendered new static pod {"component": "controller-runtime", "controller": "k8s.StaticPodServerController", "id": "kube-scheduler"}
user: warning: [2026-02-06T20:09:30.4681972592]: [talos] controller failed {"component": "controller-runtime", "controller": "k8s.NodeApplyController", "error": "1 error(s) occurred:\n\ttimeout"}
user: warning: [2026-02-06T20:09:43.1441672592]: [talos] machine is running and ready {"component": "controller-runtime", "controller": "runtime.MachineStatusController"}]

[[local]] --- [Summary] --- [FZ: Monitor]
```



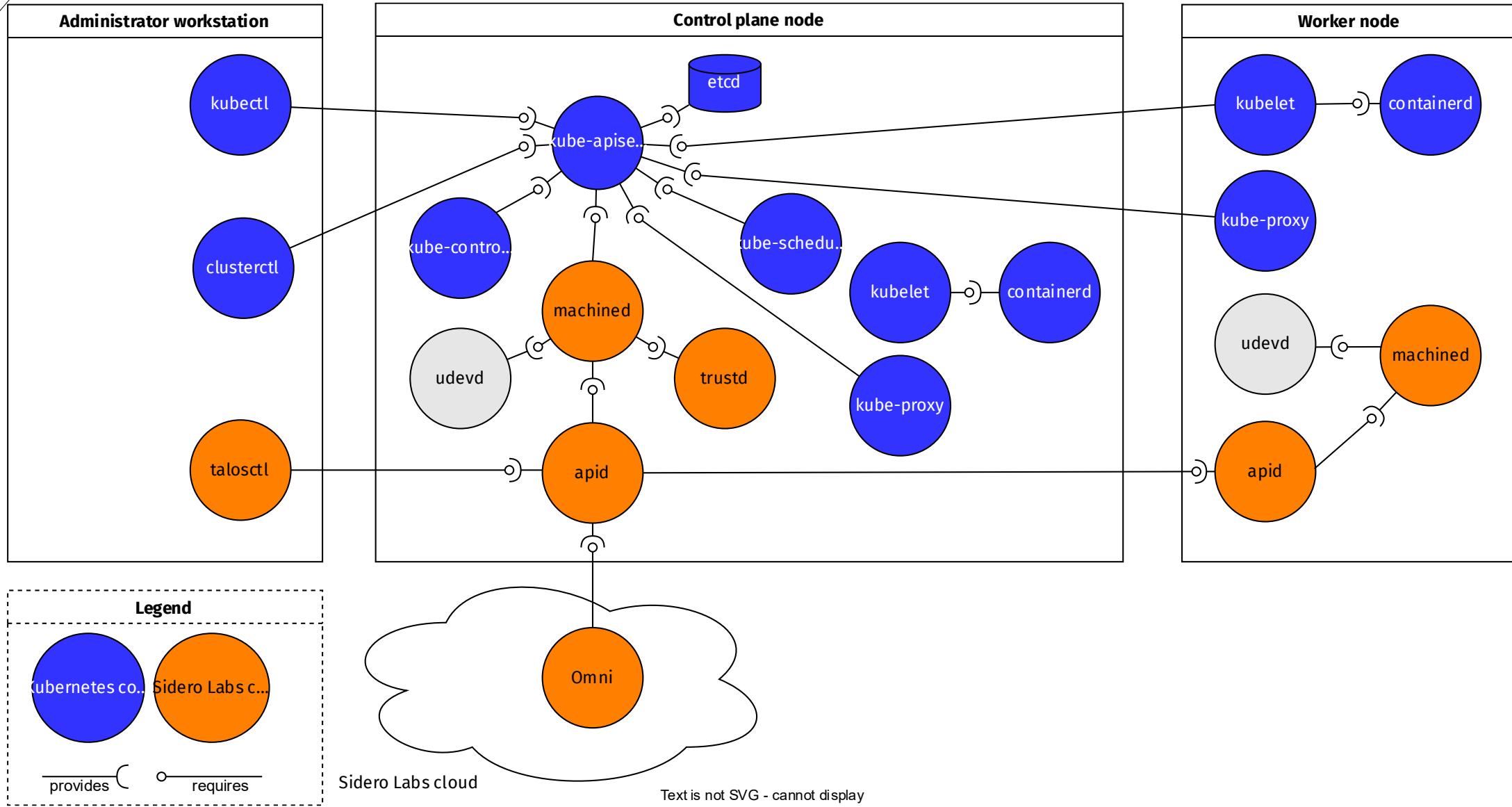
Talos Linux is a Certified Kubernetes distribution



Sidero is a proud CNCF member



# Talos



# FLUXCD



Headlamp

Clusters main

Map

Workloads

Speicher

Netzwerk

Gateway (beta)

Sicherheit

Konfiguration

Custom Resources

cert-manager

Flux

Overview

Kustomizations

HelmReleases

Sources

Image Automations

Notifications

Canaries

Flux Runtime

+ Erstellen

v1.35.0

https://headlamp.kbs610.click/c/main/flux/overview

Search

Press / to search

Sort By Most Failed First

Flux Overview

Kustomizations

12/12 running  
0/12 failed  
0/12 suspended  
0/12 processing

100%

Helm Releases

15/15 running  
0/15 failed  
0/15 suspended  
0/15 processing

100%

Git Repositories

3/3 running  
0/3 failed  
0/3 suspended  
0/3 processing

100%

OCI Repositories

4/4 running  
0/4 failed  
0/4 suspended  
0/4 processing

100%

Buckets

0/0 running  
0/0 failed  
0/0 suspended  
0/0 processing

0%

Helm Repositories

8/8 running  
0/8 failed  
0/8 suspended  
0/8 processing

100%

External Artifacts

0/0 running  
0/0 failed  
0/0 suspended  
0/0 processing

0%

Helm Charts

10/10 running  
0/10 failed  
0/10 suspended  
0/10 processing

100%

Image Repositories

6/6 running  
0/6 failed  
0/6 suspended  
0/6 processing

100%

Providers

0/0 running  
0/0 failed  
0/0 suspended  
0/0 processing

0%

Receivers

8/8 running  
0/8 failed  
0/8 suspended  
0/8 processing

100%

Image Policies

6/6 running  
0/6 failed  
0/6 suspended  
0/6 processing

100%

Image Update Automations

2/2 running  
0/2 failed  
0/2 suspended  
0/2 processing

100%

Flux Overview

Sort By Most Failed First

Kustomizations

12/12 running  
0/12 failed  
0/12 suspended  
0/12 processing

100%

Helm Releases

15/15 running  
0/15 failed  
0/15 suspended  
0/15 processing

100%

Git Repositories

3/3 running  
0/3 failed  
0/3 suspended  
0/3 processing

100%

OCI Repositories

4/4 running  
0/4 failed  
0/4 suspended  
0/4 processing

100%

Buckets

0/0 running  
0/0 failed  
0/0 suspended  
0/0 processing

0%

Helm Repositories

8/8 running  
0/8 failed  
0/8 suspended  
0/8 processing

100%

External Artifacts

0/0 running  
0/0 failed  
0/0 suspended  
0/0 processing

0%

Helm Charts

10/10 running  
0/10 failed  
0/10 suspended  
0/10 processing

100%

Image Repositories

6/6 running  
0/6 failed  
0/6 suspended  
0/6 processing

100%

Providers

0/0 running  
0/0 failed  
0/0 suspended  
0/0 processing

0%

Receivers

8/8 running  
0/8 failed  
0/8 suspended  
0/8 processing

100%

Image Policies

6/6 running  
0/6 failed  
0/6 suspended  
0/6 processing

100%

Image Update Automations

2/2 running  
0/2 failed  
0/2 suspended  
0/2 processing

100%

# FluxCD

## Source

Definiert Quellen

- HelmRepository/OCIRepository
- HelmChart
- GitRepository
- Bucket (S3)

## Helm & Kustomize

Vergleichbar mit ArgoCD Projekten

- Besitzt Referenz zu einer Source
- Können verschlüsselt sein
- Im selben Namespace wie Bestandteile

## Image

Image Update automation

- ImageRepository
- ImagePolicy
- ImageUpdateAutomation

## Notification

Definiert Kommunikationspunkte

- Alerts
- Providers
- Receivers

# Gateway API



# Gateway API

Was ist die Gateway API?

- Nachfolger der Ingress-Ressource
- Soll Ingress langfristig ersetzen
- Regelt das Routing von externem Traffic zu Services im Cluster

Warum die Gateway API?

- Empfehlung eines **EA-Mitarbeiters**
- Rollenbasiert: Gateway vs. HTTPRoute

# Gateway API

## GatewayClass

Definiert den Controller Typ

- Verweist auf den Gateway-Controller

## Gateway

Konfiguriert Listener (Ports, TLS)

- Bindet an eine GatewayClass
- Definiert Listener (Port 80, 443, ...)

## HTTPRoute

Definiert den Controller Typ

- Matched auf Host, Path, Header
- Verweist auf Backend-Services

# Gateway API

```
apiVersion: gateway.networking.k8s.io/v1
kind: Gateway
metadata:
  name: cloudflare
  namespace: ingress
  annotations:
    cert-manager.io/issuer: cloudflare
    cert-manager.io/issuer-kind: ClusterOriginIssuer
    cert-manager.io/issuer-group: cert-manager.k8s.cloudflare.com
spec:
  gatewayClassName: traefik

  listeners:
    - name: web
      hostname: "*.kbs610.click"
      port: 80
      protocol: HTTP
      allowedRoutes:
        namespaces:
          from: All
    - name: websecure
      hostname: "*.kbs610.click"
      port: 443
      protocol: HTTPS
      allowedRoutes:
        namespaces:
          from: All
  tls:
    mode: Terminate
    certificateRefs:
      - name: cloudflare-cert
```



```
kind: HTTPRoute
apiVersion: gateway.networking.k8s.io/v1
metadata:
  name: trainy
spec:
  parentRefs:
    - name: cloudflare
      namespace: ingress
  hostnames:
    - "rbc.kbs610.click"
  rules:
    - backendRefs:
        - name: trainy-service
      port: 8080
```

# Grafana mit Victoria Metrics



# Grafana mit Victoria Logs

The screenshot shows the Grafana interface for VictoriaLogs. The top navigation bar includes 'Outline' (selected), 'VictoriaLogs' (active), 'Split', 'Add', 'Last 1 hour', 'Run query', and 'Live'. The main area displays log entries with the following details:

- 1000 lines shown - 0.17% (6sec) of 1h Common labels: kubernetes.namespace\_labels.kus\_ kubernetes.namespace\_labels.kus\_ kubernetes.node\_labels.beta.kub\_ +13
- Fields panel on the left shows fields like \_partial, \_stream\_id, file, kubernetes.labels, kubernetes.name, kubernetes.namespace, kubernetes.node, kubernetes.pod\_annotation, and kubernetes.pod\_label, each with a 100% completion rate.
- Log entries list:
  - : 2026-02-11 22:20:25.298 2026-02-11 21:20:25 | DefaultDispatcher-worker-1 | TRACE | app.trainy.geops.server.geops.Client | Received frame: Frame TEXT (fin=true, buffer len = 11554)
  - : 2026-02-11 22:20:25.297 2026-02-11 21:20:25 | DefaultDispatcher-worker-1 | TRACE | io.ktor.websocket.WebSocket | Web SocketSession(StandaloneCoroutine{Active}@44920da7) receiving frame Frame TEXT (fin=true, buffer len = 3366)
  - : 2026-02-11 22:20:25.297 2026-02-11 21:20:25 | DefaultDispatcher-worker-1 | TRACE | io.ktor.websocket.WebSocket | Web SocketSession(StandaloneCoroutine{Active}@44920da7) receiving frame Frame TEXT (fin=false, buffer len = 8188)
  - : 2026-02-11 22:20:25.200 2026-02-11 21:20:25 | DefaultDispatcher-worker-1 | DEBUG | app.trainy.geops.server.core.RedisCache | Inserted position [VehiclePosition(status=REALTIME, lastUpdate=2026-02-11T21:20:12Z, vehicle=Vehicle(uic=948004232054, trainId=sbm\_14026563147488, vehicleNumber=205), journey=Journey(trainNumber=8319, line=3, lineName=S3, color=LineColor(color=value=9246864), textColor=Color(value=16777215), stroke=Color(value=9246864))), position=Coordinate(latitude=48.19678513349839, longitude=1.378602415179889), VehiclePosition(status=REALTIME, lastUpdate=2026-02-11T21:20:12Z, vehicle=Vehicle(uic=948004231510, trainId=sbm\_140265299924352, vehicleNumber=151), journey=Journey(trainNumber=8518, line=5, lineName=S5, color=LineColor(color=value=21375), textColor=Color(value=16777215), stroke=Color(value=21375))), position=Coordinate(latitude=47.989272363132216, longitude=11.740283636994235), VehiclePosition(status=REALTIME, lastUpdate=2026-02-11T21:20:13Z, vehicle=Vehicle(uic=948004230991, trainId=sbm\_140265299924352, vehicleNumber=899), journey=Journey(trainNumber=8518, line=5, lineName=S5, color=LineColor(color=value=21375), textColor=Color(value=16777215), stroke=Color(value=21375))), position=Coordinate(latitude=47.98891319608796, longitude=11.74067581974029), VehiclePosition(status=REALTIME, lastUpdate=2026-02-11T21:20:13Z, vehicle=Vehicle(uic=948004233623, trainId=sbm\_140265550082736, vehicleNumber=362), journey=Journey(trainNumber=8214, line=2, lineName=S2, color=LineColor(color=value=9157965), textColor=Color(value=16777215), stroke=Color(value=9157965))), position=Coordinate(latitude=48.14260881611207, longitude=11.540920267894222)] into Redis: 0
  - : 2026-02-11 22:20:25.200 2026-02-11 21:20:25 | DefaultDispatcher-worker-1 | DEBUG | app.trainy.geops.server.core.RedisCache | Inserted position [VehiclePosition(status=REALTIME, lastUpdate=2026-02-11T21:20:12Z, vehicle=Vehicle(uic=948004232054, trainId=sbm\_14026563147488, vehicleNumber=205), journey=Journey(trainNumber=8319, line=3, lineName=S3, color=LineColor(color=value=9246864), textColor=Color(value=16777215), stroke=Color(value=9246864))), position=Coordinate(latitude=48.19678513349839, longitude=1.378602415179889), VehiclePosition(status=REALTIME, lastUpdate=2026-02-11T21:20:12Z, vehicle=Vehicle(uic=948004231510, trainId=sbm\_140265299924352, vehicleNumber=151), journey=Journey(trainNumber=8518, line=5, lineName=S5, color=LineColor(color=value=21375), textColor=Color(value=16777215), stroke=Color(value=21375))), position=Coordinate(latitude=47.989272363132216, longitude=11.740283636994235), VehiclePosition(status=REALTIME, lastUpdate=2026-02-11T21:20:13Z, vehicle=Vehicle(uic=948004230991, trainId=sbm\_140265299924352, vehicleNumber=899), journey=Journey(trainNumber=8518, line=5, lineName=S5, color=LineColor(color=value=21375), textColor=Color(value=16777215), stroke=Color(value=21375))), position=Coordinate(latitude=47.98891319608796, longitude=11.74067581974029), VehiclePosition(status=REALTIME, lastUpdate=2026-02-11T21:20:13Z, vehicle=Vehicle(uic=948004233623, trainId=sbm\_140265550082736, vehicleNumber=362), journey=Journey(trainNumber=8214, line=2, lineName=S2, color=LineColor(color=value=9157965), textColor=Color(value=16777215), stroke=Color(value=9157965))), position=Coordinate(latitude=48.14260881611207, longitude=11.540920267894222)] into Redis: 0
  - : 2026-02-11 22:20:25.199 2026-02-11 21:20:25 | DefaultDispatcher-worker-7 | DEBUG | a.t.geops.server.core.PositionHandler | Han

On the right side, there are various configuration options: Expanded, Scroll to bottom, Newest logs first, Search logs, Deduplication, Filter levels, Display ms, Wrap JSON, Highlight text, Large font, Escape newlines, and Download logs. At the bottom right, there are 'Scroll to top' and '↑' buttons.

# GitLab of the RWTH Aachen University

## Willkommen beim GitLab der RWTH Aachen!

Angehörige der RWTH Aachen (Studierende und Mitarbeitende), sowie Angehörige von Universitäten aus dem NFDI4Ing nutzen bitte ausschließlich den DFN AAI Single Sign-On und wählen im darauffolgenden Fenster ihre Heimatuniversität aus. Nur über den Login über den Single Sign-On besteht die Möglichkeit, Projekte und Gruppen anzulegen.

Externe Nutzende können sich über GitHub authentifizieren, können aber keine Gruppen und Projekte anlegen.

Sie befinden sich auf der GitLab Instanz [git-ce.rwth-aachen.de](https://git-ce.rwth-aachen.de) der RWTH Aachen University. Weitere Informationen zur Unterscheidung der GitLab Instanzen finden Sie auf unseren Hilfeseiten.

- [Nutzungsbedingungen](#)
- [Nutzungsberechtigungen](#)
- [IT Center Help - GitLab](#)

Weitere Informationen zum Dienst finden Sie im Dokumentationsportal des IT Centers

## Welcome to the GitLab of the RWTH Aachen University!

Members of the RWTH Aachen University (students and staff) please only use the **DFN AAI Single Sign-On** and select the RWTH Aachen University in the following window. Only then will users be able to create projects and groups. External users can authenticate via **GitHub**, but cannot create groups and projects.

You are on the GitLab instance [git-ce.rwth-aachen.de](https://git-ce.rwth-aachen.de) of RWTH Aachen University. For more information on how to distinguish between GitLab instances, please see our help pages.

- [Terms of Use](#)
- [Usage Permissions](#)
- [IT Center Help - GitLab](#)

For further information about the GitLab service please visit the documentation portal of the IT Center

Mit deiner Anmeldung akzeptierst du die Nutzungsbedingungen und erkennst die Datenschutz- und Cookie-Richtlinien an.

 GitHub

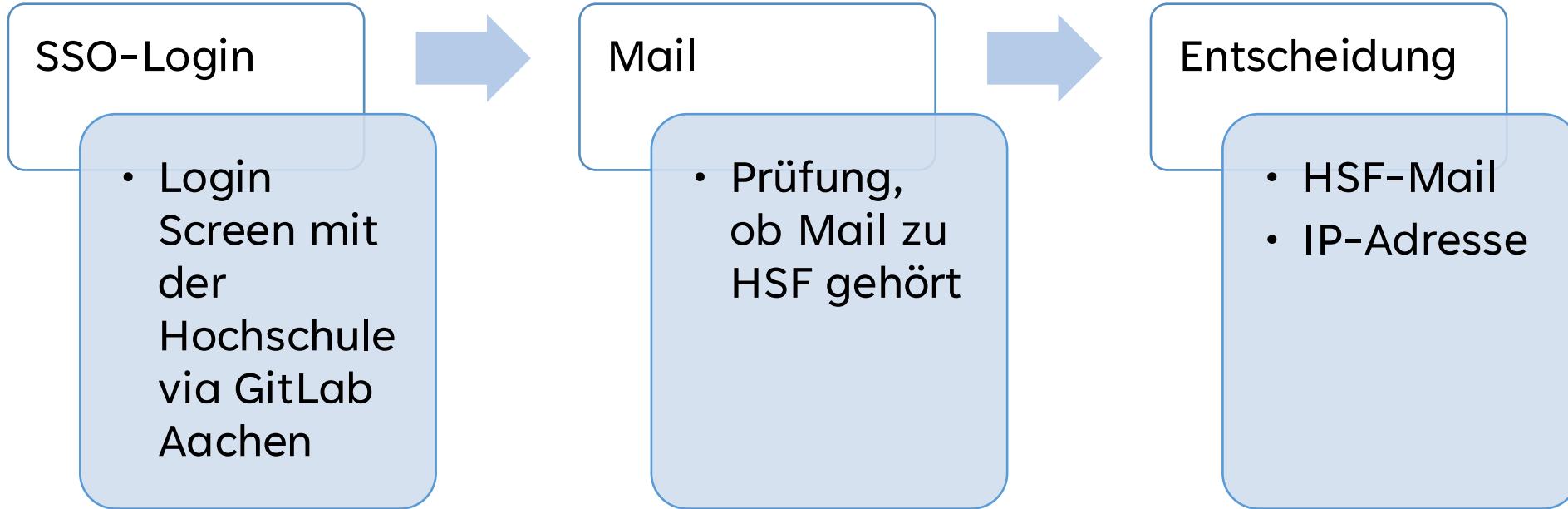
DFN-AAI Single Sign-On

Login merken

## **SSO IM CLUSTER**

- **Generell zur Anmeldung im Netzwerk**
- **Intern zu verschiedenen Tools: Whitelist relevant**
- **Headlamp: Mitglied GitLab Gruppe**
- **Grafana: GitLab Gruppe für Admin**

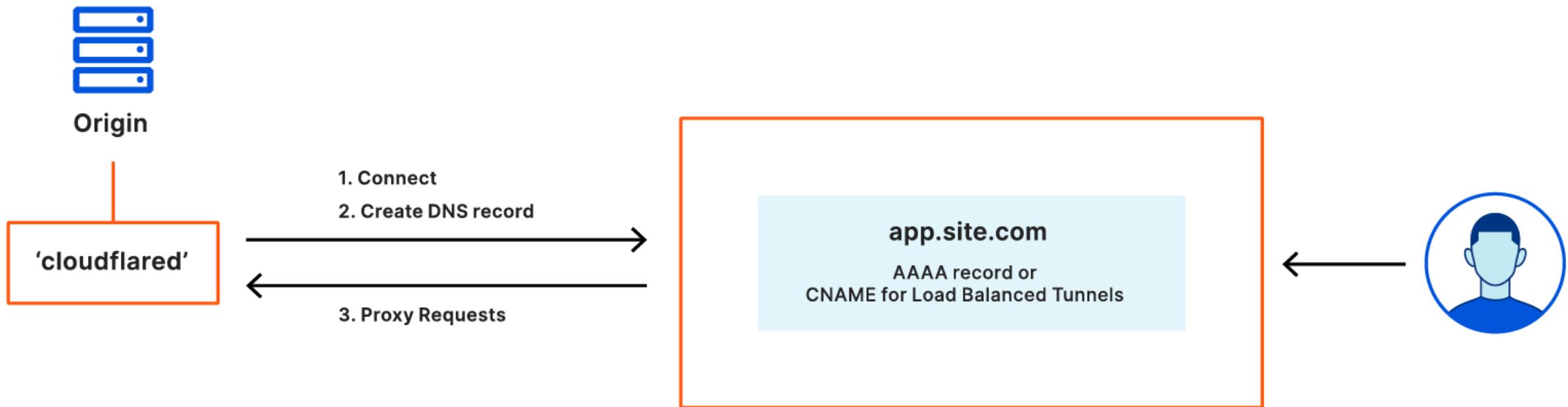
# SSO IM CLUSTER

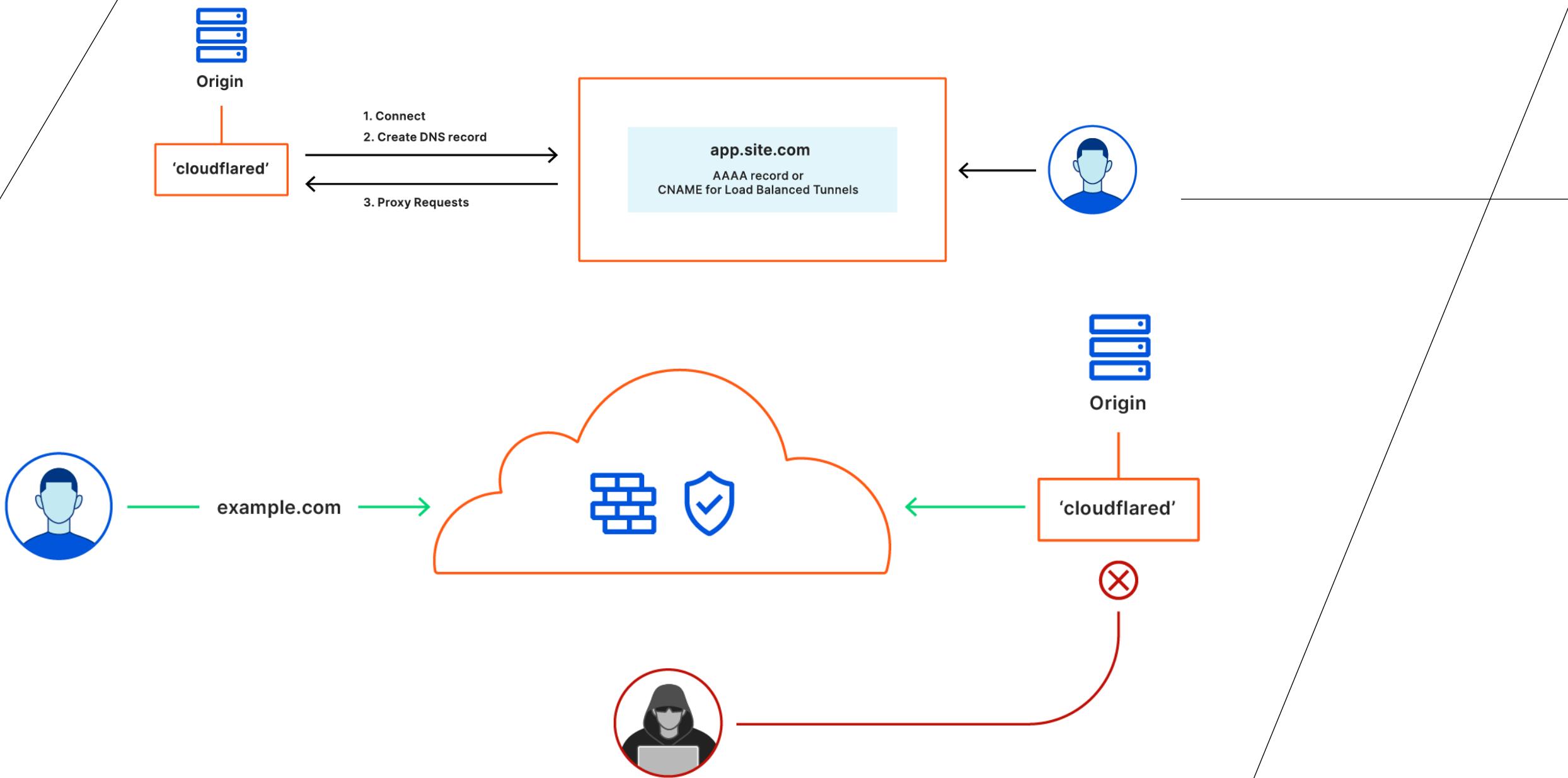




## CLOUDFLARE

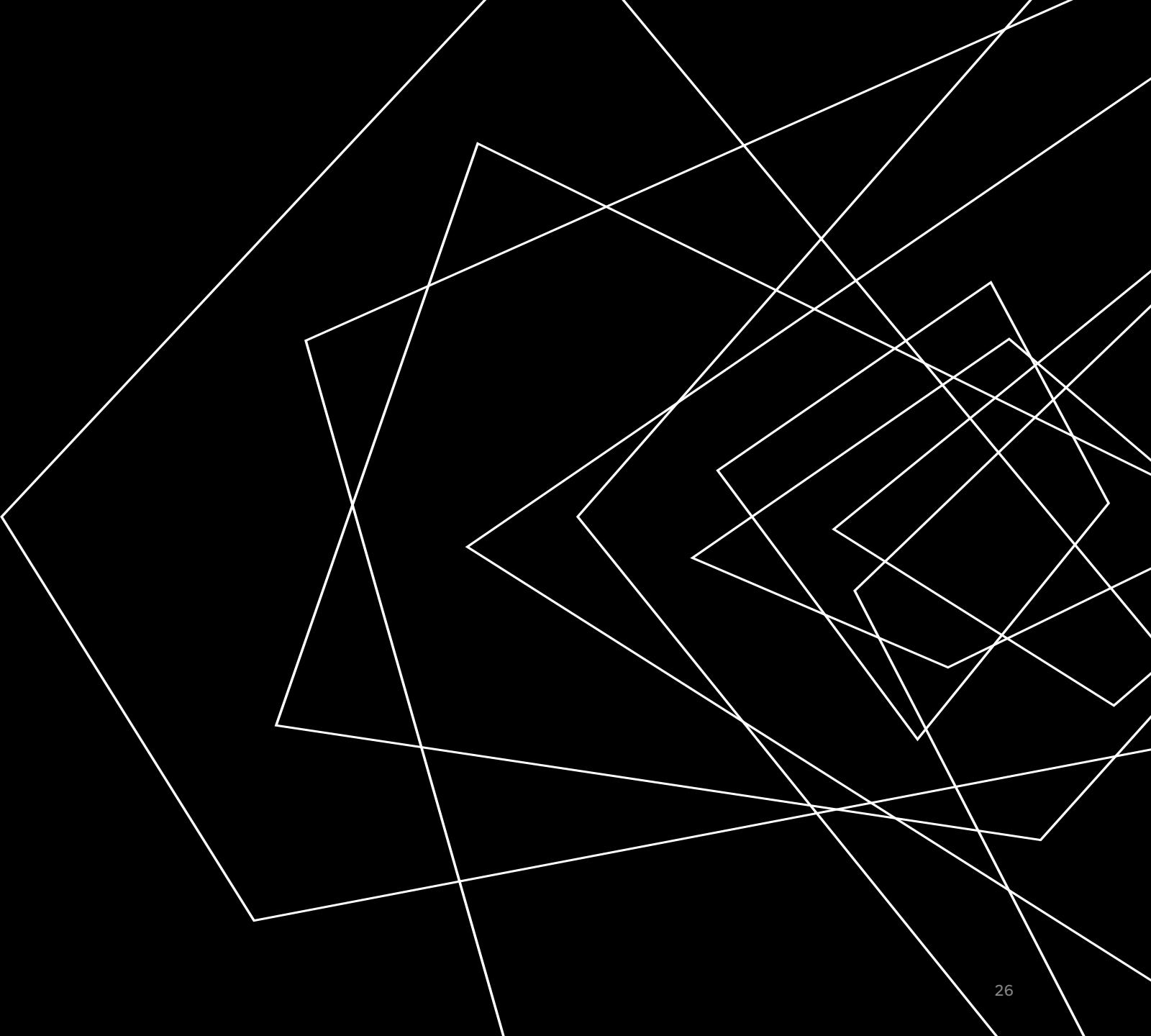
- **Cloudflare Argo Tunnel – Externer Zugriff**
- **Sicherheit**
- **Verstecke IP-Adresse**
- **Verbesserte Performance**





# PROBLEME ENTSCHEIDUNGEN

Welche Probleme und  
welche Entscheidungen  
wurden getroffen?



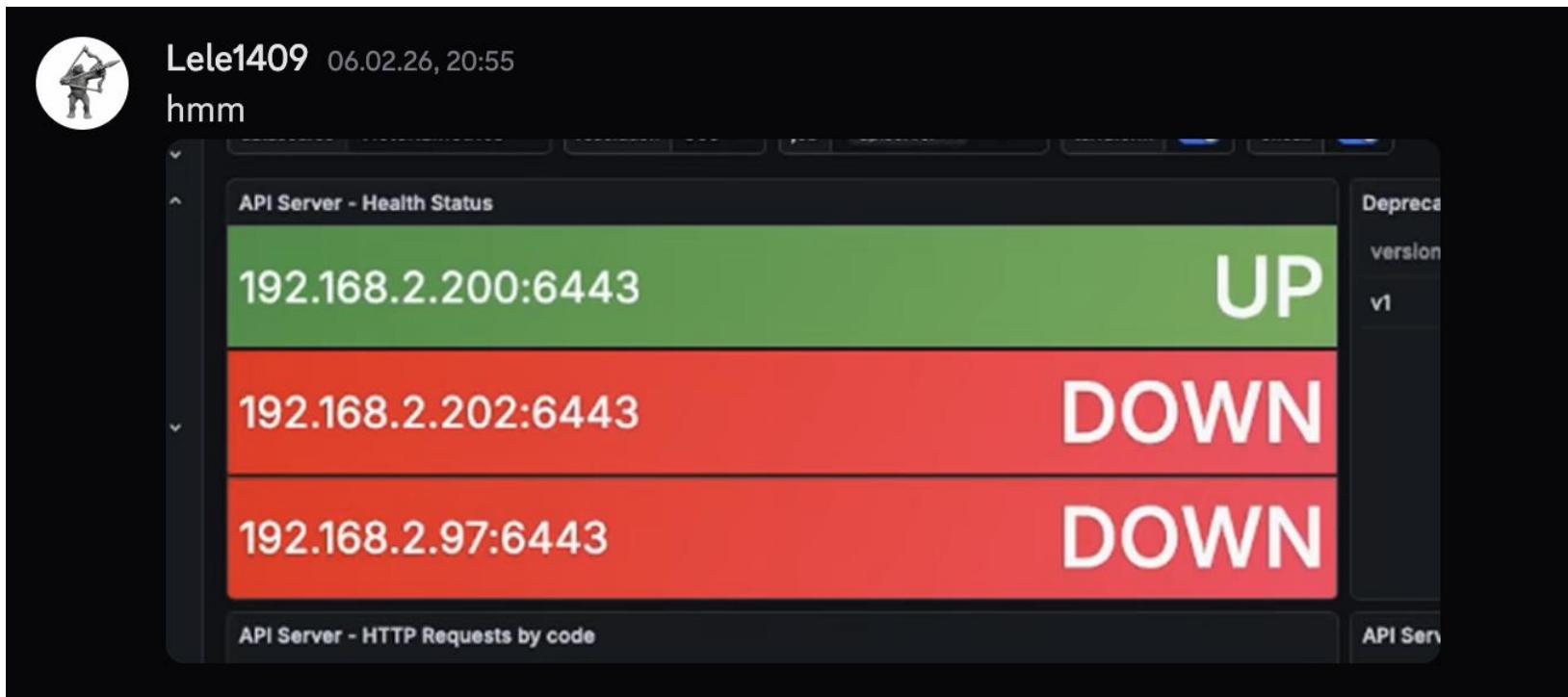
# RESSOURCENVERTEILUNG

6 Einträge werden angezeigt

<input type="checkbox"/>	Instance Name	Image Name	IP Address	Flavor
<input type="checkbox"/>	talos-worker-2	Talos	192.168.2.55, 10.32.7.76	m1.large
<input type="checkbox"/>	talos-worker-1	Talos	192.168.2.95, 10.32.6.234	m1.large
<input type="checkbox"/>	talos-worker-0	Talos	192.168.2.135, 10.32.7.226	m1.large
<input type="checkbox"/>	talos-controlplane-1	Talos	192.168.2.202, 10.32.6.132	m1.small
<input type="checkbox"/>	talos-controlplane-2	Talos	192.168.2.200, 10.32.7.122	m1.small
<input type="checkbox"/>	talos-controlplane-0	Talos	192.168.2.97, 10.32.6.57	m1.small

Name	VCPUS	RAM	Total Disk	Root Disk	Ephemeral Disk
▶ m1.small	1	2 GB	20 GB	20 GB	0 GB
▶ m1.large	4	▲ 8 GB	80 GB	80 GB	0 GB

# RESSOURCENVERTEILUNG



# RESSOURCENVERTEILUNG

6 Einträge werden angezeigt

<input type="checkbox"/>	Instance Name	Image Name	IP Address	Flavor
<input type="checkbox"/>	talos-worker-2	Talos	192.168.2.55, 10.32.7.76	m1.large
<input type="checkbox"/>	talos-worker-1	Talos	192.168.2.95, 10.32.6.234	m1.large
<input type="checkbox"/>	talos-worker-0	Talos	192.168.2.135, 10.32.7.226	m1.large
<input type="checkbox"/>	talos-controlplane-1	Talos	192.168.2.202, 10.32.6.132	m1.medium
<input type="checkbox"/>	talos-controlplane-2	Talos	192.168.2.200, 10.32.7.122	m1.medium
<input type="checkbox"/>	talos-controlplane-0	Talos	192.168.2.97, 10.32.6.57	m1.medium

Name	VCPUS	RAM	Total Disk	Root Disk	Ephemeral Disk
➤ m1.medium	2	4 GB	40 GB	40 GB	0 GB

# RESSOURCENVERTEILUNG

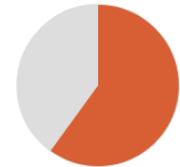
## Übersicht Kontingente

Compute



Instanzen

Benutzt 6 von 10



VCPUs

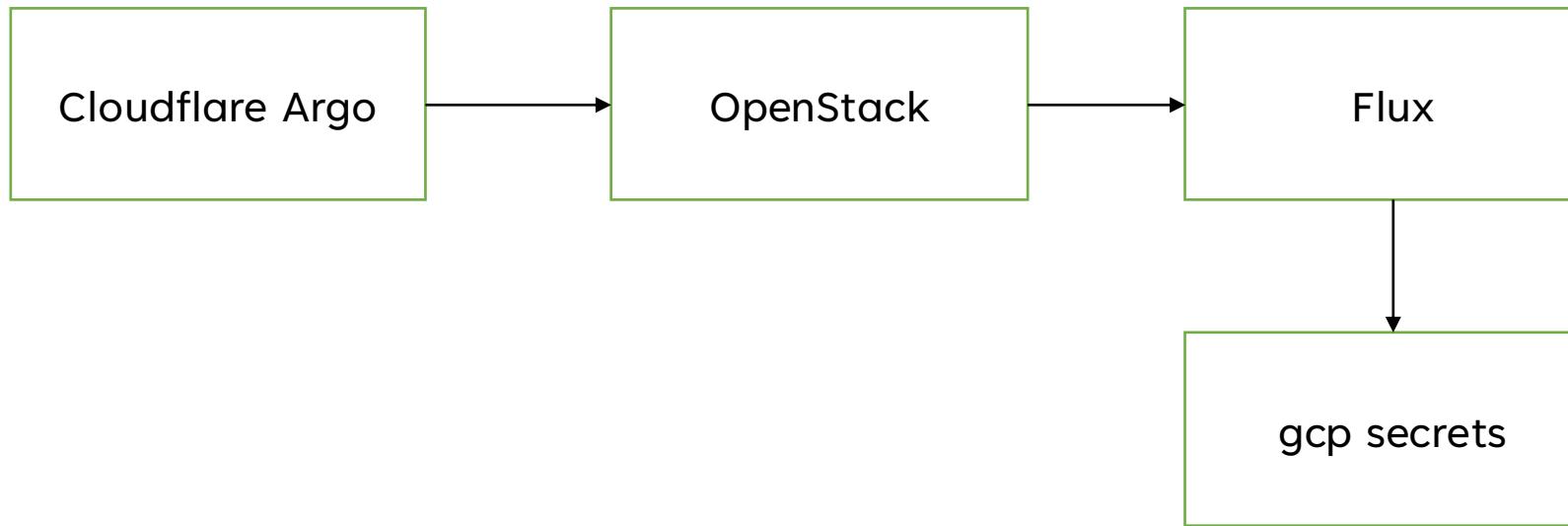
Benutzt 18 von 30



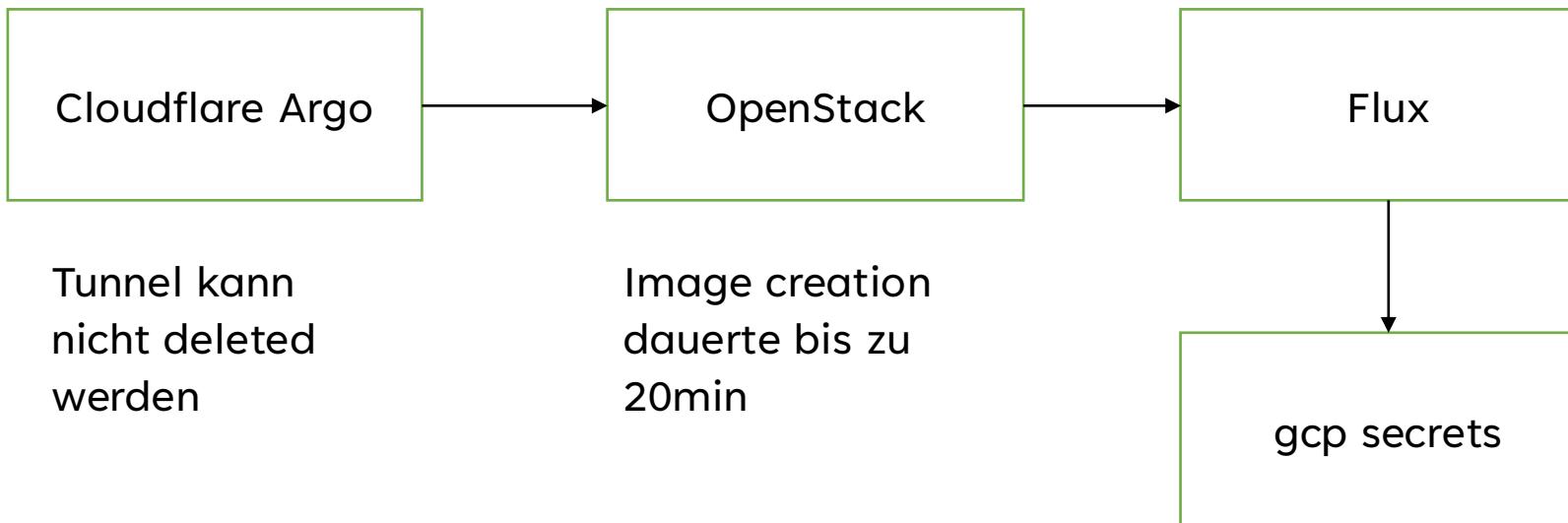
RAM

Benutzt 36GB von 40GB

# TERRAFORM MODULES



# TERRAFORM MODULES - PROBLEME



```
15  
16 resource "google_iam_workload_identity_pool" "kubernetes" {  
17     # Deleting just marks them as deleted, but they actually still exist, so we need to rename it each time  
18     workload_identity_pool_id = "kubernetes-v12"  
19 }  
20
```

# KUSTOMIZATIONS

Kustomizations		12 items		All namespaces		Search Kustomizat	
<input type="checkbox"/>	Name	Namespace	Source	Revision	Resumed	Condition	Status
<input type="checkbox"/>	cloudflare-origin-ca-crds	<a href="#">ingress</a>	cloudflare-origin-ca	trunk@sha1:77fabb29a04c0188e...	True	Ready	Applied revision: trunk@sha1:77fabb29...
<input type="checkbox"/>	flux-system	<a href="#">flux-system</a>	flux-system	main@sha1:2d63ede7fab4a9ef8...	True	Ready	Applied revision: main@sha1:2d63ede...
<input type="checkbox"/>	grafana	<a href="#">grafana</a>	flux-system	main@sha1:89e0fd4752aed75e1...	True	Not Ready	dependency 'operators/operators' is no...
<input type="checkbox"/>	headlamp	<a href="#">headlamp</a>	flux-system	main@sha1:89e0fd4752aed75e1...	True	Not Ready	dependency 'ingress/ingress' is not rea...
<input type="checkbox"/>	ingress	<a href="#">ingress</a>	flux-system	main@sha1:89e0fd4752aed75e1...	True	Not Ready	dependency 'kube-system/kube-system...
<input type="checkbox"/>	ingress-config	<a href="#">ingress</a>	flux-system	main@sha1:89e0fd4752aed75e1...	True	Not Ready	dependency 'flux-system/secrets' is no...
<input type="checkbox"/>	kube-system	<a href="#">kube-system</a>	flux-system	main@sha1:2d63ede7fab4a9ef8...	True	Ready	Applied revision: main@sha1:2d63ede...
<input type="checkbox"/>	operators	<a href="#">operators</a>	flux-system	main@sha1:2d63ede7fab4a9ef8...	True	Ready	Applied revision: main@sha1:2d63ede...
<input type="checkbox"/>	rabbitmq-operator	<a href="#">rabbitmq-system</a>	rabbitmq-operator	v2.19.1@sha1:231b13db9070e9d...	True	Ready	Applied revision: v2.19.1@sha1:231b1...
<input type="checkbox"/>	secrets	<a href="#">flux-system</a>	flux-system	main@sha1:89e0fd4752aed75e1...	True	Not Ready	dependency 'flux-system/flux-system' r...
<input type="checkbox"/>	trainy	<a href="#">trainy</a>	flux-system	main@sha1:89e0fd4752aed75e1...	True	Not Ready	dependency 'ingress/ingress' is not rea...
<input type="checkbox"/>	victoria-metrics	<a href="#">victoria-metrics</a>	flux-system	main@sha1:89e0fd4752aed75e1...	True	Not Ready	dependency 'ingress/ingress' is not rea...

# FLUX HELM CONTROLLER

Helm Install

Timeout von 5 Minuten

=> Helm Controller killen



Delete Pod **flux-system/helm-controller-645dcb7d8d-5x875** from admin@talos-controlplane-0?

Cancel

Delete

# LIVE DEMO

Unsere Anwendung in live

- Trainy (Handy Stream)
- [Grafana](#)
- Freelens

