

2020 오픈소스 컨트리뷰톤

- NexClipper - OSE(Open Source Edition)

주최  과학기술정보통신부

주관  정보통신산업진흥원

NexClipper Klevr overview

- **프로젝트명** : NexClipperOSE(OpenSourceEdition)
- **프로젝트 분야** : Container, Kubernetes, Monitoring
- **프로젝트 저장소** : <https://github.com/NexClipper/NexClipper>
- **활용 언어** : Go, JavaScript, Python
- **프로젝트 난이도** : 중

NexClipper Klevr overview

Required technical Stacks

1. Docker container
2. Linux KVM
3. Consul MariaDB
4. Terraform
5. Prometheus
6. Kubernetes(Micro K8s)
7. Git
8. Helm chart
9. Public cloud(AWS,GCP,Azure)
10. Managed K8s(EKS, GKE, AKS)
11. Network
12. Golang

④ Klor-argent

1. provisioning (Docker, ~~K8S~~ KUM (by libvirt), Prometheus.

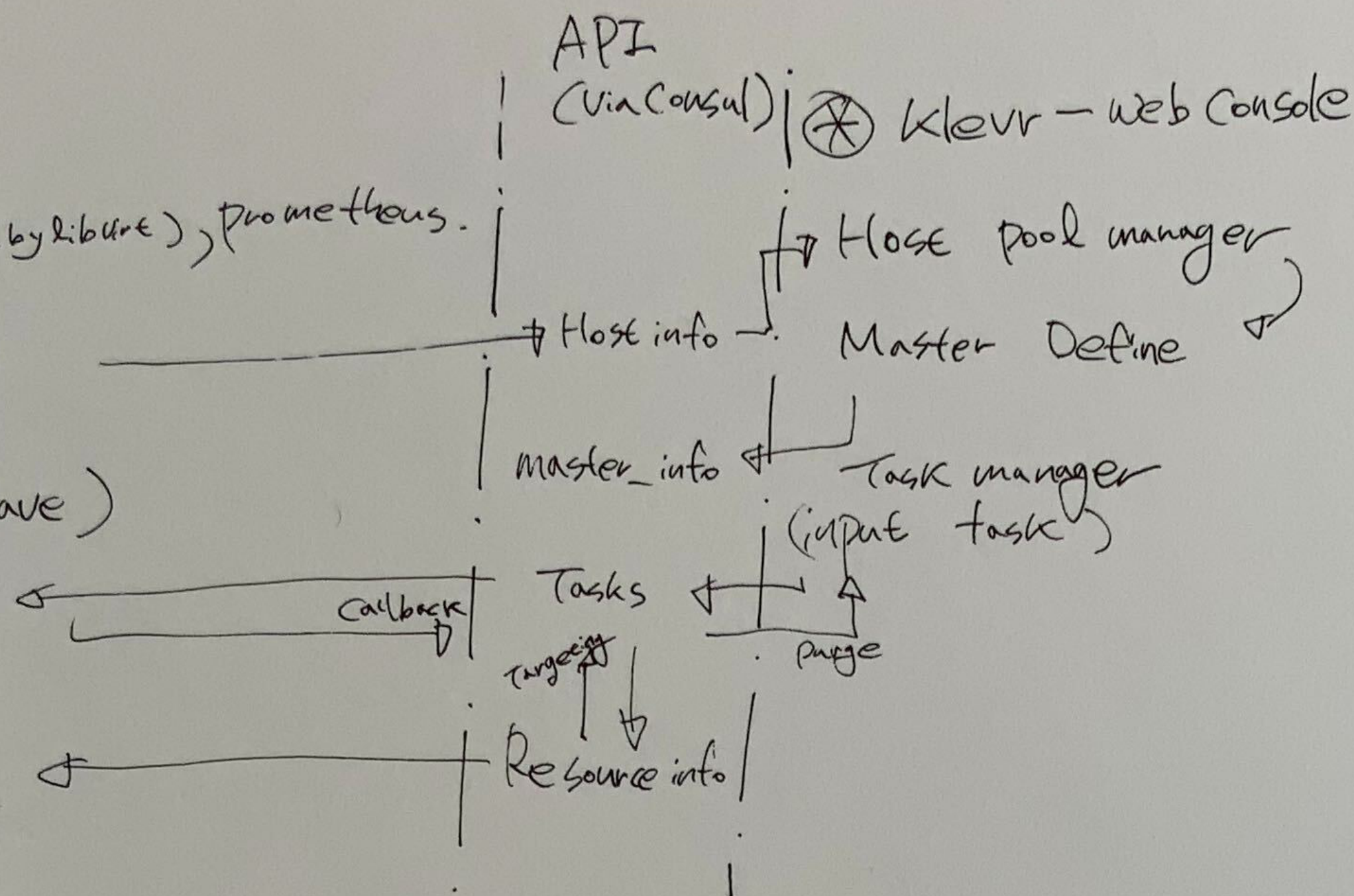
2. Connector $\leftrightarrow$ API (Consul)

2-1
3. Health checker (Master/Slave)

2-2 Task manager (if master)

3 Scheduler to Host pool

5. Beacon (if master)



--- Backends ---

Docker-Register, Github, bit.ly...

* Technical Stack

Docker Container

Linux KVM (libvirt)

Consul

Terratorum

prometheus

Kubernetes (micro k8s)

git

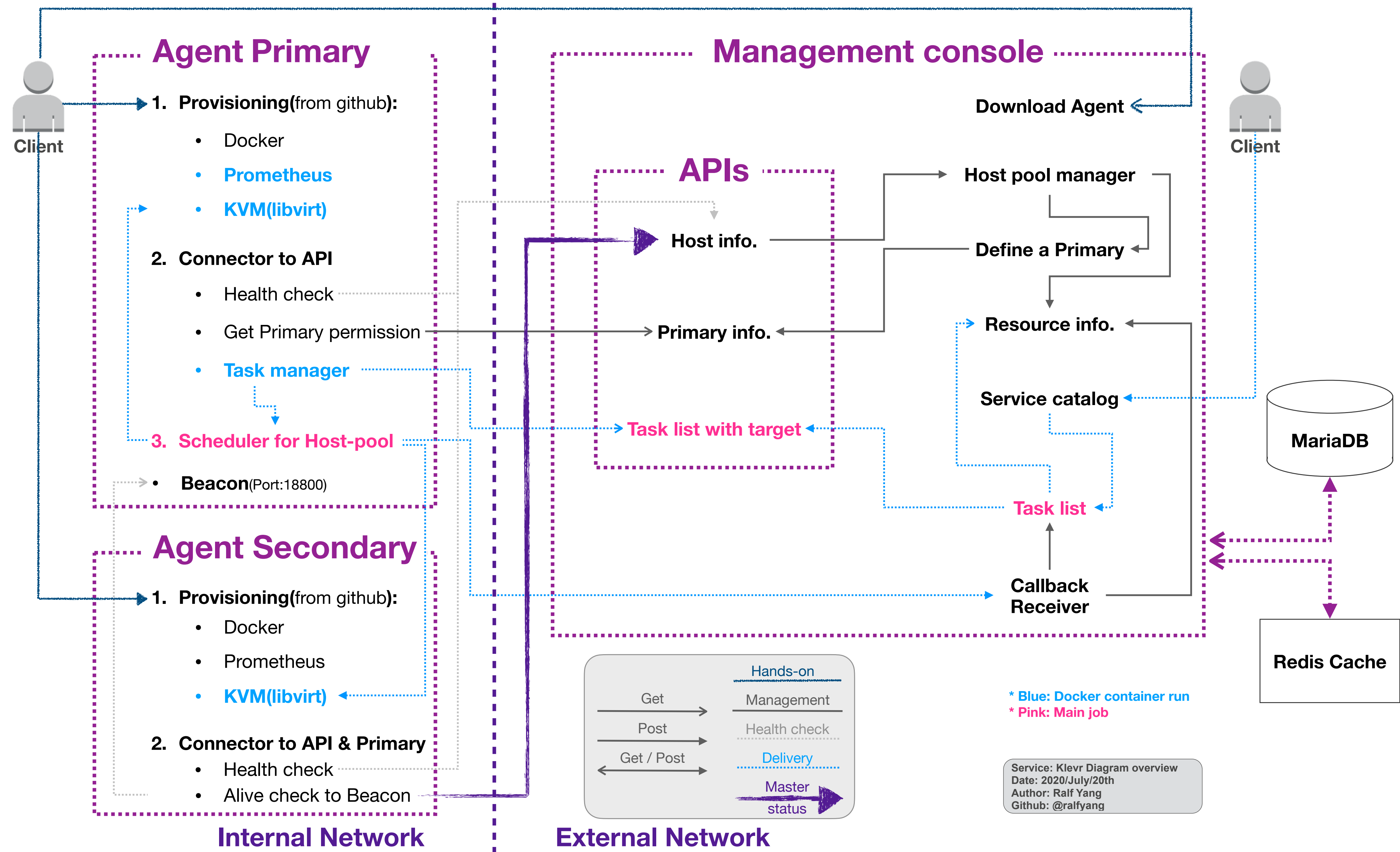
Helium chart

public Cloud (AWS, GCP, Azure)

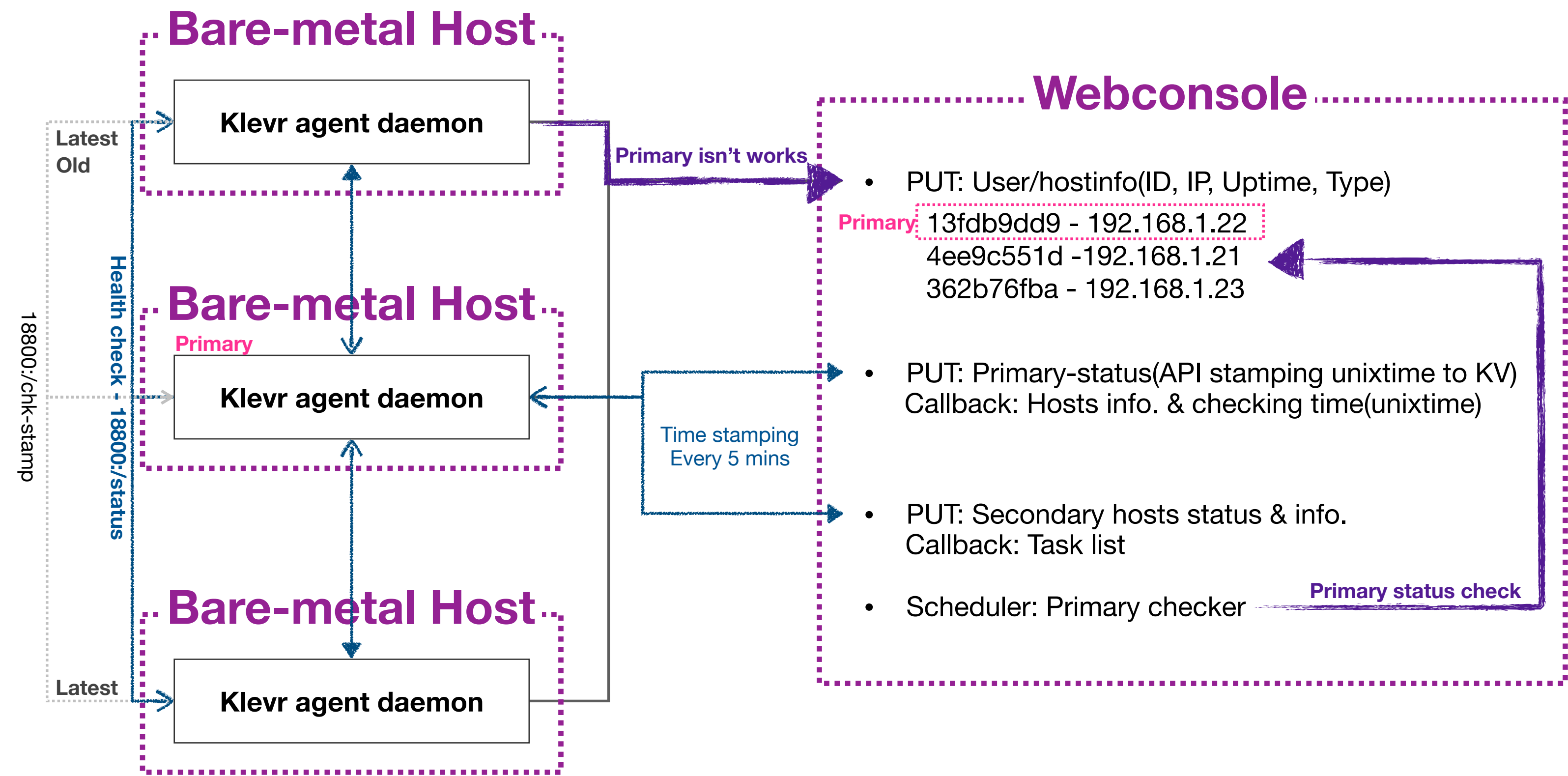
Managed KÖS (ZKS, GKZ, AKS)

golang

NexClipper Klevr diagram overview



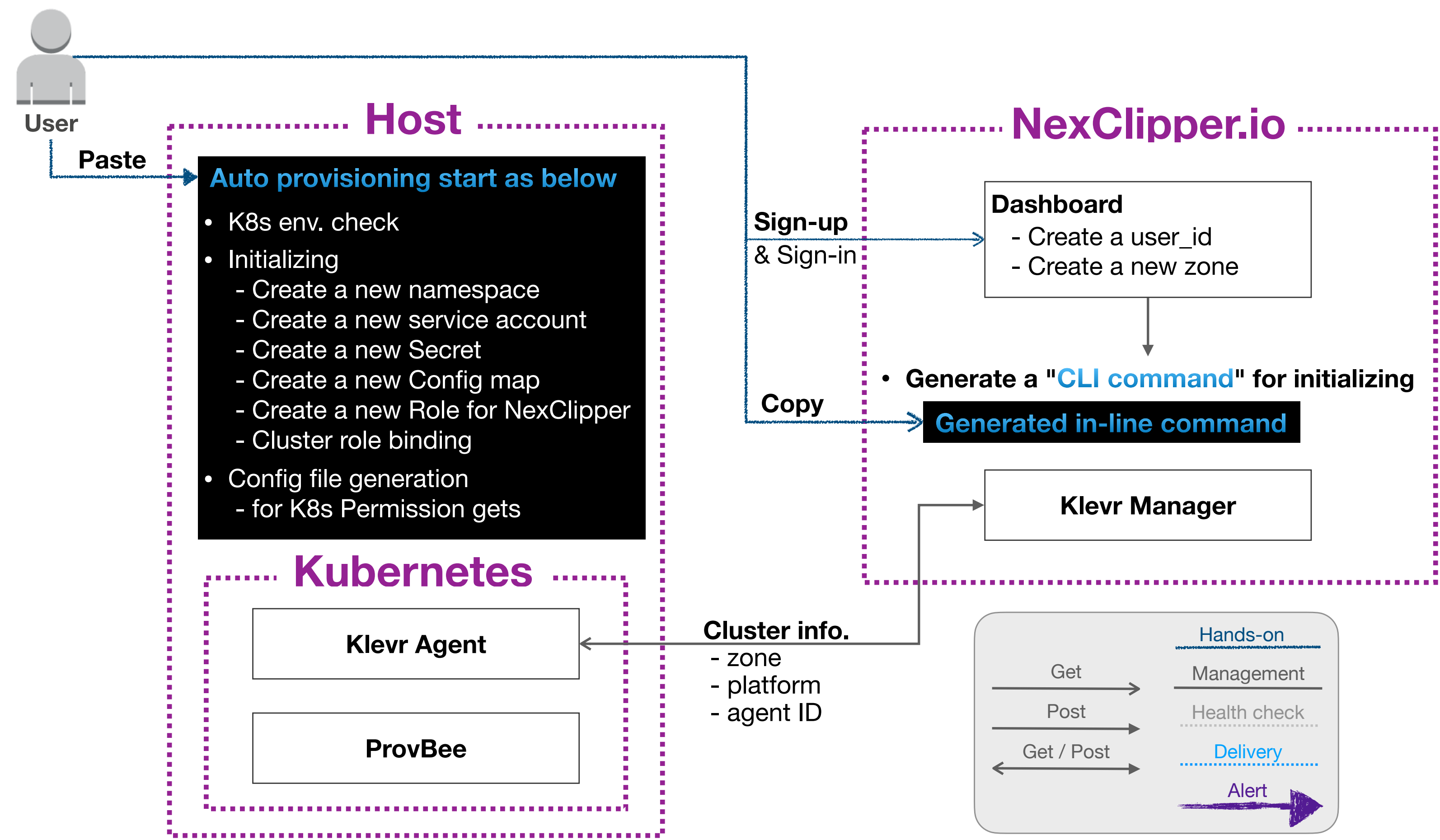
NexClipper Klevr Agent primary election & delivery logic diagram



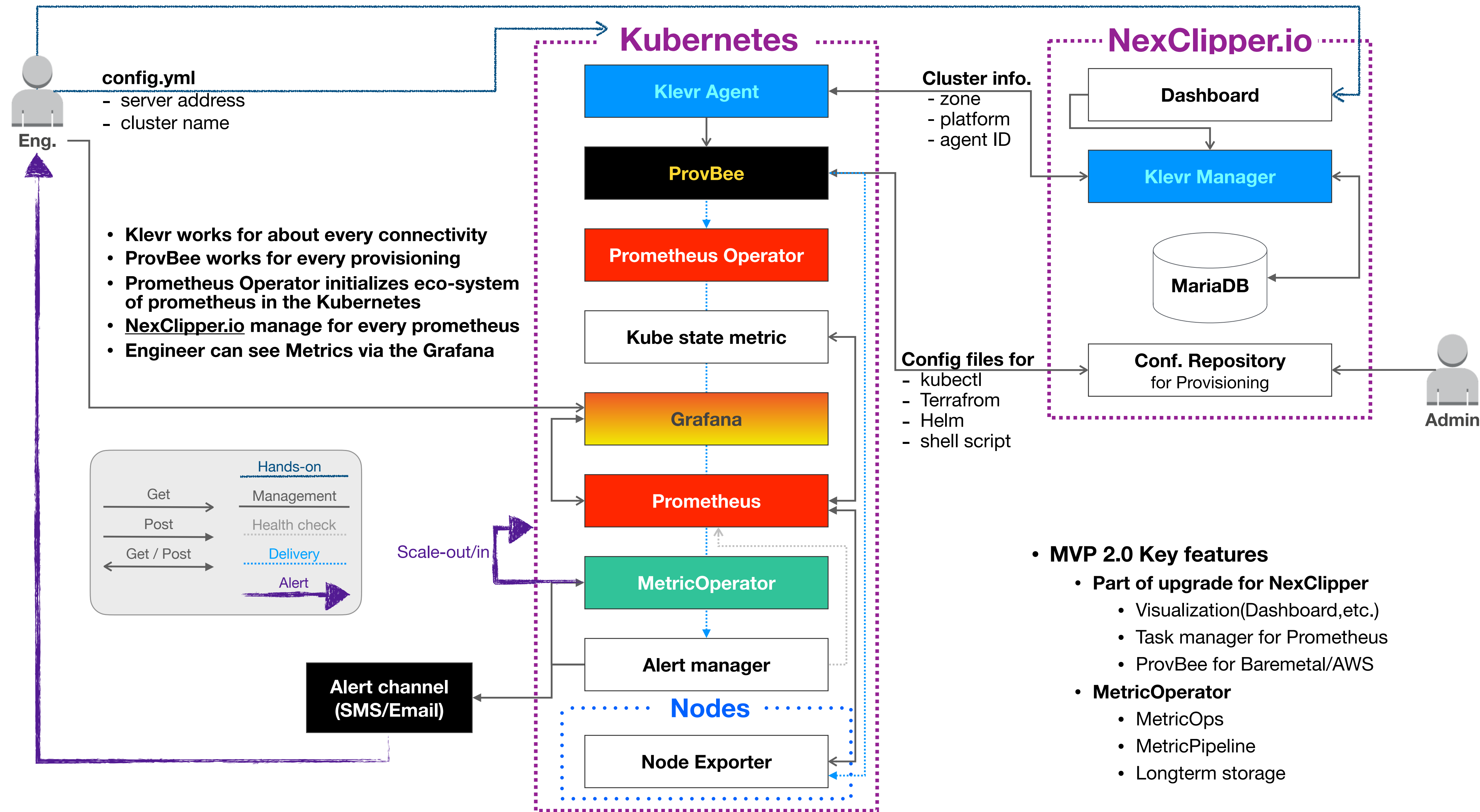
Secondary Hosts check a last stamping time from web-console in the Primary host for how is old.

Service: Klevr agent works
Date: 2020/July/16th
Author: Ralf Yang
Github: @ralfyang

NexClipper Kickstart workflow



NexClipper MVP 2.0 Overview



NexClipper Stack Overview

Infrastructure	Local	On-premise					Cloud Service Provider			
Zone	Dev	Dev/Test	Production	Dev/Test		Production	Dev/Test		Production	
Service	Applications	Applications	Applications	Applications		Applications	Applications		Applications	
Control stacks (container)			MetricOperator			MetricOperator				MetricOperator
			Prometheus			Prometheus				Prometheus
			Libvirt by ProvBee							
	ProvBee	ProvBee	ProvBee			ProvBee	ProvBee		ProvBee	ProvBee
	Klevr-agent	Klevr-agent	Klevr-agent			Klevr-agent	Klevr-agent		Klevr-agent	Klevr-agent
Orchestrator	K3s	K3s	K8s	K3s		K8s	K3s		K8s	
Environment & Resource	 Workspace	 Workspace	 Operation env.	 Workspace	 Operation env.		 Workspace	 Operation env. by Bastion		
		VM by libvirt container		VM			VM			
		 Operation env.		 Web Console			 Web Console			
Platform	Laptop	Baremetal		Private Cloud			Public Cloud			