



Monitoring Kubernetes: The sidecar pattern

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Monitoring Kubernetes

Introductions



Sensu



Overview

- Monitoring K8s: the challenges
- K8s monitoring strategies
- A closer look at sidecars!
- Demos!
- Closing comments



Containers: the new reality



Monitoring K8s

- The challenges
- The data sources





K8s monitoring strategies

Kubernetes observability strategies



- Remote polling (K8s metric/event APIs)
- Node-based (agent per host/daemonset)
- Sidecars (agent per pod)
- Logs & APM

Kubernetes monitoring strategies

- Remote polling (K8s metric/event APIs)
- Node-based (agent per host/daemonset)
- **Sidecars (agent per pod)**
- Logs & APM





Taking a closer look at K8s sidecars

Kubernetes sidecars – what are they?



Pods that run multiple containers that need to work together. A pod might encapsulate an application composed of multiple co-located containers that are tightly coupled and need to share resources. These co-located containers might form a single cohesive unit of service—one container serving files from a shared volume to the public, while a separate “sidecar” container refreshes or updates those files. The pod wraps these containers and storage resources together as a single manageable entity.

Source: <https://kubernetes.io/docs/concepts/workloads/pods/pod-overview/>

Kubernetes sidecars – the benefits

- Modular
- Composable
- Reusable



Kubernetes sidecars – some examples



- Service mesh
- Logging (for log files)
- Monitoring



Getting started with sidecars

DEMO





Monitoring services & apps on K8s w/ Sensu Go

DEMO





Closing comments, Q&A

Try it yourself! <https://github.com/calebhailey/monitoring-k8s-workloads>

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