



SMART LAYER FOR YOUR KUBERNETES OPEN SOURCE MONITORING

SRE Challenges with Kubernetes-centric Applications

Kubernetes is increasingly the platform of choice for modern environments and its complexity introduces new questions for performance management and troubleshooting, including:

- As a number of microservices communicate with each other and rely on a hierarchy of virtual machines, where is the performance bottleneck?
- How do I know if the problem is due to a change in the application or a change in the infrastructure?
- As workload to the application changes, how does the application respond?
- What about the impact of a code update on the microservice?

While popular open source tools such as Prometheus, ElasticSearch, Loki and Jaeger provide a good foundation, they lack many important analytical functions including contextual integration, dependency management, anomaly detection and causal analysis.

Intelligent Observability for Kubernetes

Using its *patented* application-centric approach, OpsCruise provides automated visibility into application dependencies, detecting problems and isolating causes to reduce MTTD and MTTR.



Key capabilities include:

1. Built natively on open source and standards based (OTel) monitoring instrumentation

for Kubernetes, such as Prometheus, Istio, Fluentd, Loki and Jaeger without using any proprietary agents or touching the application code.

2. Kubernetes as the focus.

On-prem and cloud infrastructure is wired into the cluster which includes the ingress elements like Load Balancers, SaaS external services and Cloud services.

3. Curated Kubernetes knowledge, built in.

Like having a dedicated SME, OpsCruise's embedded understanding of Kubernetes means precise insights into Out of Memory (OOM) killed containers, CPU Throttling, Node Health and Balancing, Container Restarts, Deployment Health, Autoscaling, and more.

4. Real-time discovery.

OpsCruise auto-discovers your container, cloud, and multiple Kubernetes cluster environments, without proprietary agents, sidecars, or requiring code instrumentation.

5. Real-time Performance Monitoring.

OpsCruise uses auto-instrumented operational 'flow tracing' when code instrumentation is not possible, as well as unique TracePath technology, when tracing is used, to enable real-time problem detection and resolution.

6. Cluster balancing insights.

OpsCruise's real-time monitoring of resource consumption by all Pods in a node in Pod Balancing view immediately identifies if a Pod is under-provisioned and should be migrated to nodes that have adequate capacity.

The resulting benefits **positively impact both the top and bottom line:** increased uptime through proactive problem resolution and greater organizational agility from improved SRE/DevOps productivity.

The resulting benefits positively impact both the top and bottom line: **increased uptime** through proactive problem resolution and greater **organizational agility** from improved SRE/DevOps productivity. You can be observing with OpsCruise is less than 3 minutes and it's delivered as-a-service, or as software on your premise.

About OpsCruise

OpsCruise is venture funded and based in Santa Clara, CA. Our customers include Global 2000 customers from almost every industry vertical. Our technology is supported by issued patents and we've been recognized by Gartner as a leading Observability vendor. Our leadership are industry veterans and innovators with expertise in SRE, cloud native technologies and AI/ML.

