

# MONITORING THE JVM ON KUBERNETES

WITH PROMETHEUS

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# WHAT WE'LL COVER

Monitoring the JVM on Kubernetes with Prometheus

# MONITORING

Telemetry: Logs, Metrics, Traces

Observe and react to known types of failures

# THE JVM

Languages: Java, Groovy, Clojure, Scala, Kotlin...

Frameworks: Spring/SpringBoot, Dropwizard, Jakarta EE, Microprofile, Quarkus, Micronaut...

CPU, Memory (heap, non-heap, buffers), GC activity, Threads, etc.

# KUBERNETES

An open-source system for automating deployment, scaling, and management of containerized applications.

# PROMETHEUS

An open-source systems monitoring and alerting toolkit.

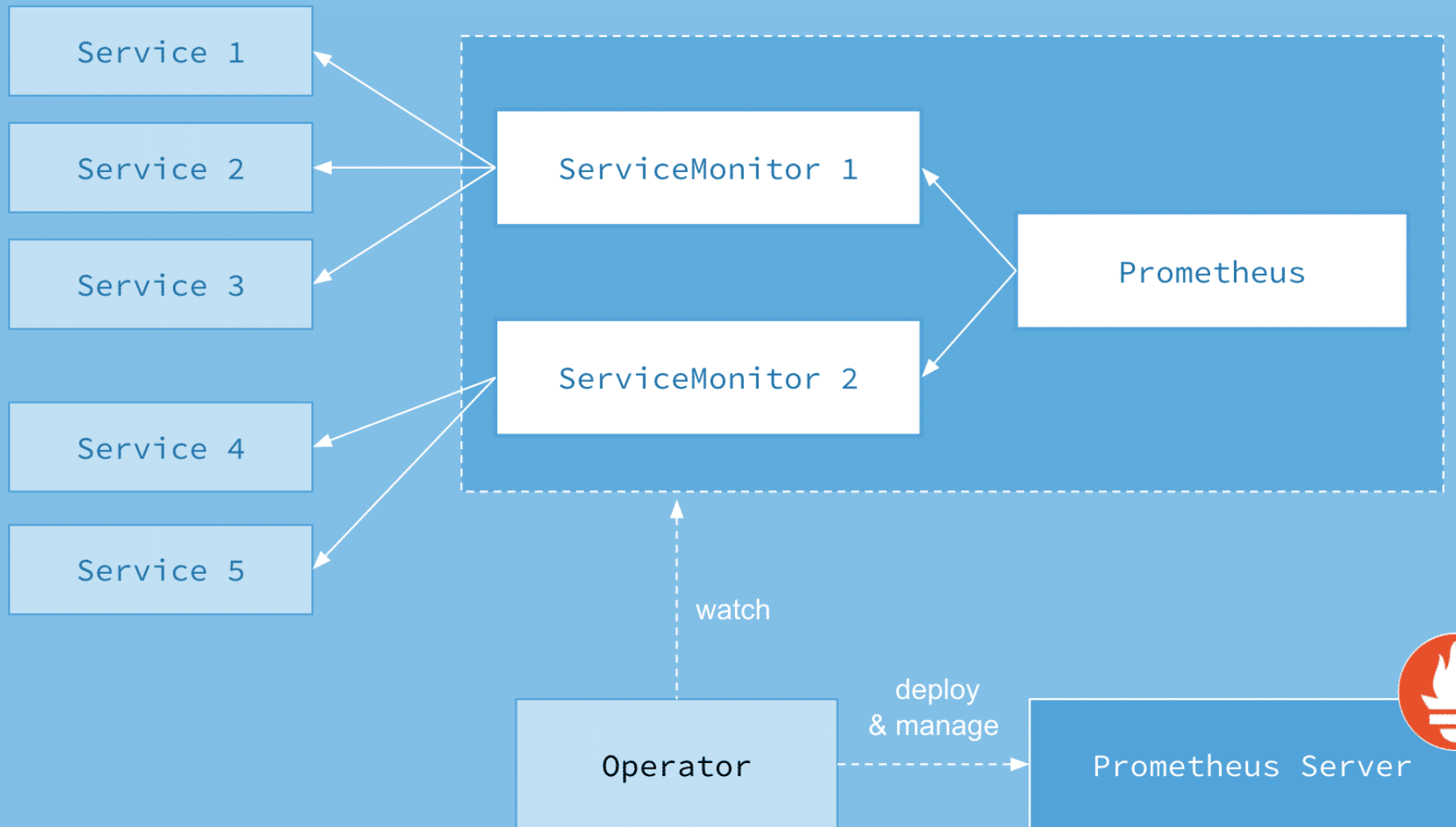
Time-series metrics, dimensional

Querying (PromQL), Visualisation, Alerting

Client libraries, integrations

Prometheus operator on K8s

# PROMETHEUS OPERATOR ON K8S





**DEMO**

# WHAT ELSE CAN WE DO?

Extend Chaos Kraken with new failure modes

Alerting integrations e.g. Slack, Pager Duty

Heap dumps on JVM OOMs, and on demand

GC logs

Remote debugging/profiling

# MORE INFO

[github.com/nickebbitt/monitoring-the-jvm-on-k8s](https://github.com/nickebbitt/monitoring-the-jvm-on-k8s)

[github.com/autotraderuk/chaos-kraken](https://github.com/autotraderuk/chaos-kraken)

[github.com/coreos/prometheus-operator](https://github.com/coreos/prometheus-operator)

[sysdig.com/blog/kubernetes-monitoring-prometheus-operator-part3/](https://sysdig.com/blog/kubernetes-monitoring-prometheus-operator-part3/)

[kruschecompany.com/kubernetes-prometheus-operator/](https://kruschecompany.com/kubernetes-prometheus-operator/)