Monitoring Network Traffic in Kubernetes

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What is Datadog?

Observability platform

- Metrics
- Distributed traces (APM)
- Log analytics
- Synthetics
- Network Performance Monitoring

http://datadoghq.com
Scaling is hard
More capacity? Add another rack!
What is Datadog?

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Fast Forward
It’s alive!
Fargate Share among AWS Container Organizations

FARGATE RUNS IN 19% OF AWS CONTAINER ENVIRONMENTS

Source: Datadog
Growing Dependencies
Layer 7 Routing in a Layer 7 World
- Fully managed
- Pod-local service to service routing
- API driven configuration
- Introspection
Datadog Network Performance Monitoring
Network Performance Monitoring
- Layer 3/4 monitoring of flows
- eBPF based – extremely low overhead
- 100% visibility, no sampling
- Flows are meaningfully resolved, not just IP/port
Still computers in the cloud

- Increasingly method calls now imply network traffic
- Lower layer routing decisions are invisible
- Container and pod routing is complicated & opaque
- Errors can be in code, in physical resource capacity, or in communication
Monitoring in the driver’s seat

External metrics provider for the Horizontal Pod Autoscaler

NEW and open source: Watermark Pod Autoscaling

https://github.com/DataDog/watermarkpodautoscaler
Thank you