

# Whose Metric is it Anyway

Kira Combs

Cloud Foundry Logging and Metrics

Denver, CO

# What you're in for

- Loggregator lesson
- Types of metrics
- Examples of important metrics
- ComponentMetrics app demo

# Loggregator

- Sources
- Metron
- Doppler
- Traffic Controller

# Loggregator

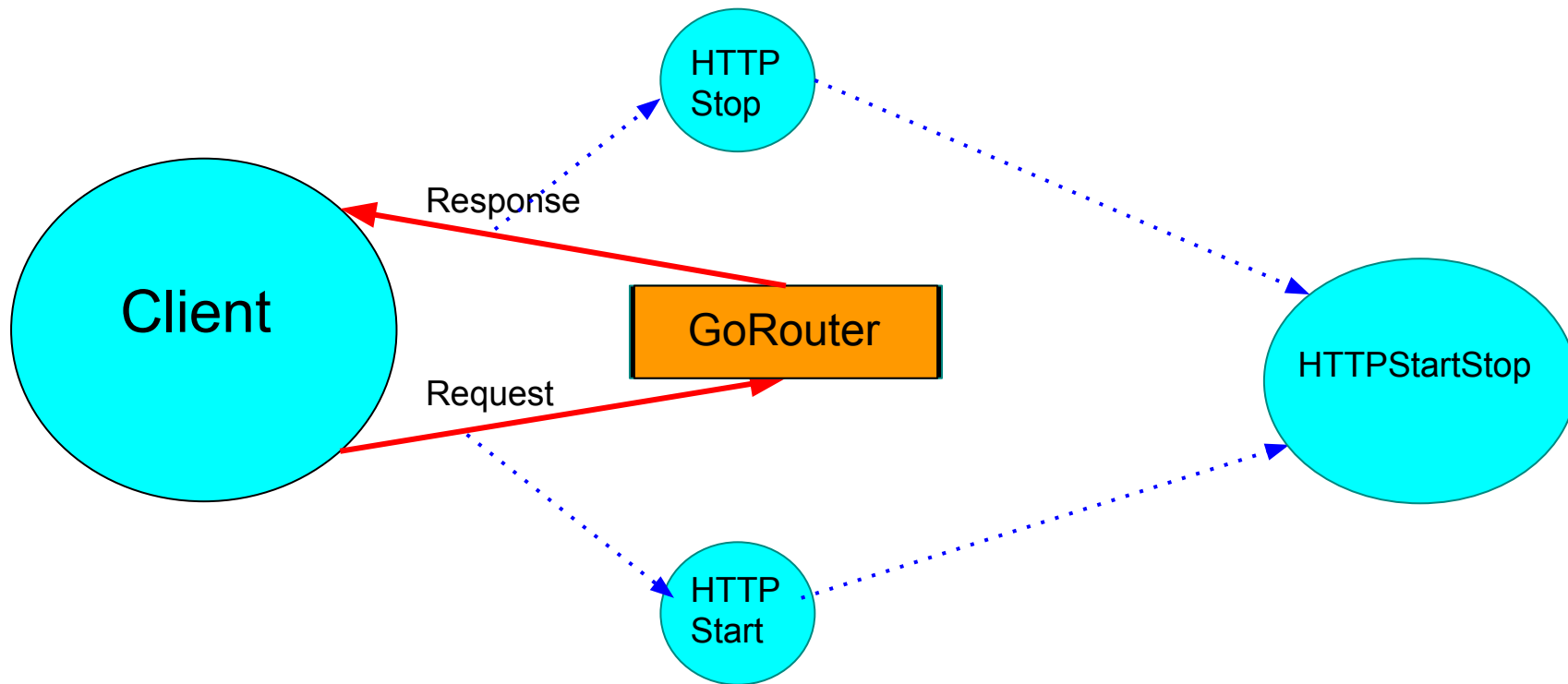
# Firehose (Demo)

# Types of Metrics

# HttpStart

# HttpStop

# HttpStartStop



# Log Events

- STDOUT or STDERR
- AppID
- Message



# Error Event

- Source
- Error Code
- Description

# Container Metric

- App Information
  - CPU Percentage
  - Disk Space
  - Memory

# Counter Event

- Numerical count
- Incremented or Decremented

<http://metrics20.org/spec/#units>

# Value Metric

- Numerical representation of a value

Symbol	Meaning
b	bit
B	byte
M	minute (strftime)
h	hour (strftime)
d	day (strftime)
w	week (strftime)
mo	month (not 'm' like in strftime because that would be SI conflict)

`app_benchmarking.rest_of_time`

`datadog.nozzle.DopplerServer.messageRouter.numberOfDumpSinks`

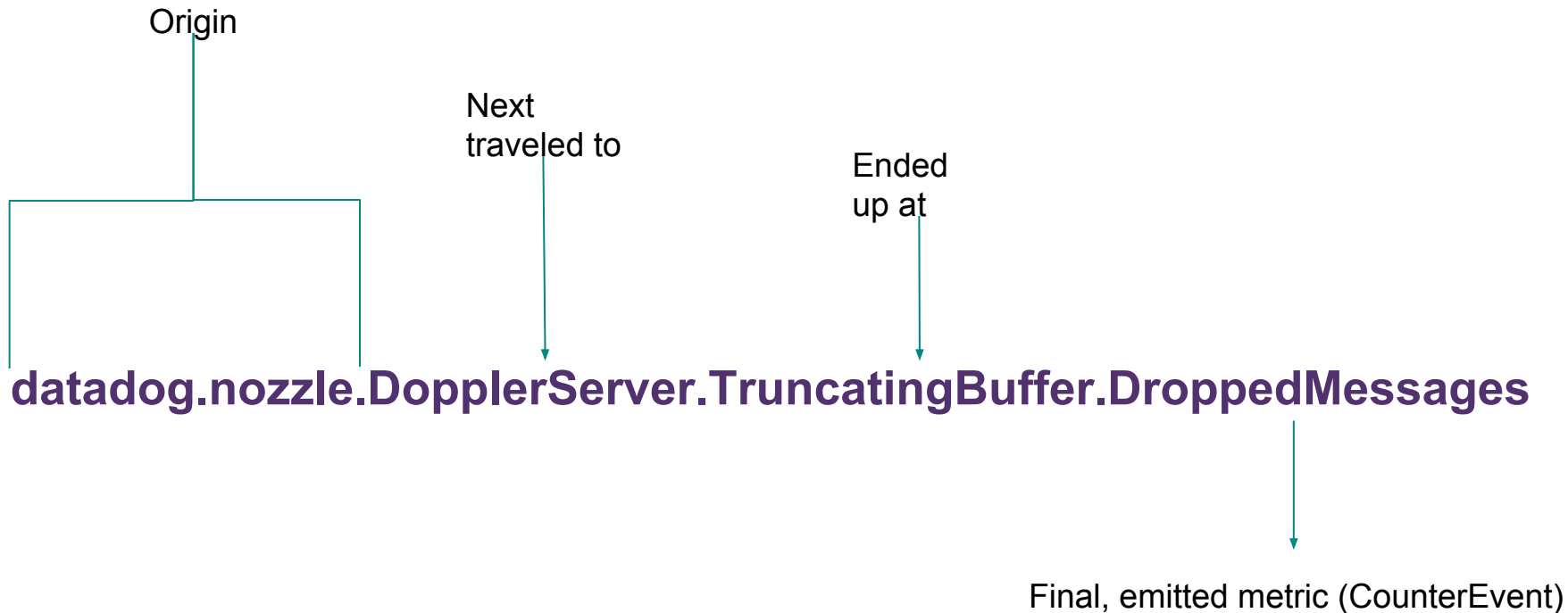
`diego.canary.app.instance`

`datadog.nozzle.routing_api.total_routes`

# Metric Structure

`datadog.nozzle.DopplerServer.TruncatingBuffer.DroppedMessages`

`datadog.nozzle.router__0.routed_app_requests`

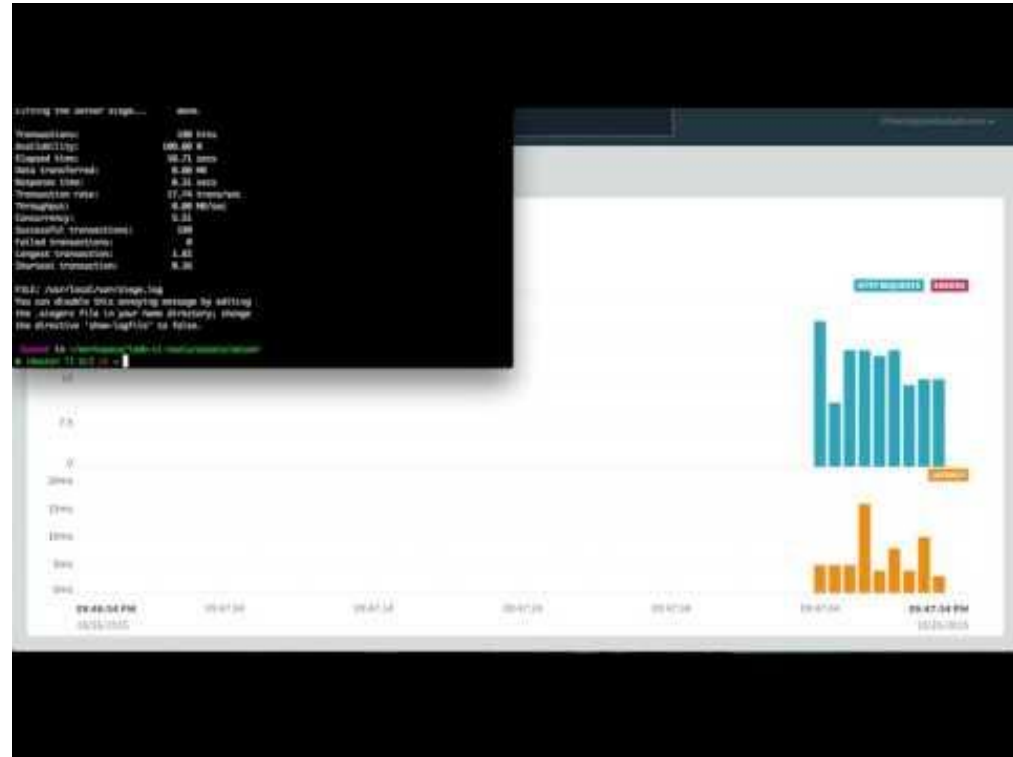


# Masters of Metrics

(Not Really)

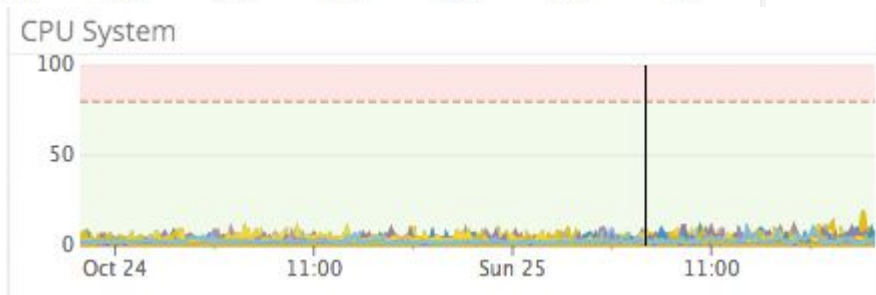
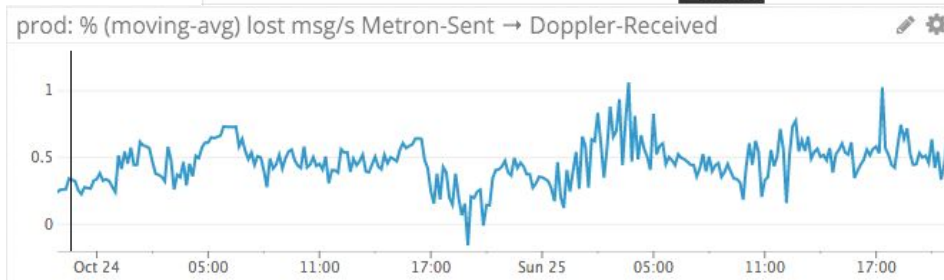
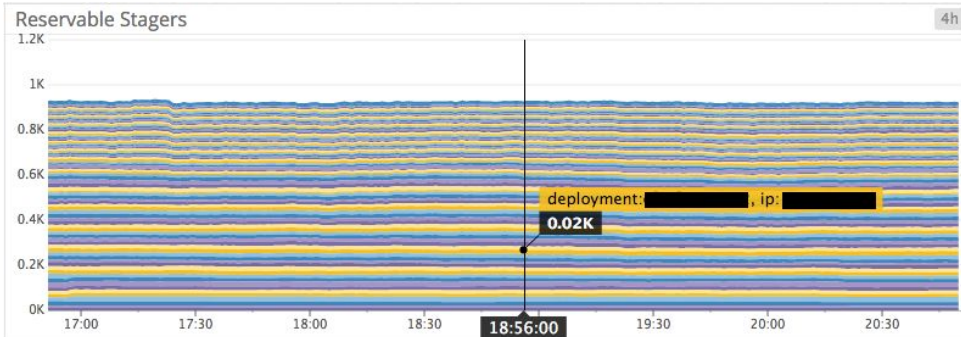
# Metric Logging Tools

APM (please enjoy a working demo)



# Metric Logging Tools

Datadog

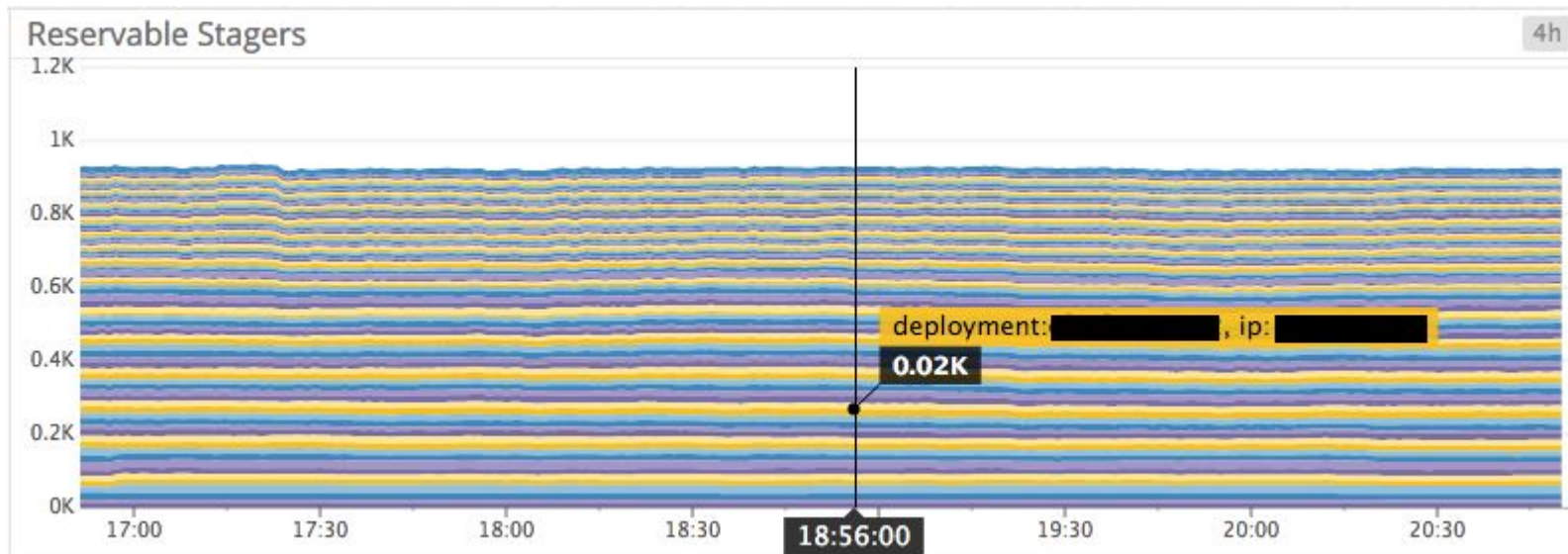




# Some Interesting Metrics

# Reservable Stagers

(cf.collector.reservable\_stagers)



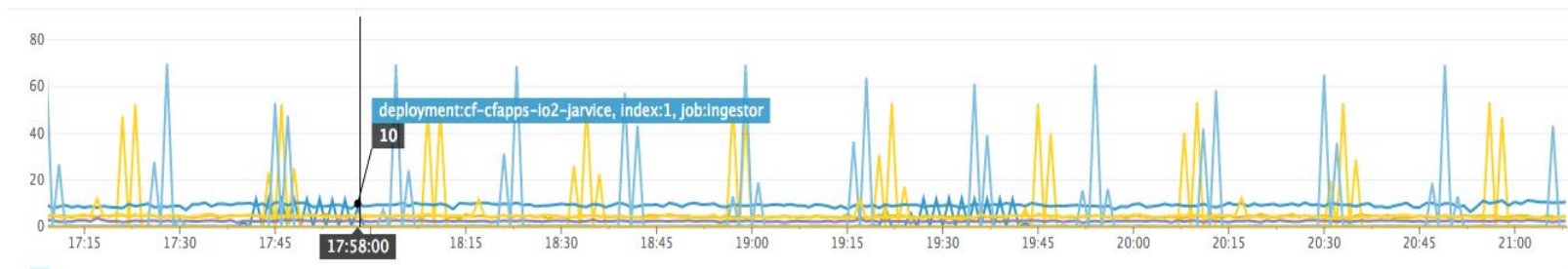
# Log Message Marshalled

(datadog.nozzle.MetronAgent.dropsondeMarshaller.logMessageMarshalled)



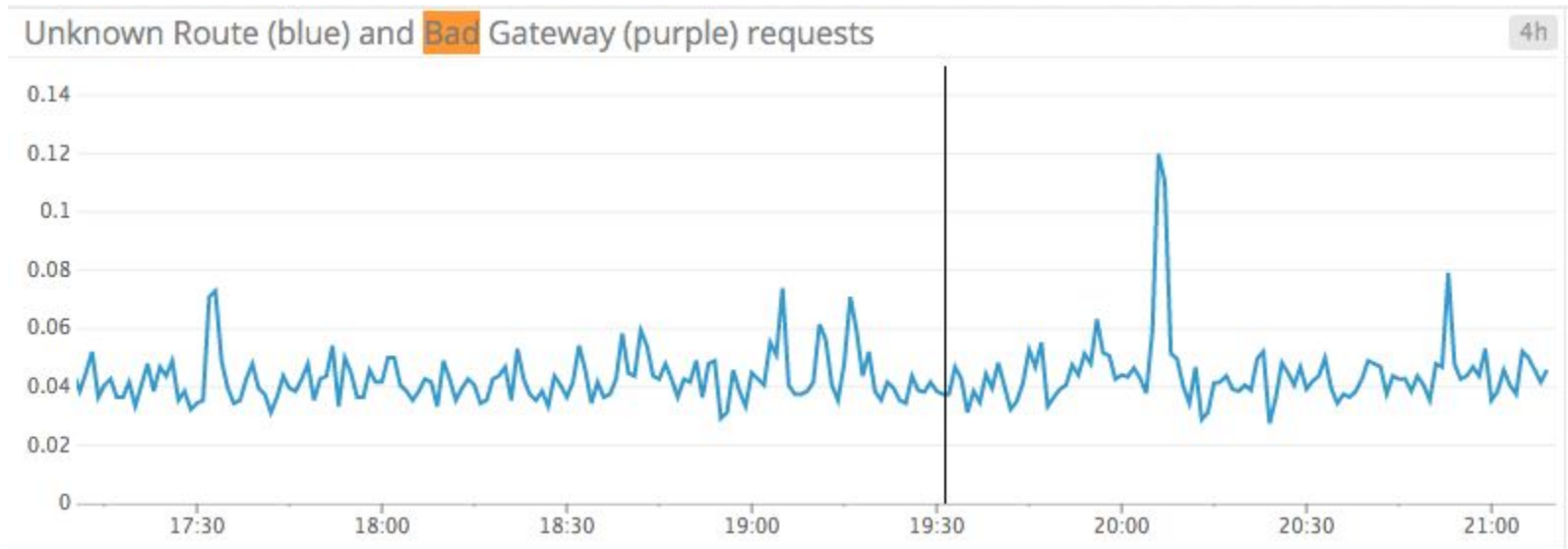
# CPU Percentage

(bosh.healthmonitor.system.cpu.user)



# Router Bad Requests

(cf.collector.router.bad\_requests)



# Demo (ComponentMetrics)

# Questions?

# Thank You

We are hiring!! (London and Berlin)  
[pivotal.io/careers](https://pivotal.io/careers)

Kira Combs

PCF Denver, CO

 @kicombs



# Additional Resources

- Hiring: <http://pivotal.io/careers>
- Metric Types: <https://github.com/cloudfoundry/dropsonde-protocol/tree/master/events>
- Value Metric Units: <http://metrics20.org/spec/#units>
- Cloud Foundry Release: <https://github.com/cloudfoundry/cf-release>
- Loggregator: <https://github.com/cloudfoundry/loggregator>
- Firehose Metrics Catalog: <https://github.com/cloudfoundry/loggregator/wiki/Firehose-Metric-Catalog>
  - (other wiki pages contain more component-specific metrics)
  - Not a complete resource