

MONITORING SILVERSTRIPE WITH ELASTIC

Philipp Krenn

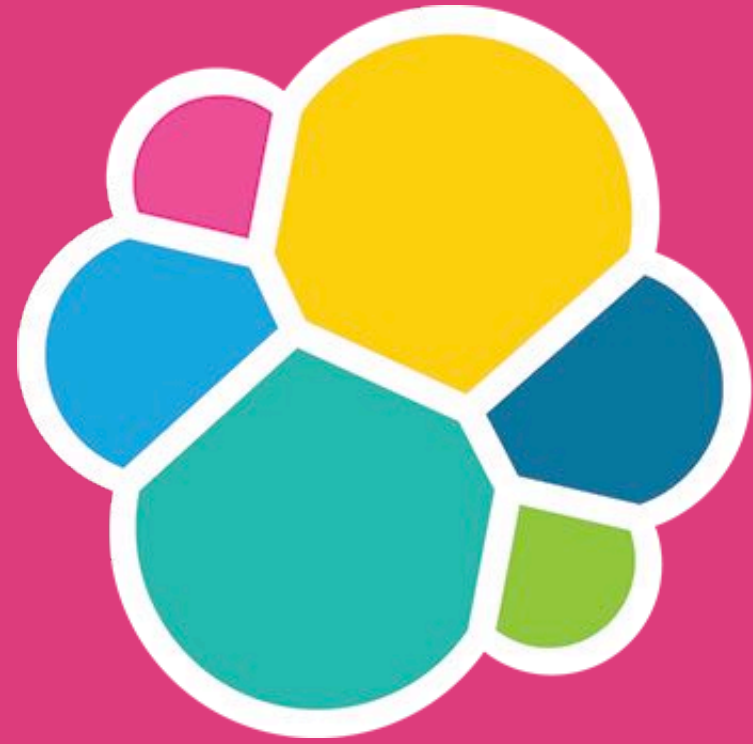
@xeraa





ALL THE THINGS!





elastic

Infrastructure | Developer 🥑

Disclaimer

I build **highly** monitored Hello World
apps

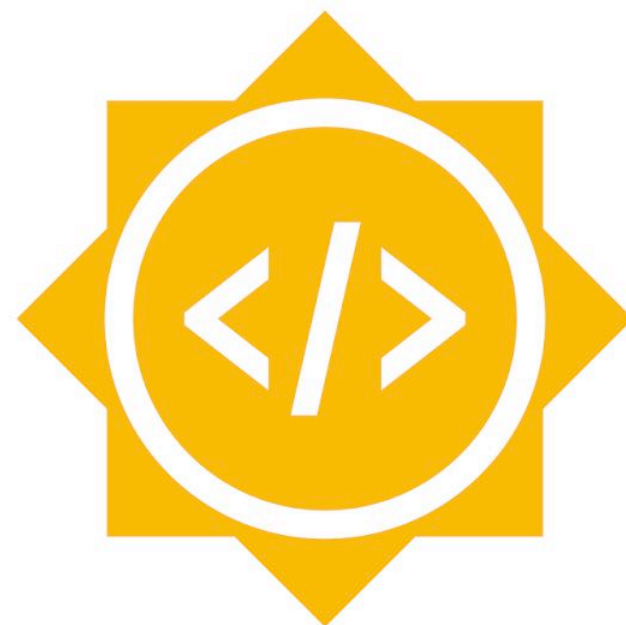
How do you log and monitor?

APPLICATION





SilverStripe



Google Summer of Code





Learn by doing: less theory, more results

SilverStripe 2.4

Module Extension, Themes, and Widgets

Create smashing SilverStripe applications by extending modules, creating themes, and adding widgets

Beginner's Guide

Philipp Krenn

[PACKT] open source*
PUBLISHING community experience distilled

CLOUD





cloud

eu-west-1a

**AWS.DATA.HIGHIO.I3**

Instance #5 v6.4.0

2 GB RAM

data master eligible ingest

JVM memory pressure 30% of 2 GB

Disk usage 2.67 GB of 60 GB

Stop routing

eu-west-1b

**AWS.MASTER.R4**

Tiebreaker #6 v6.4.0

1 GB RAM

master eligible

JVM memory pressure 33% of 1 GB

Disk usage 0 MB of 2 GB

Stop routing

eu-west-1c

**AWS.DATA.HIGHIO.I3**

Instance #4 v6.4.0

2 GB RAM

data master ingest

JVM memory pressure 28% of 2 GB

Disk usage 5.22 GB of 60 GB

Stop routing

**AWS.ML.M5**

Instance #7 v6.4.0

1 GB RAM

ml

Disk usage 0 MB of 2 GB

Stop routing

**AWS.KIBANA.R4**

Instance #1 v6.4.0

1 GB RAM



OPEN SOURCE





Kibana



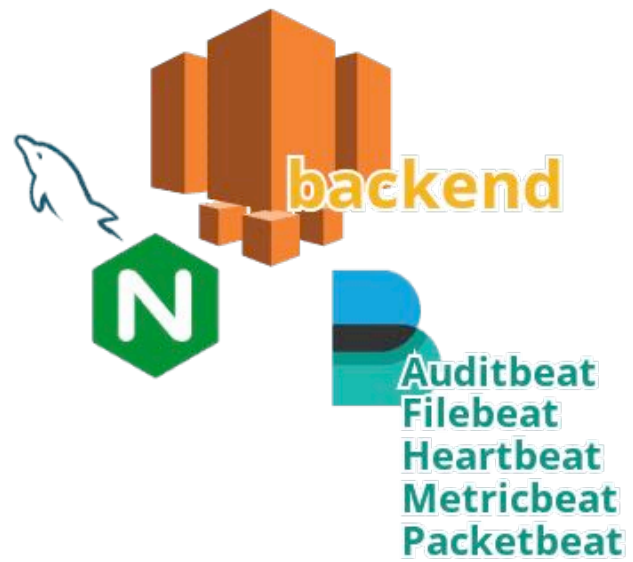
Elasticsearch



Logstash



Beats



A low-angle, upward-looking shot of a white security camera mounted on a ceiling. The ceiling features a grid of fluorescent light fixtures, with one light glowing brightly. The camera is positioned in the center-left of the frame, pointing towards the right. The overall lighting is dim, with the primary light source being the overhead fluorescent light.

MONITORING

Metricbeat: System

Packetbeat

Filebeat Modules

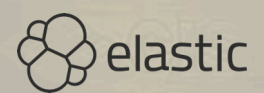
Metricbeat: Modules

Filebeat: Log + JSON

Heartbeat



Auditbeat



MORE



Name

Heap

Select an Index

metricbeat-*

Select a time field

@timestamp

Run this water

1

Broad searches can be done by adding * to your query

Matching the following condition

WHEN max() OF jolokia.metrics.memory.heap_usage.used GROUPED OVER 5 'beat.name' IS ABOVE 50000000 FOR THE LAST 5 minutes

beat.name (1 of 3): frontend.xeraa.wtf



*X-Pack and part of the Elastic Cloud

Alerts*

Name

Heap

Select an Index

metricbeat-*

Select a time field

@timestamp

Run this water

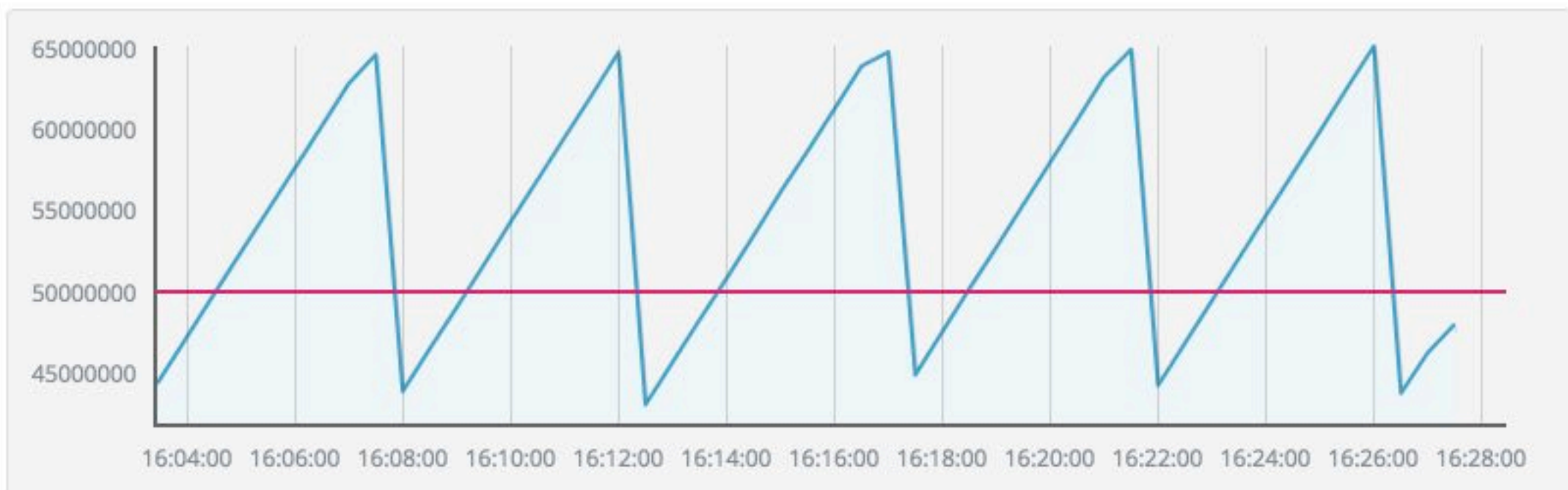
1

Broad searches can be done by adding * to your query

Matching the following condition

WHEN max() OF jolokia.metrics.memory.heap_usage.used GROUPED OVER top 5 'beat.name' IS ABOVE 50000000 FOR THE LAST 5 minutes

beat.name (1 of 3): frontend.xeraa.wtf

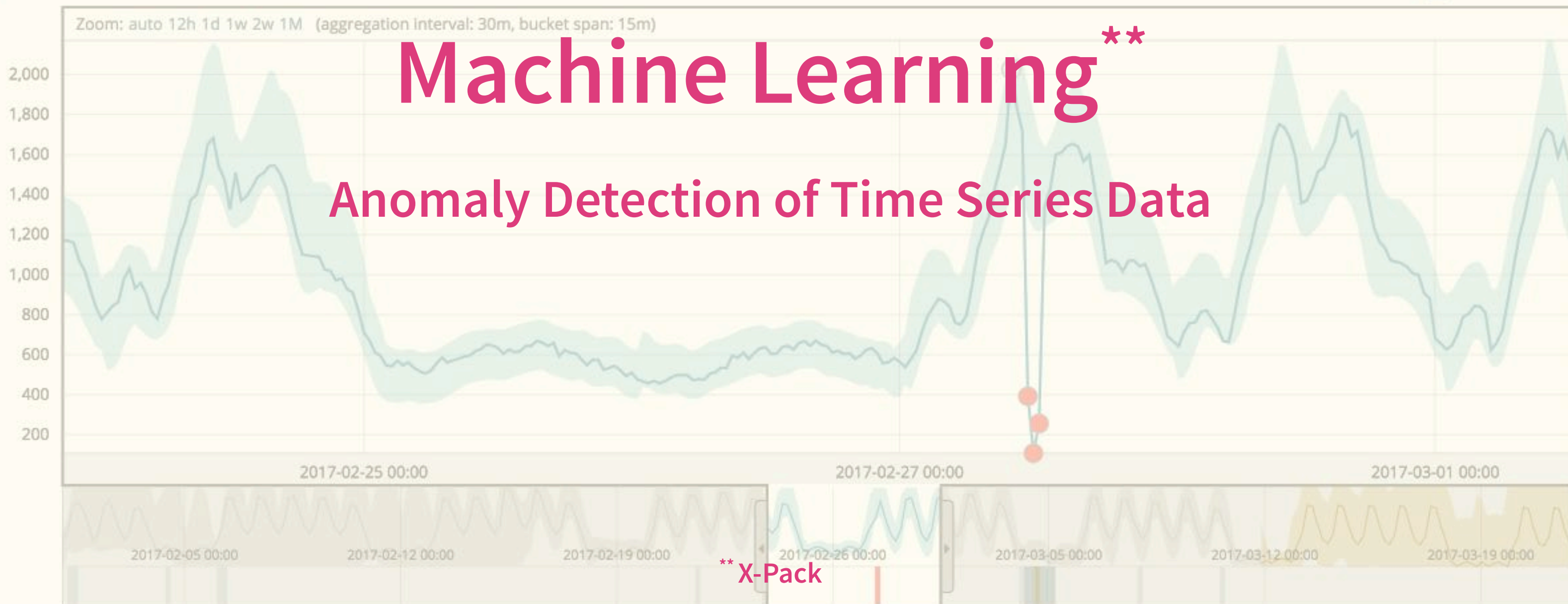


Job nginx-single

Detector: distinct_count (nginx.access.remote_ip)

Forecast

Single time series analysis of cardinality nginx.access.remote_ip

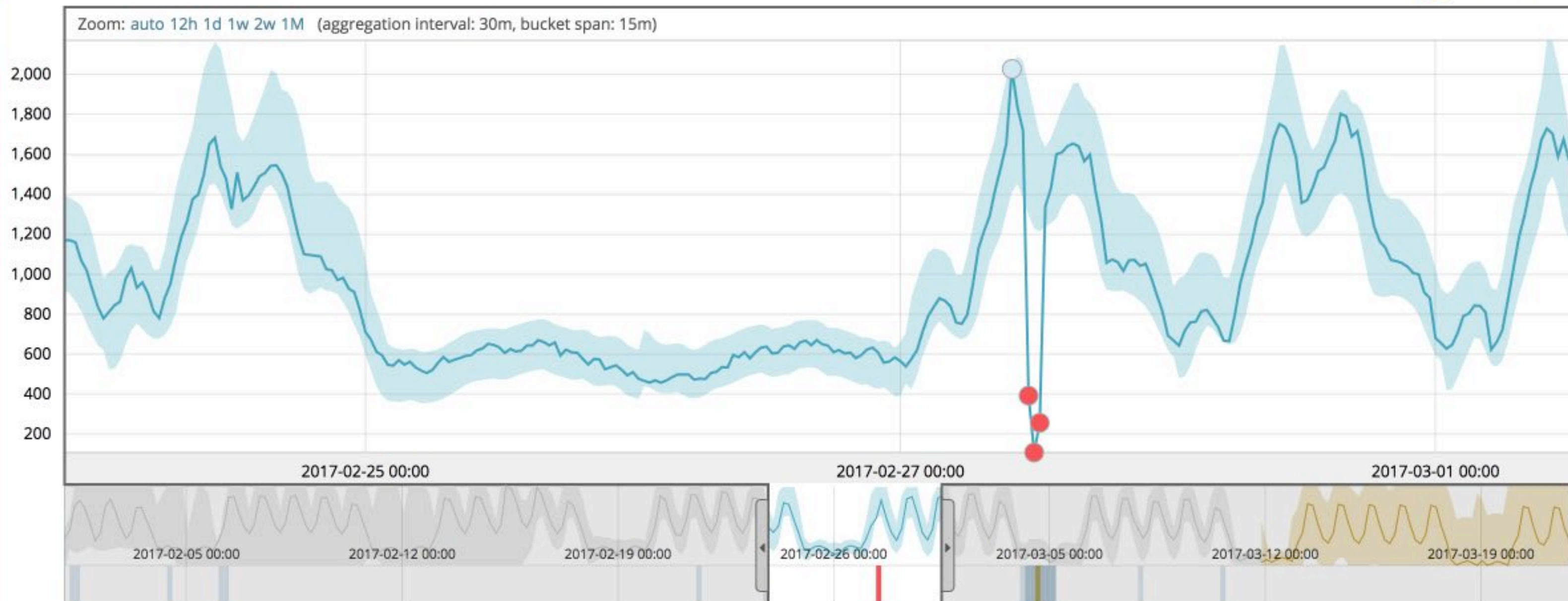
☒ show model bounds

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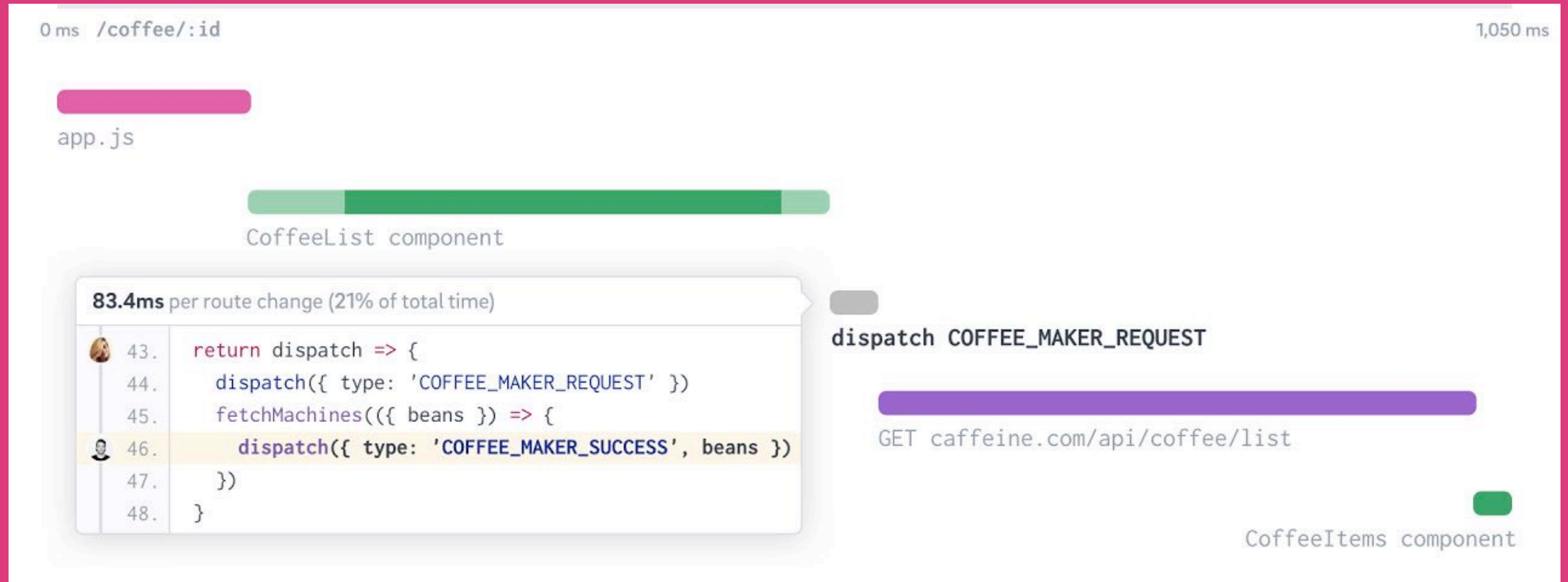
☒ show model bounds



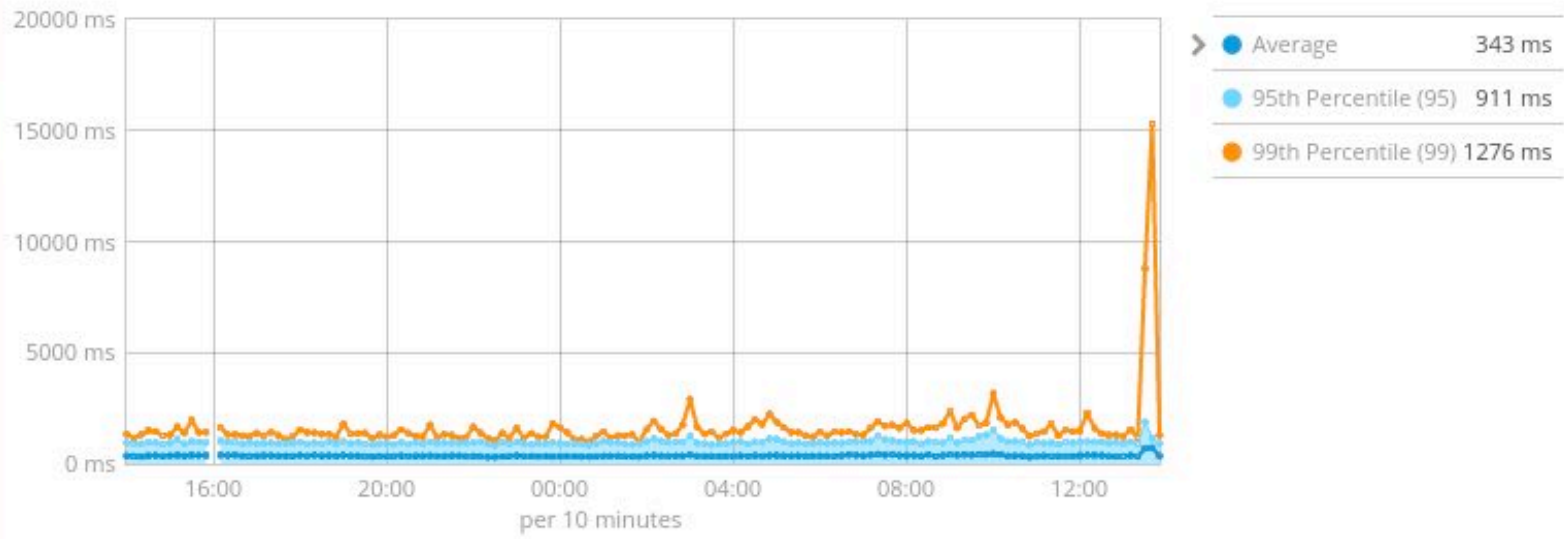
WORK HARDER

FUTURE

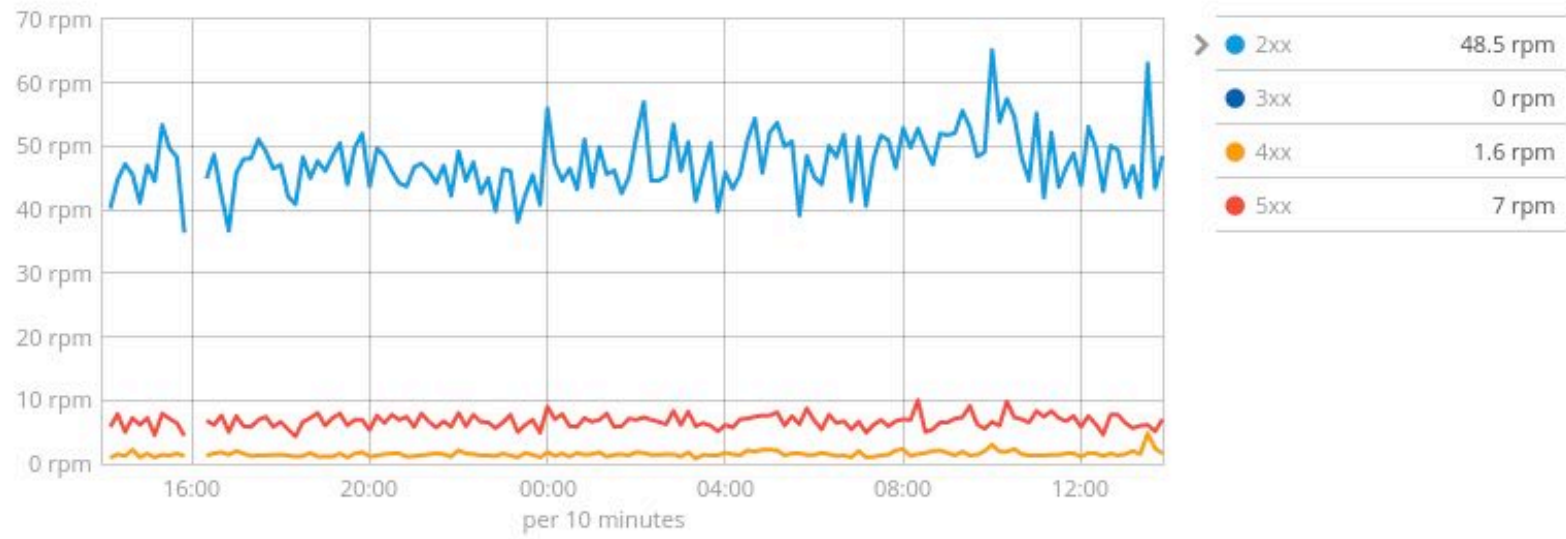
APM



APM: Response Times



APM: Request Per Minute



APM: Top Transactions

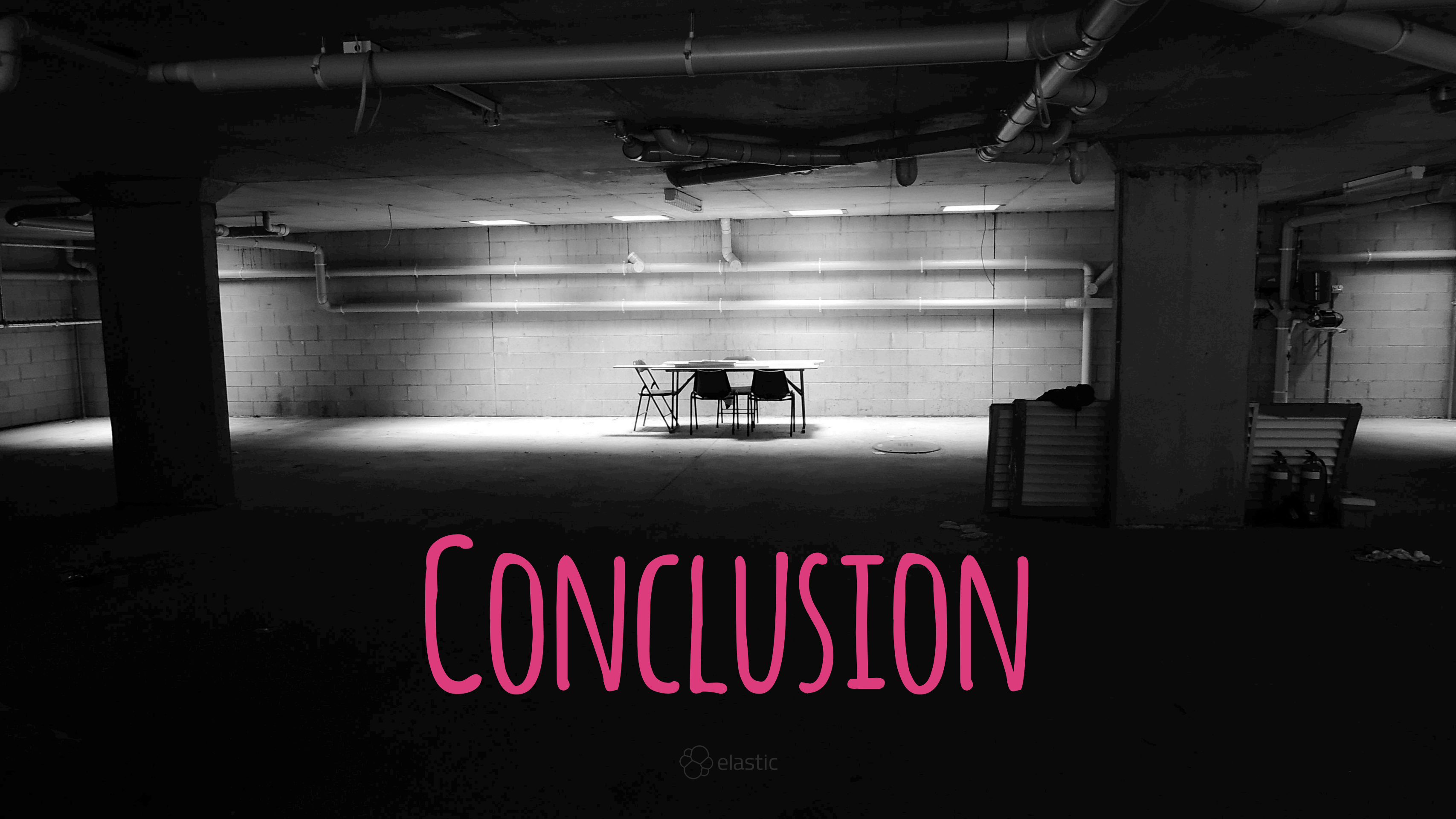
Transaction	Type	Avg. Resp Time (ms)	95th percentile of Resp Time (ms)	View Traces
GET /api/stats	request	728	1117	View Traces
GET /api/products/top	request	722	1103	View Traces
Serve to customer	Brewing Bot	519	966	View Traces
Boil water	Brewing Bot	503	961	View Traces
Roast beans	Brewing Bot	501	960	View Traces
Pour water	Brewing Bot	499	952	View Traces
Grind beans	Brewing Bot	497	956	View Traces
GET /api/products/:id/customers	request	446	1350	View Traces
POST /api/orders	request	355	521	View Traces
GET /api/orders	request	109	314	View Traces
GET /api/types/:id	request	109	240	View Traces
GET /api/orders/:id	request	107	469	View Traces
GET /api/customers	request	101	271	View Traces
GET /api/products/:id	request	98	493	View Traces
GET static file	request	80	523	View Traces
GET /api/customers/:id	request	77	338	View Traces

GA: Node.js, React, Python

Beta: Ruby, Go, Java

<https://github.com/frankkoornstra/elastic-apm-agent>

<https://github.com/philkra/elastic-apm-php-agent>



CONCLUSION



Next

<https://dashboard.xeraa.wtf>

<https://github.com/xeraa/php-monitoring>

QUESTIONS?

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PS: Sticker