

MONITOR YOUR PHP APPLICATIONS

with Logs, Metrics, Pings & Traces

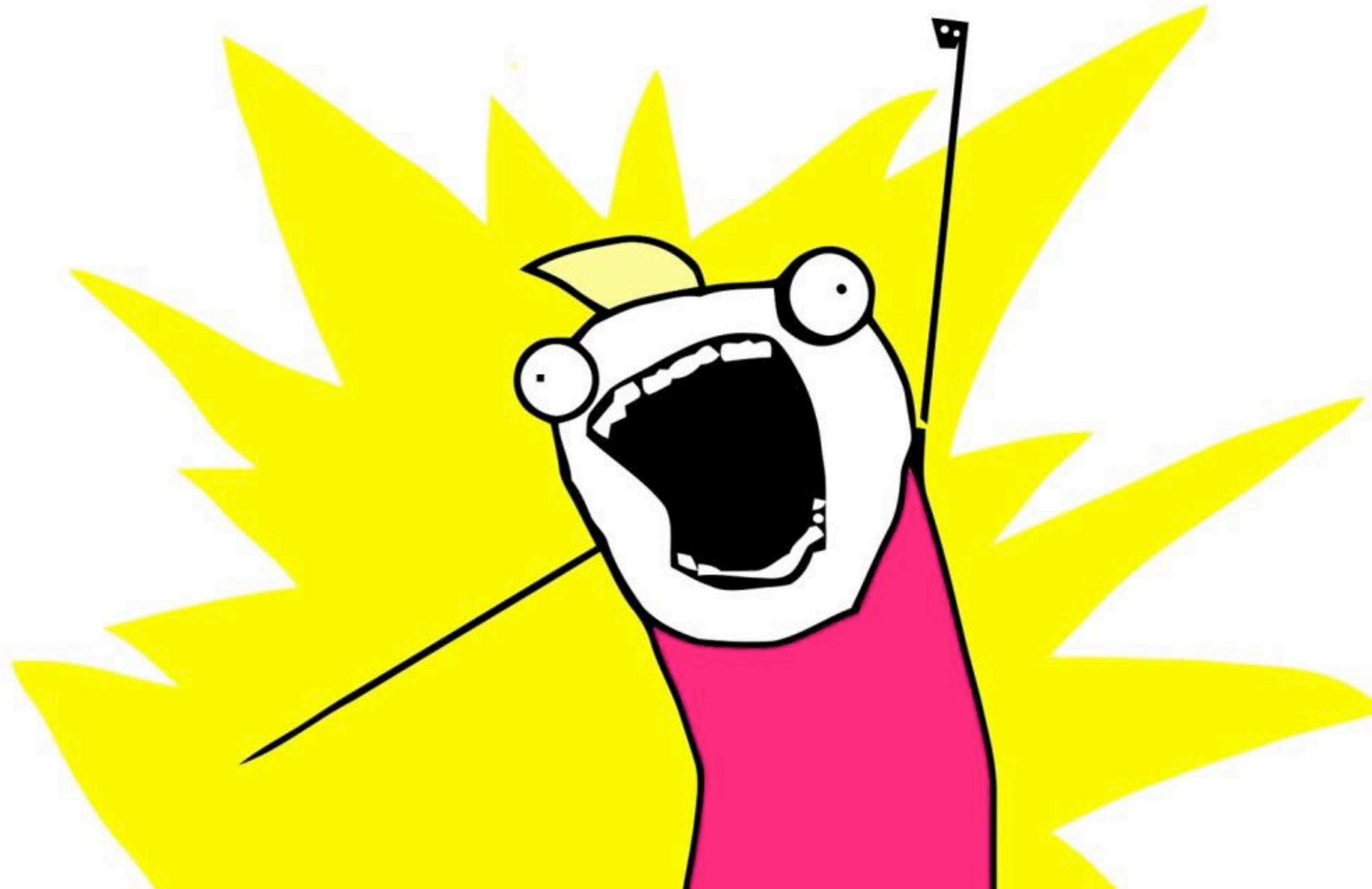
Philipp Krenn

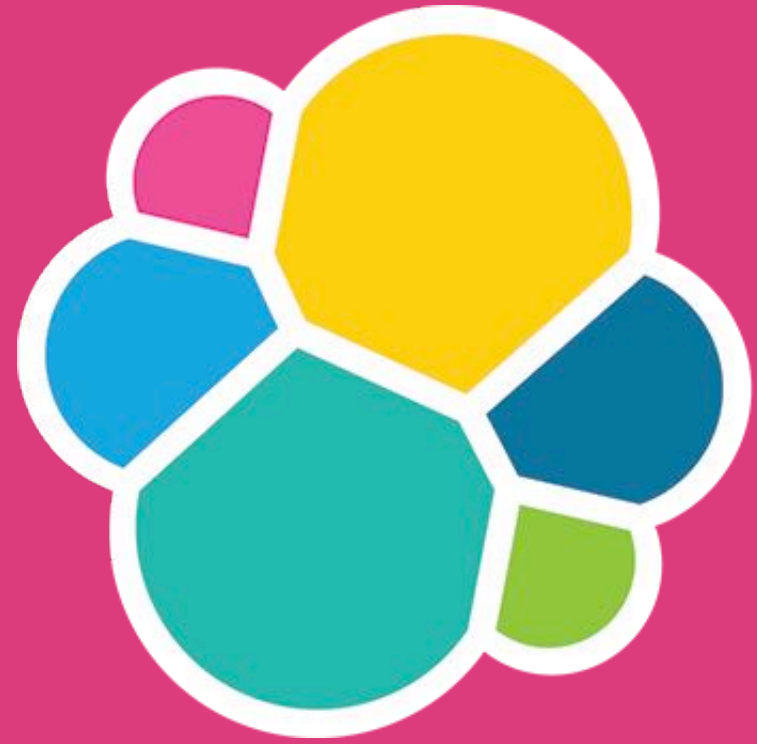
@xeraa





ALL THE THINGS!





elastic

Infrastructure | Developer 🥑

Disclaimer

I build **highly** monitored Hello World
apps

How do you log and monitor?

APPLICATION





SilverStripe





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



OPEN SOURCE





Kibana



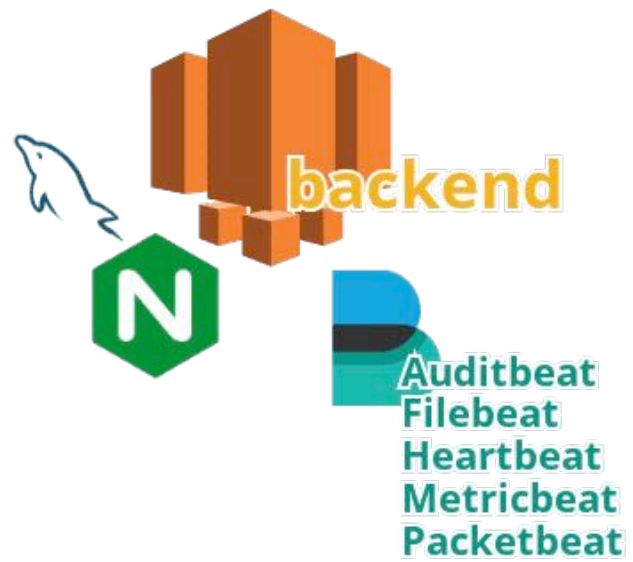
Elasticsearch



Logstash



Beats



A security camera is mounted on a ceiling in a dimly lit room. The camera is white and rectangular, with a lens visible. The ceiling has a grid pattern and fluorescent lights. The word "MONITORING" is written in large, pink, stylized letters across the bottom of the image.

MONITORING

Metricbeat: System

Packetbeat

Filebeat Modules

Metricbeat: Modules

Filebeat: Log + JSON

A photograph of two dogs running on a sandy beach. The dog on the left is a brindle-colored dog, possibly a Weimaraner, running towards the right with its mouth open. The dog on the right is a black dog, possibly a Labrador, running towards the left. The background is a bright, slightly hazy sky and a distant shoreline. The word "Heartbeat" is overlaid in the center in a pink, sans-serif font.

Heartbeat

Auditbeat

MORE



Name

Heap

Select an Index

metricbeat-*

Broad searches can be done by adding * to your query

Select a time field

@timestamp

Run this water

1

Matching the following condition

Alerts*

WHEN max() OF jolokia.metrics.memory.heap_usage.used GROUPED OVER top 3 'beatname' IS ABOVE 50000000 FOR THE LAST 5 minutes

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



*X-Pack and part of the Elastic Cloud

Name

Heap

Select an Index

metricbeat-*

Broad searches can be done by adding * to your query

Select a time field

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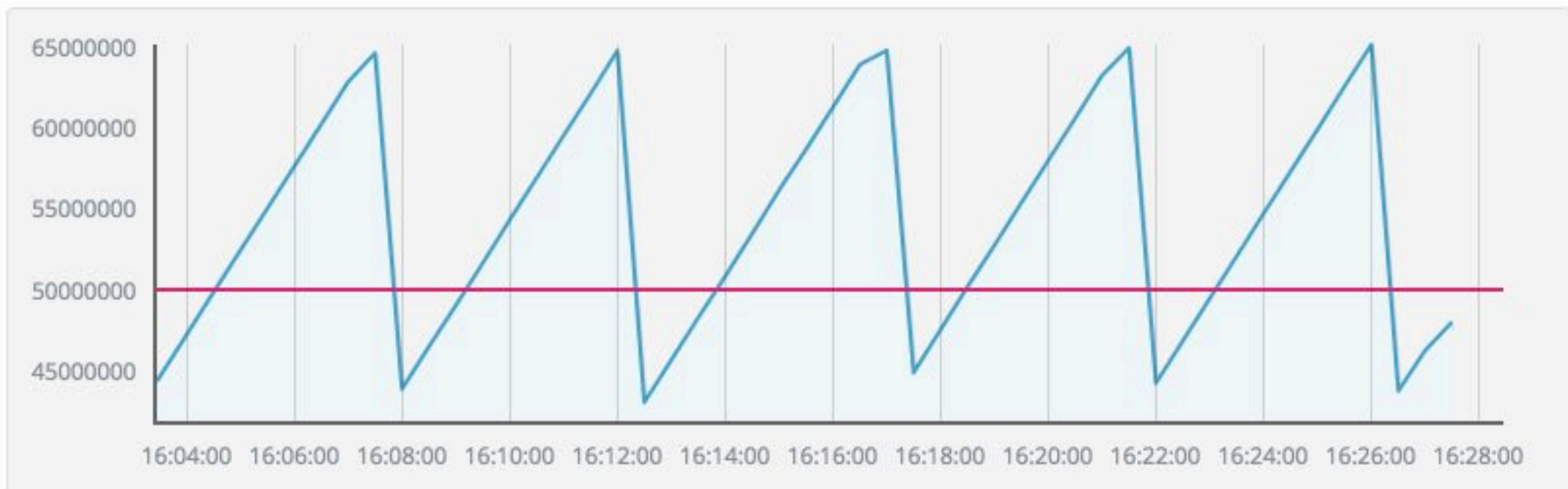
Run this water

1

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

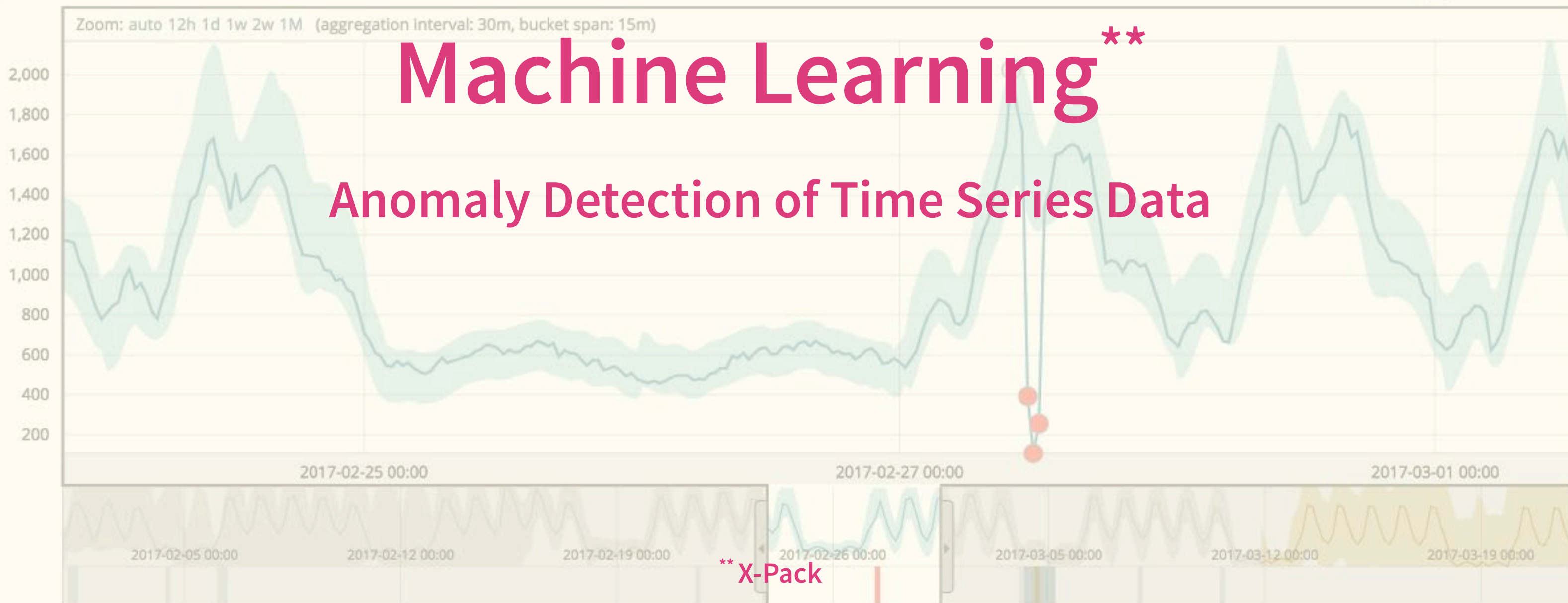
Detector: distinct_count (nginx.access.remote_ip)

Forecast

Single time series analysis of cardinality nginx.access.remote_ip

show model bounds

Zoom: auto 12h 1d 1w 2w 1M (aggregation interval: 30m, bucket span: 15m)



Machine Learning**

Anomaly Detection of Time Series Data

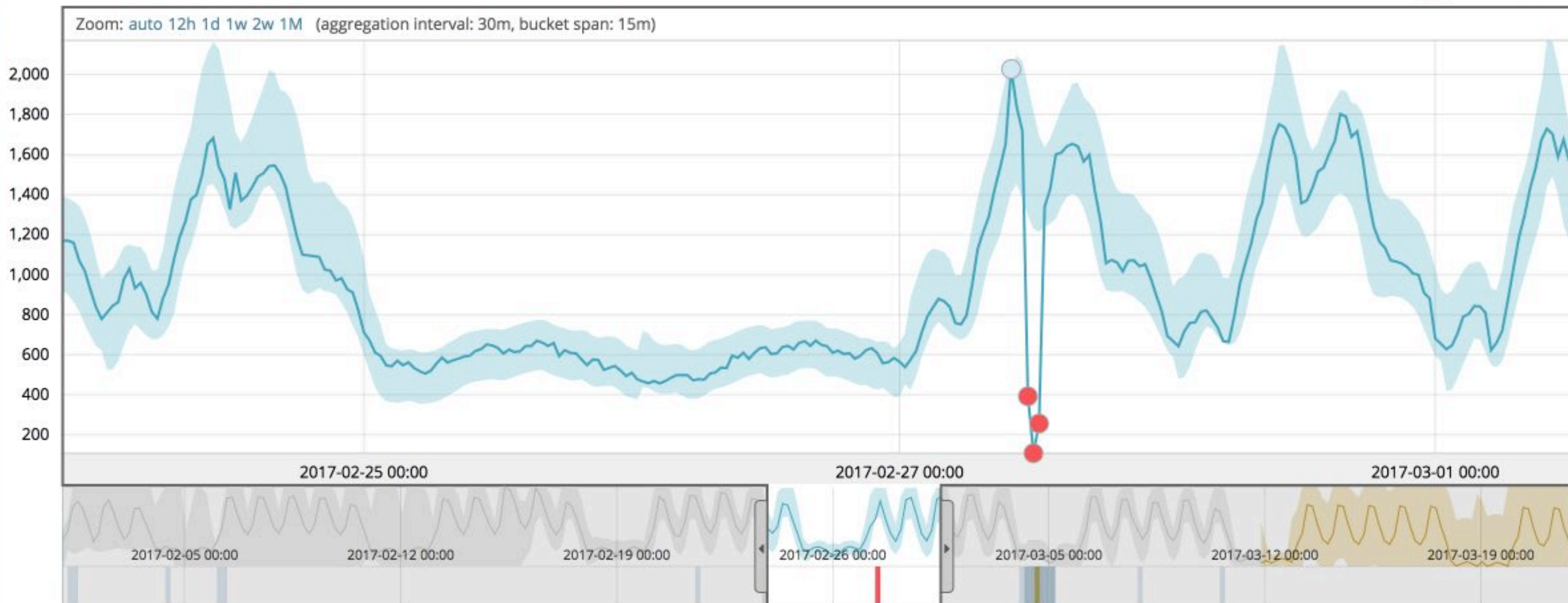
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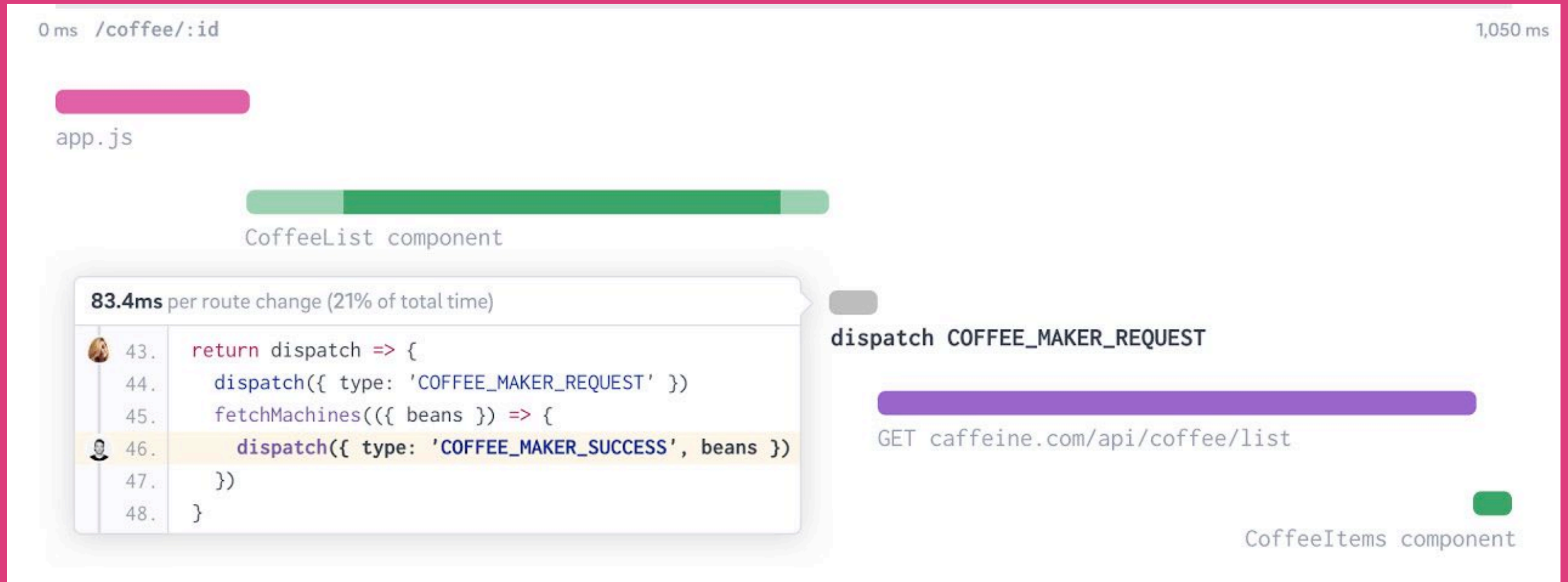




WORK HARDER

FUTURE

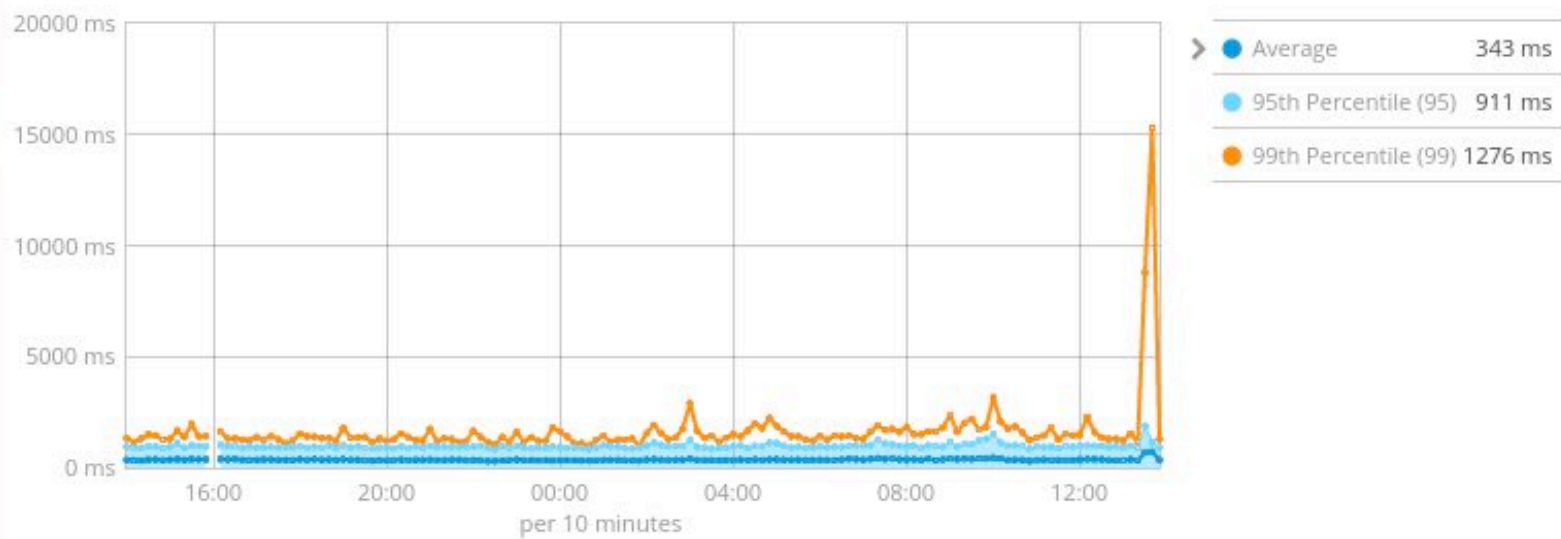
APM



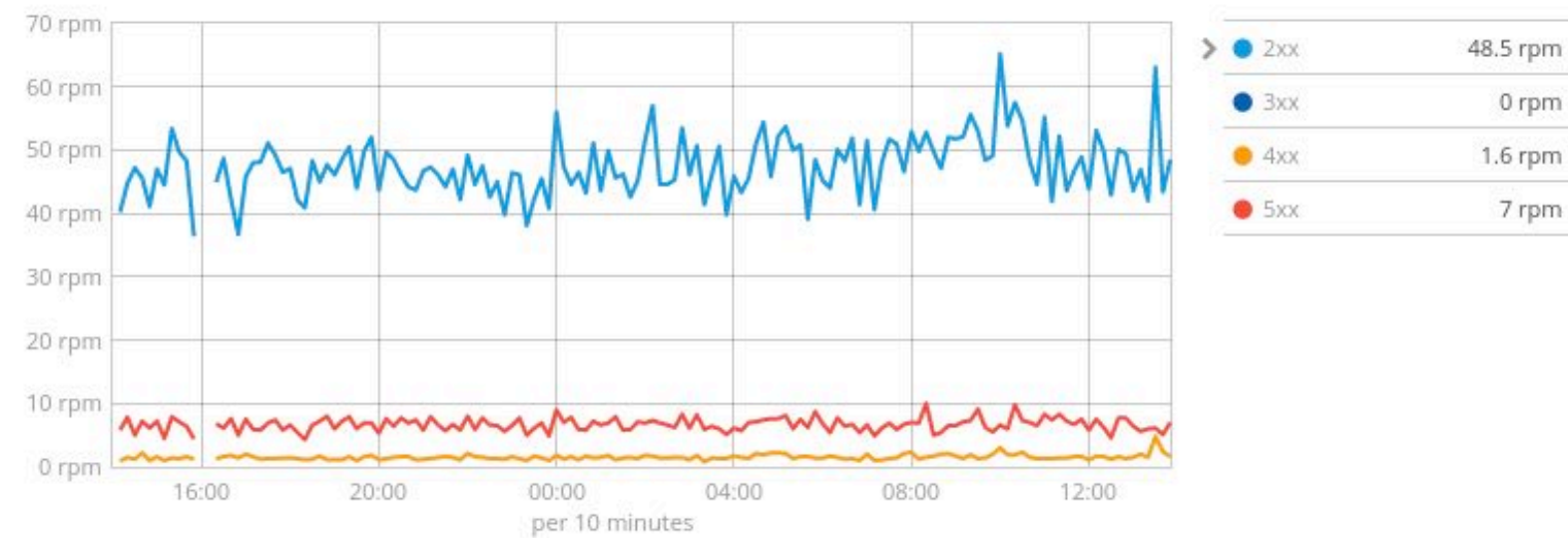
context.app.name:opbeans-backend

Uses lucene query syntax

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