

360° MONITORING OF YOUR MICROSERVICES

Philipp Krenn

@xeraa



elastic

Infrastructure | Developer Advocate



Honest Status Page

@honest_update

 Follow



We replaced our monolith with micro services so that every outage could be more like a murder mystery.

RETWEETS
2,882

LIKES
2,256



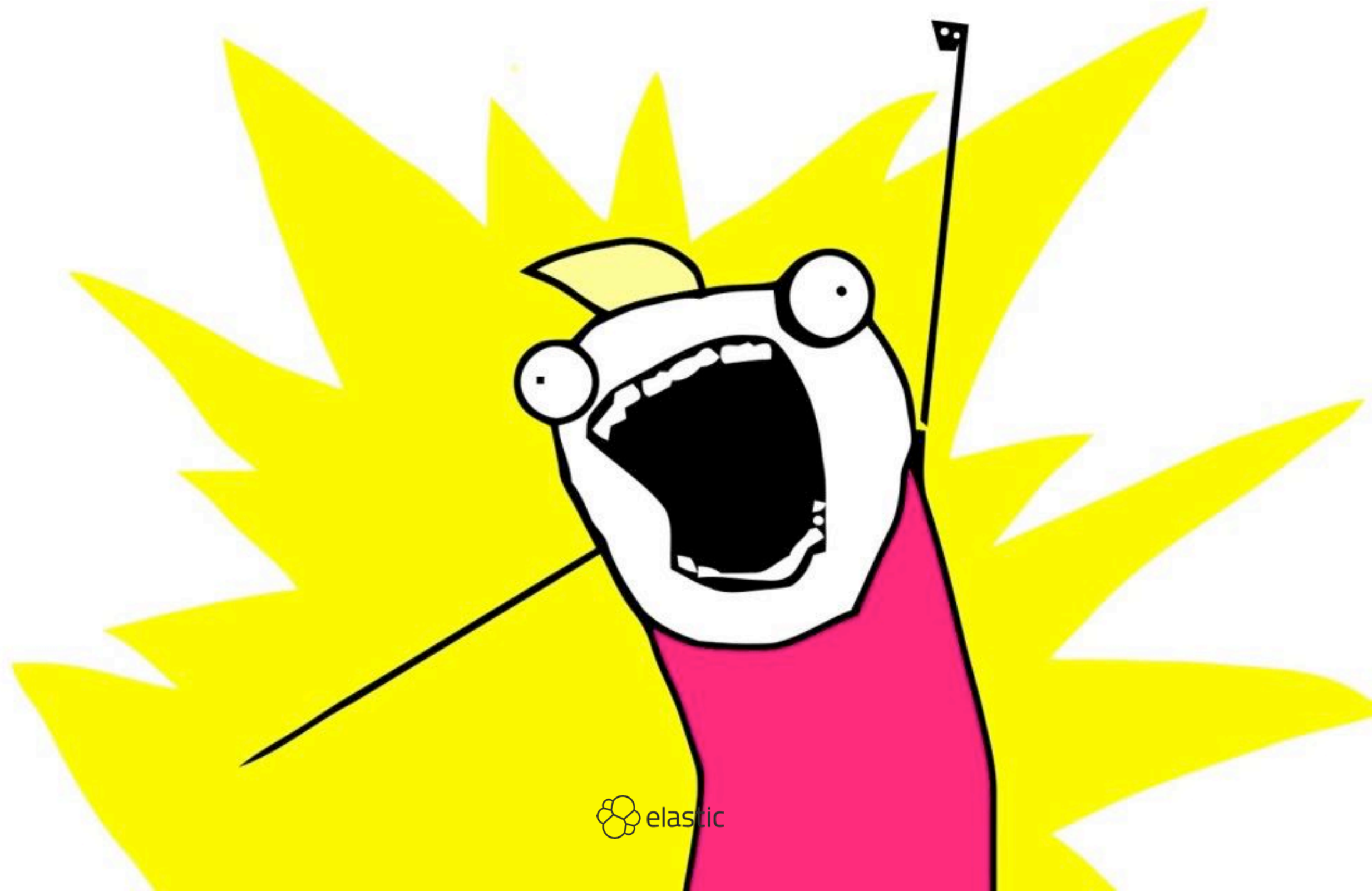
4:10 PM - 7 Oct 2015

 18

 2.9K

 2.3K

ALL THE THINGS!



Who is using all the hot 🍌?

How do you log and monitor?



Phone

Contacts

Messages

Email

App Store

Sparkasse

Music

PayPal

PayPal

Snapchat

YouTube

YouTube

Translate

Translate



Keep It Stupidly Simple

No discovery, load-balancing, security,...

SPRING INITIALIZR bootstrap your application now

Generate a with Spring Boot

Project Metadata

Artifact coordinates

Group



Artifact

Dependencies

Add Spring Boot Starters and dependencies to your application

Search for dependencies

Selected Dependencies

[Generate Project](#)

Don't know what to look for? Want more options? [Switch to the full version.](#)

start.spring.io is powered by [Spring Initializr](#) and [Pivotal Web Services](#)





AWS Lightsail

Ubuntu 16.04 VM



cloud



Kibana



Elasticsearch

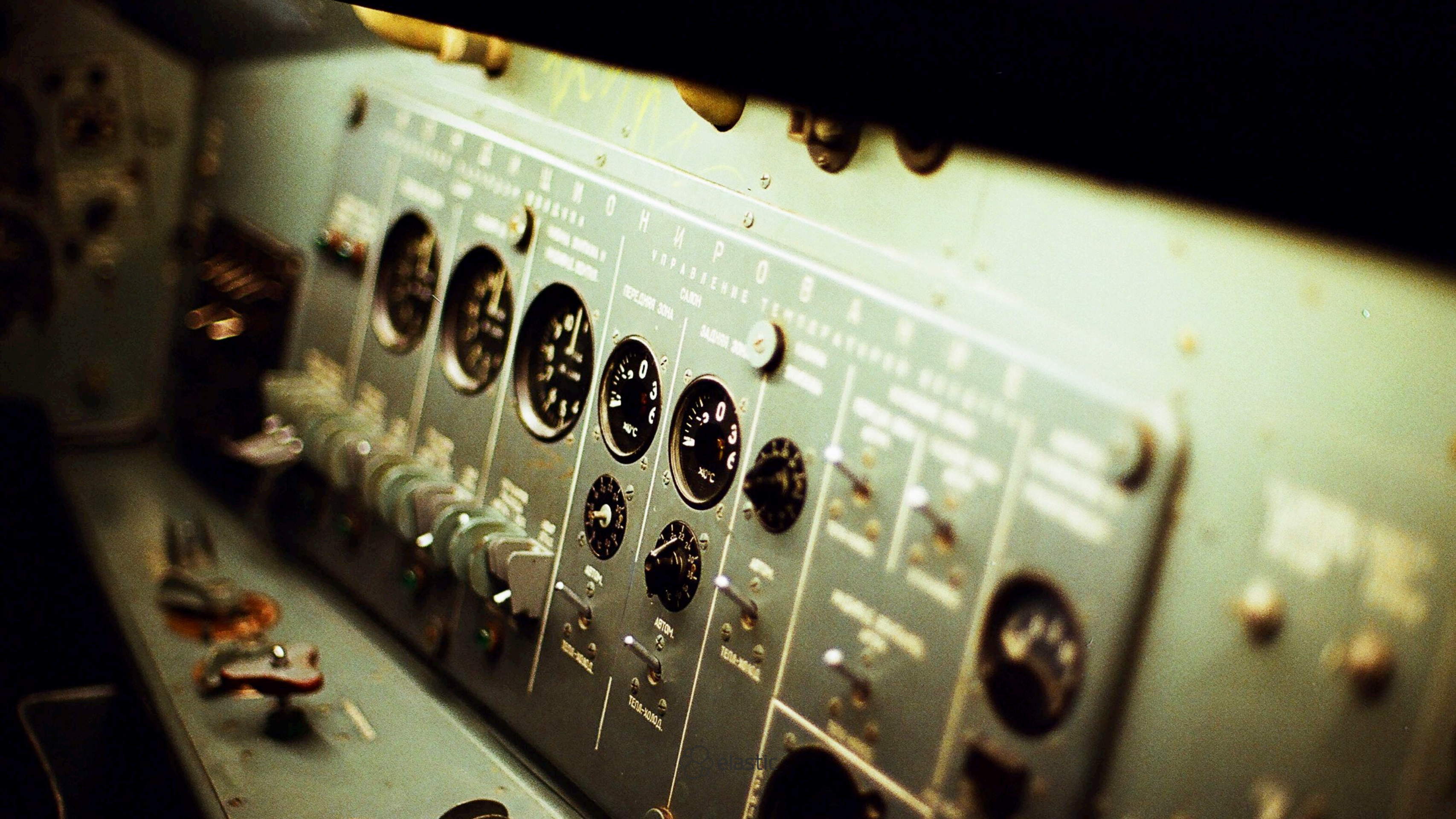


Logstash



Beats

Package
Deploy
Run



И Р О В А

УПРАВЛЕНИЕ ТЕМПЕРАТУРОЙ

ПЕРЕДНЯЯ ЗОНА

ЗАДНЯЯ ЗОНА

0 3 6 9 12 15 18 21 24 27 30 33 36 39 42 45 48 51 54 57 60 63 66 69 72 75 78 81 84 87 90 93 96 99 100
°C

0 3 6 9 12 15 18 21 24 27 30 33 36 39 42 45 48 51 54 57 60 63 66 69 72 75 78 81 84 87 90 93 96 99 100
°C

0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100
°C

АВТОМ.

ТЕПЛО-ХОЛОД.

ТЕПЛО-ХОЛОД.

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Metricbeat

Packetbeat



VINYLES SOLDES PRIX DIVERS

VINYLES SOLDES

Filebeat + JSON



Heartbeat



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Springbeat

<https://github.com/consulthys/springbeat>

ID	Description	Sensitive Default
<code>actuator</code>	Provides a hypermedia-based “discovery page” for the other endpoints. Requires Spring HATEOAS to be on the classpath.	true
<code>autoconfig</code>	Displays an auto-configuration report showing all auto-configuration candidates and the reason why they ‘were’ or ‘were not’ applied.	true
<code>beans</code>	Displays a complete list of all the Spring beans in your application.	true
<code>configprops</code>	Displays a collated list of all <code>@ConfigurationProperties</code> .	true
<code>dump</code>	Performs a thread dump.	true
<code>env</code>	Exposes properties from Spring’s <code>ConfigurableEnvironment</code> .	true
<code>flyway</code>	Shows any Flyway database migrations that have been applied.	true
<code>health</code>	Shows application health information (when the application is secure, a simple ‘status’ when accessed over an unauthenticated connection or full message details when authenticated).	false
<code>info</code>	Displays arbitrary application info.	false
<code>liquibase</code>	Shows any Liquibase database migrations that have been applied.	true
<code>metrics</code>	Shows ‘metrics’ information for the current application.	true
<code>mappings</code>	Displays a collated list of all <code>@RequestMapping</code> paths.	true
<code>shutdown</code>	Allows the application to be gracefully shutdown (not enabled by default).	true
<code>trace</code>	Displays trace information (by default the last few HTTP requests).	true

Springbeat

```
$ ./springbeat -c springbeat.yml
```



... misturas de fertilizantes...
... que ocorrem após o encaixe...
... durante o processamento é...
... durante o processamento é...
... não têm

12 12

3 - HIDRATAÇÃO
São reações em que a formação química da salmoura de cálcio

Acidificação ocorre durante a reação entre CaCO_3 (Carbonato de cálcio) e H_2SO_4 (Ácido sulfúrico) para formar CaSO_4 (Sulfato de cálcio) e CO_2 (Dióxido de carbono).

KCl = Cloreto de potássio

CaSO_4 = Sulfato de cálcio

$2\text{NH}_4\text{H}_2\text{PO}_4$ = Fosfato de monocalcário

KNO_3 = Nitrato de potássio

K_2SO_4 = Sulfato de potássio



Sleuth

```
2017-01-27 07:07:51.317 INFO
  [frontend,84ccbed4cf74fb7c,84ccbed4cf74fb7c,false]
10462 --- [nio-8080-exec-5]
c.x.MicroserviceMonitoringApplication :
Calling home
```

```
2017-01-27 07:07:51.335 INFO
  [frontend,84ccbed4cf74fb7c,60cbb971a2bc3a9b,false]
10462 --- [nio-8080-exec-6]
c.x.MicroserviceMonitoringApplication :
You called home
```

Application: frontend

Trace ID: 84ccb4ed4cf74fb7c

Span ID: 60cbb971a2bc3a9b

Send to Zipkin: false

Zipkin

SPRING INITIALIZR bootstrap your application now

Generate a Gradle Project with Spring Boot 1.5.1

Project Metadata

Artifact coordinates

Group

net.xeraa

Artifact

zipkin

Dependencies

Add Spring Boot Starters and dependencies to your application

Search for dependencies

Web, Security, JPA, Actuator, Devtools...

Selected Dependencies

Zipkin UI ×

Zipkin Server ×

Generate Project ⌘ + ↵

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Deploy Start

```
$ java -jar /opt/zipkin.jar --server.port=9411
```

WORK HARDER

Annotations in Kibana

<https://github.com/elastic/kibana/issues/2706>

What are you missing?



Application & Environment

System metrics

Uptime

Application logs
Application metrics
Request tracing

QUESTIONS?

Philipp Krenn

@xeraaa

PS: Stickers