REVV UP THE GOOD OLD SAMARITAN

SPRING BOOT ADMIN

Jatin Makhija

SPRING IO

About Me

(Jatin Makhija)

jatinmakhija

NotJustBond

Jatin Makhija

Engineering Leader
@DTDL, India

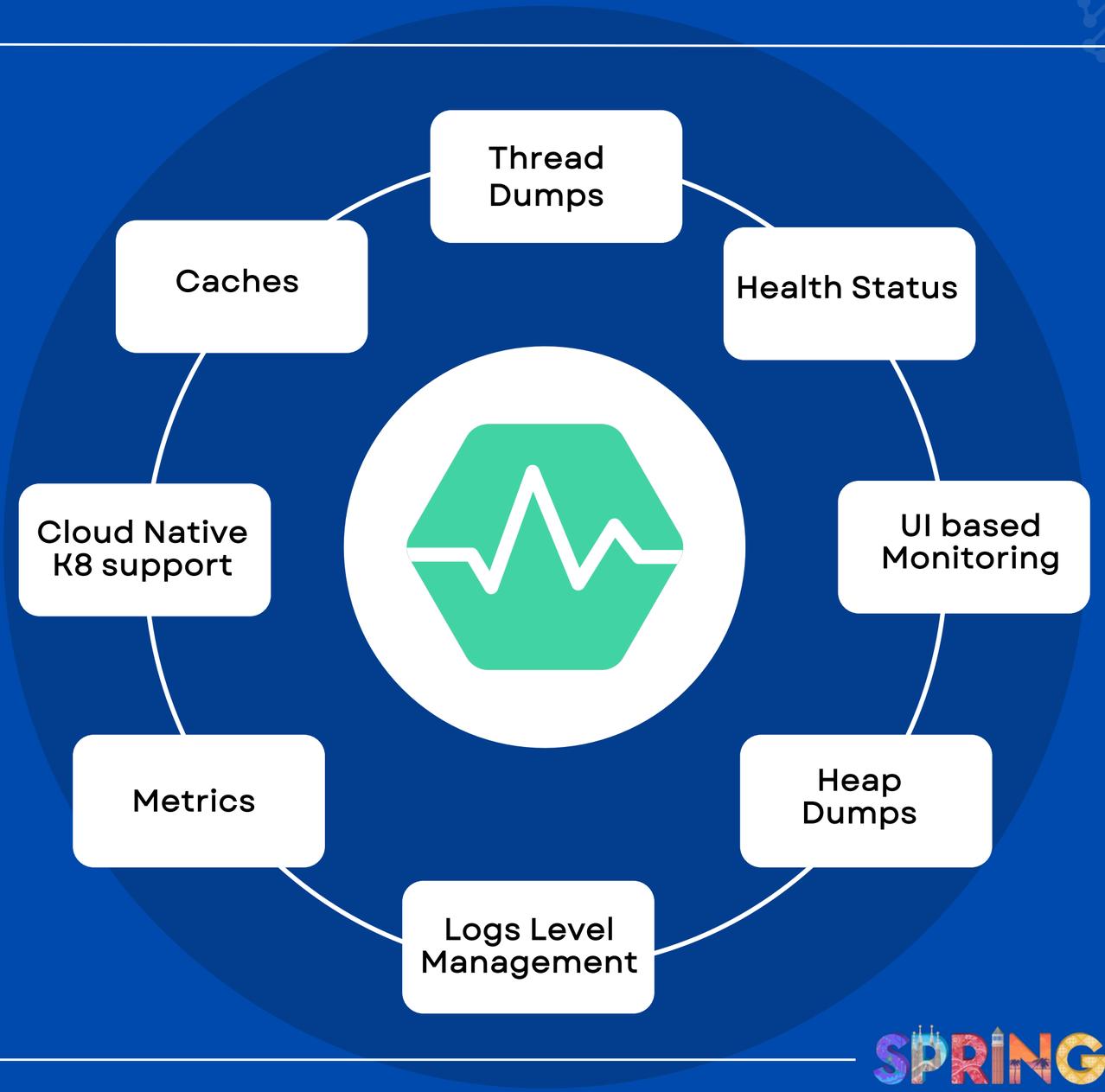
Worked with

Maker Breaker of
applications

Vocalist,
Drummer,
Explorer

SPRING IO

WHAT IS SPRING BOOT ADMIN?



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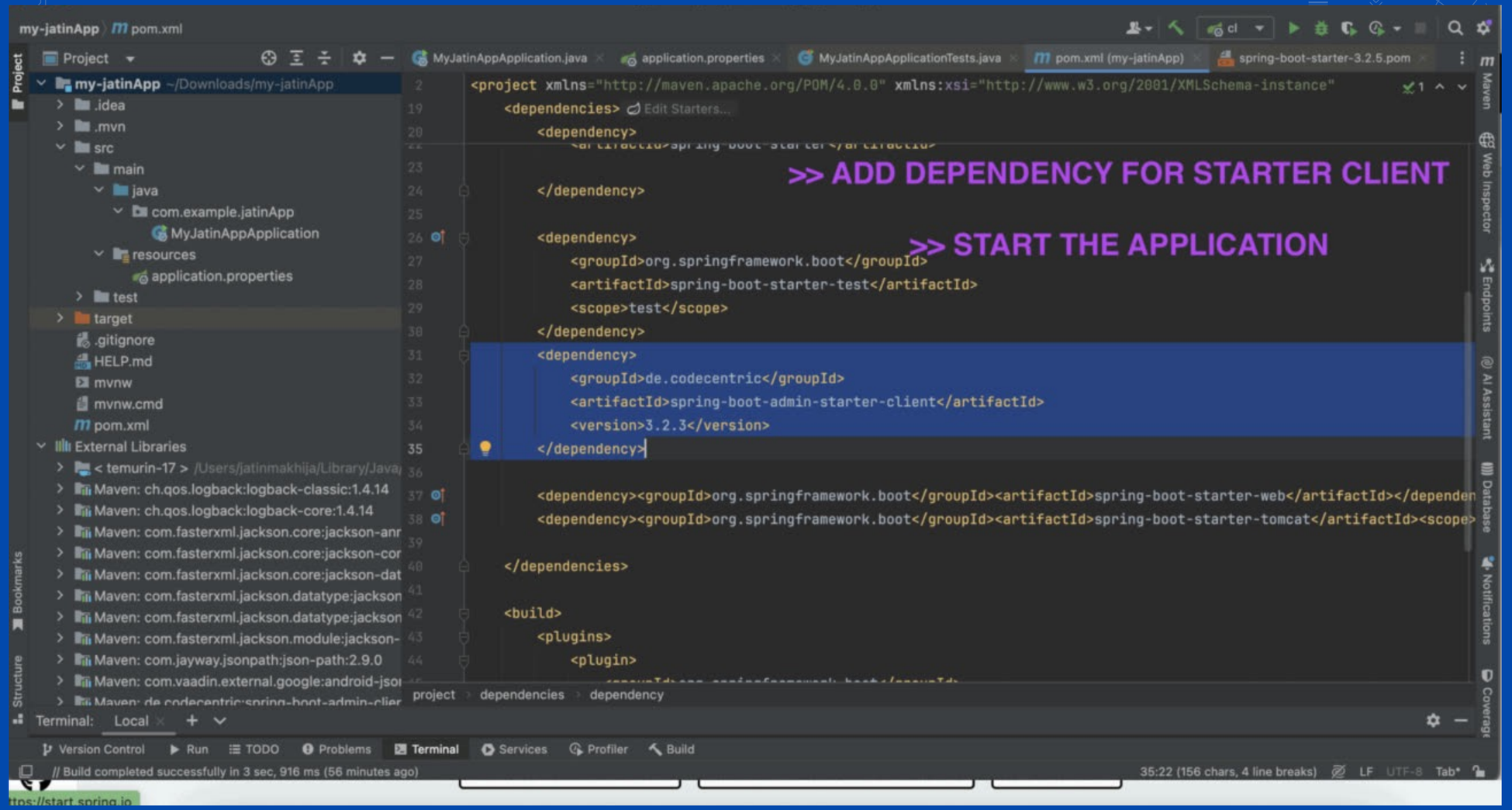
SPRING IO

SBA SETUP

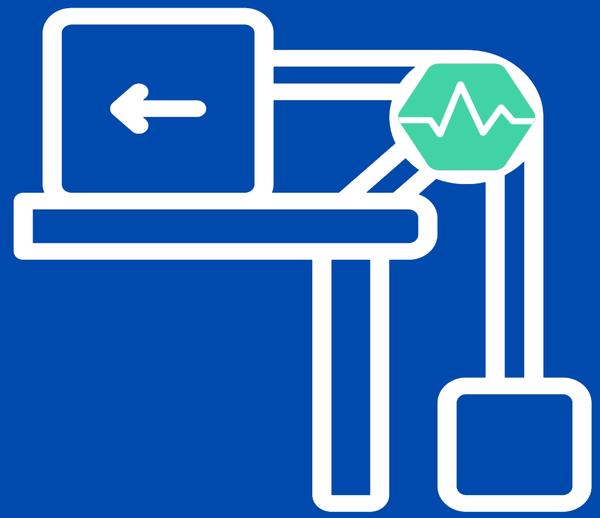


~~AGENDA~~

UP NEXT

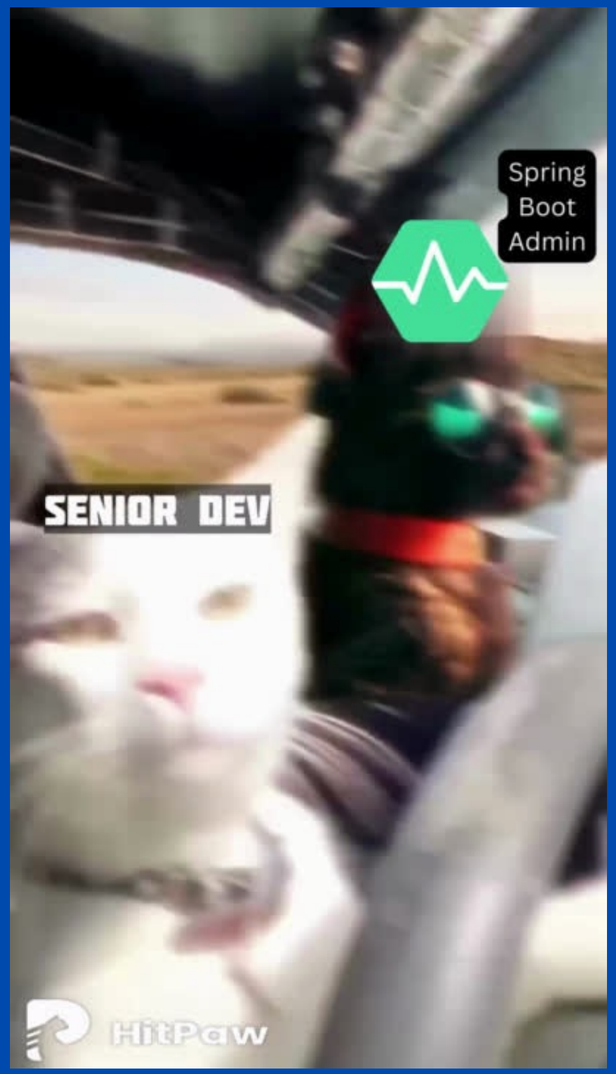
- Leveraging SBA
- Bugs, Incidents & Logs Management
- Feature Flags & Product Owners
- Automating & Automation with Sprint Boot Admin
- Health Checks & Monitoring
- Heap dumps & Thread dumps
- Timeouts & TTL
- Scale & Security

LEVERAGING SBA



BUGS, INCIDENTS & LOGS

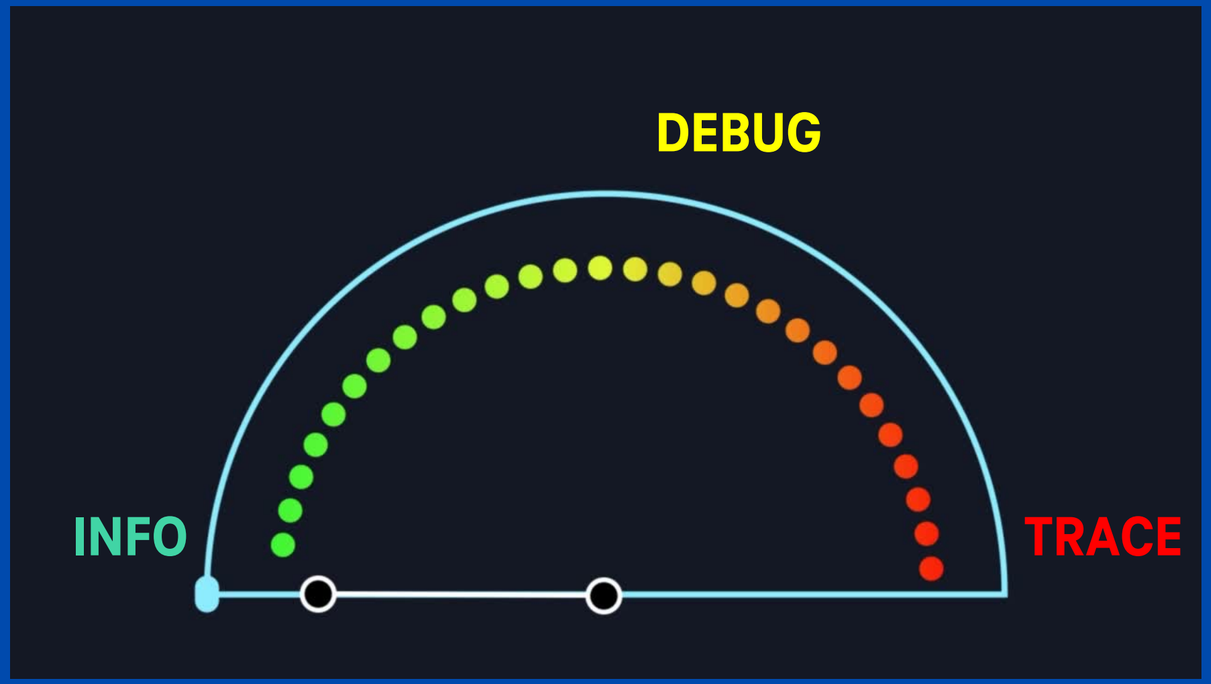
"Kids fix bugs,
legends solve incidents"



NO LOGS,
NO PROBLEM

From info to trace in

3s



SENSITIVE LOGS, Eh?

IS IT SAFE?

YES!

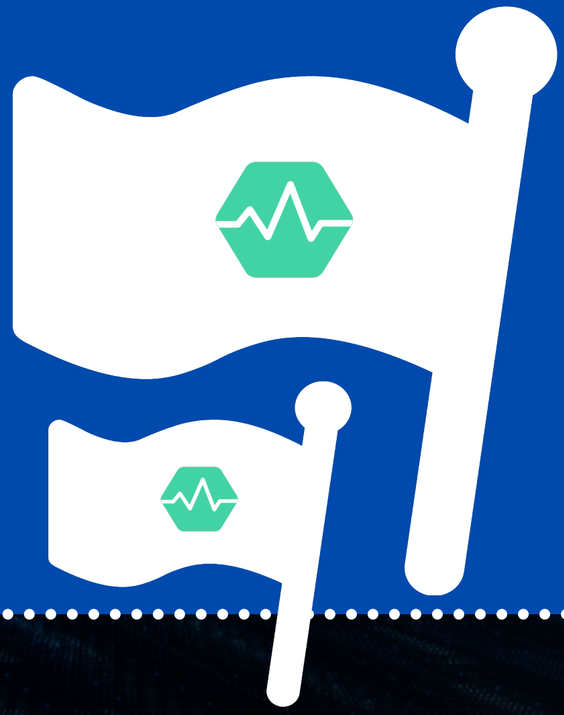
IS IT THE RIGHT THING TO DO ON PRODUCTION?

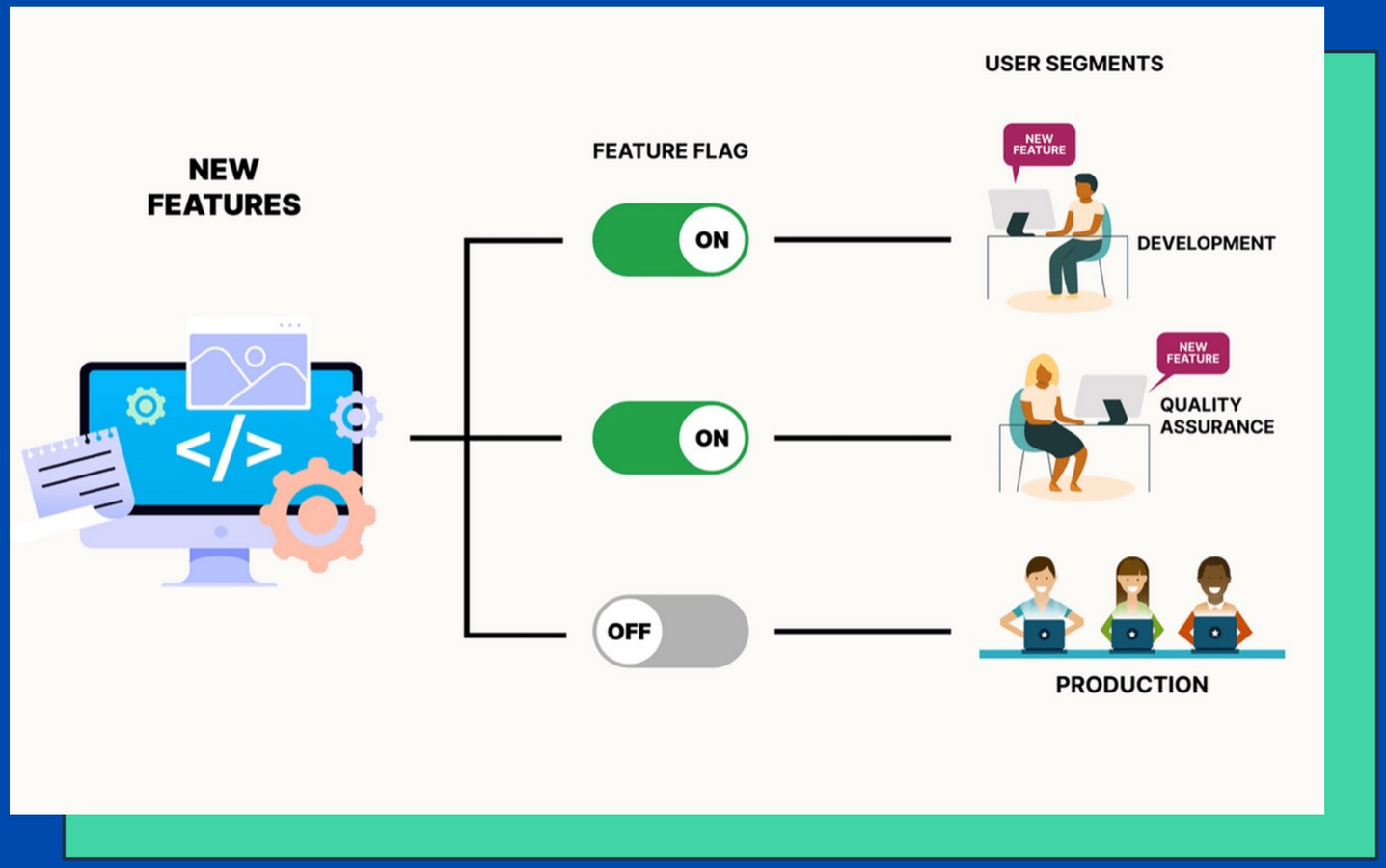
DON’T FORGET TO REVERT!

IS IT GDPR COMPLIANT?

MASK THE PII

FEATURE FLAGS





FEATURE FLAGS IN MULTITENANT APPLICATIONS

A feature a day, keeps the product owner away.

@NotJustBond

I GOT
99
FEATURES

but don't know
how to test
01 of them

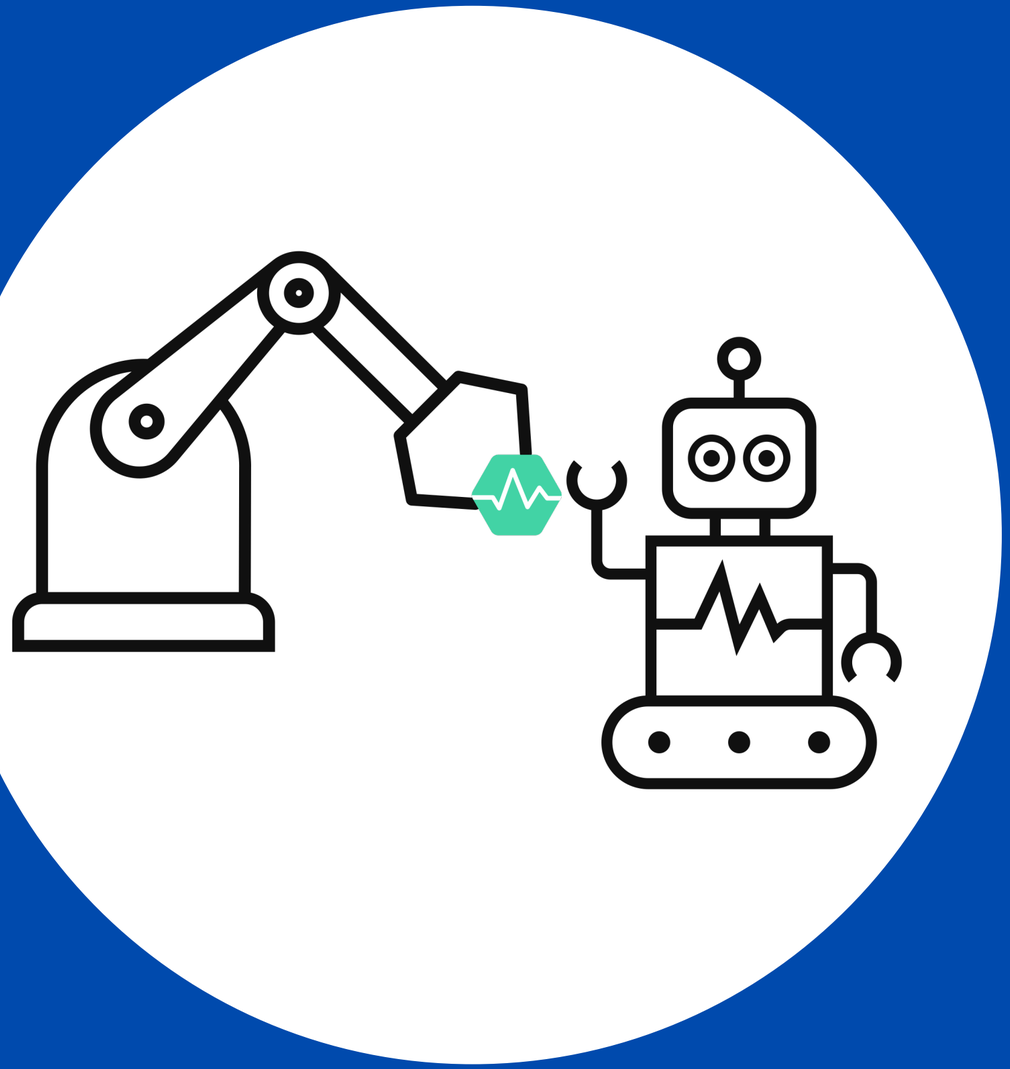
REAL
~~FEATURE~~
PROBLEM

DEMO
FEATURE FLAGS

STABILITY & COVERAGE

- ✓ No more wait time
- ✓ No more re-deployments
- ✓ Refresh in blink of an eye
- ✓ Increased test coverage

AUTOMATION
AUTOMATION
AUTOMATION
AUTOMATION
AUTOMATION
AUTOMATION
AUTOMATION



SNEAK PEAK INTO ARCHITECTURAL DESIGN

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Source: flaticon.com

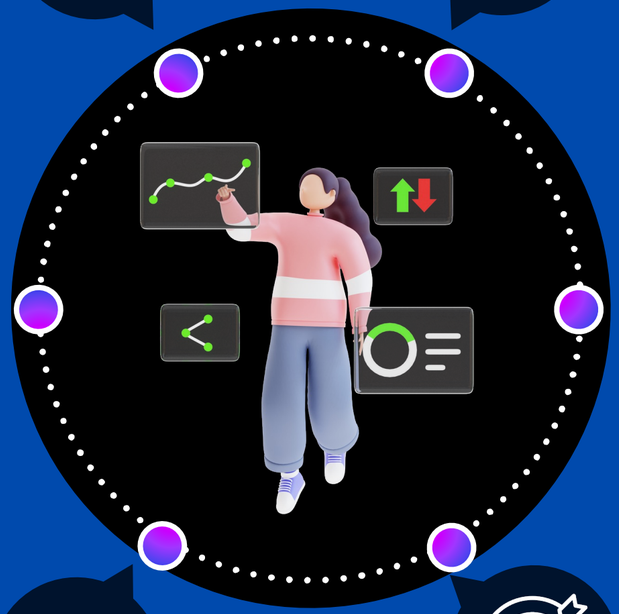
DEMONSTRATION

AUTOMATE TO ELEVATE

Improved efficiency & efficacy of tests

Early detection of defects

High Scalability

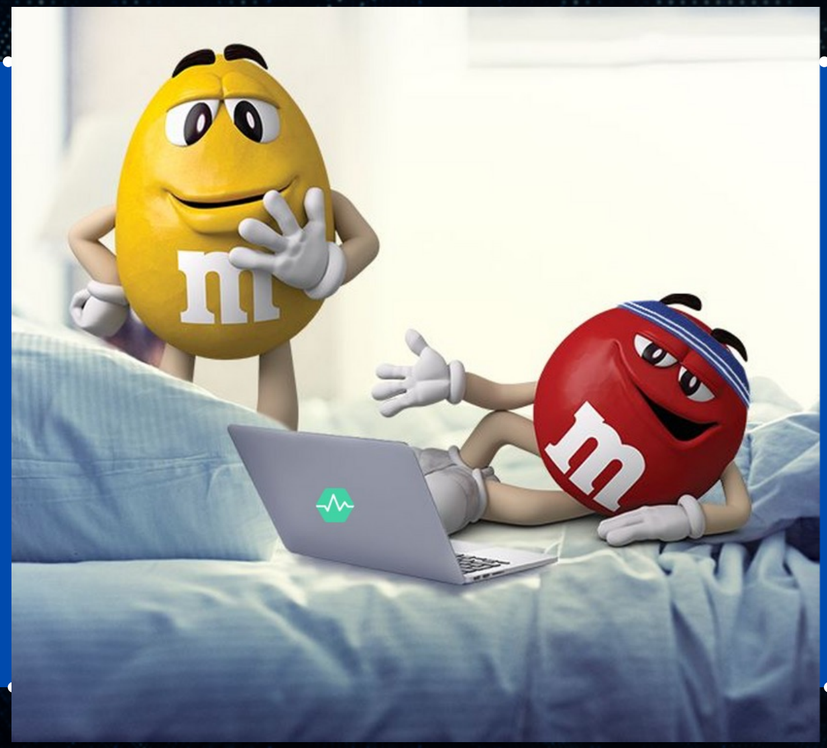


Increased test coverage

Ease of regression

Increased Accuracy

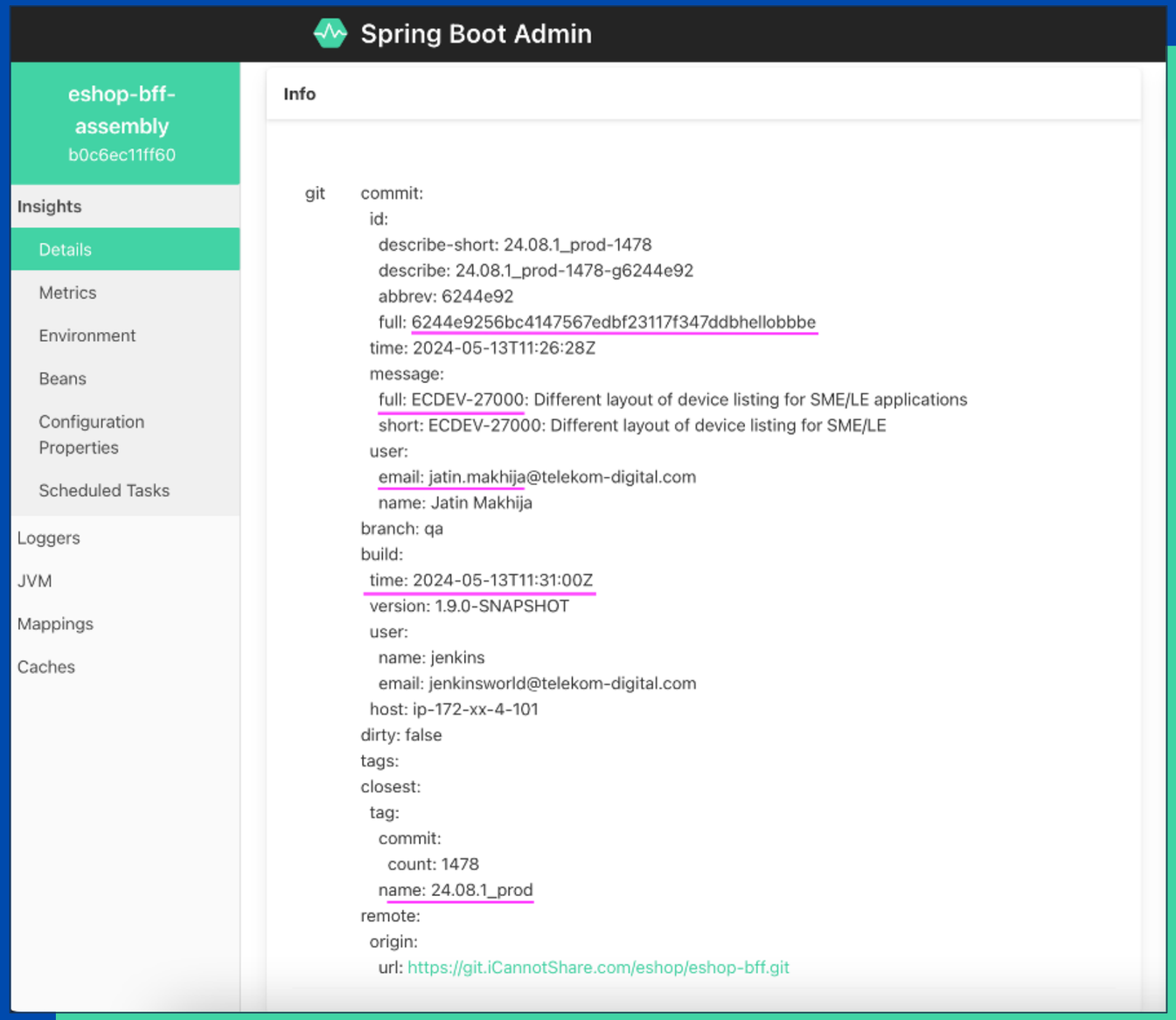
METRICS & MONITORING



DEMO

WHO LET THE CODE OUT?

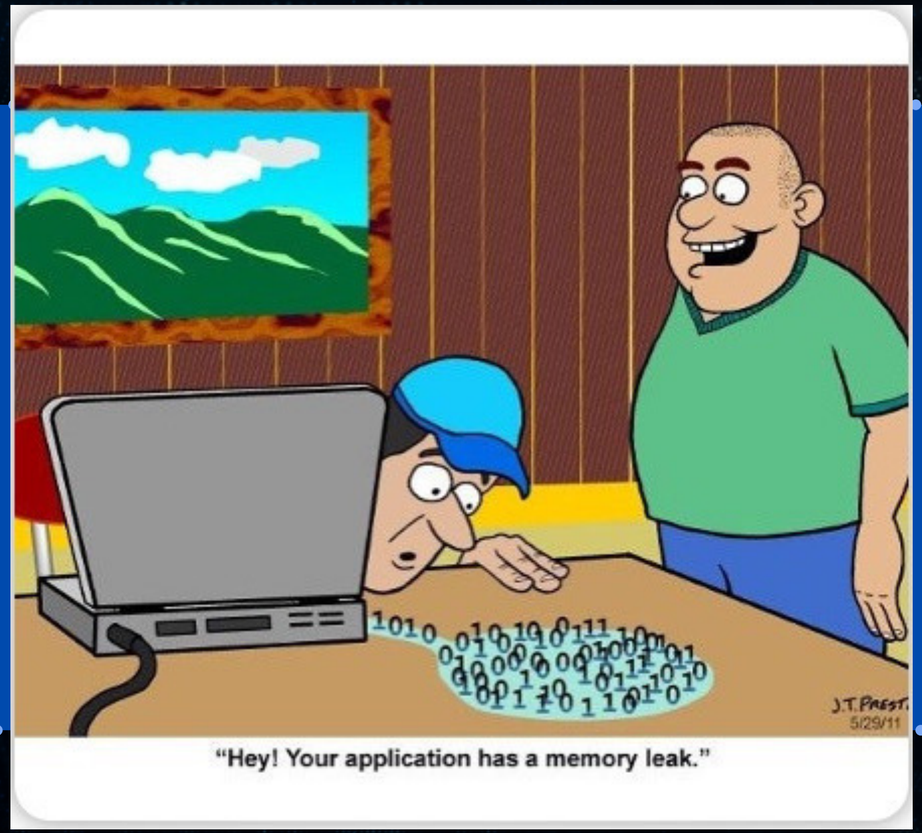
- When was the last build done?
- Did it successfully roll up to all Kubernetes 40 pods?
- Who did it?
- What is the tag/branch deployed?
- Was it done on blue, or green or both?


Spring Boot Admin
eshop-bff-assembly
b0c6ec11ff60
Insights
Details
Metrics
Environment
Beans
Configuration Properties
Scheduled Tasks
Loggers
JVM
Mappings
Caches
Info
git commit:
id:
describe-short: 24.08.1_prod-1478
describe: 24.08.1_prod-1478-g6244e92
abbrev: 6244e92
full: 6244e9256bc4147567edbf23117f347ddbhellobbbe
time: 2024-05-13T11:26:28Z
message:
full: ECDEV-27000: Different layout of device listing for SME/LE applications
short: ECDEV-27000: Different layout of device listing for SME/LE
user:
email: jatin.makhija@telekom-digital.com
name: Jatin Makhija
branch: qa
build:
time: 2024-05-13T11:31:00Z
version: 1.9.0-SNAPSHOT
user:
name: jenkins
email: jenkinsworld@telekom-digital.com
host: ip-172-xx-4-101
dirty: false
tags:
closest:
tag:
commit:
count: 1478
name: 24.08.1_prod
remote:
origin:
url: https://git.iCannotShare.com/eshop/eshop-bff.git

DEPENDENCIES & OVERRIDE

```
<plugin>
  <groupId>pl.project13.maven</groupId>
  <artifactId>git-commit-id-plugin</artifactId>
  <executions>
    <execution>
      <id>get-the-git-infos</id>
      <goals>
        <goal>revision</goal>
      </goals>
    </execution>
  </executions>
</plugin>
```

HEAP DUMPS

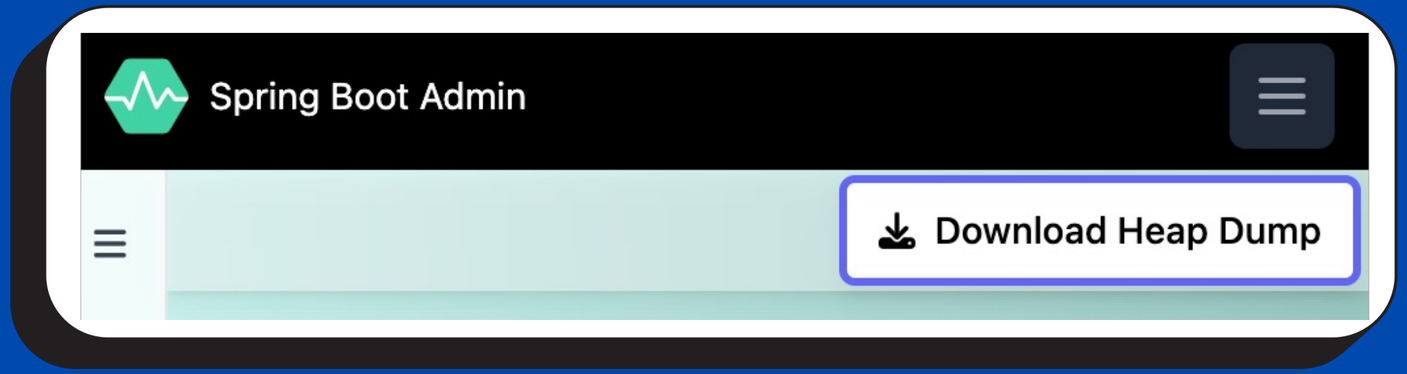


-XX:+HeapDumpOnOutOfMemoryError -XX:HeapDumpPath=/opt/tmp/heapdump.bin

jmap -dump:format=b,file=/opt/tmp/heapdump.bin 37320

GET
http://{ip}:9091/actuator/heapdump

JVisualVM



THREAD DUMPS

TIMEOUTS & TTL

TIMEOUTS & TTL

01 Cache

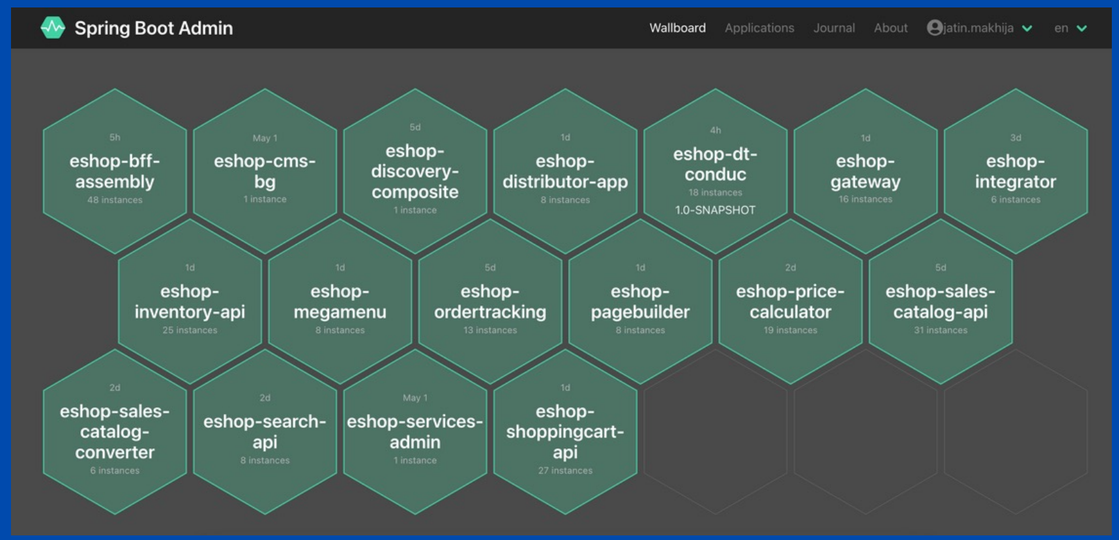
02 API Request

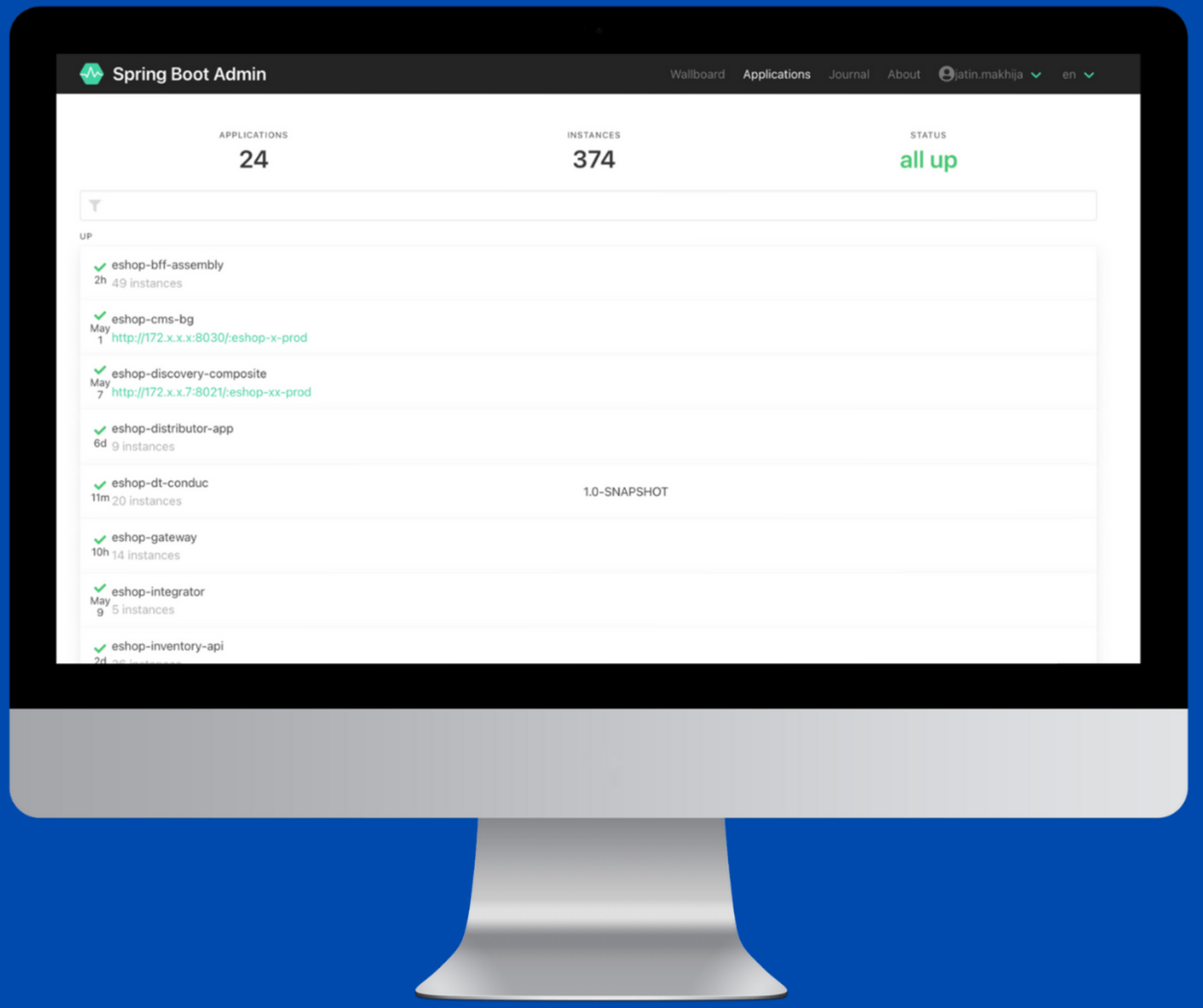
03 DB Connection

04 DB Read timeout

05 Circuit breaker configs

SBA @ SCALE


Spring Boot Admin
Wallboard
Applications
Journal
About
jatin.makhija
en
5h
eshop-bff-assembly
48 instances
May 1
eshop-cms-bg
1 instance
5d
eshop-discovery-composite
1 instance
1d
eshop-distributor-app
8 instances
4h
eshop-dt-conduc
18 instances
1.0-SNAPSHOT
1d
eshop-gateway
16 instances
3d
eshop-integrator
6 instances
1d
eshop-inventory-api
25 instances
1d
eshop-megamenu
8 instances
5d
eshop-ordertracking
13 instances
1d
eshop-pagebuilder
8 instances
2d
eshop-price-calculator
19 instances
5d
eshop-sales-catalog-api
31 instances
2d
eshop-sales-catalog-converter
6 instances
2d
eshop-search-api
8 instances
May 1
eshop-services-admin
1 instance
1d
eshop-shoppingcart-api
27 instances


Spring Boot Admin
Wallboard
Applications
Journal
About
jatin.makhija
en
APPLICATIONS
24
INSTANCES
374
STATUS
all up
UP
eshop-bff-assembly
2h 49 instances
eshop-cms-bg
May 1 http://172.x.x.x:8030/:eshop-x-prod
eshop-discovery-composite
May 7 http://172.x.x.7:8021/:eshop-xx-prod
eshop-distributor-app
6d 9 instances
eshop-dt-conduc
11m 20 instances
1.0-SNAPSHOT
eshop-gateway
10h 14 instances
eshop-integrator
May 9 5 instances
eshop-inventory-api

SECURITY & ACCESS CONTROL

Role	Summary	Access Level
SERVICE_ADMIN	Basic role to access SBA and get information like environment, configuration, loggers, beans, and JVM stats.	Level 1
SERVICE_ADMIN_ENV_EDIT	Update a particular environment property with the desired value in memory.	Level 2
SERVICE_ADMIN_CONFIG_REFRESH	Complete refresh of refreshable properties and bean using the /refresh end point	Level 2
SERVICE_ADMIN_THREADDUMP	Can perform a thread dump	Level 3

Thank You for your time!

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NotJustBond

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