

SESSION FOUR

Advanced Spring Boot

Common Challenges

“I have no idea what is going on. It’s responding but I don’t know if it’s healthy as requests are taking too long.”



“Our service pool **seems fine** but we’re **not sure** if traffic is being balanced properly.”



“We deployed a new version, but **the deployment broke**. We’re not sure **how many versions are deployed**.”



Production-Ready Endpoints

Actuator

AuditEvents

AutoConfig

Beans

ConfigProps

Dump

Env

Flyway

Health

Info

Loggers

Liquibase

Metrics

Mappings

Shutdown

Trace

Docs

HeapDump

Jolokia

Logfile

Actuator



Metrics

- Record
- Gauges
- Counters
- Compose



Health

- Disk Space
- Data Source Connection
- JMS
- Rabbit
- Redis
- ...



Data

- Liquibase
- Flyway
- Configuration



Info

- Build Info
- Git Version
- Build Date

Auto-Configured Health Indicators

`DiskSpaceHealthIndicator`

Checks for low disk space

`DataSourceHealthIndicator`

Validates [DataSource](#) connection

`ElasticsearchHealthIndicator`

Checks if [Elasticsearch](#) is up

`JmsHealthIndicator`

Checks if a [JMS broker](#) is up

`MailHealthIndicator`

Checks if a [mail server](#) is up

`MongoHealthIndicator`

Checks if [MongoDB](#) is up

`RabbitHealthIndicator`

Checks if [RabbitMQ](#) server is up

`RedisHealthIndicator`

Checks if [Redis](#) server is up

`SolrHealthIndicator`

Checks if [Solr](#) server is up

`CassandraHealthIndicator`

Checks if [Cassandra DB](#) is up

Custom Health Indicator

```
import org.springframework.boot.actuate.health.Health;
import org.springframework.boot.actuate.health.HealthIndicator;
import org.springframework.stereotype.Component;

@Component
public class MyHealthIndicator implements HealthIndicator {

    @Override
    public Health health() {
        int errorCode = check(); // perform some specific health check
        if (errorCode != 0) {
            return Health.down().withDetail("Error Code", errorCode).build();
        }
        return Health.up().build();
    }
}
```

Profiles

Why?

- Flexibility
- Runtime
- Feature Control

```
server:
```

```
  port: 9000
```

```
---
```

```
spring:
```

```
  profiles: development
```

```
server:
```

```
  port: 9001
```

```
---
```

```
spring:
```

```
  profiles: production
```

```
server:
```

```
  port: 0
```

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Questions?

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Lab: Advanced Spring Boot