



# Spring Boot With Dropwizard Metrics

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Spring Boot comes with a healthy dose of metrics built in but having used Dropwizard extensively in house we have come to rely on some of the timing metrics it provides out of the box. As we turn our gaze to Spring Boot we wanted to make sure we still had access to the same extensive metrics that Dropwizard provides.

I have provided a [basic project on github](#) with metrics embedded and below will describe how you can add the Dropwizard metrics to your own Spring Boot projects.

## Basic setup

Add the Dropwizard metrics dependancies to your gradle.build and a dependancy for Ryan Tenney's [Spring metrics library](#). Ryan Tenney's library provides easy integration of the Dropwizard metrics libraries with Spring Boot.

```
compile ('com.ryantenney.metrics:metrics-spring:3.1.3')
{
    exclude group: 'com.codahale.metrics'
    exclude group: 'org.springframework'
}
compile 'io.dropwizard.metrics:metrics-core:3.1.2'
compile 'io.dropwizard.metrics:metrics-annotation:3.1.2'
```

Make your `SpringBootApplication` extend Ryan Tenney's `MetricsConfigurerAdapter` and add his `@EnableMetrics(proxyTargetClass = true)` annotation to your Application class.

```
import
com.ryantenney.metrics.spring.config.annotation.EnableMetr

import
com.ryantenney.metrics.spring.config.annotation.MetricsCon

import org.springframework.boot.SpringApplication;
import
org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication
@EnableMetrics(proxyTargetClass = true)
public class Application extends
MetricsConfigurerAdapter {
    public static void main(String[] args) {
        SpringApplication.run(Application.class, args);
    }
}
```

Add the `@Timer` annotation to any endpoints you wish to add timers for.

```
import com.codahale.metrics.annotation.Timed;
import
org.springframework.web.bind.annotation.RestController;
import
org.springframework.web.bind.annotation.RequestMapping;

@RestController
public class HelloController {
    @Timed
    @RequestMapping("/")
    public String index() {
        return "Greetings from Spring Boot!";
    }
}
```

You will then find the Dropwizard metrics added to the native Spring Boot metrics found at `localhost:8080/metrics`.

```
{
  "mem": 657794,
  "mem.free": 455872,
  "processors": 4,
  "instance.uptime": 25609,
  "uptime": 32713,
  "systemload.average": 2.64697265625,
  "heap.committed": 609792,
  "heap.init": 131072,
  "heap.used": 153919,
  "heap": 1864192,
  "nonheap.committed": 49344,
  "nonheap.init": 2496,
  "nonheap.used": 48002,
  "nonheap": 0,
  "threads.peak": 14,
  "threads.daemon": 4,
  "threads.totalStarted": 18,
  "threads": 14,
  "classes": 6239,
  "classes.loaded": 6239,
  "classes.unloaded": 0,
  "gc.ps_scavenge.count": 9,
  "gc.ps_scavenge.time": 126,
  "gc.ps_marksweep.count": 1,
  "gc.ps_marksweep.time": 54,

  "co.instil.HelloController.index.snapshot.75thPercentile":
    0,
```

```
"co.instil.HelloController.index.snapshot.median": 0,
"co.instil.HelloController.index.snapshot.max": 8,
"co.instil.HelloController.index.fifteenMinuteRate":
0.004432121596082617,
"co.instil.HelloController.index.snapshot.mean": 1,
"co.instil.HelloController.index.meanRate":
0.26342740827887096,

"co.instil.HelloController.index.snapshot.95thPercentile":
8,
"co.instil.HelloController.index.oneMinuteRate":
0.06396446829654137,
"co.instil.HelloController.index.count": 7,

"co.instil.HelloController.index.snapshot.98thPercentile":
8,
"gauged.response.metrics": 184,

"co.instil.HelloController.index.snapshot.999thPercentile"
8,
"gauged.response.root": 4,
"counter.status.200.metrics": 1,
"co.instil.HelloController.index.snapshot.stdDev": 2,
"counter.status.200.root": 7,
"co.instil.HelloController.index.fiveMinuteRate":
0.013222836942706007,
"co.instil.HelloController.index.snapshot.min": 0,

"co.instil.HelloController.index.snapshot.99thPercentile":
```

8

}

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