



# ***Quarkus Metrics***



## Quarkus-micrometer

```
package com.redhat.training;

import io.micrometer.core.instrument.MeterRegistry;

public class MyResource {

    @Inject
    public MeterRegistry registry;

    ...code omitted...
}
```



/q/metrics



## Counter

```
package com.redhat.training;

import io.micrometer.core.instrument.MeterRegistry;
import io.micrometer.core.instrument.Tags;

...code omitted...
public class CardTransactionsResource {

    ...code omitted...

    @Inject
    public MeterRegistry registry;

    @PostConstruct
    public void initMeters() {
        registry.counter(
            "card_transaction",
            Tags.of("description", "Count of card transactions")
        );
    }

    @GET
    public Set<CardTransaction> list() {
        registry.counter("card_transaction").increment();

        return transactionsService.list();
    }
}
```

```
@Counted(
    value = "card_transaction",
    description = "Count of card transactions"
)
public Set<CardTransaction> list() {
    return transactionsService.list();
}
```

- ❶ Metric name
- ❷ Metric description. The `@Counted` annotation treats the `description` field as a property, instead of a tag.



## Gauge

```
{package com.redhat.training;

import io.micrometer.core.instrument.MeterRegistry;

...code omitted..._
public class CardTransactionsResource {

    private final Stopwatch stopWatch = Stopwatch.createStarted(); ❶

    @Inject
    public MeterRegistry registry;

    @PostConstruct
    public void initMeters() {
        registry.gauge( ❷
            "time_since_last_exec", ❸
            Tags.of("description", "Time since the last execution"), ❹
            stopWatch, ❺
            Stopwatch::getTime ❻
        );
    }

    @GET
    public Set<CardTransaction> list() {
        stopWatch.reset(); ❼
        stopWatch.start(); ❽
    }
}
```



# Timers

```
1  @POST
   public Transaction create(CardTransaction trx) {
       return registry.timer("transaction_creation_time") 1
           .wrap( 2
               (Supplier<Transaction>) () -> transactionsService.create(trx) 3
           ).get(); 4
   }
}
```



***Grafana***







4.57



Time to last call to GET /expenses



Total Requests to POST /expenses

