Desafío 32 - Programación Backend

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Se realizan las siguientes pruebas al servidor con las siguientes herramientas:

- **Node Prof**
  - Resultados sin *console.log*

```
[Summary]:
   ticks  total  nonlib   name
      0    0.0%    0.0%  JavaScript
     87   87.9%  100.0%  C++
     25   25.3%   28.7%  GC
     12   12.1%          Shared libraries
```

  - Resultados con *console.log*

```
[Summary]:
   ticks  total  nonlib   name
    213    3.8%    4.0%  JavaScript
   5033   89.5%   95.5%  C++
    280    5.0%    5.3%  GC
    354    6.3%          Shared libraries
     22    0.4%          Unaccounted
```

- **Artillery**
  - Resultados sin *console.log*

```
Started phase 0, duration: 1s @ 21:37:50(-0400) 2021-08-26
Report @ 21:37:53(-0400) 2021-08-26
Elapsed time: 2 seconds
  Scenarios launched:  20
  Scenarios completed: 20
  Requests completed:  1000
  Mean response/sec: 404.86
  Response time (msec):
    min: 3
    max: 41
    median: 26
    p95: 35
    p99: 38
  Codes:
    200: 1000

All virtual users finished
Summary report @ 21:37:53(-0400) 2021-08-26
  Scenarios launched:  20
  Scenarios completed: 20
  Requests completed:  1000
  Mean response/sec: 403.23
  Response time (msec):
    min: 3
    max: 41
    median: 26
    p95: 35
    p99: 38
```

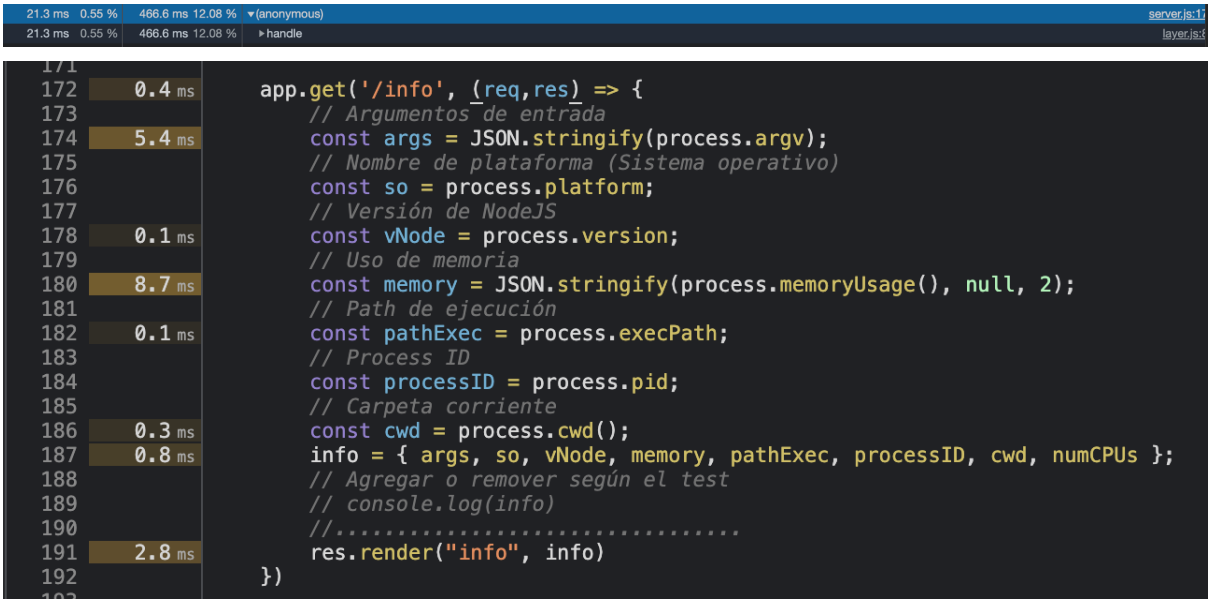
```
  Scenario counts:
    0: 20 (100%)
  Codes:
    200: 1000
```

- Resultados con *console.log*

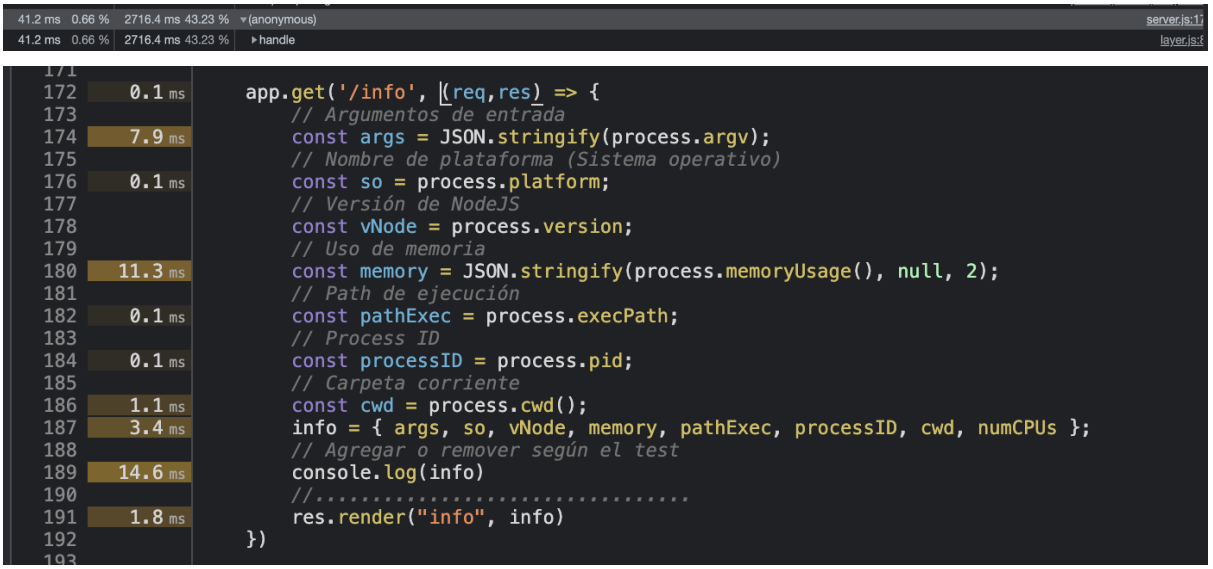
```
Started phase 0, duration: 1s @ 21:37:10(-0400) 2021-08-26
Report @ 21:37:12(-0400) 2021-08-26
Elapsed time: 2 seconds
  Scenarios launched:  20
  Scenarios completed: 20
  Requests completed:  1000
  Mean response/sec: 403.23
  Response time (msec):
    min: 2
    max: 54
    median: 32
    p95: 46
    p99: 50.5
  Codes:
    200: 1000

All virtual users finished
Summary report @ 21:37:12(-0400) 2021-08-26
  Scenarios launched:  20
  Scenarios completed: 20
  Requests completed:  1000
  Mean response/sec: 401.61
  Response time (msec):
    min: 2
    max: 54
    median: 32
    p95: 46
    p99: 50.5
  Scenario counts:
    0: 20 (100%)
  Codes:
    200: 1000
```

- **Chrome dev tools inspect**
  - Resultados sin *console.log*



  - Resultados con *console.log*



- **0x y Autocannon**
  - Resultados sin *console.log*

```
> npm run test

> coderhouse_backend@0.0.0 test
> node benchmark.js

Running all benchmarks in parallel ...
Running 20s test @ http://localhost:8080/info
100 connections
```

Stat	2.5%	50%	97.5%	99%	Avg	Stdev	Max
Latency	93 ms	99 ms	176 ms	232 ms	109.08 ms	26.84 ms	362 ms

Stat	1%	2.5%	50%	97.5%	Avg	Stdev	Min
Req/Sec	400	400	996	1083	909.9	163.84	400
Bytes/Sec	1.18 MB	1.18 MB	2.95 MB	3.21 MB	2.7 MB	486 kB	1.18 MB

```
Req/Bytes counts sampled once per second.

18k requests in 20.05s, 53.9 MB read
```

  - Resultados con *console.log*

```
> npm run test

> coderhouse_backend@0.0.0 test
> node benchmark.js

Running all benchmarks in parallel ...
Running 20s test @ http://localhost:8080/info
100 connections
```

Stat	2.5%	50%	97.5%	99%	Avg	Stdev	Max
Latency	101 ms	111 ms	196 ms	254 ms	121.4 ms	29.68 ms	372 ms

Stat	1%	2.5%	50%	97.5%	Avg	Stdev	Min
Req/Sec	357	357	869	964	819.35	155.66	357
Bytes/Sec	1.06 MB	1.06 MB	2.58 MB	2.86 MB	2.43 MB	462 kB	1.06 MB

```
Req/Bytes counts sampled once per second.

16k requests in 20.04s, 48.6 MB read
```

Conclusión:

En base a los resultados de los test de rendimiento, se llega a la conclusión de que el *loggear* la información hace que se demanden más recursos para la ejecución del servidor, en comparación con no *loggearla*. Como recomendación y pasos a seguir, se aconseja solamente loggear la información necesaria, ya que si se hace de manera muy detallada, se debe considerar que el rendimiento de nuestro servidor empeorará.