

环境:

jdk 1.8.0 221

```
C:\WINDOWS\system32>java -version
java version "1.8.0_221"
Java(TM) SE Runtime Environment (build 1.8.0_221-b11)
Java HotSpot(TM) 64-Bit Server VM (build 25.221-b11, mixed mode)
```

操作系统: Window10

CUP: 12核 24线程。amd 3900x

内存: 16G

基准速度: 4.00 GHz

插槽: 1 内核: 12 逻辑处理器: 24

运行项目: 老师提供的gateway-server工程

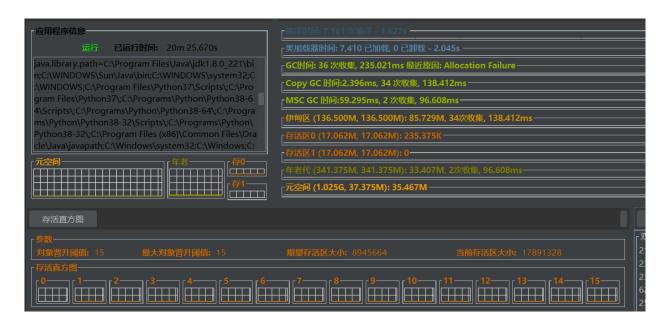
压测参数: sb -u http://localhost:8088/api/hello -c 50 -N 60

测试一参数设置:串行

-XX:+PrintGCDetails -XX:+UseSerialGC -Xms512m -Xmx512m -

XX:+PrintGCDateStamps

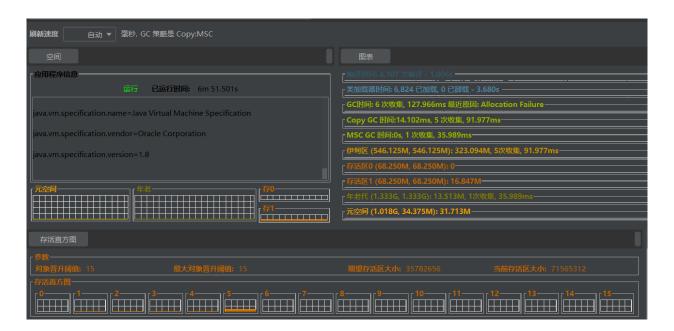
```
PS C:\Users\W10> sb -u http://localhost:8088/api/hello -c 50 -N 60
Starting at 2020/10/25 22:46:17
[Press C to stop the test]
10616 (RPS: 167.4)
Finished at 2020/10/25 22:47:20 (took 00:01:03.4559989)
10638 (RPS: 167.7)
                                      Status 200: 10638
RPS: 174.1 (requests/second)
Max: 1133ms
Min: 4ms
Avg: 281.8ms
  50%
       below 270ms
 60%
 80%
 90%
 95%
 98%
99.9%
       below 987ms
```



-XX:+PrintGCDetails -XX:+UseSerialGC -Xms2048m -Xmx2048m -

XX:+PrintGCDateStamps

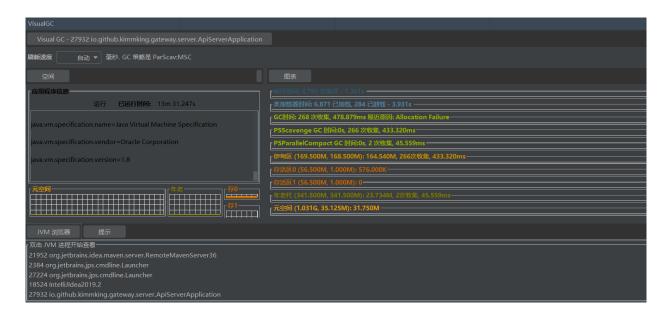
```
PS C:\Users\W10> sb -u http://localhost:8088/api/hello -c 50 -N 60
Starting at 2020/10/25 23:01:09
[Press C to stop the test]
       (RPS: 166.4)
10570
Finished at 2020/10/25 23:02:13 (took 00:01:03.5660006)
      (RPS: 166.9)
                                        Status 200: 10602
RPS: 173.5 (requests/second)
Max: 1399ms
Min: 4ms
Avg: 282.8ms
       below 302ms
  80%
       below 496ms
  98%
       below 645ms
       below 1046ms
```



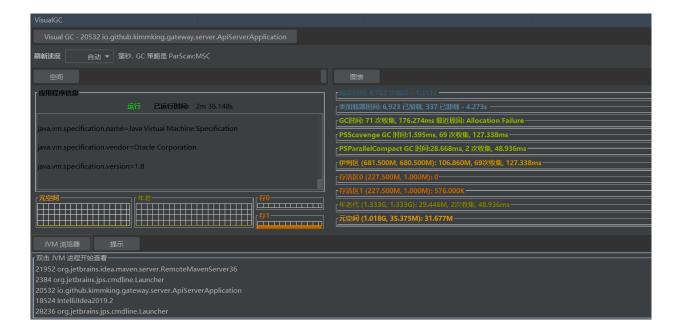
测试二参数设置: 并行

-XX:+PrintGCDetails -XX:+UseParallelGC -Xms512m -Xmx512m -

XX:+PrintGCDateStamps



-XX:+PrintGCDetails -XX:+UseParallelGC -Xms2048m -Xmx2048m - XX:+PrintGCDateStamps



测试三参数设置: CMS(并发)

-XX:+PrintGCDetails -XX:+UseConcMarkSweepGC -Xms4096m -Xmx4096m -XX:+PrintGCDateStamps

```
PS C:\Users\W10> sb -u http://localhost:8088/api/hello -c 50 -N 60
Starting at 2020/10/25 23:29:21
[Press C to stop the test]
415738 (RPS: 6571.2)
Finished at 2020/10/25 23:30:25 (took 00:01:03.4909998)
Status 200: 415745
RPS: 6790.8 (requests/second)
Max: 180ms
Min: 0ms
Avg: 0.1ms
  50%
       below Oms
  60% below 0ms
  70% below 0ms
  80% below 0ms
  90% below 0ms
      below 0ms
  95%
  98% below 4ms
  99%
      below 4ms
99.9% below 8ms
```



测试四参数设置: G1

-XX:+PrintGC -XX:+UseG1GC -Xms4096m -Xmx4096m -XX:+PrintGCDateStamps

```
PS C:\Users\W10> sb -u http://localhost:8088/api/hello -c 50 -N 60
Starting at 2020/10/25 23:34:00
[Press C to stop the test]
415127 (RPS: 6563.3)
Finished at 2020/10/25 23:35:04 (took 00:01:03.4519983)
Status 200: 415130
RPS: 6782.7 (requests/second)
Max: 155ms
Min: 0ms
Avg: 0.1ms
       below 0ms
  50%
  60%
  70%
  80%
       below Oms
      below Oms
  90%
  95%
       below Oms
  98%
       below 4ms
  99%
99.9%
```

