一、2 个实例，有 Redis

初始 Redis 状态：

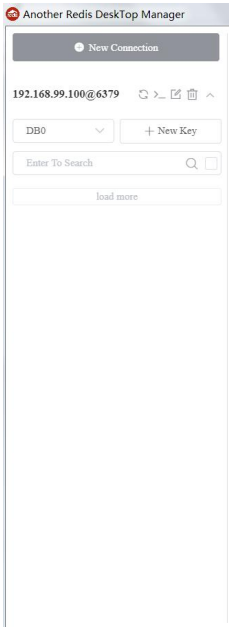
测试后 Redis 状态：

测试结果：

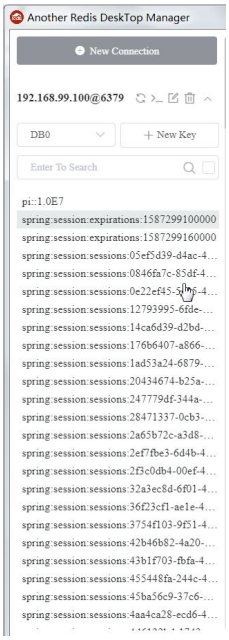
```
---- Global Information --------------------------------------------------------
> request count                                     200 (OK=106    KO=94    )
> min response time                                 420 (OK=420    KO=60000 )
> max response time                               60001 (OK=57980  KO=60001 )
> mean response time                              30753 (OK=4817   KO=60000 )
> std deviation                                   28995 (OK=12451  KO=0     )
> response time 50th percentile                   27577 (OK=1814   KO=60000 )
> response time 75th percentile                   60000 (OK=2090   KO=60000 )
> response time 95th percentile                   60001 (OK=39753  KO=60001 )
> response time 99th percentile                   60001 (OK=57463  KO=60001 )
> mean requests/sec                               3.125 (OK=1.656  KO=1.469 )
```

二、4 个实例，有 Redis

初始 Redis 状态：



测试后 Redis 状态：



第一次测试结果：

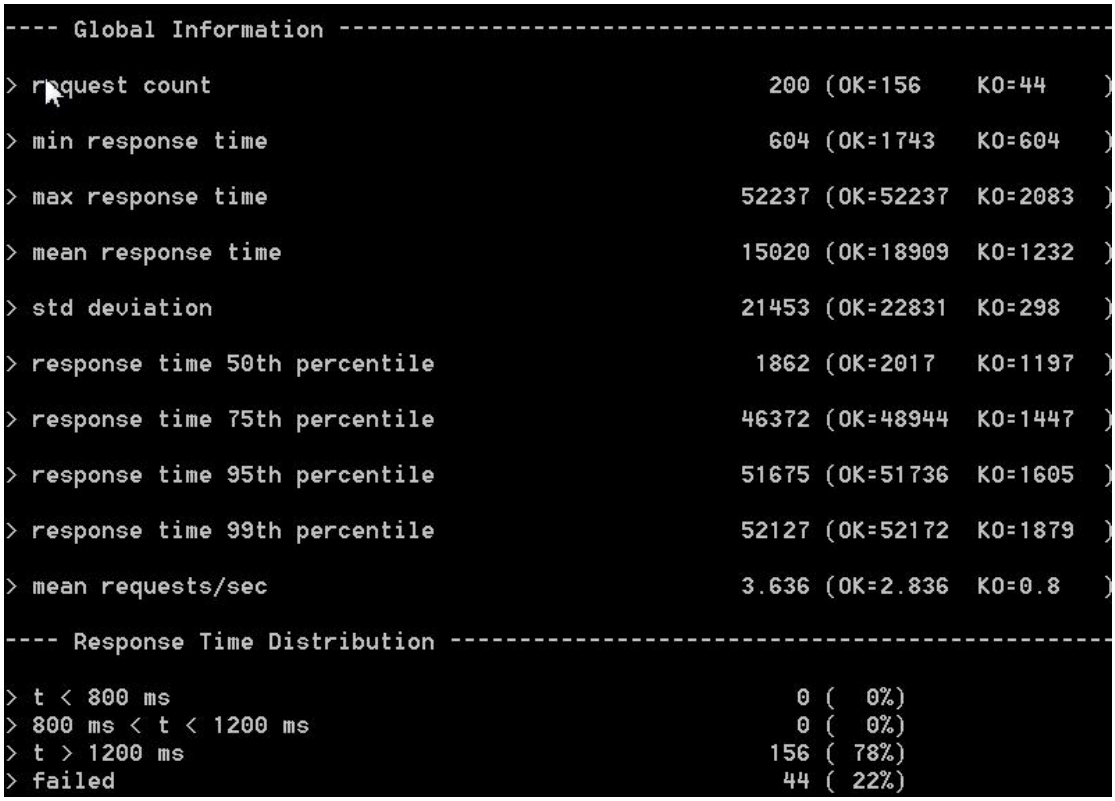
```
---- Global Information --------------------------------------------------------
> request count                                       200 (OK=200    KO=0     )
> min response time                                   462 (OK=462    KO=-     )
> max response time                                 52361 (OK=52361  KO=-     )
> mean response time                                23523 (OK=23523  KO=-     )
> std deviation                                     19913 (OK=19913  KO=-     )
> response time 50th percentile                     21901 (OK=21901  KO=-     )
> response time 75th percentile                     41626 (OK=41626  KO=-     )
> response time 95th percentile                     50464 (OK=50464  KO=-     )
> response time 99th percentile                     52016 (OK=52016  KO=-     )
> mean requests/sec                                 3.704 (OK=3.704  KO=-     )
---- Response Time Distribution ------------------------------------------------
> t < 800 ms                                           47 ( 24%)
> 800 ms < t < 1200 ms                                  3 (  2%)
> t > 1200 ms                                         150 ( 75%)
> failed                                                0 (  0%)
================================================================================
```

第二次测试结果（可以看到因为有第一次的缓存，所以第二次响应速度很快）：

```
---- Global Information --------------------------------------------------------
> request count                                       200 (OK=200    KO=0     )
> min response time                                    31 (OK=31     KO=-     )
> max response time                                  2281 (OK=2281   KO=-     )
> mean response time                                  906 (OK=906    KO=-     )
> std deviation                                       645 (OK=645    KO=-     )
> response time 50th percentile                       706 (OK=706    KO=-     )
> response time 75th percentile                      1466 (OK=1466   KO=-     )
> response time 95th percentile                      2063 (OK=2063   KO=-     )
> response time 99th percentile                      2274 (OK=2274   KO=-     )
> mean requests/sec                                66.667 (OK=66.667 KO=-     )
---- Response Time Distribution ------------------------------------------------
> t < 800 ms                                          123 ( 62%)
> 800 ms < t < 1200 ms                                 17 (  9%)
> t > 1200 ms                                          60 ( 30%)
> failed                                                0 (  0%)
================================================================================
```

三、2 个实例，无 Redis

第一次测试结果：



```
---- Global Information --------------------------------------------------------
> request count                                     200 (OK=156    KO=44    )
> min response time                                 604 (OK=1743   KO=604   )
> max response time                               52237 (OK=52237  KO=2083  )
> mean response time                              15020 (OK=18909  KO=1232  )
> std deviation                                   21453 (OK=22831  KO=298   )
> response time 50th percentile                    1862 (OK=2017   KO=1197  )
> response time 75th percentile                   46372 (OK=48944  KO=1447  )
> response time 95th percentile                   51675 (OK=51736  KO=1605  )
> response time 99th percentile                   52127 (OK=52172  KO=1879  )
> mean requests/sec                               3.636 (OK=2.836  KO=0.8   )
---- Response Time Distribution ------------------------------------------------
> t < 800 ms                                          0 (  0%)
> 800 ms < t < 1200 ms                                0 (  0%)
> t > 1200 ms                                       156 ( 78%)
> failed                                             44 ( 22%)
```

四、4 个实例，无 Redis

第一次测试结果：

（因为没有 redis 存储 Session，所以会有访问 pi 时返回状态 401 的情况出现）

```
---- Global Information --------------------------------------------------------
> request count                                       200 (OK=123    KO=77    )
> min response time                                   217 (OK=236    KO=217   )
> max response time                                 11940 (OK=11940  KO=558   )
> mean response time                                 1552 (OK=2311   KO=340   )
> std deviation                                      3237 (OK=3941   KO=63    )
> response time 50th percentile                       376 (OK=469    KO=337   )
> response time 75th percentile                       548 (OK=574    KO=375   )
> response time 95th percentile                     11032 (OK=11200  KO=452   )
> response time 99th percentile                     11837 (OK=11840  KO=556   )
> mean requests/sec                                15.385 (OK=9.462  KO=5.923 )
---- Response Time Distribution ------------------------------------------------
> t < 800 ms                                          100 ( 50%)
> 800 ms < t < 1200 ms                                  0 (  0%)
> t > 1200 ms                                          23 ( 12%)
> failed                                               77 ( 39%)
---- Errors --------------------------------------------------------------------
> status.find.in(200,201,202,203,204,205,206,207,208,209,304), f     77 (100.0%)
ound 401
================================================================================
```

第二次测试结果：

（因为没有 redis 进行缓存，所以第二次测试的响应速度也不会更快）

```
---- Global Information --------------------------------------------------------
> request count                                       200 (OK=128    KO=72    )
> min response time                                   151 (OK=319    KO=151   )
> max response time                                 16165 (OK=16165  KO=437   )
> mean response time                                 2046 (OK=3024   KO=307   )
> std deviation                                      4200 (OK=4990   KO=42    )
> response time 50th percentile                       408 (OK=432    KO=303   )
> response time 75th percentile                       441 (OK=625    KO=318   )
> response time 95th percentile                     12767 (OK=13807  KO=374   )
> response time 99th percentile                     16123 (OK=16135  KO=435   )
> mean requests/sec                                11.765 (OK=7.529  KO=4.235 )
---- Response Time Distribution ------------------------------------------------
> t < 800 ms                                          100 ( 50%)
> 800 ms < t < 1200 ms                                  0 (  0%)
> t > 1200 ms                                          28 ( 14%)
> failed                                               72 ( 36%)
---- Errors --------------------------------------------------------------------
> status.find.in(200,201,202,203,204,205,206,207,208,209,304), f     72 (100.0%)

ound 401
================================================================================
```