Muhammad Ersya Vinorian
5025211045

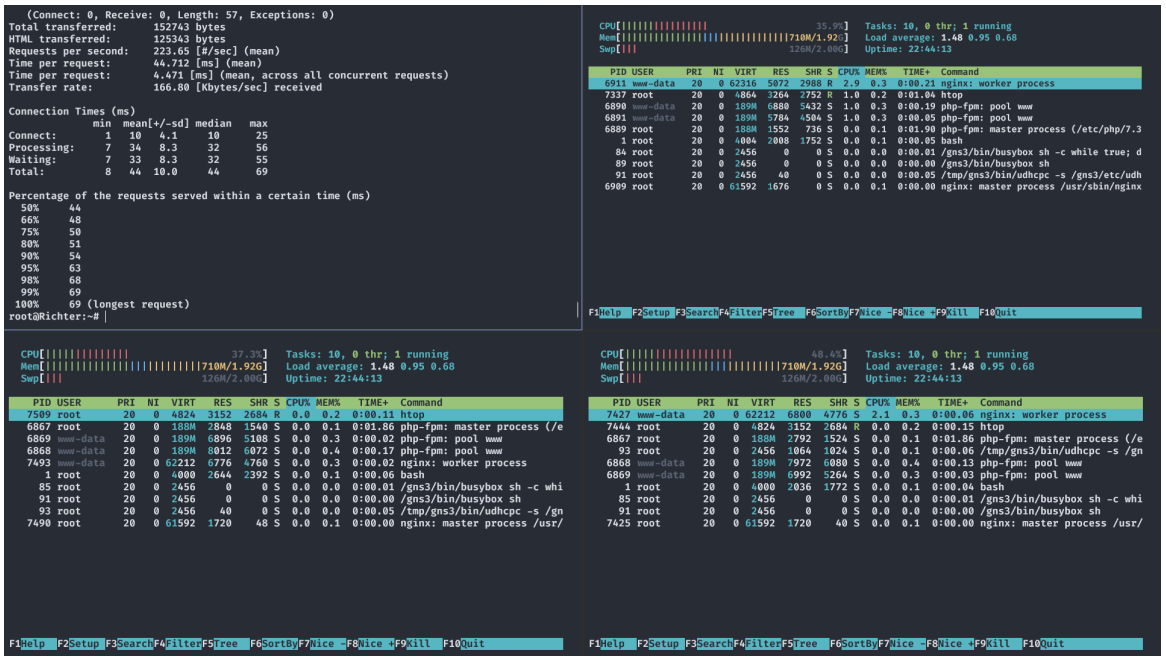
Nomor 8

I. Hasil Testing

a. Weighted Round Robin

```
$ ab -n 200 -c 10 -A netics:ajka01 http://channel.a01.com/
```

```
Server Software:        nginx/1.14.2
Server Hostname:        channel.a01.com
Server Port:            80

Document Path:          /
Document Length:        627 bytes

Concurrency Level:      10
Time taken for tests:   0.894 seconds
Complete requests:      200
Failed requests:        57
   (Connect: 0, Receive: 0, Length: 57, Exceptions: 0)
Total transferred:      152743 bytes
HTML transferred:       125343 bytes
Requests per second:    223.65 [#/sec] (mean)
Time per request:       44.712 [ms] (mean)
Time per request:       4.471 [ms] (mean, across all concurrent
requests)
Transfer rate:          166.80 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        1   10   4.1     10      25
Processing:     7   34   8.3     32      56
Waiting:        7   33   8.3     32      55
Total:          8   44  10.0     44      69

Percentage of the requests served within a certain time (ms)
  50%     44
  66%     48
  75%     50
  80%     51
  90%     54
  95%     63
  98%     68
  99%     69
 100%     69 (longest request)
```

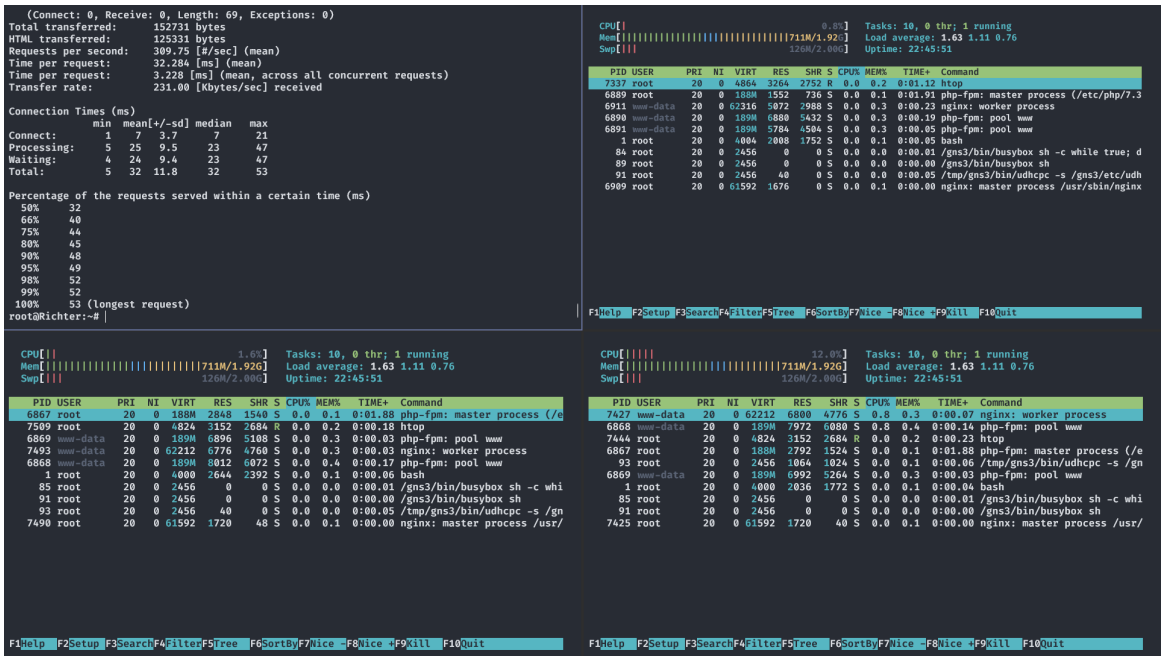


b. Least Connection

```
$ ab -n 200 -c 10 -A netics:ajka01 http://channel.a01.com/
```

```
Server Software:        nginx/1.14.2
Server Hostname:        channel.a01.com
Server Port:            80

Document Path:          /
Document Length:        627 bytes

Concurrency Level:      10
Time taken for tests:   0.646 seconds
Complete requests:      200
Failed requests:        69
   (Connect: 0, Receive: 0, Length: 69, Exceptions: 0)
Total transferred:      152731 bytes
HTML transferred:       125331 bytes
Requests per second:    309.75 [#/sec] (mean)
Time per request:       32.284 [ms] (mean)
Time per request:       3.228 [ms] (mean, across all concurrent
requests)
Transfer rate:          231.00 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        1    7   3.7      7      21
Processing:     5   25   9.5     23      47
Waiting:        4   24   9.4     23      47
Total:          5   32  11.8     32      53

Percentage of the requests served within a certain time (ms)
  50%     32
  66%     40
  75%     44
  80%     45
  90%     48
  95%     49
```

```
  98%      52
  99%      52
 100%      53 (longest request)
```

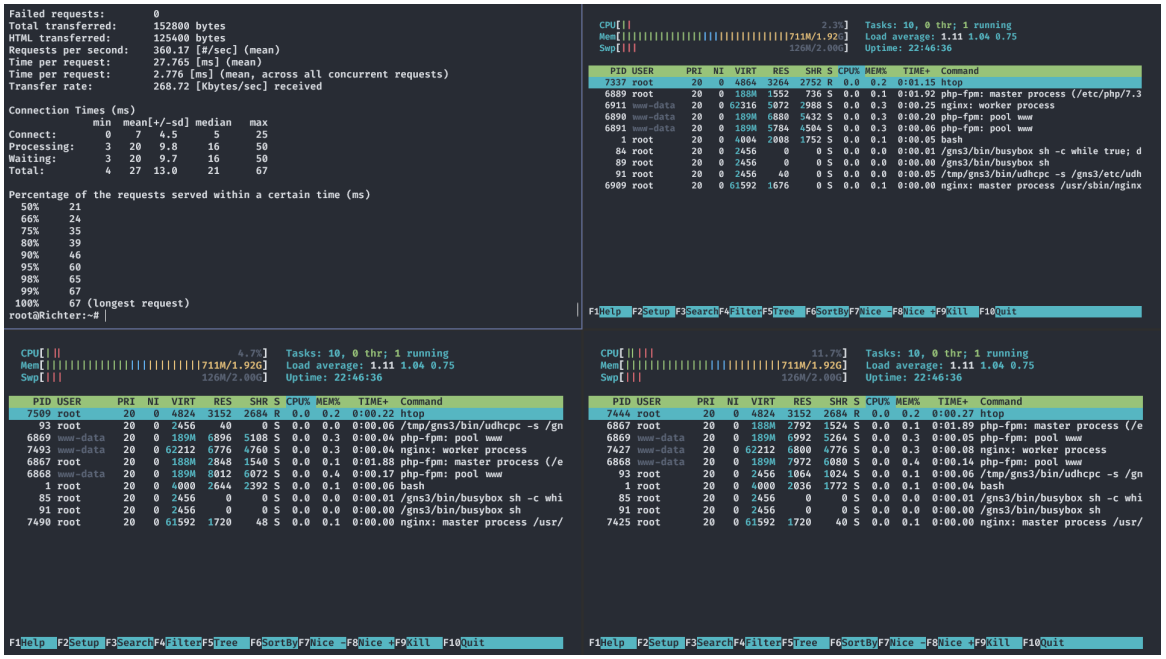


c. IP Hash

```
$ ab -n 200 -c 10 -A netics:ajka01 http://channel.a01.com/
```

```
Server Software:        nginx/1.14.2
Server Hostname:        channel.a01.com
Server Port:            80

Document Path:          /
Document Length:        627 bytes

Concurrency Level:      10
Time taken for tests:   0.555 seconds
Complete requests:      200
Failed requests:        0
Total transferred:      152800 bytes
HTML transferred:       125400 bytes
Requests per second:    360.17 [#/sec] (mean)
Time per request:       27.765 [ms] (mean)
Time per request:       2.776 [ms] (mean, across all concurrent
requests)
Transfer rate:          268.72 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    7   4.5      5      25
Processing:     3   20   9.8     16      50
Waiting:        3   20   9.7     16      50
Total:          4   27  13.0     21      67

Percentage of the requests served within a certain time (ms)
  50%     21
  66%     24
  75%     35
```

```
  80%      39
  90%      46
  95%      60
  98%      65
  99%      67
 100%      67 (longest request)
```

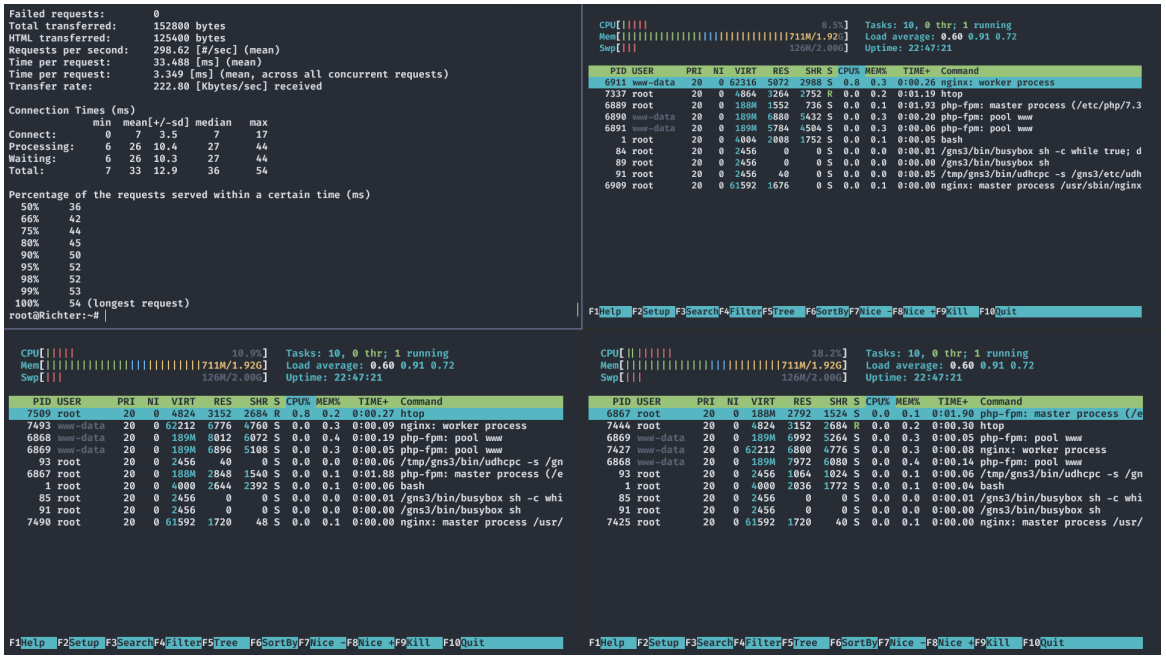


d. Generic Hash

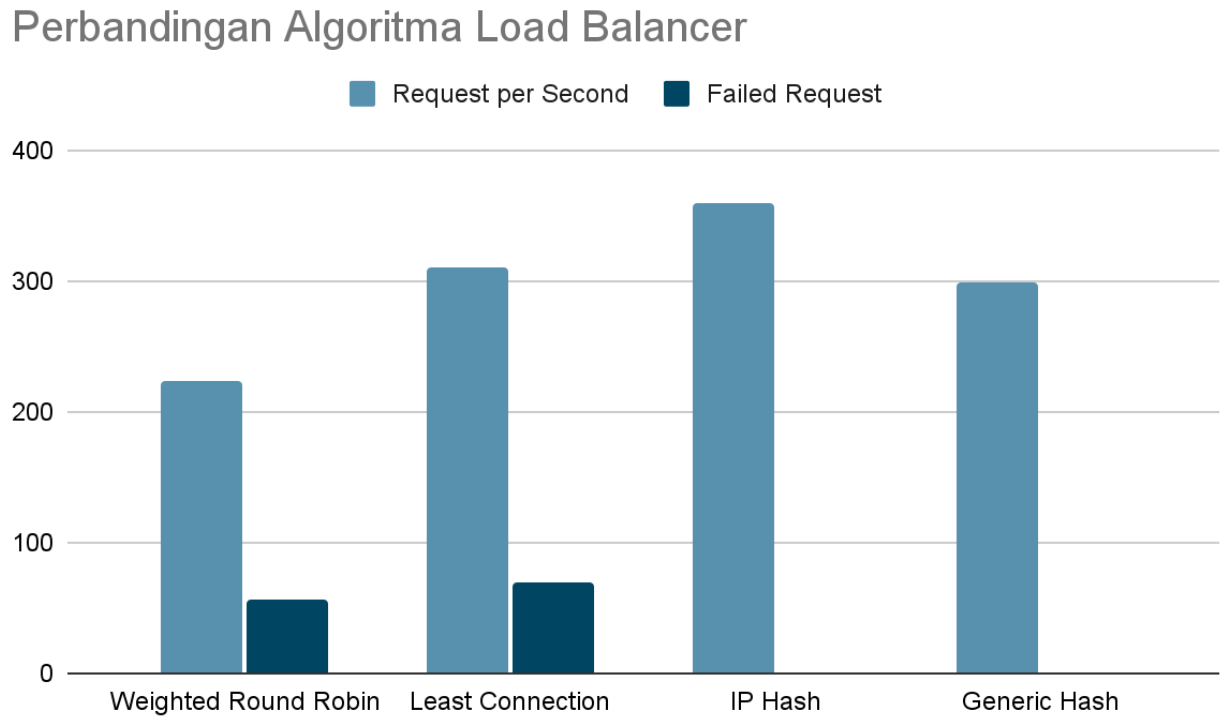
```
$ ab -n 200 -c 10 -A netics:ajka01 http://channel.a01.com/
```

```
Server Software:        nginx/1.14.2
Server Hostname:        channel.a01.com
Server Port:            80

Document Path:          /
Document Length:        627 bytes

Concurrency Level:      10
Time taken for tests:   0.670 seconds
Complete requests:      200
Failed requests:        0
Total transferred:      152800 bytes
HTML transferred:       125400 bytes
Requests per second:    298.62 [#/sec] (mean)
Time per request:       33.488 [ms] (mean)
Time per request:       3.349 [ms] (mean, across all concurrent
requests)
Transfer rate:          222.80 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    7   3.5      7      17
Processing:     6   26  10.4     27      44
Waiting:        6   26  10.3     27      44
Total:          7   33  12.9     36      54

Percentage of the requests served within a certain time (ms)
```

```
  50%      36
  66%      42
  75%      44
  80%      45
  90%      50
  95%      52
  98%      52
  99%      53
 100%      54 (longest request)
```



II. Grafik



III. Analisis

Dapat dilihat dari grafik bahwa pengujian terefisien terdapat ketika load balancer menggunakan algoritma IP hash. Hal tersebut dikarenakan pembagian kerja pada worker node disesuaikan dengan hash dari IP yang melakukan request. Pencarian hash tersebut tentu akan lebih cepat daripada perhitungan worker node mana yang paling sedikit diakses (least connection). Sedangkan jika menggunakan weighted round robin, pembagian kerja worker node tidak akan efektif, karena sulit untuk menyesuaikan dengan resources dari worker node itu sendiri. Mirip dengan IP hash, generic hash yang digunakan adalah hash dari request url, yang tentu saja lebih panjang dari pada IP. Sehingga untuk kasus ini, algoritma load balancer paling efisien adalah menggunakan IP hash.

Nomor 9

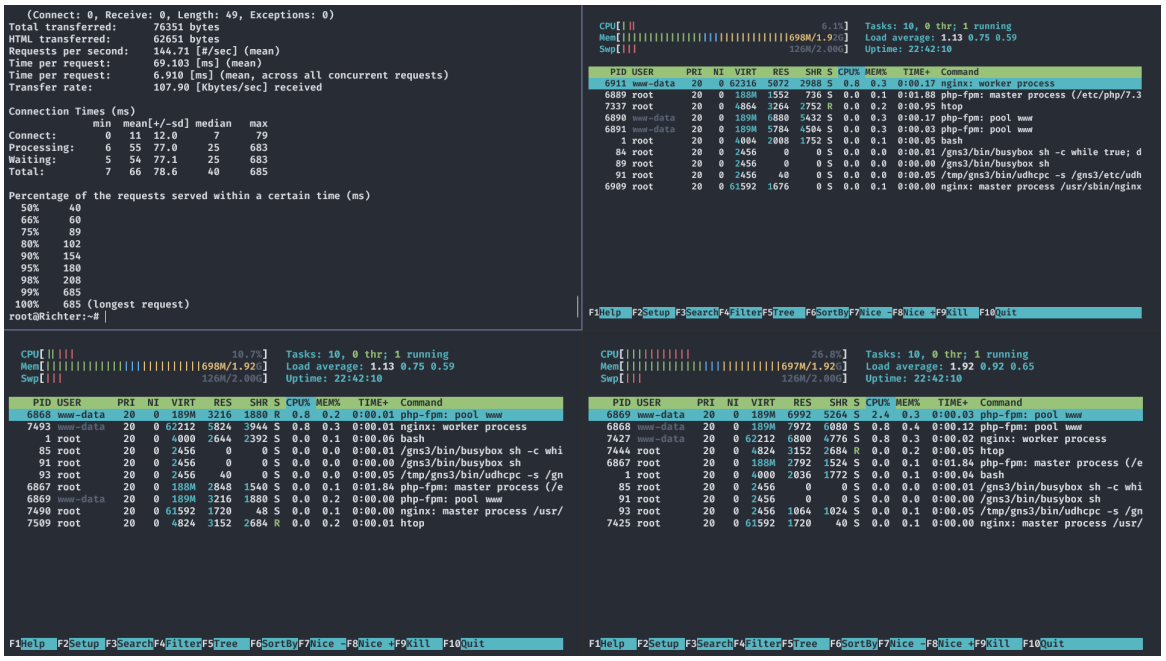
I. Hasil Testing

a. 3 Worker

```
$ ab -n 100 -c 10 -A netics:ajka01 http://channel.a01.com/
```

```
Server Software:        nginx/1.14.2
Server Hostname:        channel.a01.com
Server Port:            80

Document Path:          /
Document Length:        627 bytes

Concurrency Level:      10
Time taken for tests:   0.350 seconds
Complete requests:      100
Failed requests:        33
   (Connect: 0, Receive: 0, Length: 33, Exceptions: 0)
Total transferred:      76367 bytes
HTML transferred:       62667 bytes
```

```
Requests per second:    285.92 [#/sec] (mean)
Time per request:       34.975 [ms] (mean)
Time per request:       3.498 [ms] (mean, across all concurrent
requests)
Transfer rate:          213.23 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    7   3.6      6      18
Processing:     3   27  16.6     25     145
Waiting:        2   27  16.5     25     143
Total:          3   34  16.7     33     147

Percentage of the requests served within a certain time (ms)
  50%     33
  66%     41
  75%     44
  80%     45
  90%     50
  95%     58
  98%     61
  99%    147
 100%    147 (longest request)
```

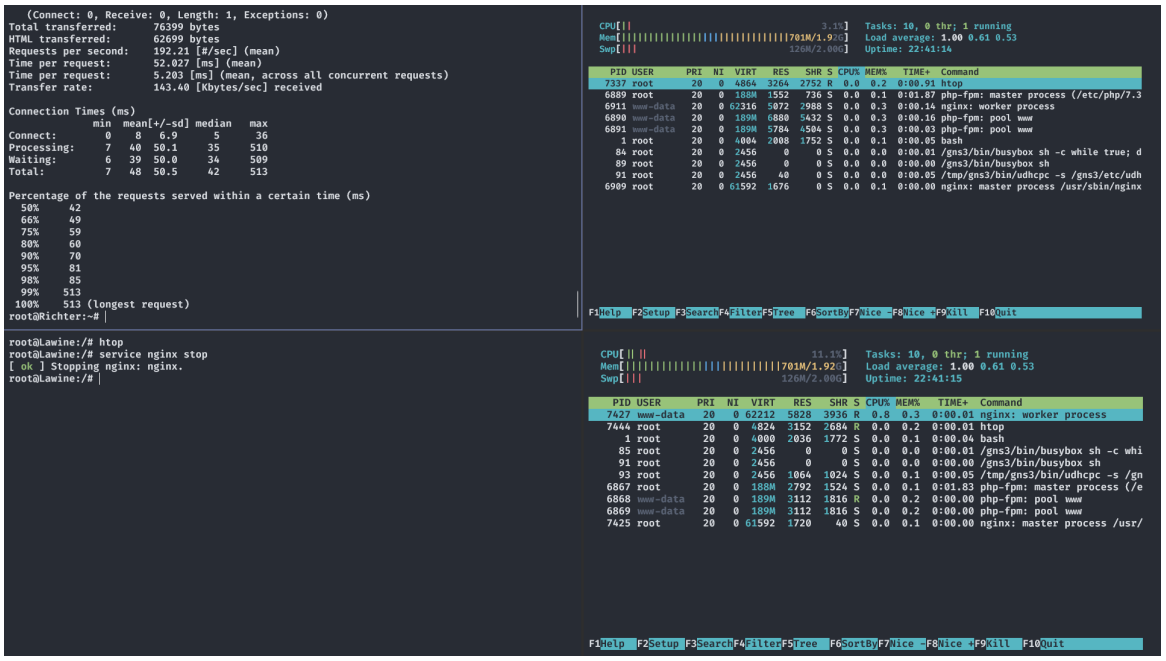


b. 2 Worker

```
$ ab -n 100 -c 10 -A netics:ajka01 http://channel.a01.com/
```

```
Server Software:        nginx/1.14.2
Server Hostname:        channel.a01.com
Server Port:            80

Document Path:          /
Document Length:        627 bytes

Concurrency Level:      10
Time taken for tests:   0.520 seconds
Complete requests:      100
```

```
Failed requests:        1
   (Connect: 0, Receive: 0, Length: 1, Exceptions: 0)
Total transferred:      76399 bytes
HTML transferred:       62699 bytes
Requests per second:    192.21 [#/sec] (mean)
Time per request:       52.027 [ms] (mean)
Time per request:       5.203 [ms] (mean, across all concurrent
requests)
Transfer rate:          143.40 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    8   6.9      5      36
Processing:     7   40  50.1     35     510
Waiting:        6   39  50.0     34     509
Total:          7   48  50.5     42     513

Percentage of the requests served within a certain time (ms)
  50%     42
  66%     49
  75%     59
  80%     60
  90%     70
  95%     81
  98%     85
  99%    513
 100%    513 (longest request)
```

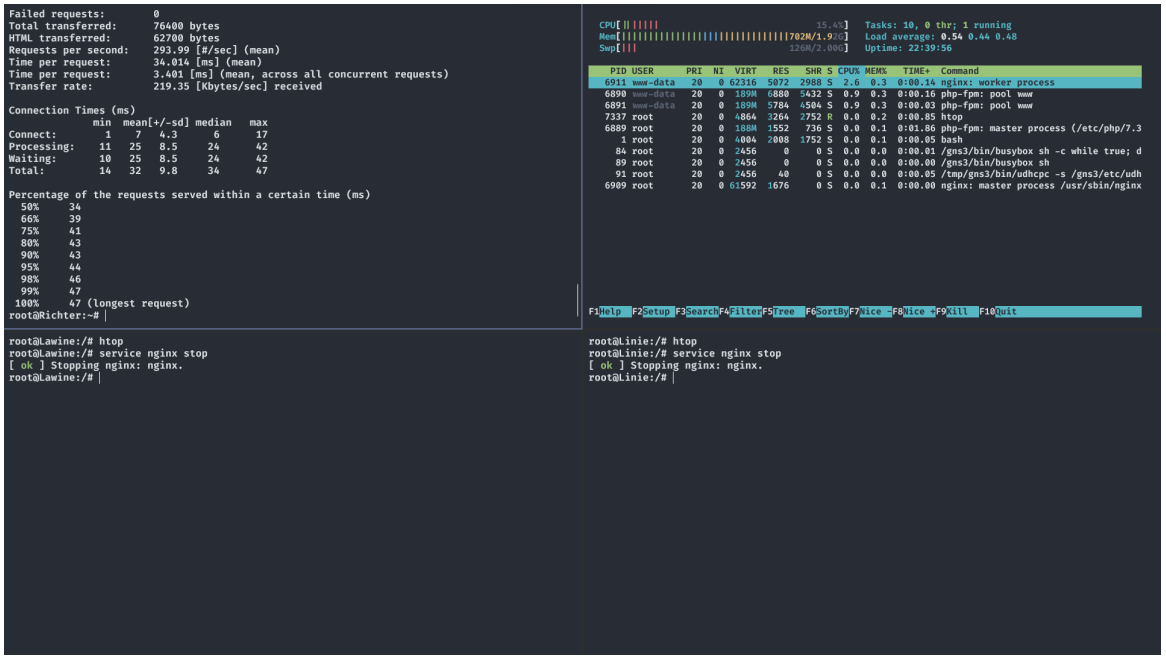


c. 1 Worker

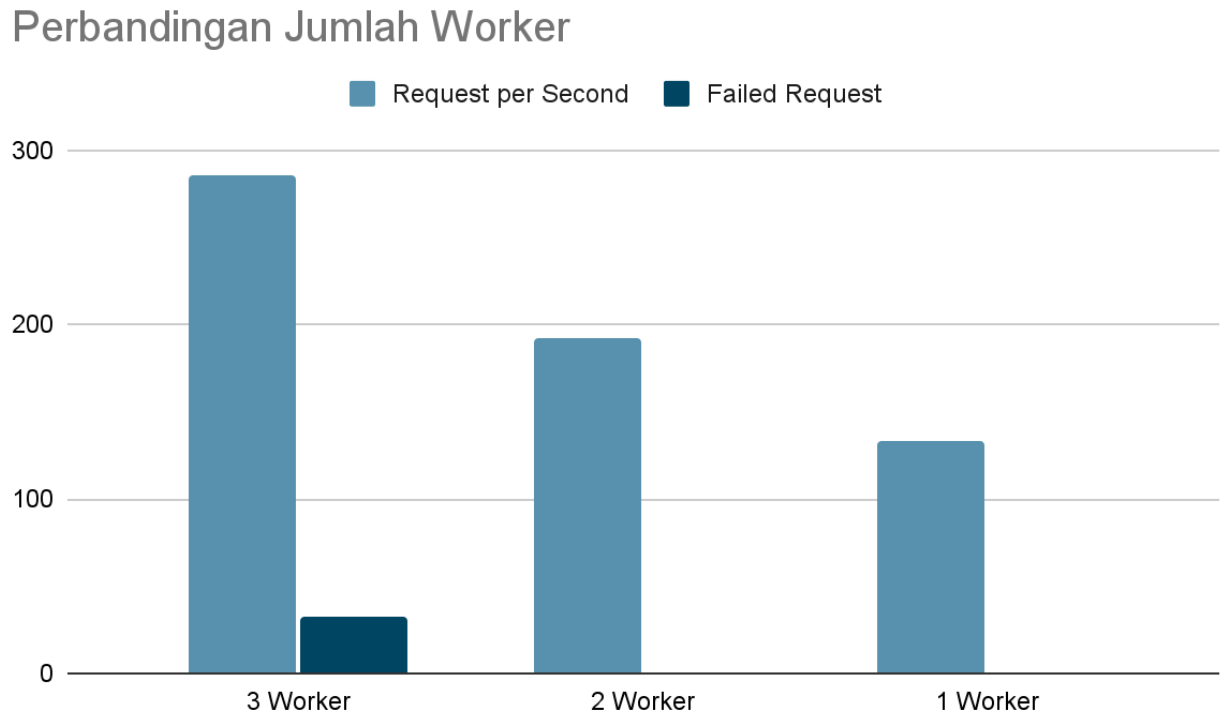
```
$ ab -n 100 -c 10 -A netics:ajka01 http://channel.a01.com/
```

```
Server Software:        nginx/1.14.2
Server Hostname:        channel.a01.com
Server Port:            80

Document Path:          /
Document Length:        627 bytes
```

```
Concurrency Level:      10
Time taken for tests:   0.751 seconds
Complete requests:      100
Failed requests:        0
Total transferred:      76400 bytes
HTML transferred:       62700 bytes
Requests per second:    133.08 [#/sec] (mean)
Time per request:       75.143 [ms] (mean)
Time per request:       7.514 [ms] (mean, across all concurrent
requests)
Transfer rate:          99.29 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    6   4.2      7      13
Processing:    12   31  40.1     28     414
Waiting:       12   31  39.9     27     413
Total:         13   37  40.0     34     415

Percentage of the requests served within a certain time (ms)
  50%     34
  66%     39
  75%     42
  80%     43
  90%     44
  95%     46
  98%    110
  99%    415
 100%    415 (longest request)
```



II. Grafik



Nomor 15

cred.json	{
	"username": "testing",
	“password": "pass123"
	}

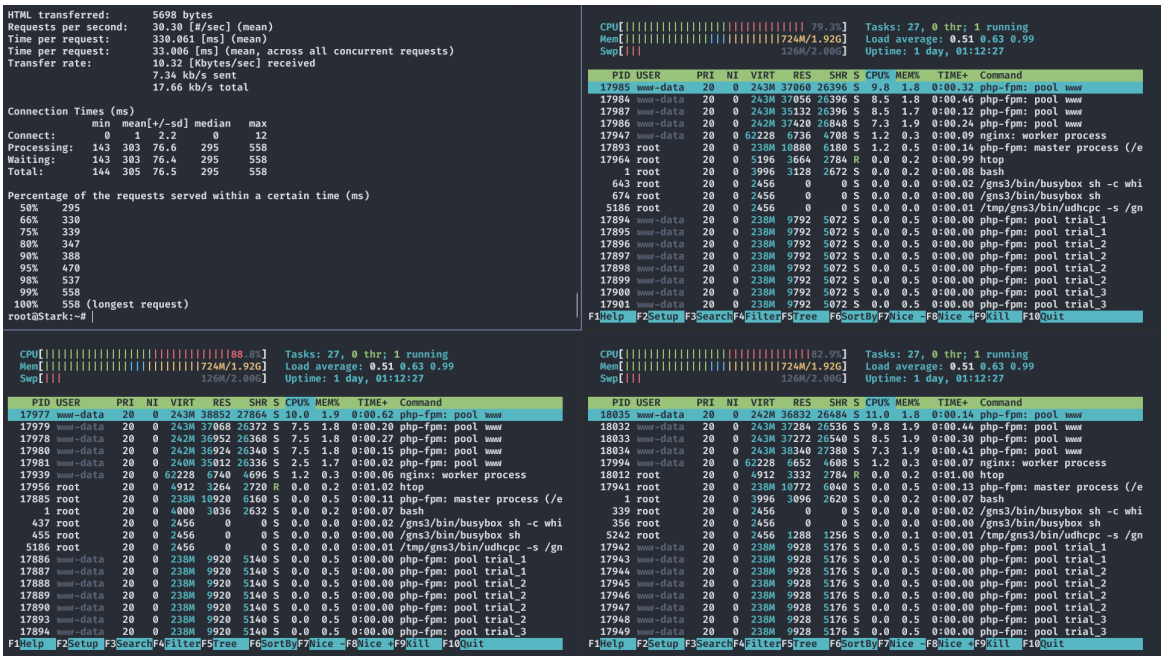
Request	curl -X POST -H "Content-Type: application/json" -d @cred.json canyon.a01.com/api/auth/register

Response Success	{
	"user": {
	"username": "testing",
	"updated_at": "2023-11-16T12:05:39.000000Z",
	"created_at": "2023-11-16T12:05:39.000000Z",
	"id": 1
	},
	"token":
	"eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJodHRwOi8vd29ya2VyL2FwaS9hdXRoL3JlZ2lzdGVyIiwiaWF0IjoxNzAwMTM2MzM5LCJleHAiOjE3MDAxMzk5MzksIm5iZiI6MTcwMDEzNjMzOSwianRpIjoiYmRvT29lek50b2F5cjNHQiIsInN1YiI6IjEiLCJwcnYiOiIyM2JkNWM4OTQ5ZjYwMGFkYjM5ZTcwMWM0MDA4NzJkYjdhNTk3NmY3In0.V-E574v6dev1IS0NrBfLNvOqsj7SfPx9l0NaDuvq8UQ"
	}

Response Error	{
	"username": ["The username has already been taken."]
	}

Stress Test	ab -n 100 -c 10 -p cred.json -T "application/json" -H "Accept: application/json" -H "Content-Type: application/json" http://canyon.a01.com/api/auth/register

```
Server Software:        nginx/1.14.2
Server Hostname:        canyon.a01.com
Server Port:            80

Document Path:          /api/auth/register
Document Length:        451 bytes

Concurrency Level:      10
Time taken for tests:   3.301 seconds
Complete requests:      100
Failed requests:        99
   (Connect: 0, Receive: 0, Length: 99, Exceptions: 0)
Non-2xx responses:      99
Total transferred:      34894 bytes
Total body sent:        24800
HTML transferred:       5698 bytes
Requests per second:    30.30 [#/sec] (mean)
Time per request:       330.061 [ms] (mean)
Time per request:       33.006 [ms] (mean, across all concurrent requests)
Transfer rate:          10.32 [Kbytes/sec] received
                        7.34 kb/s sent
                        17.66 kb/s total

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    1   2.2      0      12
Processing:   143  303  76.6    295     558
Waiting:      143  303  76.4    295     558
Total:        144  305  76.5    295     558

Percentage of the requests served within a certain time (ms)
  50%    295
  66%    330
  75%    339
  80%    347
  90%    388
  95%    470
  98%    537
  99%    558
 100%    558 (longest request)
```



Nomor 16

cred.json	{
	"username": "testing",
	“password": "pass123"
	}

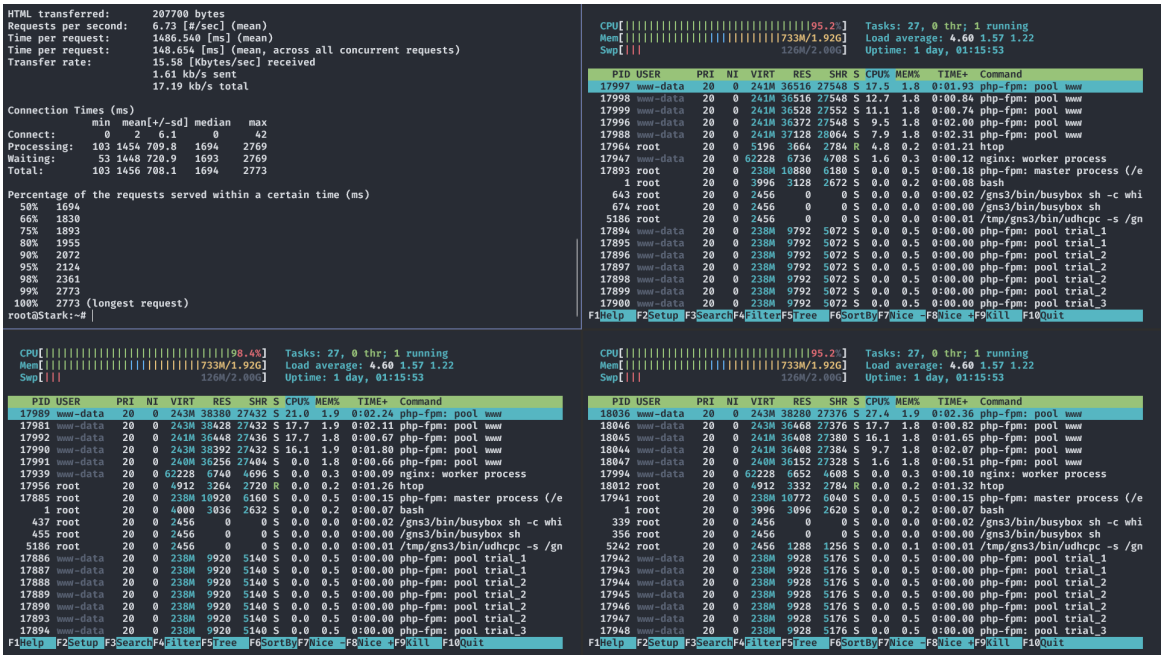
Request	curl -X POST -H "Content-Type: application/json" -d @cred.json canyon.a01.com/api/auth/login

Response Success	{
	"token": "eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJodHRwOi8vd29ya2VyL2FwaS9hdXRoL2xvZ2luIiwiaWF0IjoxNzAwMTM3NTUzLCJleHAiOjE3MDAxNDExNTMsIm5iZiI6MTcwMDEzNzU1MywianRpIjoiUUZCVHY0UU1Va1VEdXR2eSIsInN1YiI6IjQiLCJwcnYiOiIyM2JkNWM4OTQ5ZjYwMGFkYjM5ZTcwMWM0MDA4NzJkYjdhNTk3NmY3In0.rioyGhPAGEPNleeXlIwo14LB9erewybZWb0e20YY-28"
	}

Stress Test	ab -n 100 -c 10 -p cred.json -T "application/json" -H "Accept: application/json" -H "Content-Type: application/json" http://canyon.a01.com/api/auth/login

```
Server Software:        nginx/1.14.2
Server Hostname:        canyon.a01.com
Server Port:            80

Document Path:          /api/auth/login
Document Length:        324 bytes

Concurrency Level:      10
Time taken for tests:   14.865 seconds
Complete requests:      100
Failed requests:        20
   (Connect: 0, Receive: 0, Length: 20, Exceptions: 0)
Non-2xx responses:      20
Total transferred:      237218 bytes
```

```
Total body sent:        24500
HTML transferred:       207700 bytes
Requests per second:    6.73 [#/sec] (mean)
Time per request:       1486.540 [ms] (mean)
Time per request:       148.654 [ms] (mean, across all concurrent requests)
Transfer rate:          15.58 [Kbytes/sec] received
                        1.61 kb/s sent
                        17.19 kb/s total

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    2   6.1      0      42
Processing:   103 1454 709.8   1694    2769
Waiting:       53 1448 720.9   1693    2769
Total:        103 1456 708.1   1694    2773

Percentage of the requests served within a certain time (ms)
  50%   1694
  66%   1830
  75%   1893
  80%   1955
  90%   2072
  95%   2124
  98%   2361
  99%   2773
 100%   2773 (longest request)
```



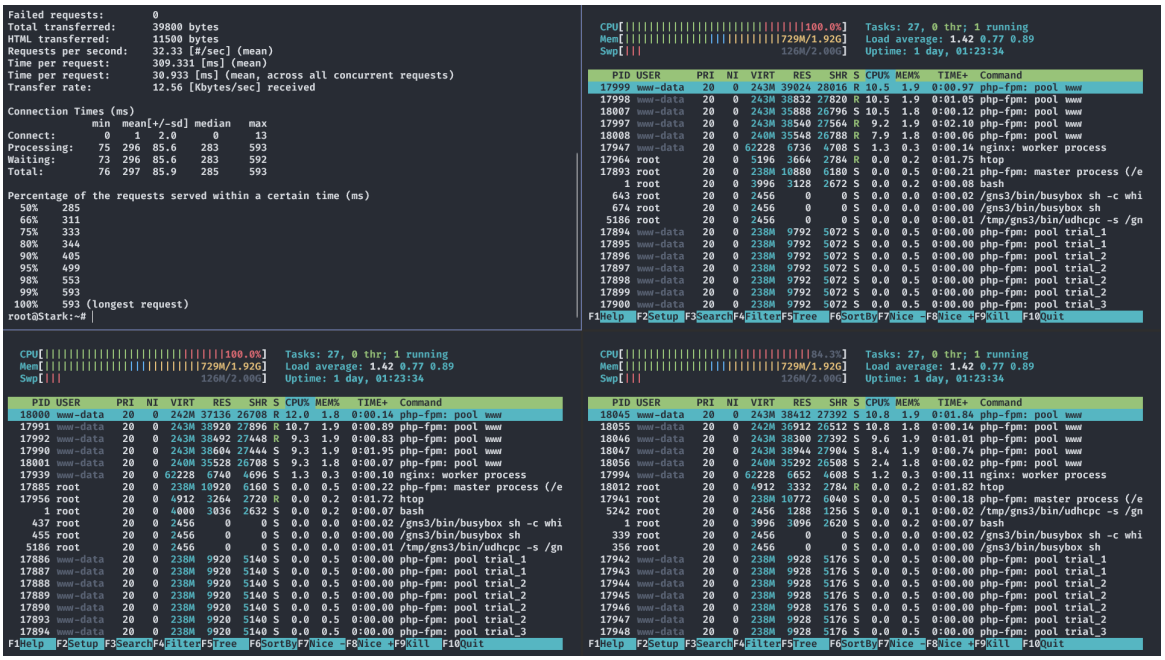
Nomor 17

Request	curl -X GET -H "Content-Type: application/json" -H "Authorization: Bearer eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJodHRwOi8vd29ya2VyL2FwaS9hdXRoL2xvZ2luIiwiaWF0IjoxNzAwMTM3NTUzLCJleHAiOjE3MDAxNDExNTMsIm5iZiI6MTcwMDEzNzU1MywianRpIjoiUUZCVHY0UU1Va1VEdXR2eSIsInN1YiI6IjQiLCJwcnYiOiIyM2JkNWM4OTQ5ZjYwMGFkYjM5ZTcwMWM0MDA4NzJkYjdhNTk3NmY3In0.rioyGhPAGEPNleeXlIwo14LB9erewybZWb0e20YY-28" -d @cred.json canyon.a01.com/api/me

Response Success	{
	  "id": 4,
	  "username": "testing",
	  "created_at": "2023-11-16T12:25:31.000000Z",
	  "updated_at": "2023-11-16T12:25:31.000000Z"
	}

Stress Test	ab -n 100 -c 10 -H "Content-Type: application/json" -H "Authorization: Bearer eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJodHRwOi8vd29ya2VyL2FwaS9hdXRoL2xvZ2luIiwiaWF0IjoxNzAwMTM3NTUzLCJleHAiOjE3MDAxNDExNTMsIm5iZiI6MTcwMDEzNzU1MywianRpIjoiUUZCVHY0UU1Va1VEdXR2eSIsInN1YiI6IjQiLCJwcnYiOiIyM2JkNWM4OTQ5ZjYwMGFkYjM5ZTcwMWM0MDA4NzJkYjdhNTk3NmY3In0.rioyGhPAGEPNleeXlIwo14LB9erewybZWb0e20YY-28" http://canyon.a01.com/api/me

```
Server Software:        nginx/1.14.2
Server Hostname:        canyon.a01.com
Server Port:            80

Document Path:          /api/me
Document Length:        115 bytes

Concurrency Level:      10
Time taken for tests:   3.093 seconds
Complete requests:      100
Failed requests:        0
Total transferred:      39800 bytes
HTML transferred:       11500 bytes
Requests per second:    32.33 [#/sec] (mean)
Time per request:       309.331 [ms] (mean)
Time per request:       30.933 [ms] (mean, across all concurrent requests)
Transfer rate:          12.56 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    1   2.0      0      13
Processing:    75  296  85.6    283     593
Waiting:       73  296  85.6    283     592
Total:         76  297  85.9    285     593

Percentage of the requests served within a certain time (ms)
  50%    285
  66%    311
  75%    333
  80%    344
  90%    405
  95%    499
  98%    553
  99%    593
 100%    593 (longest request)
```



Nomor 19

I. Hasil Testing

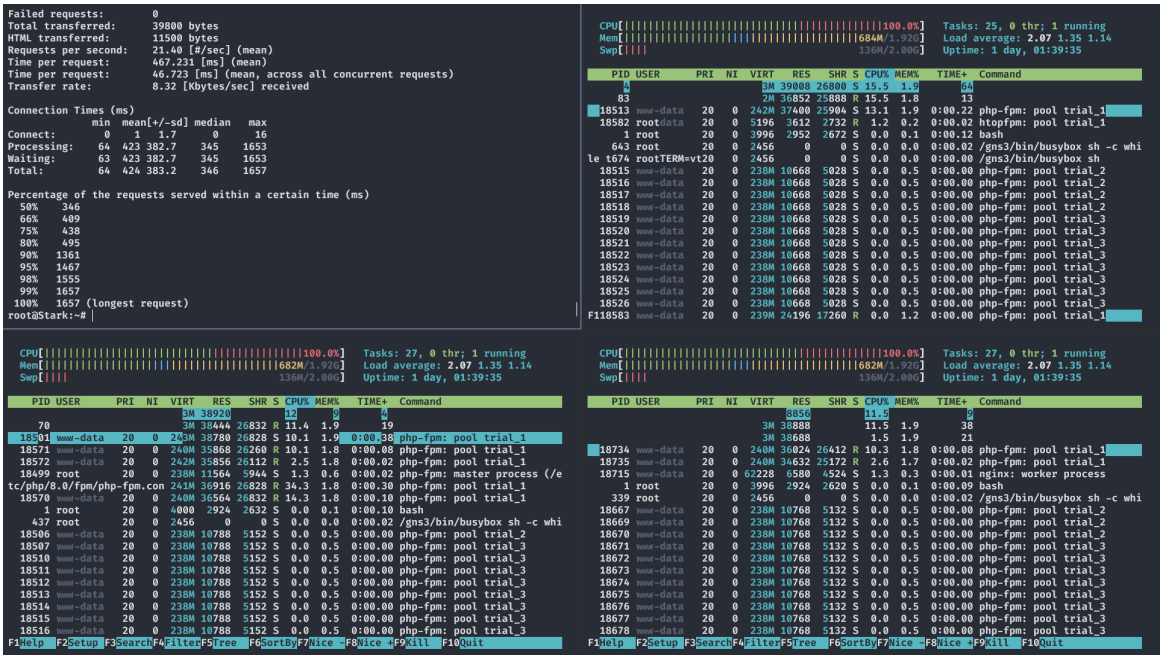
a. Percobaan 1

```
pm.max_children = 5
pm.start_servers = 2
pm.min_spare_servers = 1
pm.max_spare_servers = 3
```

```
ab -n 100 -c 10 -H "Content-Type: application/json" -H
"Authorization: Bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJodHRwOi8vd29ya2VyL
2FwaS9hdXRoL2xvZ2luIiwiaWF0IjoxNzAwMTM3NTUzLCJleHAiOjE3MDAxNDExNTM
sIm5iZiI6MTcwMDEzNzU1MywianRpIjoiUUZCVHY0UU1Va1VEdXR2eSIsInN1YiI6I
jQiLCJwcnYiOiIyM2JkNWM4OTQ5ZjYwMGFkYjM5ZTcwMWM0MDA4NzJkYjdhNTk3NmY
3In0.rioyGhPAGEPNleeXlIwo14LB9erewybZWb0e20YY-28"
http://canyon.a01.com/api/me
```

```
Server Software:        nginx/1.14.2
Server Hostname:        canyon.a01.com
Server Port:            80

Document Path:          /api/me
Document Length:        115 bytes

Concurrency Level:      10
Time taken for tests:   4.672 seconds
Complete requests:      100
Failed requests:        0
Total transferred:      39800 bytes
HTML transferred:       11500 bytes
Requests per second:    21.40 [#/sec] (mean)
Time per request:       467.231 [ms] (mean)
Time per request:       46.723 [ms] (mean, across all concurrent
requests)
Transfer rate:          8.32 [Kbytes/sec] received

Connection Times (ms)
```

```
                min  mean[+/-sd] median   max
Connect:          0    1   1.7      0      16
Processing:      64  423 382.7    345    1653
Waiting:         63  423 382.7    345    1653
Total:           64  424 383.2    346    1657

Percentage of the requests served within a certain time (ms)
  50%    346
  66%    409
  75%    438
  80%    495
  90%   1361
  95%   1467
  98%   1555
  99%   1657
 100%   1657 (longest request)
```



b. Percobaan 2

```
pm.max_children = 10
pm.start_servers = 4
pm.min_spare_servers = 2
pm.max_spare_servers = 6
```

```
ab -n 100 -c 10 -H "Content-Type: application/json" -H
"Authorization: Bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJodHRwOi8vd29ya2VyL
2FwaS9hdXRoL2xvZ2luIiwiaWF0IjoxNzAwMTM3NTUzLCJleHAiOjE3MDAxNDExNTM
sIm5iZiI6MTcwMDEzNzU1MywianRpIjoiUUZCVHY0UU1Va1VEdXR2eSIsInN1YiI6I
jQiLCJwcnYiOiIyM2JkNWM4OTQ5ZjYwMGFkYjM5ZTcwMWM0MDA4NzJkYjdhNTk3NmY
3In0.rioyGhPAGEPNleeXlIwo14LB9erewybZWb0e20YY-28"
http://canyon.a01.com/api/me
```

```
Server Software:        nginx/1.14.2
Server Hostname:        canyon.a01.com
Server Port:            80

Document Path:          /api/me
```

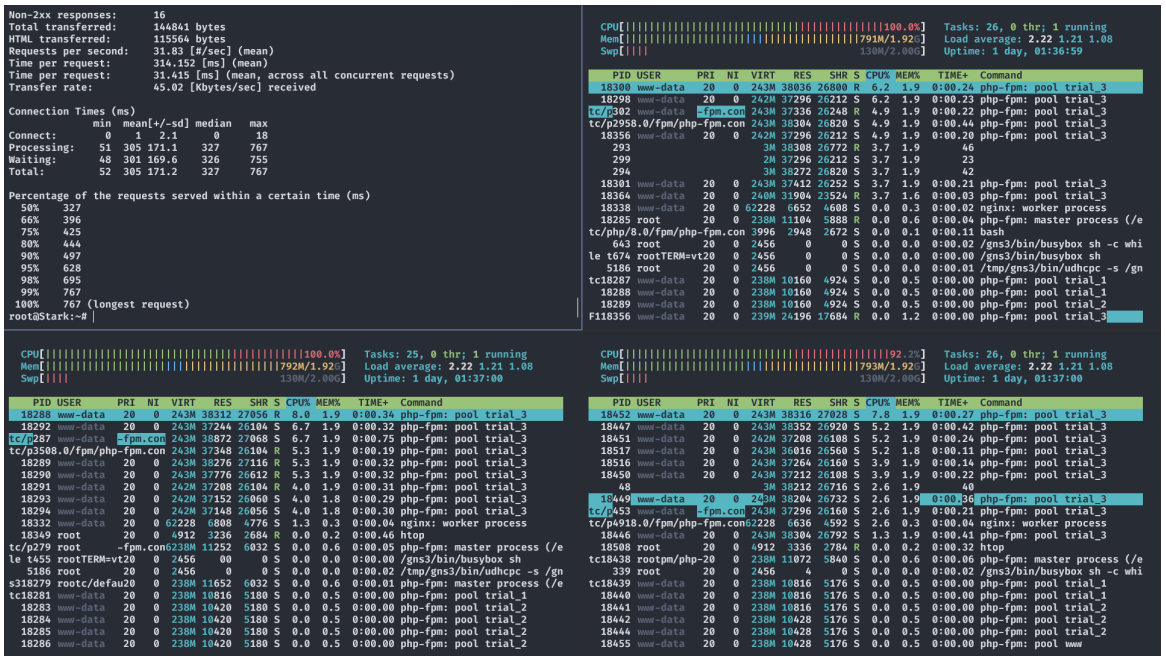
```
Document Length:        115 bytes

Concurrency Level:      10
Time taken for tests:   5.101 seconds
Complete requests:      100
Failed requests:        0
Total transferred:      39800 bytes
HTML transferred:       11500 bytes
Requests per second:    19.60 [#/sec] (mean)
Time per request:       510.078 [ms] (mean)
Time per request:       51.008 [ms] (mean, across all concurrent
requests)
Transfer rate:          7.62 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    1   2.9      0      21
Processing:    43  456 549.2    163    2251
Waiting:       43  456 549.1    163    2251
Total:         43  458 550.2    163    2252

Percentage of the requests served within a certain time (ms)
  50%    163
  66%    512
  75%    677
  80%    761
  90%   1265
  95%   1899
  98%   2132
  99%   2252
 100%   2252 (longest request)
```

c. Percobaan 3

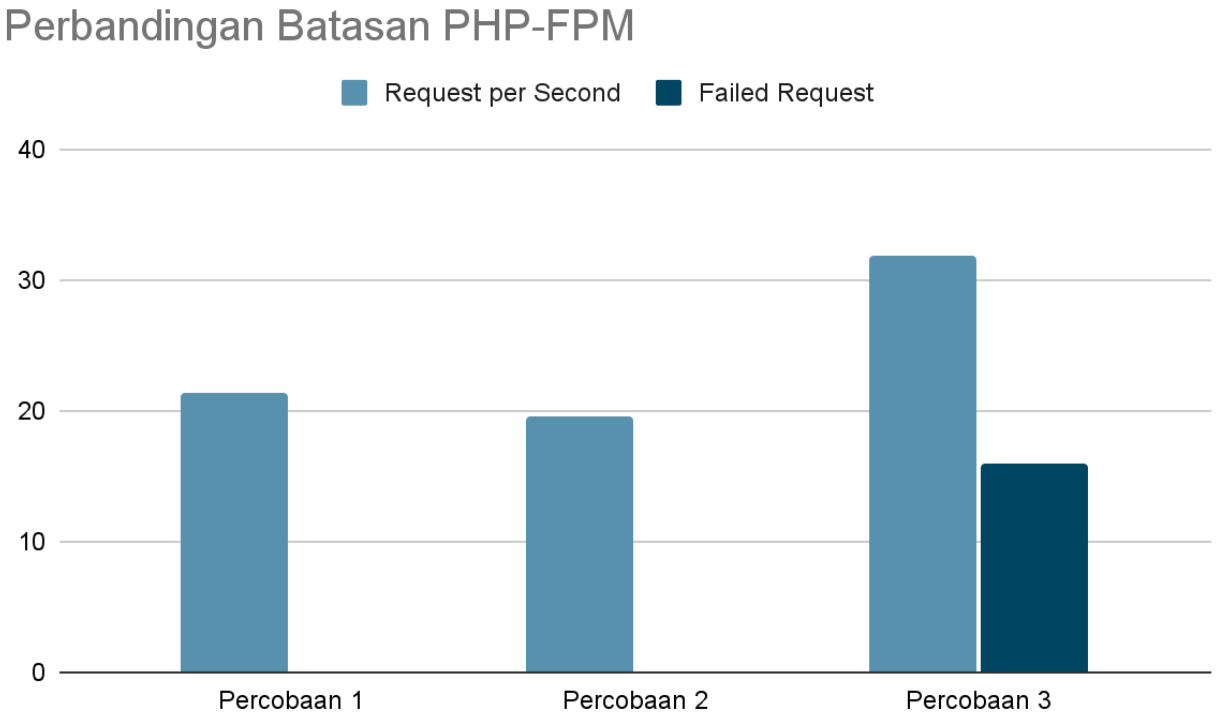
```
pm.max_children = 20
pm.start_servers = 8
pm.min_spare_servers = 4
pm.max_spare_servers = 12
```

```
ab -n 100 -c 10 -H "Content-Type: application/json" -H
"Authorization: Bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJodHRwOi8vd29ya2VyL
2FwaS9hdXRoL2xvZ2luIiwiaWF0IjoxNzAwMTM3NTUzLCJleHAiOjE3MDAxNDExNTM
sIm5iZiI6MTcwMDEzNzU1MywianRpIjoiUUZCVHY0UU1Va1VEdXR2eSIsInN1YiI6I
jQiLCJwcnYiOiIyM2JkNWM4OTQ5ZjYwMGFkYjM5ZTcwMWM0MDA4NzJkYjdhNTk3NmY
3In0.rioyGhPAGEPNleeXlIwo14LB9erewybZWb0e20YY-28"
http://canyon.a01.com/api/me
```

```
Server Software:        nginx/1.14.2
Server Hostname:        canyon.a01.com
Server Port:            80

Document Path:          /api/me
Document Length:        115 bytes

Concurrency Level:      10
Time taken for tests:   3.142 seconds
Complete requests:      100
Failed requests:        16
   (Connect: 0, Receive: 0, Length: 16, Exceptions: 0)
Non-2xx responses:      16
Total transferred:      144841 bytes
HTML transferred:       115564 bytes
Requests per second:    31.83 [#/sec] (mean)
Time per request:       314.152 [ms] (mean)
Time per request:       31.415 [ms] (mean, across all concurrent
requests)
Transfer rate:          45.02 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    1   2.1      0      18
Processing:    51  305 171.1    327     767
Waiting:       48  301 169.6    326     755
Total:         52  305 171.2    327     767

Percentage of the requests served within a certain time (ms)
  50%    327
  66%    396
  75%    425
  80%    444
  90%    497
  95%    628
  98%    695
  99%    767
 100%    767 (longest request)
```



II. Grafik



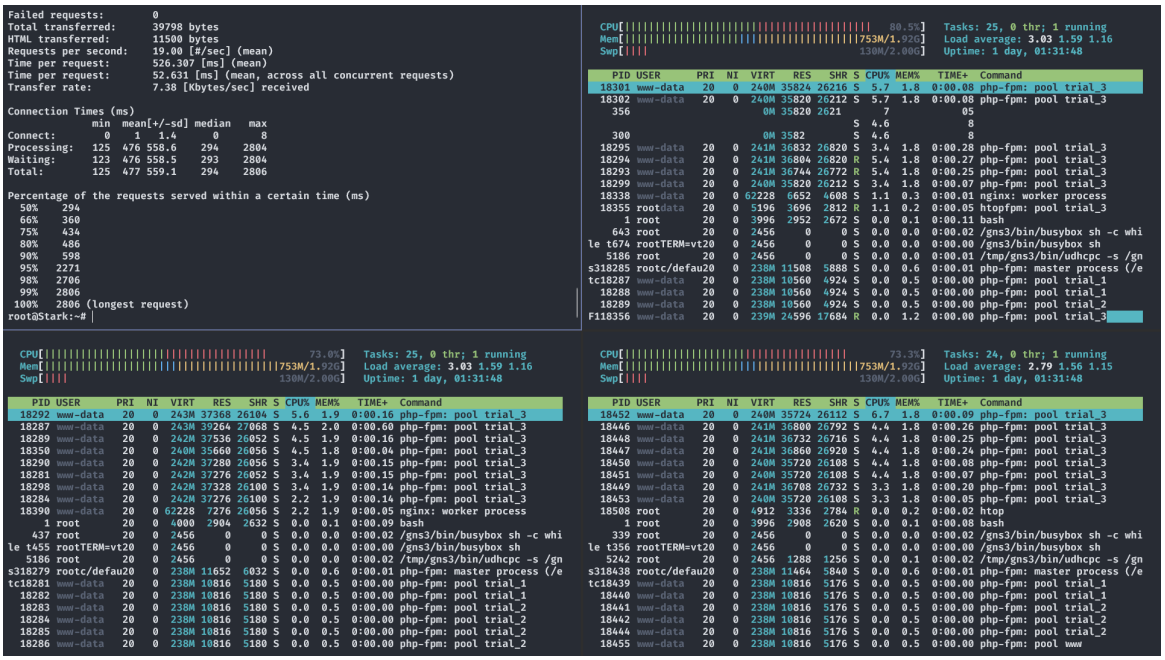
III. Analisa

Dilihat dari hasil grafik, percobaan paling efisien adalah ketiga menggunakan konfigurasi pertama, yaitu jumlah children dalam setiap worker node dibatasi lebih sedikit. Dengan pembatasan tersebut, maka request akan didistribusikan secara lebih merata pada worker node yang lainnya. Sedangkan dengan menaikkan jumlah children dalam setiap workernya, belum tentu dengan resources yang sama worker node akan mampu untuk menjalankan children dengan jumlah tersebut. Sehingga dapat mengakibatkan banyak request yang gagal.

Nomor 20

```
ab -n 100 -c 10 -H "Content-Type: application/json" -H "Authorization: Bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJpc3MiOiJodHRwOi8vd29ya2VyL2FwaS9hdXRoL
2xvZ2luIiwiaWF0IjoxNzAwMTM3NTUzLCJleHAiOjE3MDAxNDExNTMsIm5iZiI6MTcwMDEzNzU1Myw
ianRpIjoiUUZCVHY0UU1Va1VEdXR2eSIsInN1YiI6IjQiLCJwcnYiOiIyM2JkNWM4OTQ5ZjYwMGFkY
jM5ZTcwMWM0MDA4NzJkYjdhNTk3NmY3In0.rioyGhPAGEPNleeXlIwo14LB9erewybZWb0e20YY-28
" http://canyon.a01.com/api/me
```

```
Server Software:        nginx/1.14.2
Server Hostname:        canyon.a01.com
Server Port:            80

Document Path:          /api/me
Document Length:        115 bytes

Concurrency Level:      10
Time taken for tests:   5.263 seconds
Complete requests:      100
Failed requests:        0
Total transferred:      39798 bytes
HTML transferred:       11500 bytes
Requests per second:    19.00 [#/sec] (mean)
Time per request:       526.307 [ms] (mean)
Time per request:       52.631 [ms] (mean, across all concurrent requests)
Transfer rate:          7.38 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    1   1.4      0       8
Processing:   125  476 558.6    294    2804
Waiting:      123  476 558.5    293    2804
Total:        125  477 559.1    294    2806

Percentage of the requests served within a certain time (ms)
  50%    294
  66%    360
  75%    434
  80%    486
  90%    598
  95%   2271
  98%   2706
  99%   2806
 100%   2806 (longest request)
```



```
Failed requests:        0
Total transferred:      39798 bytes
HTML transferred:       11500 bytes
Requests per second:    19.00 [#/sec] (mean)
Time per request:       526.307 [ms] (mean)
Time per request:       52.631 [ms] (mean, across all concurrent requests)
Transfer rate:          7.38 [Kbytes/sec] received

Connection Times (ms)
              min  mean[+/-sd] median   max
Connect:        0    1   1.4      0       8
Processing:   125  476 558.6    294    2804
Waiting:      123  476 558.5    293    2804
Total:        125  477 559.1    294    2806

Percentage of the requests served within a certain time (ms)
  50%    294
  66%    360
  75%    434
  80%    486
  90%    598
  95%   2271
  98%   2706
  99%   2806
 100%   2806 (longest request)
root@Stark:~#
```

```
CPU[||||||
```