

Lab3 Benchmark Results

Maximum number of connections that can be handled by the server before any connection drops: ~2500

Maximum number of requests per second (RPS) that can be sustained by the server when operating with maximum number of connections: 689.56/sec (mean)

Average response time or latency per request: 1.450ms

99 percentile response time or latency per request: 3584ms

Utilization of CPU, memory, disk IO, and network when max performance is sustained (dstat):

```
----total-cpu-usage---- -----memory-usage----- -dsk/total- -net/total-
usr sys idl wai hiq siq| used  buff  cach  free| read  writ| recv  send
  0   0 100   0   0   0| 154M 105M 367M 366M|1155B 4051B|    0    0
  0   0 100   0   0   0| 154M 105M 367M 366M|    0    0| 260B 1206B
  0   0 100   0   0   0| 154M 105M 367M 366M|    0    0| 104B  460B
  0   1  99   0   0   0| 154M 105M 367M 366M|    0    0| 104B  460B
  0   0 100   0   0   0| 154M 105M 367M 366M|    0    0| 104B  460B
  0   1  99   0   0   0| 154M 105M 367M 366M|    0    0|  24k   29k
72  12   8   0   0   8| 157M 106M 369M 360M|    0    0| 876k  566k
83  10   2   0   0   5| 159M 106M 373M 355M|8192B    0| 619k  549k
60  10  26   0   0   4| 161M 106M 375M 350M|    0    0| 205k  373k
17   2  80   0   0   1| 162M 106M 376M 348M|    0    0|  52k  105k
 3   2  94   0   0   1| 162M 106M 376M 348M|    0    0|  63k   63k
 1   0  98   1   0   0| 162M 106M 376M 348M|    0 8072k|   52B  358B
 0   0 100   0   0   0| 162M 106M 376M 348M|    0    0| 104B  460B
 0   0 100   0   0   0| 162M 106M 376M 348M|    0    0| 104B  460B
 0   1  99   0   0   0| 162M 106M 376M 348M|    0    0| 104B  460B
 0   0 100   0   0   0| 162M 106M 376M 348M|    0    0| 104B  460B
 0   1  99   0   0   0| 162M 106M 376M 348M|    0    0| 104B  460B
```

Full AB Run Results:

This is ApacheBench, Version 2.3 <\$Revision: 1706008 \$>

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Benchmarking ec2-34-237-5-126.compute-1.amazonaws.com (be patient)

Completed 250 requests

Completed 500 requests

Completed 750 requests

Completed 1000 requests

Completed 1250 requests

Completed 1500 requests

Completed 1750 requests
Completed 2000 requests
Completed 2250 requests
Completed 2500 requests
Finished 2500 requests

Server Software:

Server Hostname: ec2-34-237-5-126.compute-1.amazonaws.com
Server Port: 80

Document Path: /search?keywords=toronto
Document Length: 0 bytes

Concurrency Level: 2500
Time taken for tests: 3.625 seconds
Complete requests: 2500
Failed requests: 0
Non-2xx responses: 2500
Total transferred: 762500 bytes
HTML transferred: 0 bytes
Requests per second: 689.56 [#/sec] (mean)
Time per request: 3625.495 [ms] (mean)
Time per request: 1.450 [ms] (mean, across all concurrent requests)
Transfer rate: 205.39 [Kbytes/sec] received

Connection Times (ms)

	min	mean[+/-sd]	median	max
Connect:	0	341 409.5	203	1188
Processing:	125	1207 984.6	989	3315
Waiting:	125	1207 984.7	989	3315
Total:	144	1548 1043.4	1614	3609

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

50%	1614
66%	2074
75%	2311
80%	2475
90%	3020
95%	3316
98%	3447
99%	3584
100%	3609 (longest request)