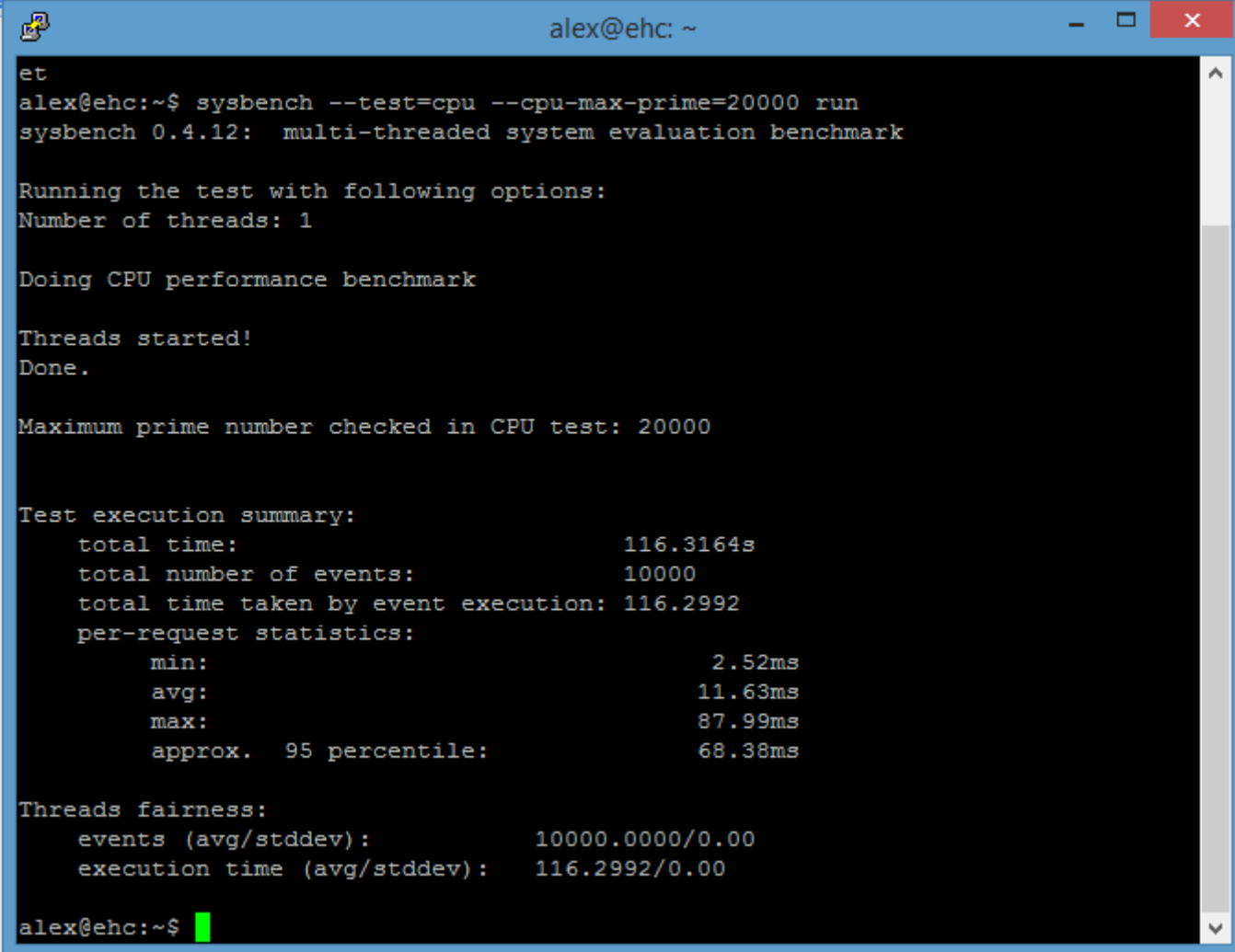


## Pruebas de rendimiento del servidor.

Estas pruebas de rendimiento se desarrollaron para conocer las limitaciones de la base de datos del servidor y conocer cuáles eran los tiempos de espera máximos para las consultas más pesadas. La prueba se llevó a cabo por Alejandro el sábado 12 de abril de 2014, a las 22:06:37.

Los resultados de las mismas son los siguientes:

- Para ver el rendimiento de la CPU:

A screenshot of a terminal window titled 'alex@ehc: ~'. The terminal shows the execution of the 'sysbench' command with the following output:

```
alex@ehc:~$ sysbench --test=cpu --cpu-max-prime=20000 run
sysbench 0.4.12: multi-threaded system evaluation benchmark

Running the test with following options:
Number of threads: 1

Doing CPU performance benchmark

Threads started!
Done.

Maximum prime number checked in CPU test: 20000

Test execution summary:
total time: 116.3164s
total number of events: 10000
total time taken by event execution: 116.2992
per-request statistics:
  min: 2.52ms
  avg: 11.63ms
  max: 87.99ms
  approx. 95 percentile: 68.38ms

Threads fairness:
  events (avg/stddev): 10000.0000/0.00
  execution time (avg/stddev): 116.2992/0.00

alex@ehc:~$
```

- Estudio de concurrencia de consultas:

```
alex@ehc: ~  
mysqlslap: Error when connecting to server: 1049 Unknown database 'mysqlslap'  
mysqlslap: Error when connecting to server: 1049 Unknown database 'mysqlslap'  
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mysqlslap: Error when connecting to server: 1049 Unknown database 'mysqlslap'  
mysqlslap: Error when connecting to server: 1049 Unknown database 'mysqlslap'  
^C  
alex@ehc:~$ mysqlslap --user=alex --password=alex --auto-generate-sql --concurr  
ency=50 --iterations=10  
Benchmark  
Average number of seconds to run all queries: 0.813 seconds  
Minimum number of seconds to run all queries: 0.365 seconds  
Maximum number of seconds to run all queries: 1.598 seconds  
Number of clients running queries: 50  
Average number of queries per client: 0  
alex@ehc:~$
```

- Para latencias de entrada y salida (acceso a disco):

```
alex@ehc: ~  
Block size 16Kb  
Number of random requests for random IO: 0  
Read/Write ratio for combined random IO test: 1.50  
Periodic FSYNC enabled, calling fsync() each 100 requests.  
Calling fsync() at the end of test, Enabled.  
Using synchronous I/O mode  
Doing random r/w test  
Threads started!  
Time limit exceeded, exiting...  
Done.  
  
Operations performed: 127020 Read, 84680 Write, 270869 Other = 482569 Total  
Read 1.9382Gb Written 1.2921Gb Total transferred 3.2303Gb (11.024Mb/sec)  
705.54 Requests/sec executed  
  
Test execution summary:  
total time: 300.0537s  
total number of events: 211700  
total time taken by event execution: 38.4378  
per-request statistics:  
min: 0.00ms  
avg: 0.18ms  
max: 197.14ms  
approx. 95 percentile: 0.47ms  
  
Threads fairness:  
events (avg/stddev): 211700.0000/0.00  
execution time (avg/stddev): 38.4378/0.00  
  
alex@ehc:~$
```