Benchmarking My Http Sever Using Httperf

Standard Usage:

```
httperf --server localhost --port 2345 --num-conn 300 --rate 30
```

Results:

```
cylMBP:~ caixiaomo$ httperf --server localhost --port 2345 --num-conn 300 --rate 30
httperf --client=0/1 --server=localhost --port=2345 --uri=/ --rate=30 --send-buffer=4096 --recv-buffer=16384 --num-conns=300 --num-calls=1
httperf: warning: open file limit > FD_SETSIZE; limiting max. # of open files to FD_SETSIZE
Maximum connect burst length: 1

Total: connections 300 requests 300 replies 300 test-duration 9.969 s

Connection rate: 30.1 conn/s (33.2 ms/conn, <=1 concurrent connections)
Connection time [ms]: min 2.0 avg 2.2 max 4.3 median 2.5 stddev 0.2
Connection time [ms]: connect 0.1
Connection length [replies/conn]: 1.000

Request rate: 30.1 req/s (33.2 ms/req)
Request size [B]: 62.0

Reply rate [replies/s]: min 30.0 avg 30.0 max 30.0 stddev 0.0 (1 samples)
Reply time [ms]: response 0.4 transfer 1.7
Reply size [B]: header 51.0 content 899.0 footer 0.0 (total 950.0)
Reply status: 1xx=0 2xx=300 3xx=0 4xx=0 5xx=0

CPU time [s]: user 2.79 system 7.18 (user 28.0% system 72.0% total 100.0%)
Net I/O: 29.8 KB/s (0.2*10^6 bps)

Errors: total 0 client-timo 0 socket-timo 0 connrefused 0 connreset 0
Errors: fd-unavail 0 addrunavail 0 ftab-full 0 other 0
```

Our team run ten connections *[--num-conns 300]* local host at a rate of one connection per second *[--rate 30]*.

These are some of the results:

1. "Connection rate" /"Request Rate" – This indicates how many connections per seconds.
2. "Connection time [ms]" – shows that, on average, it took 2.2 milliseconds to establish a connection. Only successful TCP connection establishments are counted
3. "Connection length" -- It gives the average number of replies received on each connection that received at least one reply
4. "Reply size'' contains statistics on the average size of the replies---all numbers are in reported bytes. Specifically, the line lists the average length of reply headers, the content, and footers (HTTP/1.1 uses footers to realize the "chunked" transfer encoding). In our testing, the header is 51.0 bytes, the average content length is 899 bytes, and there were no footers. The total reply length of 950 bytes on average.
5. "Reply status" – we all getting 200's when testing which means all the request is successful.

Reference:

http://www.labs.hpe.com/research/linux/httperf/httperf-man-0.9.txt

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