Chasing the Ghost

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User

**Linode
Node balancer**

alpha

beta

**redis
master**

**redis
slave**

**mongo
master**

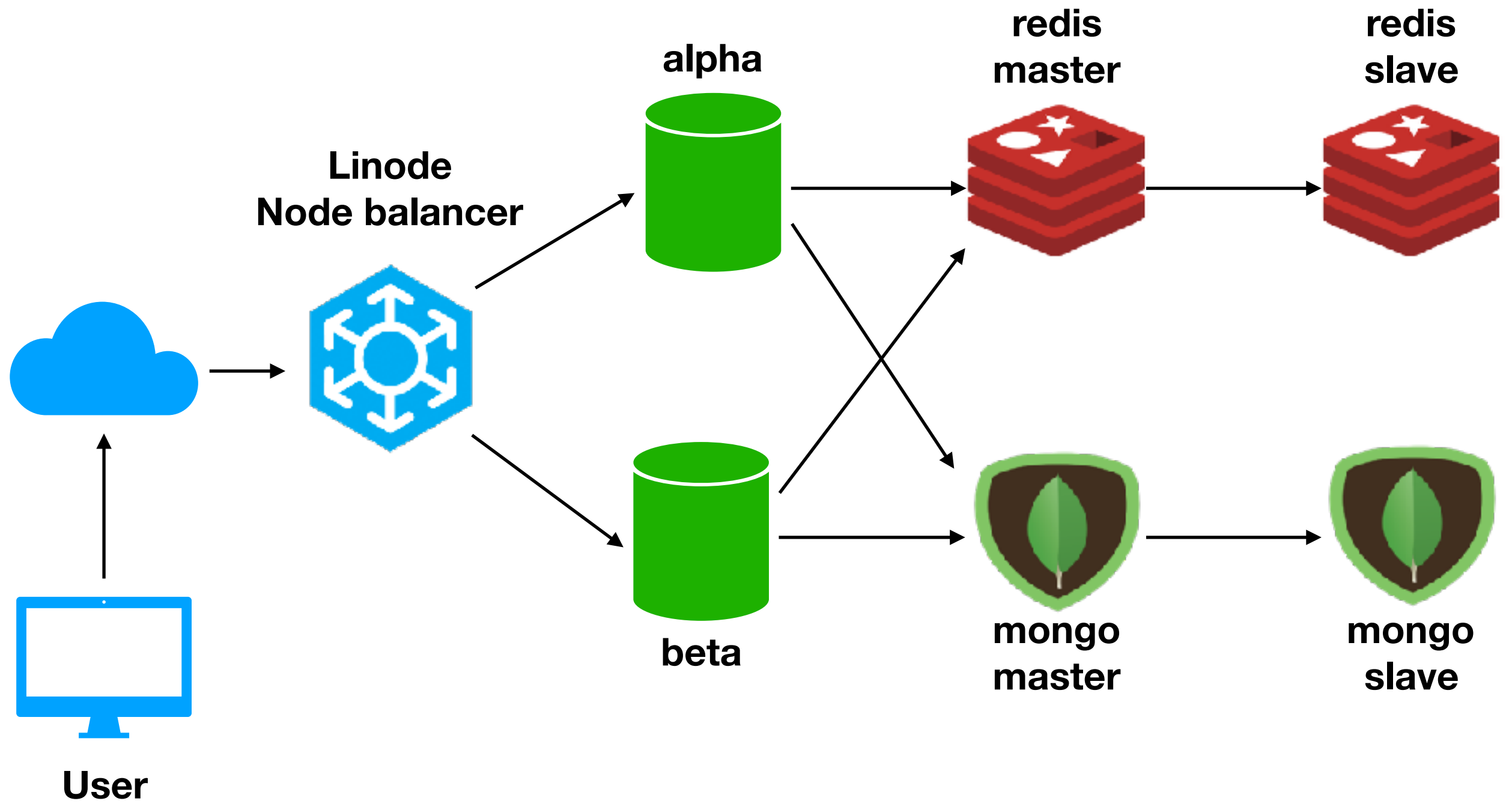**mongo
slave**

application server

haproxy　　　　　　**nginx**　　　　　　**node.js**　　　　　　**redis**
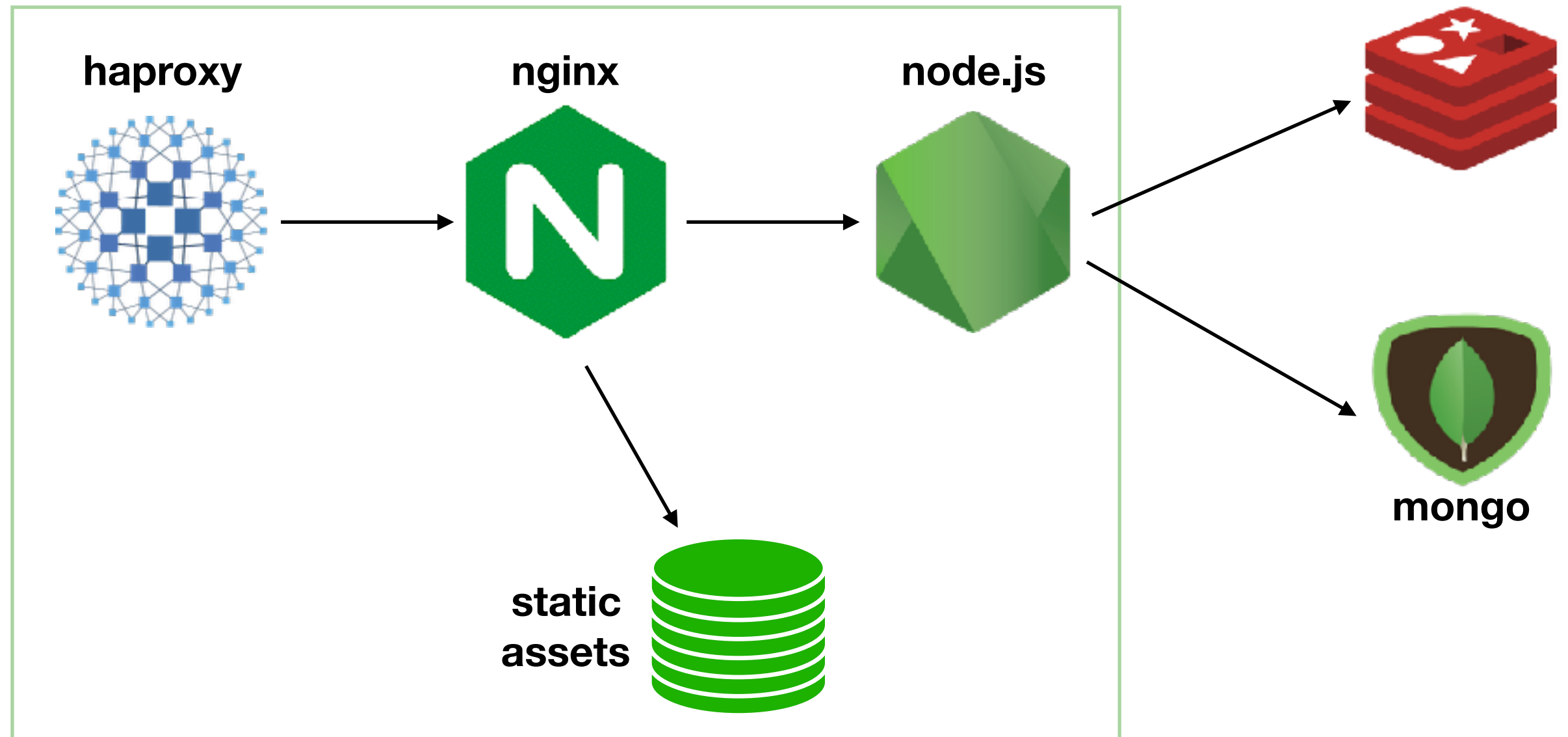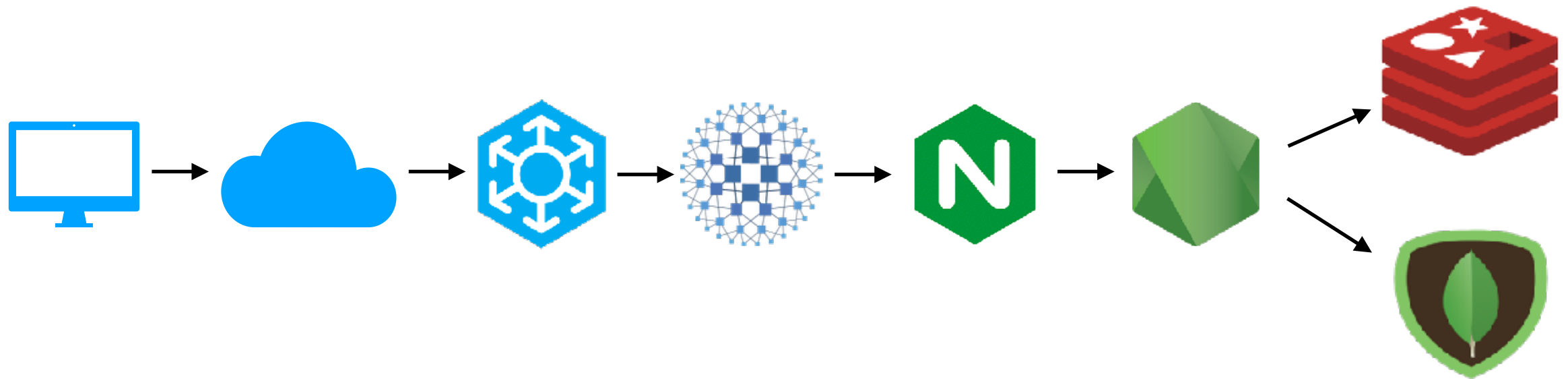
static assets

mongo
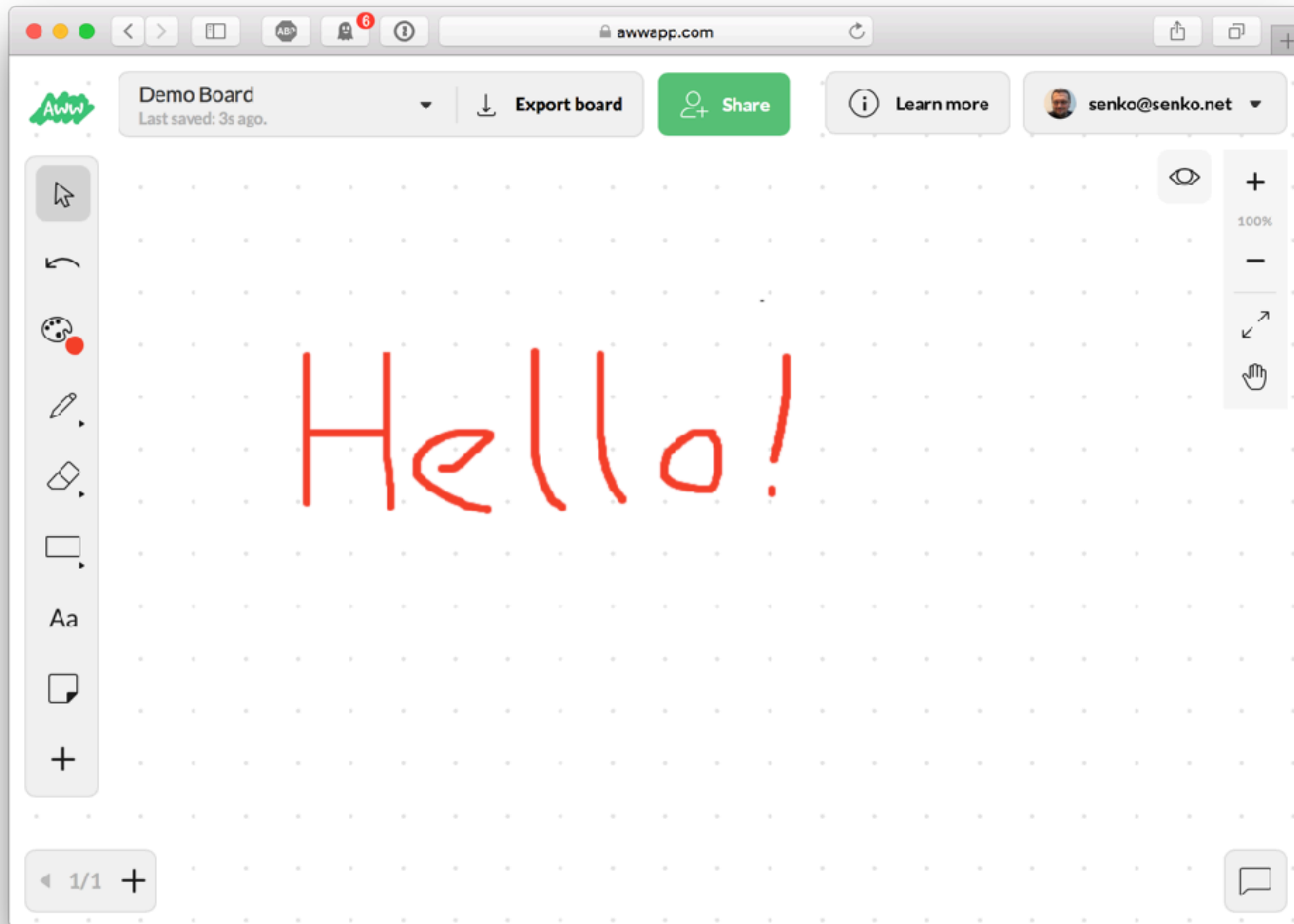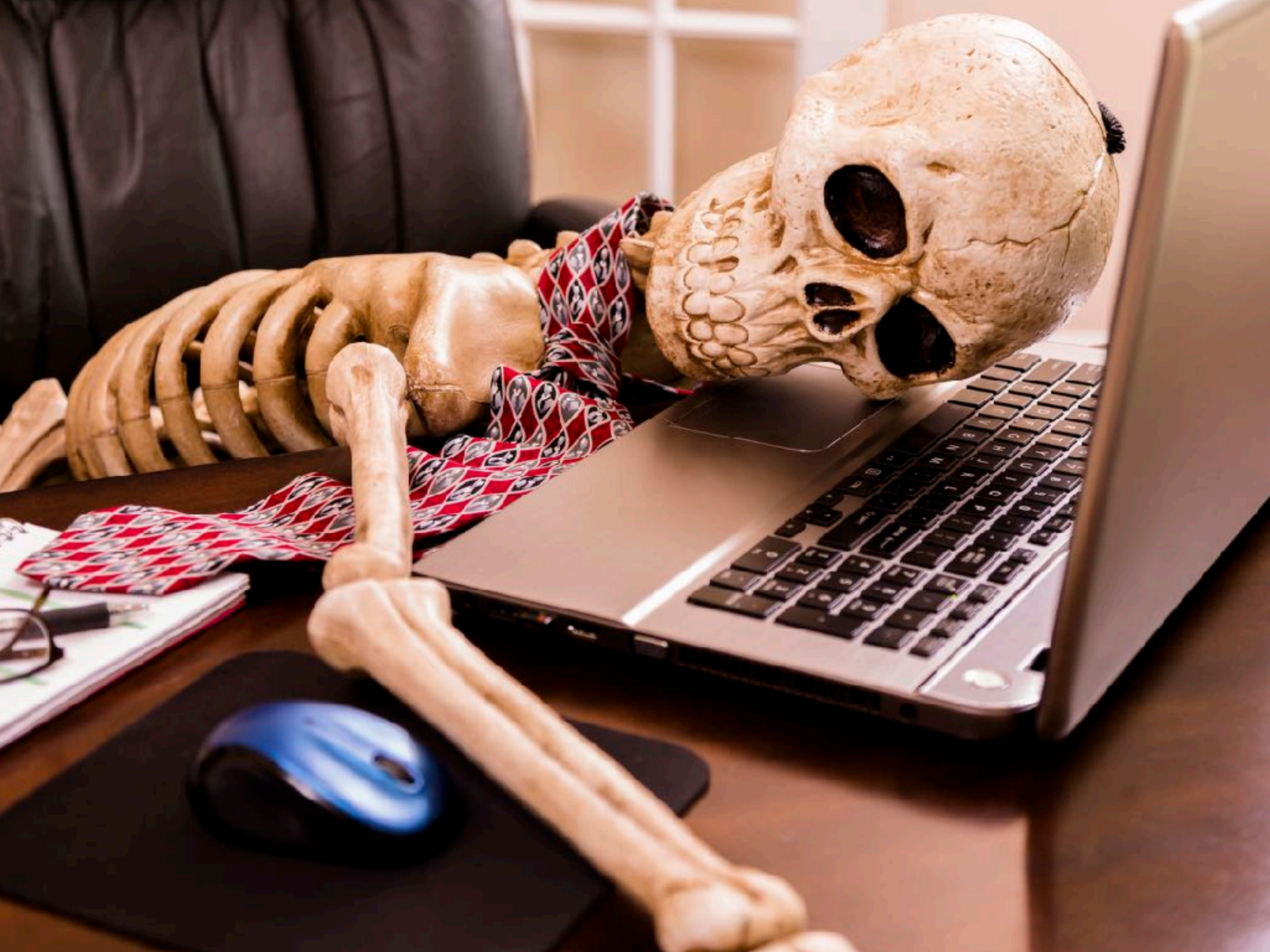
Total request/response time: 60s

```javascript
var emitTime = new Date();
socket.emit(msg, data, function(data) {
    var replyTime = new Date(),
        rtt = (replyTime - emitTime);
    if ((replyTime - emitTime) > 2000) {
        debug('Slow socket reply: ' + msg + ' in ' + rtt + 'ms', data);
        Raven.captureMessage('Slow socket reply', {
            level: 'warning',
            extra: {
                rtt: rtt,
                boardId: (typeof window.aww !== "undefined") ?
                    window.aww.getBoardInfo().boardId : undefined
            }
        });
    }
});
```

index.html

178ms

logo.png

87ms

socket.io

| WS init | frame | frame | frame | | frame | ... |

nginx

127.0.0.1 - - [21/Oct/2017:15:22:06 +0000] "GET / HTTP/1.1" 200 853714 "-" "curl/7.52.1" 0.000 -

haproxy

Oct 21 15:22:06 aww-alpha haproxy[23673]: 192.168.255.45:50954 [21/Oct/2017:15:22:05.891]
        front_web~ back_web/local 281/0/0/0/472 200 854022 - - ---- 817/69/40/41/0 0/0 "GET / HTTP/1.1"

waiting for request: 281ms
waiting in internal queue: 0ms
connecting to upstream: 0ms
waiting for upstream: 0ms
total time (including sending response): 472ms

client

"The request for /api/board/NNN/ops timed out."

haproxy

```
Oct 24 02:43:54 aww-beta haproxy[32283]: 192.168.255.34:50854 [24/Oct/2017:02:43:54.141]
        front_web~ back_web/local 65/0/1/76/143 200 4364 - - -- 672/361/278/278/0 0/0
        "GET /api/board/NNN/ops HTTP/1.1"
```
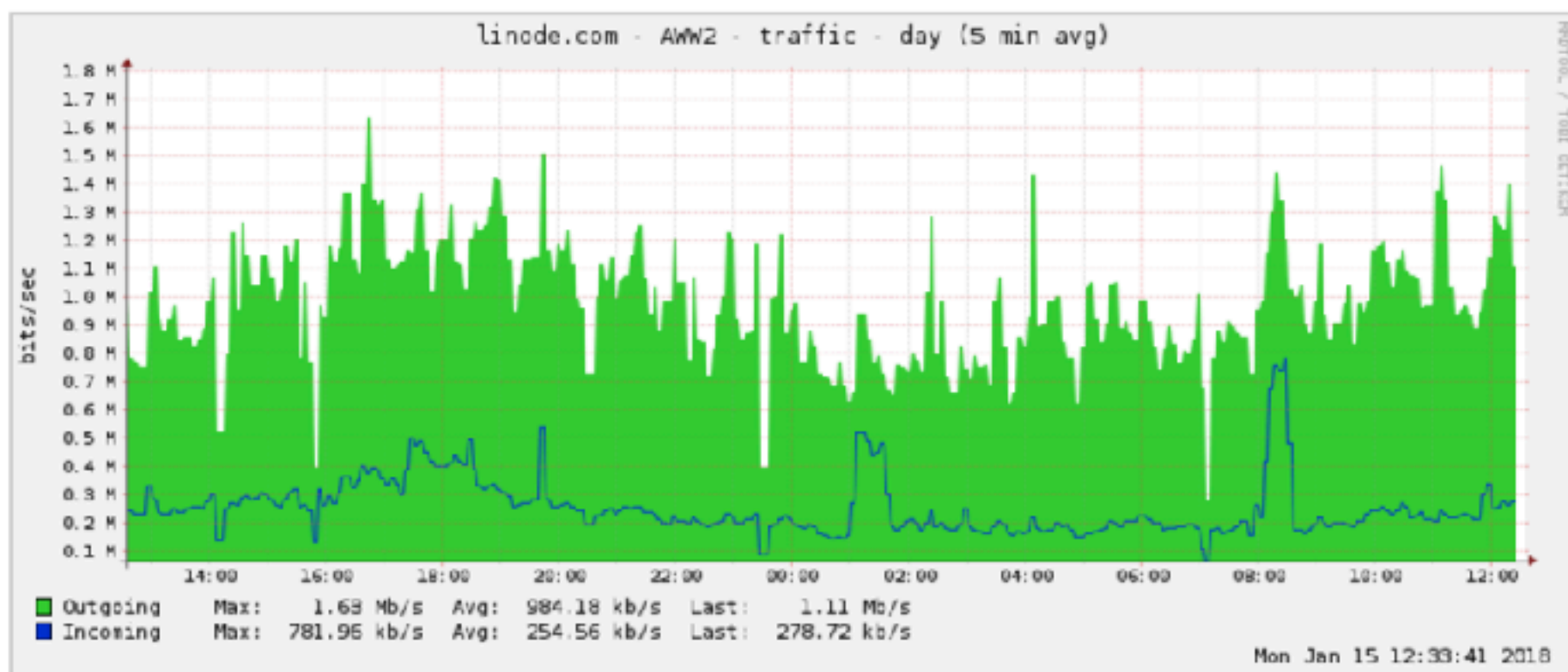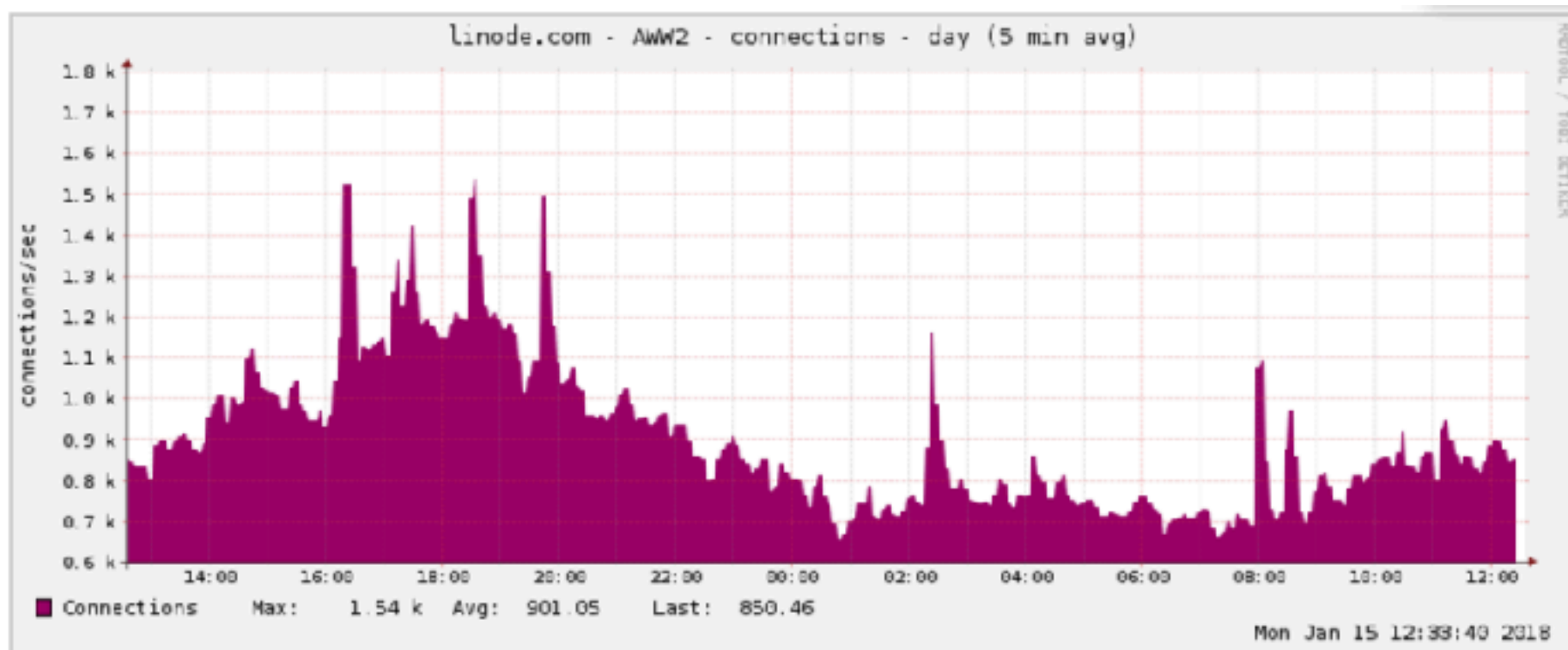
waiting for request: 65ms
waiting in internal queue: 0ms
connecting to upstream: 1ms
waiting for upstream: 76ms
total time (including sending response): 143ms

linode.com - AWW2 - connections - day (5 min avg)

Connections   Max: 1.54 k   Avg: 901.05   Last: 850.46

Mon Jan 15 12:33:40 2018

linode.com - AWW2 - traffic - day (5 min avg)

Outgoing   Max: 1.69 Mb/s   Avg: 984.18 kb/s   Last: 1.11 Mb/s
Incoming   Max: 781.96 kb/s   Avg: 254.56 kb/s   Last: 278.72 kb/s

Mon Jan 15 12:33:41 2018

connecting to upstream server directly

```
root@localhost:~# curl https://aww-alpha/ -o /dev/null
100  841k  100  841k    0     0   575k      0  0:00:01  0:00:01 --:--:--  575k

root@localhost:~# mtr -rwbzc 100 aww-alpha
Start: Tue Oct 24 13:53:51 2017
HOST: localhost                     Loss%   Snt   Last   Avg  Best  Wrst StDev
  …
  9. AS63949 aww-alpha (...)        1.0%    100  154.9 155.0 154.8 155.4   0.0
```

connecting via load balancer

```
root@localhost:~# curl https://awwapp.com/ -o /dev/null
100  841k  100  841k    0     0  25761      0  0:00:33  0:00:33 --:--:--  200k

root@localhost:~# mtr -rwbzc 100 awwapp.com # node balancer
Start: Tue Oct 24 13:53:13 2017
HOST: localhost                     Loss%   Snt   Last   Avg  Best  Wrst StDev
  8. AS63949 awwapp.com (96.126.99.209) 75.0%  100  157.4 155.1 154.9 157.4   0.5
```

The end!

… or is it?

```
Nov 27 22:45:44 aww-alpha haproxy[2387]: 192.168.255.34:58046 [27/Nov/2017:22:45:43.205]
front_web~ back_web/local 483/0/1/314/917 404 13082 - - ---- 2000/112/86/87/0 0/0 "GET / HTTP/1.1"
```

```
Nov 27 22:45:44 aww-alpha haproxy[2387]: 192.168.255.34:58046 [27/Nov/2017:22:45:43.205]
front_web~ back_web/local 483/0/1/314/917 404 13082 - - ---- 2000/112/86/87/0 0/0 "GET / HTTP/1.1"
```

```
Oct 21 15:22:06 aww-alpha haproxy[23673]: 192.168.255.45:50954 [21/Oct/2017:15:22:05.891]
front_web~ back_web/local 281/0/0/0/472 200 854022 - - ---- 817/69/40/41/0 0/0 "GET / HTTP/1.1"
```

The end!

no, really!