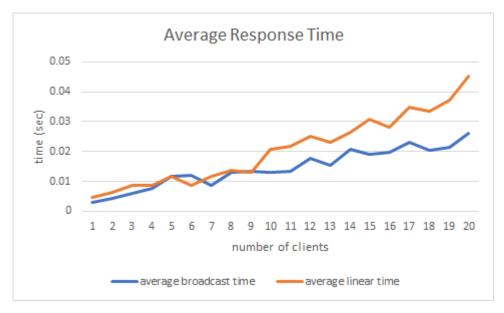
Performance

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October 14, 2018



As the linear topology scales out with more clients, it sees a more rapid increase in hit latency as opposed to broadcasting.

```
read.csv(file="C:\\Users\\abuch\\Desktop\\pa2Performance.csv", header=TRUE, sep=",")
```

```
##
      number.of.peers average.broadcast.time average.linear.time
## 1
                     1
                                   0.003104271
                                                        0.004662510
## 2
                     2
                                   0.004398423
                                                        0.006465371
## 3
                     3
                                   0.005844520
                                                        0.008708659
                     4
## 4
                                   0.007732692
                                                        0.008680649
## 5
                     5
                                   0.011786133
                                                        0.011786312
                     6
## 6
                                   0.012147238
                                                        0.008789999
                     7
## 7
                                   0.008731082
                                                        0.011802194
## 8
                     8
                                   0.012912617
                                                        0.013870866
                     9
## 9
                                   0.013502754
                                                        0.012972223
## 10
                    10
                                   0.012983419
                                                        0.020728492
## 11
                                   0.013450920
                                                        0.021828829
                    11
## 12
                    12
                                   0.017722694
                                                        0.025008348
## 13
                    13
                                   0.015534873
                                                        0.023128811
## 14
                    14
                                   0.020896794
                                                        0.026552574
## 15
                    15
                                   0.019208042
                                                        0.030905642
## 16
                                   0.019652865
                                                        0.028007344
                    16
## 17
                    17
                                   0.022969744
                                                        0.034784564
## 18
                    18
                                   0.020439629
                                                        0.033403004
## 19
                    19
                                                        0.037356337
                                   0.021314650
## 20
                    20
                                   0.026008915
                                                        0.045124553
```