## **MP3 Report**

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The following table are my findings from running on my laptop with the following specs

**OS:** *x*86\_64

**Kernel:** 3.13.11-31.current

**CPU:** *Intel i7-7500U (4) @ 3.500GHz* 

Memory: 7791MiB

There are three users. The number of request will remain constant at 10,000.

Size of Buffer	1	5	50
Number of Worker Threads			
1	11.579	11.538	11.542
2	5.762	5.729	5.789
3	3.822	3.821	3.851
4	2.866	2.845	2.868
5	2.292	2.298	2.286
6	1.95	1.941	1.912
7	1.657	1.652	1.663
8	1.452	1.47	1.463
9	1.286	1.285	1.293
10	1.176	1.168	1.153
20	0.628	0.652	0.638
30	0.46	0.459	0.467
40	0.381	0.356	0.351
50	0.348	0.337	0.319
100	0.284	0.27	0.235
150	0.248	0.252	0.223

The number of worker threads decreases the time by nearly a factor of 0.5 early on. Above 100 workers, the time change is very minimal. The size of the buffer did not have much effect until the size of the workers started to get large.

## Time vs Number of Workers (Size of Buffer = 1)

