

Assignment Report

CSCE-313-512

PA6 The Server Moved Out

Demo – Done in person to TA Wilson

Data Transfer - Varying W

`./client -n 15000 -p 15 -h <host> -r <port> -w ___` as shown below:

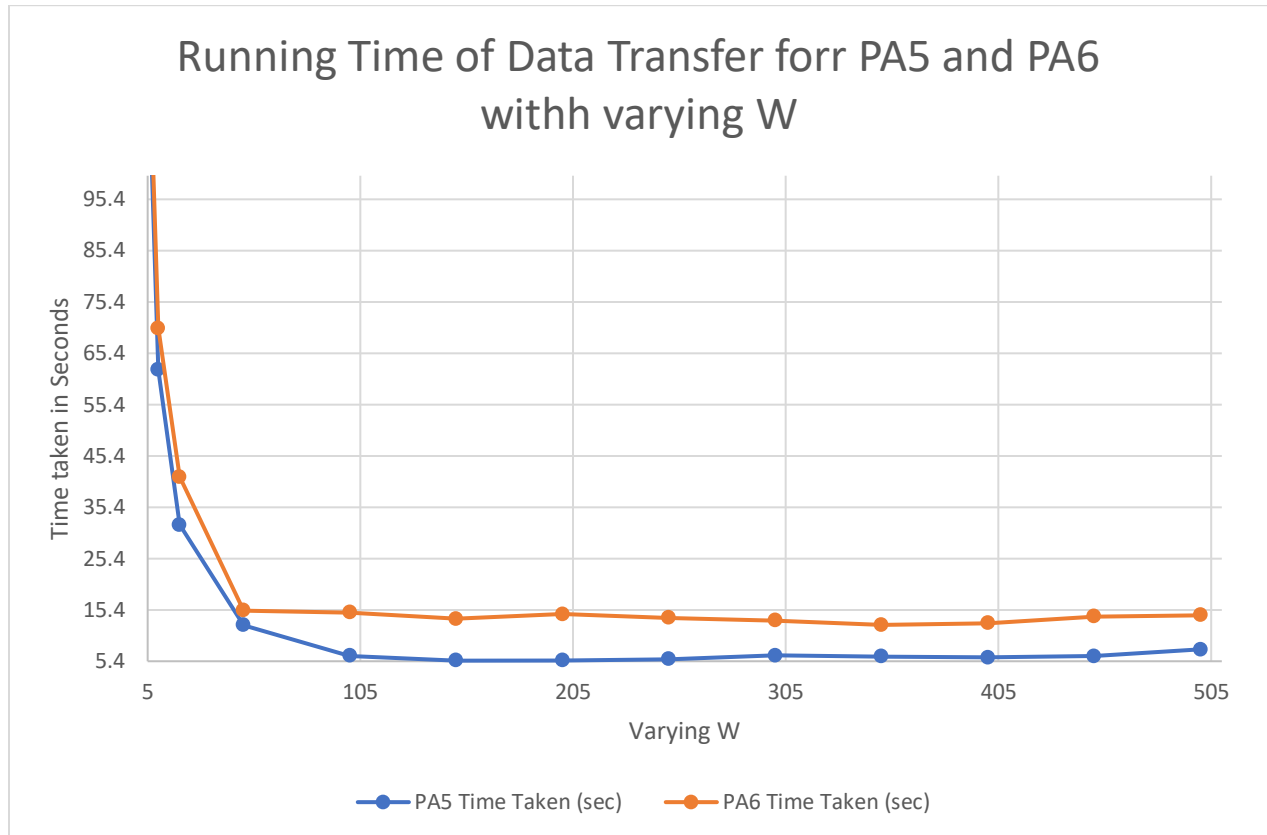
Results:

| W Size | PA5 Time Taken (sec) | PA6 Time Taken (sec) |
|--------|----------------------|----------------------|
| 5 | 126.65 | 134.84 |
| 10 | 62.16 | 70.28 |
| 20 | 31.97 | 41.30 |
| 50 | 12.44 | 15.28 |
| 100 | 6.46 | 14.92 |
| 150 | 5.56 | 13.65 |
| 200 | 5.54 | 14.60 |
| 250 | 5.78 | 13.84 |
| 300 | 6.54 | 13.34 |
| 350 | 6.32 | 12.48 |
| 400 | 6.10 | 12.81 |
| 450 | 6.36 | 14.10 |
| 500 | 7.70 | 14.41 |

General Observation for Different W (worker thread):

As the data shows in the table above, the time taken by PA6 for data transfer is significantly and consistently larger compared to the PA5. The point of **DIMINISHING** is around 400 and above and for PA5 it was also around 300.

Graph:



File Transfer - Varying W

`./client -f 15.csv -h 127.0.0.1 -r 9099 -w _____` as shown below

| Varying Worker Threads | PA5 Time Taken (sec) | PA6 Time Taken (sec) |
|------------------------|----------------------|----------------------|
| 50 | 0.38 | 0.26 |
| 150 | 0.41 | 0.29 |
| 250 | 0.82 | 0.30 |
| 350 | 0.94 | 0.23 |
| 450 | 1.2630 | 0.20 |
| 550 | 2.71 | 0.25 |
| 1000 | 1.112 | 0.47 |
| 2000 | 7.12 | Too Many Files Open |

General Observation: As shown from the table above and graph below, the more the number of worker threads for PA6, it seems to help at first and then 1000 threads seem to slow down the program. The runtime is significantly different from PA5 and PA6 seems to be a lot faster than PA5.

Graph:

