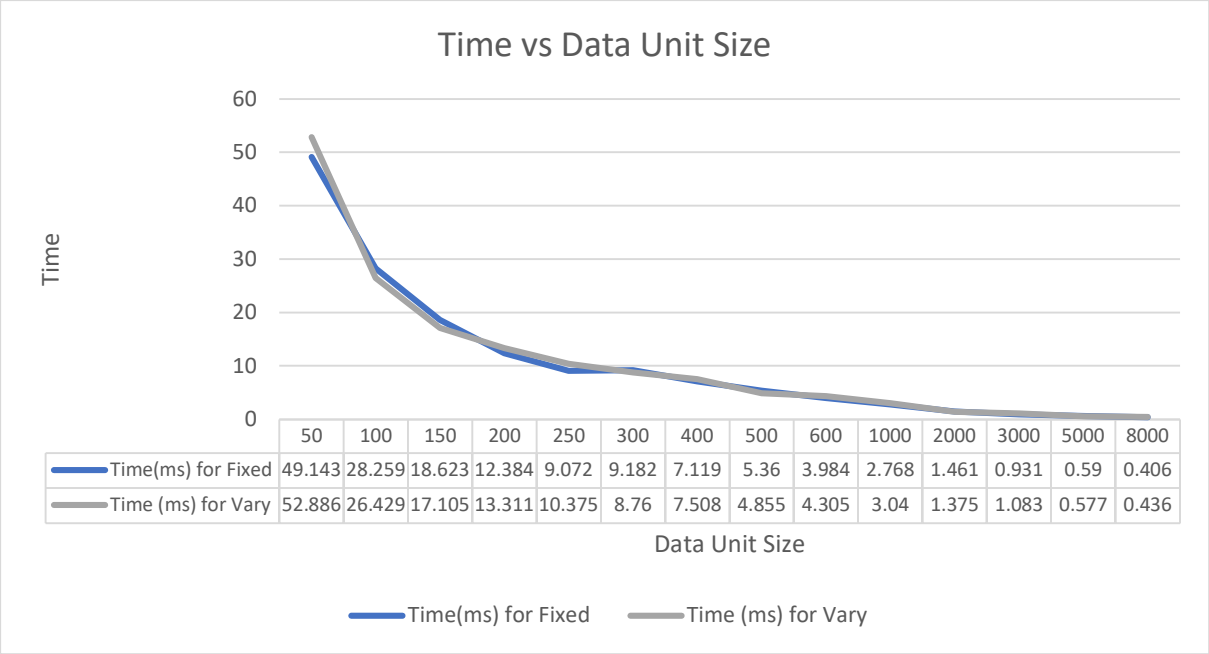
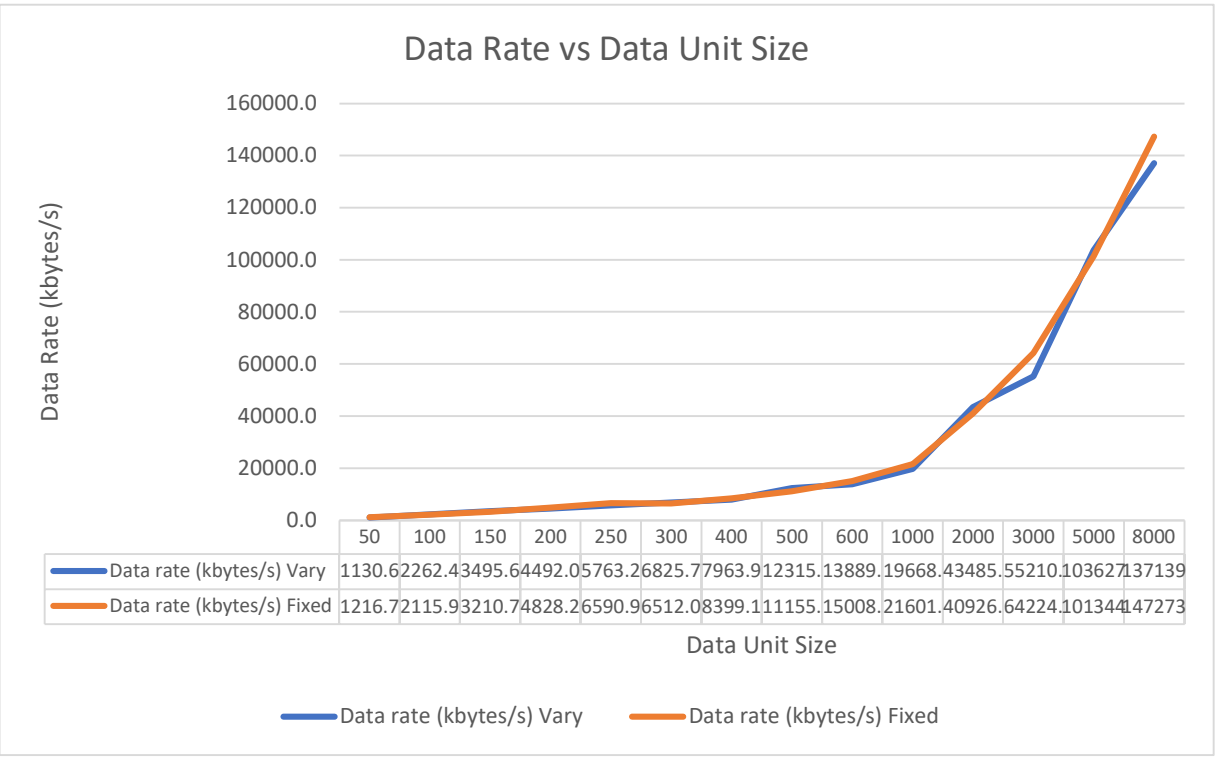
Fixed-batch size = 2			
Time(ms) fixed	Data sent(byte)	Data rate (kbytes/s) Fixed	Data unit size
49.143	59793	1216.7	50
28.259	59793	2115.9	100
18.623	59793	3210.7	150
12.384	59793	4828.2	200
9.072	59793	6590.9	250
9.182	59793	6512.0	300
7.119	59793	8399.1	400
5.36	59793	11155.4	500
3.984	59793	15008.3	600
2.768	59793	21601.5	1000
1.461	59793	40926.1	2000
0.931	59793	64224.5	3000
0.59	59793	101344.1	5000
0.406	59793	147273.4	8000
0.309	59793	193504.9	10000
0.07	59793	854185.7	60000
0.08	59793	747412.5	70000

Vary-batch size = 1,2,3			
Time(ms) vary	Data sent(byte)	Data rate (kbytes/s) Vary	Data unit size
52.886	59793	1130.6	50
26.429	59793	2262.4	100
17.105	59793	3495.6	150
13.311	59793	4492.0	200
10.375	59793	5763.2	250
8.76	59793	6825.7	300
7.508	59793	7963.9	400
4.855	59793	12315.8	500
4.305	59793	13889.2	600
3.04	59793	19668.8	1000
1.375	59793	43485.8	2000
1.083	59793	55210.5	3000
0.577	59793	103627.4	5000
0.436	59793	137139.9	8000



	50	100	150	200	250	300	400	500	600	1000	2000	3000	5000	8000
Time(ms) for Fixed	49.143	28.259	18.623	12.384	9.072	9.182	7.119	5.36	3.984	2.768	1.461	0.931	0.59	0.406
Time (ms) for Vary	52.886	26.429	17.105	13.311	10.375	8.76	7.508	4.855	4.305	3.04	1.375	1.083	0.577	0.436



	50	100	150	200	250	300	400	500	600	1000	2000	3000	5000	8000
Data rate (kbytes/s) Vary	1130.6	2262.4	3495.6	4492.0	5763.2	6825.7	7963.9	12315.	13889.	19668.	43485.	55210.	103627	137139
Data rate (kbytes/s) Fixed	1216.7	2115.9	3210.7	4828.2	6590.9	6512.0	8399.1	11155.	15008.	21601.	40926.	64224.	101344	147273

Report:
As the data unit size increassed, so did the data rate of the transmission. This is because the more data would be transmitted in with less time spent on defragmentation at the end point. This speeds up the process of the overall transmission.

What was interesting is that as the DU increased, the growth in data rate and the decrease in time was not linear but exponential for both protocol. This indicated that the performance improvement for both is favourable for increased DU. Another observation was that the difference in the performance between the 2 protocol was not substantial. While the protocol that used the varying ACK has slightly poorer data rate, the difference is minor. This could be due to the small RTT as there is minimal hops for the transmission of the message of the client to the server and hence the delay of the ACK did not substantially affect the tranmission. It is also important to note that for every 6 packets, there will be 3 ACK for both protocol, what differs the the size of the window that is allocated for the tranmission, where the fixed-batch always has 2, while the vary-batch will change between [1,2,3].

The assumptions made are
1. The hops taken by the packet is the same for a fair comparison of different DUs
2. The machine used for sending and the machine used for receiving are not changed in this experiment
3. No additional congestion nor reduction in congestion occured in the network