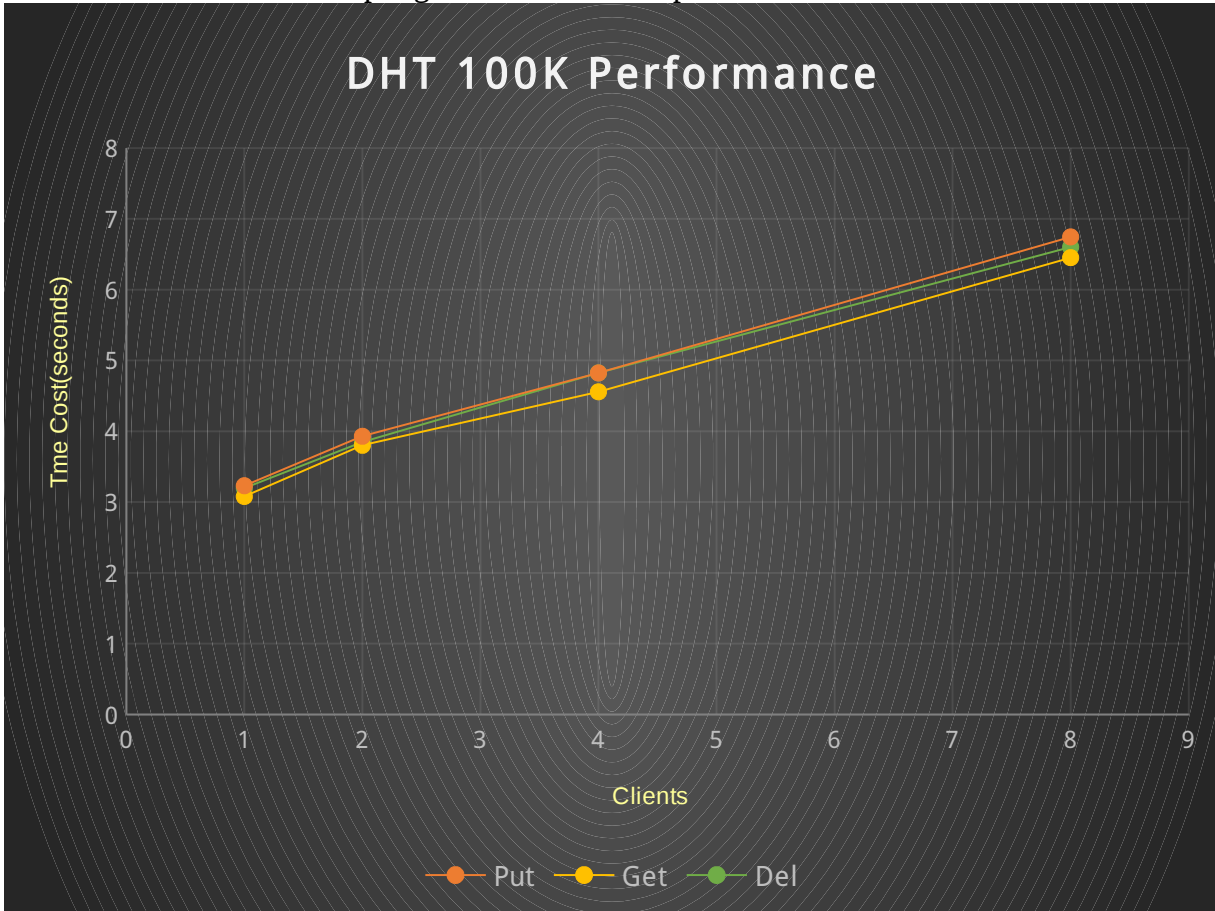# Performance Evaluation

Brief conclusion on 100K times put/get/del continuous operations in 8 hash table servers as follows:

Single server executes 100K times put/get/del using 6 threads:

```
fei@yu:~/Dropbox/CS550S2/jwHash-master$ ./test 8888
Store 100000 strings by int in 6 threads for single server: 0.019735 sec, read: 0.009692 sec, delete: 0.011405 sec
```

PUT 100k	GET 100k	DEL 100k
0.019735sec	0.009692sec	0.011405sec

Details:
A) Single client sends out 100K times put/get/del to 8 distributed hash table servers and the time cost are as follows, because of network and buffer I/O blocking cost.

PUT 100k	GET 100k	DEL 100k

3.230877sec	3.078678sec	3.197167sec

B) Two clients send out 100K times put/get/del consequently and concurrently to 8 distributed hash table servers and the average time cost are as follows:

PUT 100k	GET 100k	DEL 100k
(3.961349 + 3.897798)/2= 3.929574sec	(3.795719 + 3.808044)/2= 3.801882sec	(3.711669 + 3.985814)/2= 3.848742sec

C) Four clients send out 100K times put/get/del consequently and concurrently to 8 distributed hash table servers and the average time cost are as follows:

PUT 100k	GET 100k	DEL 100k
(4.761454 + 4.605169 + 4.692693 + 5.236204)/4 = 4.823880sec	(4.602897 + 4.471731 + 4.484735 + 4.669657)/4 = 4.557255sec	(4.882802 + 4.669870 + 4.694572 + 5.048190)/4 = 4.823859sec

D) Eight clients send out 100K times put/get/del consequently and concurrently to 8 distributed hash table servers and the average time cost are as follows:

PUT 100k	GET 100k	DEL 100k
(5.899115 + 6.070146 + 6.651369 + 7.013801+ 7.172174 + 7.119761+ 6.949714 + 7.081860)/8 = 6.744743sec	(5.893641 + 6.024790 + 6.472407 + 6.765904 + 6.833322 + 6.748583 + 6.536046 + 6.345236)/8 = 6.452491sec	(6.179128 + 6.175421 + 6.616839 + 6.900797 + 6.996230 + 6.888348 + 6.618437 + 6.436975)/8 = 6.601522sec