

CS550 Assignment 2

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Performance evaluation

1. Test:

The test is based on running 8 servers at the same time.

- a). Normal input key and value(passed)
- b). Normal get value by using key(passed)
- c). Normal delete value by using key(passed)
- d). Input invalid operation which is not input, get or del(passed)
- e). Input an invalid key or value(passed)
- f). get a value by inputting an nonexistent key(passed)
- g). del a value by inputting an nonexistent key(passed)
- h). back up a key and value in the input() (passed)
- i). get a value from back up server when expected server lost connection(passed)

2. Performance

Using "tester.java" to test and running eight clients before testing

Test input :100000 times

Test get :100000 times

Test del :100000 times

The 1 client test

The average time of 100000 times input 0.00254246s

The average time of 100000 times get 0.00252256s

The average time of 100000 times del 0.00252015s

The 2 client test

The average time of 100000 times input 0.00249436s

The average time of 100000 times get 0.00279109s

The average time of 100000 times del 0.00243075s

The 3 client test

The average time of 100000 times input 0.00247833s

The average time of 100000 times get 0.00279604s

The average time of 100000 times del 0.00275032s

The 4 client test

The average time of 100000 times input 0.00613918s

The average time of 100000 times get 0.00277807s

The average time of 100000 times del 0.002761s

The 5 client test

The average time of 100000 times input 0.00261658s
The average time of 100000 times get 0.00376078s
The average time of 100000 times del 0.00313711s

The 6 client test

The average time of 100000 times input 0.00243975s
The average time of 100000 times get 0.0029944s
The average time of 100000 times del 0.00250892s

The 7 client test

The average time of 100000 times input 0.00249481s
The average time of 100000 times get 0.0027541s
The average time of 100000 times del 0.0056811s

The 8 client test

The average time of 100000 times input 0.00312842s
The average time of 100000 times get 0.00318698s
The average time of 100000 times del 0.00319642s