

# Performance Evaluation

I tested the server side functions `search_file()` and `register_file()` performance based on loop requests from client.

From the following snapshots, we can get every search request within buffer size = 8192 costs  $163180/383 = 0.426$  ms, meanwhile every file registration costs  $155138/1994 = 77.8$  microseconds.

```
Tue Sep 22 00:22:16 2015
:matched files information send success!
search file 379 times in 161503 microseconds
Tue Sep 22 00:22:16 2015
:message received...
Tue Sep 22 00:22:16 2015
:matched files information send success!
search file 380 times in 161920 microseconds
Tue Sep 22 00:22:16 2015
:message received...
Tue Sep 22 00:22:16 2015
:matched files information send success!
search file 381 times in 162339 microseconds
Tue Sep 22 00:22:16 2015
:message received...
Tue Sep 22 00:22:16 2015
:matched files information send success!
search file 382 times in 162761 microseconds
Tue Sep 22 00:22:16 2015
:message received...
Tue Sep 22 00:22:16 2015
:matched files information send success!
search file 383 times in 163180 microseconds
```

```
ue Sep 22 00:32:11 2015
Id 6913 File /home/fei/Dropbox/CS550/CS550S1/peer2/radom1996 register success!
register file 1990 times in 152483 microseconds
ue Sep 22 00:32:11 2015
message received...
ue Sep 22 00:32:11 2015
Id 6914 File /home/fei/Dropbox/CS550/CS550S1/peer2/radom1997 register success!
register file 1991 times in 152532 microseconds
ue Sep 22 00:32:11 2015
message received...
ue Sep 22 00:32:11 2015
Id 6915 File /home/fei/Dropbox/CS550/CS550S1/peer2/radom1998 register success!
register file 1992 times in 152618 microseconds
ue Sep 22 00:32:11 2015
message received...
ue Sep 22 00:32:11 2015
Id 6916 File /home/fei/Dropbox/CS550/CS550S1/peer2/radom1999 register success!
register file 1993 times in 152710 microseconds
ue Sep 22 00:32:11 2015
message received...
ue Sep 22 00:32:11 2015
Id 6917 File /home/fei/Dropbox/CS550/CS550S1/peer2/radom2000 register success!
register file 1994 times in 155138 microseconds
```