

Writeup

I tested my program using different situations. First, I tried to upload two files and get the outputs, and I also curl -T http://localhost:8843 --request-target ABCDEFabcdef012345XYZxyz-mm for put method to make sure the files are uploaded. Also, I use curl http://localhost:8843/[name] for get method. Also, I check the status code for each situation, and all the test cases passed.

Q&A

Is there any difference in performance? What is likely to be the bottleneck in your system? How much concurrency is available in various parts, such as dispatch, worker, logging? Can you increase concurrency in any of these areas and, if so, how?

Answer: There are some differences between the performance because when you send four files at the same time together and send four files separately, the throughput is different. Network bottlenecks occur when there's an overloaded server, an overburdened network communication device, and when the network itself loses integrity. I think worker is related to the concurrency because worker is a pool of threads, and concurrency refers to trying to do multiple things at once. I think I can increase concurrency by reducing the number of threads, and increase the amount of processor resources, I/O, and real memory.