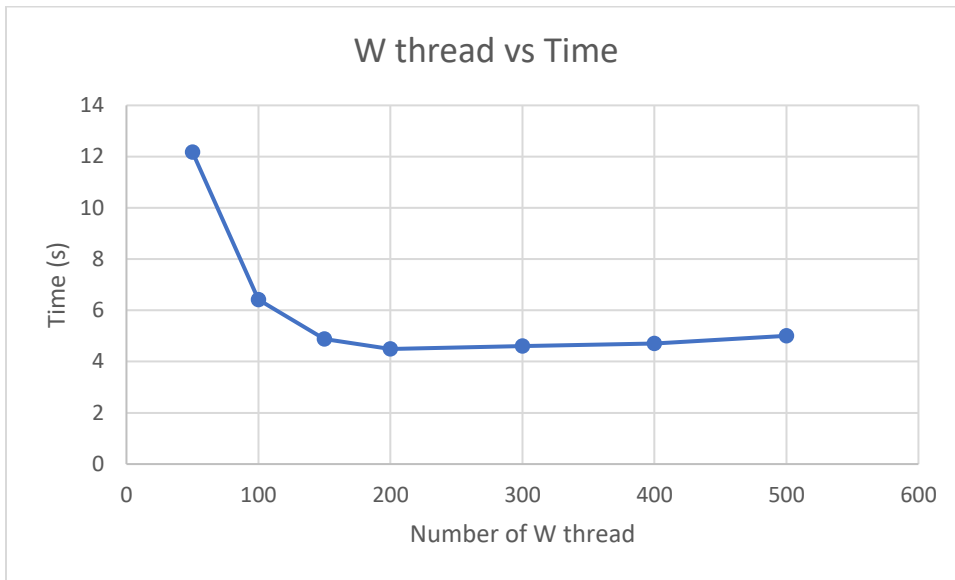
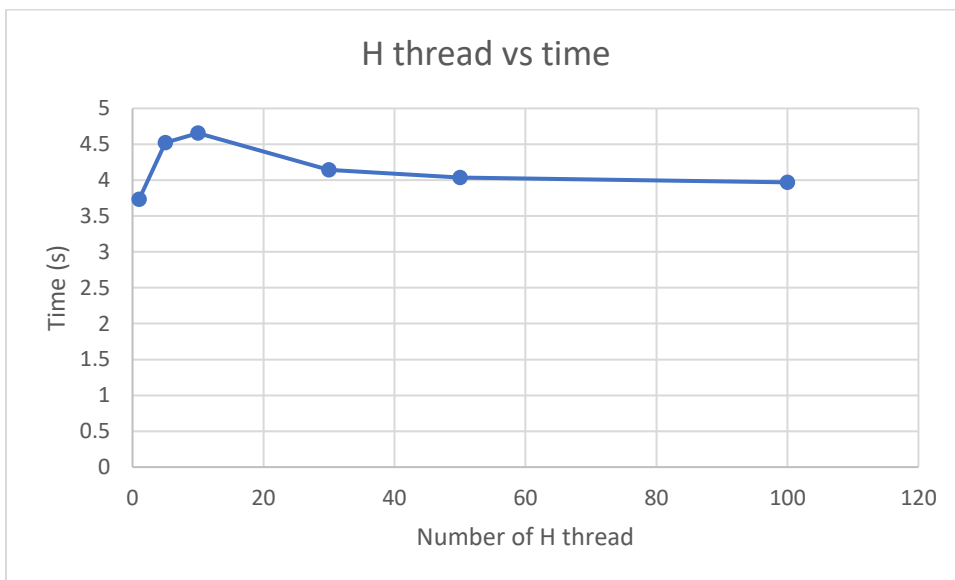


Different worker threads in data request



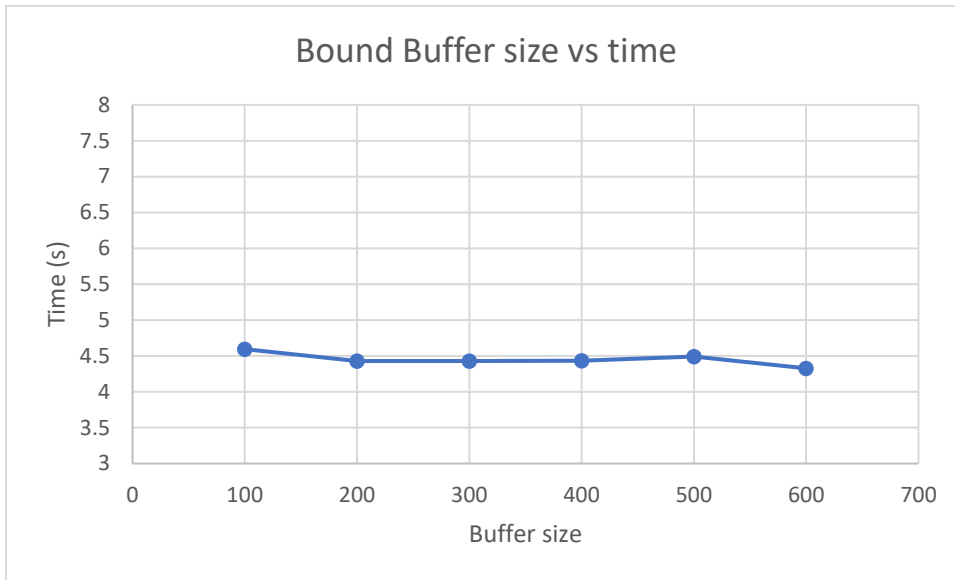
The greater number of worker thread, less the runtime until the number of worker thread reach 200. Thus, the Diminishing point is around 200 worker threads. When the number of worker thread greater than 200, having more worker thread tend to slow down the program performance.

Different Histogram threads in data request



Having more histogram thread give only a few performances increase to the program. Especially after the number of histogram thread is greater than 50, the runtime seems to be stable.

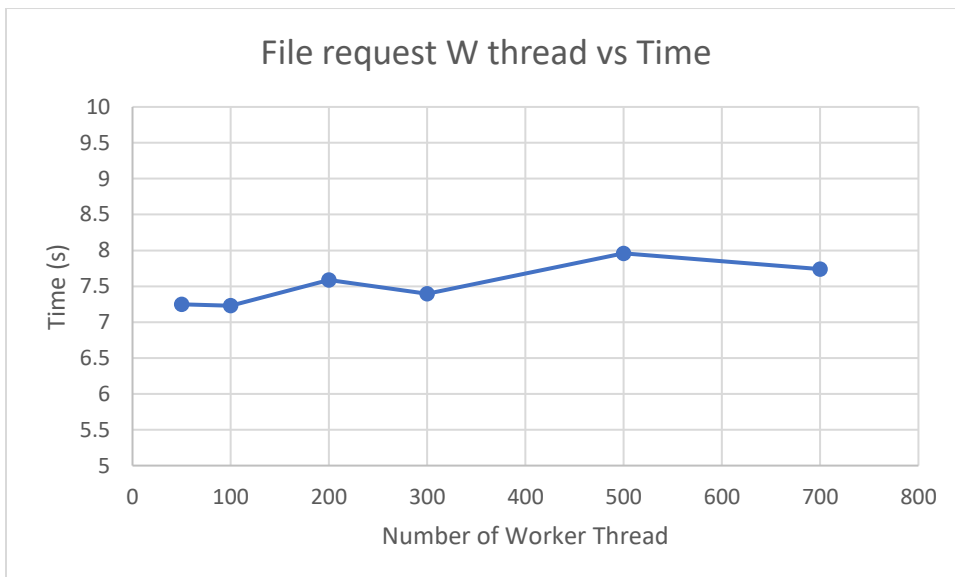
Different Bound buffer size in data request



The difference of the buffer size doesn't really have affect the runtime of the program.

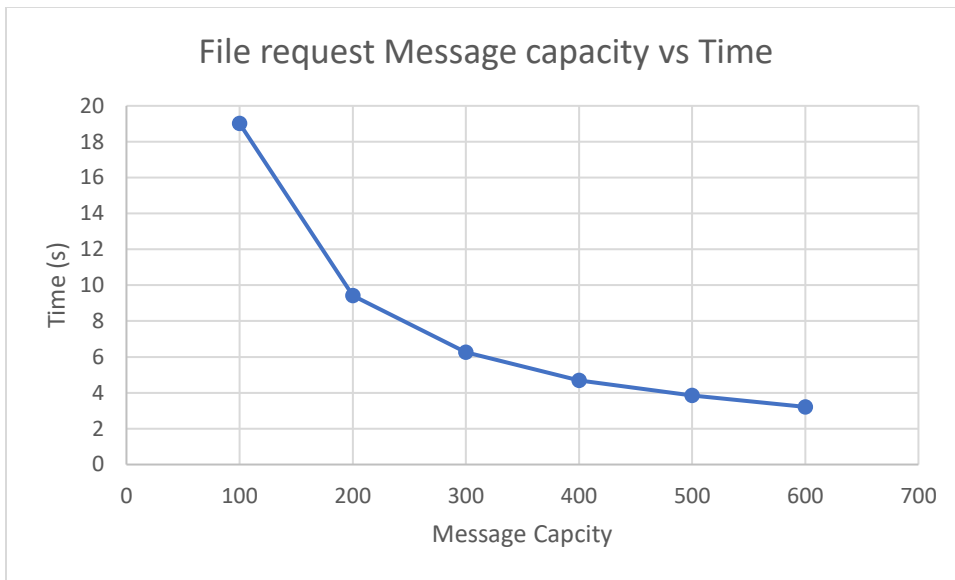
The runtime seems to be stable even with the change of buffer size.

Different worker threads in file request



The number of worker thread in file request doesn't really have affect the runtime of the program. The runtime slightly increases when the number of worker thread become larger. Since we working on the same disk, the number higher w does not give any advantage for file transfers.

Different message capacity in file request



When the message capacity become larger, the runtime of the program significantly decreases. The bigger the message capacity, the more bytes of information can be sent at the given time in the file request. Thus, it takes fewer time to finished the file transfer.