

## Abstract

Big data began to be a very important role especially in the current era and can be searched anywhere such as in the field of computers and technology, business finance, astronomy and others. For small data use simple data management, only in dealing with big data required a better data management such as Hadoop which Hadoop is devoted to handle big data and can handle it well [8]. In doing the task Hadoop requires scheduling which is the scheduling required to get a good performance in processing big data [8]. Static scheduling is a Hadoop strategy design which allocates jobs to the processor before program execution begins which the advantage is to minimize the processing time process, eg scheduler such as FIFO Scheduler, Fair Scheduler and Capacity Scheduler [8]. FIFO Scheduler is the simplest scheduling system because it will only run the first job entry, Fair Scheduler is a scheduling system that puts forward justice in resource sharing, while the Capacity Scheduler is merging between FIFO Scheduler as its queue and Fair scheduler as its resourction sharing system.

The test results show that the Fair scheduler has better performance than the Capacity Scheduler both in terms of completion time on single job with 4.32% difference, CPU up to 15.6%, and memory up to 5.15% while in multiwork work the drastic difference is shown by the capacity to fair ie the completion time increases up to 24.25%, CPU up to 7.8% and memory usage up to 9.5%

**Keywords** : *Big data, Hadoop, Fair Scheduler, Capacity Scheduler, FIFO Scheduler, Scheduling*