



Centralized Control flow:

- i. Master/RE-Manager is used to set the job descriptions and launch the BigJob.py(BigJob Manager) which posts the job description to the advert service.
- ii. As and when a BigJob becomes active, BigJob.py launches the BigJob agents.
- iii. The bigjob agents poll for jobs in the advert server and allocate the resources to the subjobs
- iv. The subjob in this case is the replica. The replicas are now launched
- v. The bigjob agents launch their respective replicas and monitor them
- vi. the bigjob agent collects the results and posts them to the advert server.
- vii. the Master queries the advert server for updated states/results and if it find two matching replicas, it conducts an exchange
- viii. master resubmits the replicas/job descriptions to the advert server.
- ix. the bigjob agent polls for the jobs and relaunches the replicas

time for each step:

- 1: 2 seconds
- 2: 1 second
- 3: partial queue time
(waits till the BJs get active)
- 4: 1.5 seconds per sub-job
- 5: included in 4
- 6: run time
- 7: 0.5 seconds
- 8: included in 7
- 9: 0.3 seconds
- 10: 1 sec
- 11: 1 second per exchange