Performance Analysis and Comparison of MPI, OpenMP and Hybrid NPB – MZ

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Weekly Report (June 4 – July 11)

Main Tasks:

- Developing the Scalability Analysis:
    1. Finished collecting all performance data from DataStar p655 and Hydra.
    2. Finished a complete release of the Scalability Analysis document
    3. Found out that MPI is faster than OpenMP and that Hybrid is faster than MPI.
- Developing the Process Partition Scheme:
    4. Resubmmitted jobs in DataStar p655 and Hydra.
    5. Got some output results from DataStar but by problems of waiting in queries I have not received all data.
- Went to a group meeting with Dr. Taylor, Dr. Wu, Sameh, Coker and Timothy where discussed our progress report .

Main Goals for future:

- Finish the collecting data for processor partition.
- Write a document about processor partition.
- Start uploading data to prophesy database.
- Start to investigate why MPI is faster than OpenMP.

Need Help:

- I need some kind of guidance on how I am going to upload data in the prophesy database and how I am going to do an experiment to find out why MPI is faster than OpenMP.