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

Héctor J. Machín Machín Texas A&M CS Department REU Summer 2008 hjmachin@cs.tamu.edu

Weekly Report (June 14 – June 20)

Main Tasks:

- Developing the Scalability Analysis:
 - 1. Submitted jobs with different problem classes and different number of processors in MPI to DataStar p655 and Hydra.
 - 2. Repeated the process three times per case for achieving a more accuracy level.
 - 3. Organized the output files of the submitted jobs.
 - 4. Looked at the output files to see differences.
- Initial web page submitted (link: http://students.cs.tamu.edu/hjmachin/).
- Went to a group meeting with Dr. Taylor, Dr. Wu, Sameh, Coker and Timothy where we planned to discuss Yelick's paper next week.

Main Goals for future:

- Continue with the Scalability Analysis on up to 1024 processors (with increasing number of processors and problem sizes) for OpenMP and Hybrid NPB MZ.
- Write a document about scalability analysis.

Need Help:

• I need some kind of guidance on how I am going to develop de scalability analysis document with the great amount of data that I am getting from the output files.