

CSC 548: Project

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Implementing computation timing deltas on the MPI Trace Compression Framework replay engine

Progress Report 1 (November 11th, 2006)

Progress made so far:

1. Getting familiar with existing work
 - a. Successfully copied, compiled and ran the record engine and got traces.
 - b. Compiled the replay engine code --- this required a few minor changes here and there.
 - c. Changed a few debug switches to obtain different traces.
2. Ran the replay engine with the traces generated by record engine
 - a. Record engine does not recognize the traces properly --- changes required are in progress
3. Discussed timing trace format with Aditya. We've discussed the timing trace format and decided on the following
 - a. Timing trace will be stored separately so that we can replay with or without the timing
 - b. The trace will have a mpi call index and min/max/avg time information
 - c. Since timing info will have a pattern similar to the calls, we can use a similar compression method

Plan of Work

Deadline

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|------------|---|
| 11/13/2006 | Get the replay engine to work. If not, it should be in a state where the problems are identified.
Concretely define the data structure for the timing trace. |
| 11/20/2006 | Replay engine should be running properly. The timing trace implementation should be near completion |
| 11/27/2006 | Timing trace implementation ready. Source integrated with the record engine changes.
Final project ready |