

Evaluating Energy and Power Impacts of Multilevel Checkpointing MPI Applications on Three Parallel Architectures

Notes

- Resilience Method

- I. Checkpoint Based - Saving State
- II. Redundancy Based - replicating computation
- III. Algorithm Based - modify applications to operate on encoded
- IV. Proactive Methods - preventative measures

- FTI ^{utilizes} local storage + replication

- multilevel checkpointing - less frequent, more resilient checkpoints → better efficiency, less load on PFS

- FTI impacts MPI comm. performance slightly

- different bit positions - Small difference in runtime, bigger difference in power consumption