

Hierarchical data replication strategy to improve performance in cloud computing

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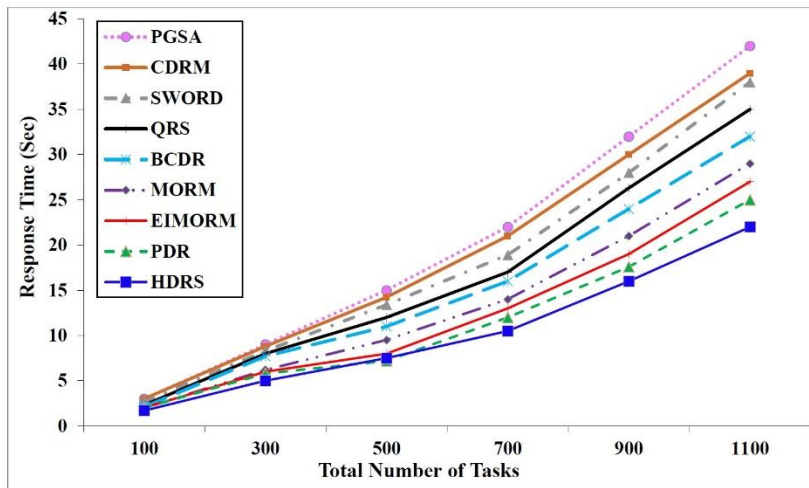
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Problems & Ideas

- **Problems of data replication in cloud computing environment:**
 - What is the appropriate structure for replica management?
 - Which file should be replicated?
 - Where the new replica should be placed?
 - Which replica should be replaced?
- **Ideas: Dynamic data replication algorithm**
 - Design the multi-tier structure for data replication in cloud;
 - Determine the popular files based on the exponential decay concept;
 - Propose replica placement algorithm based on the network level locality;
 - Present replica replacement method according to the number of access for the file in future time and file size.

Main Contributions

- Reduce response time



- Improve load variance

