

Framework for evaluating update propagation techniques in large scale data grid

ABSTRACT

This paper introduces a framework for evaluating update propagation techniques in large scale Data Grid. The framework qualitatively compares the update propagation techniques using an analytical model based network queuing model. To achieve accuracy, the framework takes into account, the computing element, storage element capacity in addition to the arrival rate, and the computational complexity moreover it consider the heterogeneity of the grid environment and the heterogeneity of the jobs. The framework can predict the utilization, response time, update propagation response time of the update propagation techniques.

Keyword: Update propagation; Data grid; Replica consistency; Queuing network model