

Research on Prediction Model of Dynamic Load-Balancing with Mobile Agent in a Parallel Distributed System*

Yang Yongjian Cao Xiaodong Chen Yajun
College of Computer Science and Technology, Jilin University,
Changchun, CHINA 130021
Email: yyj@jlu.edu.cn Tel: 13926998181

ABSTRACT

In parallel-distributed system, the task distributed to every processing element is imbalance, and so the load of every PE is imbalance, so we introduce load balance mechanism. In this paper, by combined mobile agent and prediction mathematical model, we propose a simple and effective prediction algorithm of load balancing using in a parallel-distributed system, so the resource in system is fully utilized and processing rate of task is improved.

Keywords: Parallel Distributed System, Dynamic Load-balancing, Performance Prediction, Rate of Load balance Change

* This research is sponsored by STPP (Science and Technology Planning Projects) [pc200320007] of Zhuhai city, in China.