Abstract

Tabu search algorithm like simulated annealing or evolutionary algorithm or genetic algorithm and guided local search algorithm is an effective solution of optimization problem. This is the most comprehensive combinatorial optimization technique available for treating difficult problems. It is a neighborhood-based search method which is very useful in distributed systems for monitoring applications. Distributed operation of Applications involve: Multiple applications deployed over different sets of hosts e.g. Datacenters. Application State monitored the performance of both systems and applications running on large-scale distributed systems. It is constantly collecting detailed performance attribute values as a large number of nodes & a large number of attributes. Tricky task of Resource aware application state monitoring is the monitoring overlay construction. In this method first, it jointly considers inter-task cost sharing opportunity and node-level resource constraints. Further, it clearly models the per-message processing overhead which can be extensive but is often ignored by earlier works. Second, REMO produces a forest of optimized monitoring trees through iterations of two phases. One stage explores cost-sharing opportunities between tasks, and the other refines the tree with resource-sensitive construction schemes. REMO also included an adaptive algorithm that balances the profit and costs of cover adaptation. This is helpful for large systems with continuously changing monitoring tasks.
Resource Aware Monitoring in Distributed System using Tabu Search Algorithm

References

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Index Terms

Computer Science

Algorithms

Keywords

Resource-Aware  State Monitoring  Datacenter  Adaption.