The Parallelization of Algorithm Based on Partition Principle for Association Rules Discovery

Authors : Khadidja Belbachir, Hafida Belbachir

Abstract : subsequently the expansion of the physical supports storage and the needs ceaseless to accumulate several data, the sequential algorithms of associations' rules research proved to be ineffective. Thus the introduction of the new parallel versions is imperative. We propose in this paper, a parallel version of a sequential algorithm "Partition". This last is fundamentally different from the other sequential algorithms, because it scans the data base only twice to generate the significant association rules. By consequence, the parallel approach does not require much communication between the sites. The proposed approach was implemented for an experimental study. The obtained results, shows a great reduction in execution time compared to the sequential version and Count Distributed algorithm.

Keywords : association rules, distributed data mining, partition, parallel algorithms

Conference Title : ICIT 2016 : International Conference on Information Technology

Conference Location : Zurich, Switzerland

Conference Dates : January 12-13, 2016

1