Privacy Preserving Association Rule Mining

in Distributed Environments

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Abstract: This paper focuses on the association rule mining in large-scale distributed environments. It proposes a new privacy preserving distributed data mining system based on the Web services, and also provides a corresponding privacy-preserving association rule mining algorithm. This new system can scale above several dozens of participants, maintain the privacy of all the sources, and achieve a higher data mining efficiency. Thus, it can resolve the problems we have encountered before effectively.

Key Words: Privacy preserving data mining, Distributed system, Association rule, Web Services