

Review report on the doctoral thesis entitled: "Trust Management System in P2P Networks" by Mr. Miroslav Novotny

This thesis studies security issues in Peer-to-Peer (P2P) distributed system. It covers a wide area concerned with this important topic, from authentication in the network layer to the reputation management in the application layer, and provides an extensive survey in the trust management for P2P systems. P2P is a distributed system consisting of a number of autonomous computers called peers, and in contrast to traditional client/server systems, there is no centralized authority which controls the behaviour of participant peers including the maintenance of global information acquired by them. The main contribution of this thesis is to propose a new trust management scheme for P2Ps called BubbleTrust, which is different from conventional schemes in the sense that it takes into both of provider reputation and evaluator reputation. The idea used there is highly original and sophisticated, which proves the ability of the author for creative scientific work. The proposed scheme is experimentally evaluated by simulations, and the result of simulations indicates that the proposed scheme improves the performance of previous schemes, which implies that the scheme proposed in this thesis is useful in actual P2P systems.



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