Abstract: An Identification based Authentication for Ad-Hoc Networks

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Abstract

Wireless communication has drawn increasing attentions in recent years due to its wide range of application. Often deployed in hostile environments, Ad-hoc is particularly vulnerable to malicious attacks. Thus security becomes a critical issue. This paper supported the same level security with AM-E [18]. Furthermore, to minimize the energy consumption, ID based hierarchical node authentication proposed. Compared with AM-E, node energy consumption is decreased about 34% of one round and total round number is increased about 300 rounds in this proposed paper. The total energy consumption is decreased about 29%.