Abstract

A wireless network with Ad hoc nature consists of mobile nodes which facilitates a fundamental architecture for communication without the support of traditional steady and fixed-positioned routers. However, the architecture must preserve communicating routes and the hosts have mobile nature and they have their restricted transmission range. There are various protocols for controlling the routing in the mobility environment. In MANET, the mobile nodes can perform the roles of both hosts and routers. Various MANET applications use for Military strategic communications and Disaster recovery mostly dependent on secure node communication. For Secure Communication, we use several Logical Hierarchy key protocol in Mobile Ad-hoc Network. But group key administration looks many problems because of unreliable media, less energy resources, mobile node failure. In this paper, we analyze new logical key with Optimal Probabilistic Technique. In this key, all nodes are shaped in a tree structure. OPLKH decreases the rekey cost and routing energy consumption in Mobile ad hoc network. In simulation, we calculated the number of rekeys cost, total energy consumption at server, key generation energy consumption.
References

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Index Terms

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Keywords

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