STI Protocol Design to Improve the Security over Multi-hop Networks

International Journal of Computer Applications
Foundation of Computer Science (FCS), NY, USA

Volume 130 - Number 11

Year of Publication: 2015

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10.5120/ijca2015907117

Abstract

Wireless communication is very extensively used in the current world and we are rapidly moving to a hands-free swift world. Even with the arrival of advancements at such a rate in the wireless world, The Wireless Mesh Networks generally uses the AODV routing protocols to handle the traffic flow in the Mesh network. But our proposed routing protocol can securely discover the route between the pair of nodes in the Wireless Mesh Network. In this, we are utilizing Polynomial bi variate key pre distribution scheme to provide authentication and security. In this scenario each node is assigned with random key. In this paper, we present a simple and efficient method for secure traversal of information across the network through multiple intermediate hops in the network. The proposed scheme is evaluated by using the Network Simulator (NS2).

References


Index Terms

Computer Science Networks

Keywords

Wireless Mesh Network, Routing metrics i.e. ETX, CAB, Routing protocol.