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Abstract

Mobile ad hoc networks are wireless multi hop networks characterized by lack of centralization, in dynamic topologies. So there is a chance to get various types of attacks including denial of service attacks, which leads to consume the system resources like bandwidth, power and memory. To avoid these vulnerable attacks researchers proposed many

schemes, but still those are possessing huge threats. Hence there is a necessity of new secure routing mechanism. So we introduced new secure mechanism by using Elliptic Curve Cryptography (ECC) with help of DYMO routing protocol. Here we implemented access control mechanism on ECC which ensure authentication and confidentiality. There by we can able to identify resource consumption attack and mitigates this by informing to other routing AGENT node about its identity and bootstrapping time. Here the main advantage with ECC is, it takes less memory provides great security and perfectly suitable for low power devices like mobile nodes. So the performance of the overall system is good compare with other secure routing mechanisms.

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Index Terms

Computer Science

Wireless Security

Key words

Access Control

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Bootstrapping Time

DYMO

MANET