Routing Misbehavior in Ad Hoc Network

Abstract

Rushing attack may cause more vulnerability in MANET as it can be used as a pre-requisite for launching some other types of Denial-of-Service attacks. Significant research efforts have been made towards increasing the survivability of MANET either by developing secure routing algorithms or by improving the robustness of MAC layer protocol in the presence of selfish or compromised nodes. Malicious nodes that disobey the standard, degrades the performance of well-behaved nodes significantly. However, little work has been done on quantifying the impact of these misbehaviors on the performance of ad hoc routing protocols. In this paper, we focus on the impact of rushing attack implemented by malicious nodes (MNs) on AODV routing protocol as an extension of our previous work. The Simulation study shows that the claim of our previous work stands true that AODV protocol fails completely in presence of rushing attack.

Reference

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Index Terms

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Key words

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Attacks in ad hoc routing
Rushing Attack

DoS attacks

MANET