Effect of Rushing Attack in AODV and Its Prevention Technique

Abstract

The MANET incorporates mobile nodes that forward information or packets from node to node without a wired connection. The topology changes rapidly and unproductively, there is no central control for routing of packets hence the communication is on mutual trust. There are many proposed routing protocol in which on-demand routing is most preferable among all as its overhead is very low. Thus attention has been paid on developing a secure reactive protocol against various attacks. In this proposed work effect of rushing attack is presented over AODV. This attack results in denial-of-services and is effectively damaging as it can also be performed by weak attacker. Thus we develop a Rushing attack prevention (RAP) is a generic rushing attack prevention mechanism for the reactive protocols. In this proposed work AODV protocol is used for study of rushing attack and implemented the proposed techniques over it then compared the results of AODV with attack and with prevention technique.

References

- Bing Wu, Jianmin Chen and Jie Wu, Mihaela Cardei, "A Survey of Attacks and Countermeasures in Mobile Ad Hoc Networks", Wireless/Mobile Network Security,
Effect of Rushing Attack in AODV and Its Prevention Technique

- Hyojin Kim, Ruy de Oliveira, Bharat Bhargava and JooSeok Song, "A Novel Robust Routing Scheme against Rushing Attacks in Wireless Ad Hoc Networks.", Published online: 12 July 2012© Springer Science+Business Media, LLC. 2012.

Index Terms

Computer Science
Security
Keywords
MANET  rushing attack  RAP  Reactive Protocol  AODV