

CHAPTER 7

CONCLUSIONS AND SCOPE FOR FURTHER STUDY

7.1 Conclusions

The primary issue and drawback found in the mobile ad-hoc network is the security. Various types of attacks are processed in MANET to reduce its efficiency and make it vulnerable to these attacks. Due to drastic growth of communication over the network, it is essential to overcome attacks from the malicious nodes that are using sinkhole attack. This malicious node collects all the incoming data. The drawback of mobile ad-hoc network is that it has no infrastructure, so it becomes the victim of the attacks. To overcome these issues, the work proposed three ways of preventing methods and they are UDRPG dynamic key management based node authentication for secret communication in MANET, A Time Adaptive Enhanced ACK mechanism for detecting and preventing Sinkhole attacks in MANET and ECMS cluster head based Certificate Revocation. The experiment results are showing that the proposed work gives better performance than existing methods and increase in efficient transmission of data in the network.

7.2 Scope for Further Study

Further study includes study of more enhanced technique to improve the key management system for securing data in a reliable format. As the technology improvement in the field of MANET is increasing, the prevention of network attacks needs to have high standards with new advanced mechanisms. The proposed work for node authentication can be improved by enhancing and make new hybrid communication techniques. The TAEACK can be improved in future by adding other cryptographic techniques and increase the prevention and detection of sinkhole attacks. The Certificate Revocation is another most important paradigm that can be considered for improvement for efficient transmission in future study.