Abstract

A wireless ad-hoc network is a decentralized type of wireless network. The network is ad hoc because it does not rely on a preexisting infrastructure, such as routers in wired networks or access points in managed (infrastructure) wireless networks. Now a day in fast growing world, use of internet is increasing popularly and at the same time Location-based service is also getting more popular even in ad-hoc network. Location-based service providers require user’s current locations to answer their location-based queries. The primary objective of the present work is to develop a system which preserves the location privacy of the concerned individual by applying K-anonymization and obfuscation algorithms. This objective is achieved by simulating K-anonymization and obfuscation algorithms for Manhattan mobility model and Waypoint mobility model using NS-2. 34 environment. In the experiments, the user’s current location is hide by rectangle [bounding box] according to users privacy need.

References

Hybrid model for Location Privacy in Wireless Ad-Hoc Networks for Mobile Applications

- L. Sweeney and P. Samarati, 2002, "Protecting Privacy When Disclosing Information: k-anonymity & its enforcement through Generalization", in Proc. of MobiCom.

Index Terms

Computer Science    Wireless

Keywords

Location-based service [LBS]    wireless ad-hoc networks    LCA    GCA