Abstract

Mobile Ad hoc Networks are wireless networks which are composed of mobile nodes without any kind of wired infrastructure. Dynamic topology is one of the crucial ingredients. There is a problem in accessing the data items because of Ad hoc Nature. Caching can help in mobile ad hoc networks to improve the accessibility and availability of data items. In this paper, we propose a novel caching scheme called Efficient Dynamic Group Caching (EDGC) which allows grouping of mobile hosts at one hop distance. Sub Group Head and Group Master will manage the group. By using the proposed Efficient Group Caching, the caching space in nodes can be efficiently utilized and thus the redundancy of cached data is decreased and the average access latency is reduced.

References

- N. Chand, R. C. Joshi and Manoj Misra, &quot;Cooperative caching in mobile ad hoc
networks based on data utility;
- Ying-Hong Wang and Jinhui Chen, "Dynamic Caching mechanism for Mobile Ad Hoc Networks; 11th International Conference on Parallel and Distributed Computing (ICPADS &apos;05), 2005.
- Han Ke "Cooperative Caching Algorithm based on Grouping Nodes in Mobile Ad hoc Network; International Conference on Information and Automation, 2010.

Index Terms
Keywords
Group Caching  Manets  Cache  Query Latency  Group Head  Group Master