Abstract

The Mobile nodes are communicating with each other without centralized administration and data is accessed from the data source through multi-hop environment. The accessed data is stored in the mobile node's cache for its own and neighbor's future use. Caching is a significant process to store the frequently accessed data item in the MANET. Data availability and
A Review of Cooperative Caching Strategies in Mobile Ad Hoc Networks

Accessibility is a challenging task due to mobility of nodes, limited battery power and insufficient bandwidth. Cooperative caching addresses these challenges to improve the data availability and efficiency of data access by sharing and coordination among the mobile nodes. These challenges have received a tremendous amount of concentration from researchers and led to development of many different cooperative caching strategies. This paper attempts to provide the review and hypothetical analysis of various cooperative caching strategies in the mobile ad hoc networks based on their performance metrics such as cache hit ratio and average query delay with respect to cache size and number of mobile nodes. The Global Cluster Cooperative caching provides better performance than others in terms of cache hit and average query delay.

Reference

- Lim S., Lee W.C., Cao G. and Das, “Performance Comparison of Cache Invalidation
A Review of Cooperative Caching Strategies in Mobile Ad Hoc Networks


Index Terms

Computer Science

Wireless

Key words

Mobile ad hoc network

Cooperative Caching

cache hit

query delay