

IMPLEMENTING DATA SYNCHRONIZATION IN SCALABLE MULTICASTING OVER MANET ENVIRONMENT USING BLOOM FILTERS

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Abstract

Now a days, group communication becomes an important aspect in MANET. This Group Communication is implemented in MANET using Multicasting method. In existing system we have used ODMRP (On-Demand Multicast Routing Protocol) and SPBM (Scalable Position-Based Multicast) for multitasking over MANET. Here we implement EGMP (Efficient Geographic Multicast Protocol) which is preferred over ODMRP and SPBM for efficient and scalable multitasking over MANET. Also for data synchronization, bloom filtering mechanisms are used. Bloom Filters are the data structure that uses a constant size in order to store information about elements in a MANET environment. The efficiency and the scalability of EGMP using bloom filters are evaluated through simulations and quantitative analysis. Simulation result proves that EGMP with Bloom filters have high packet delivery ratio, low control overhead and multicast group joining delay and multicast hop.

Keywords : Bloom Filter, MANET, Multicast, Synchronization