

## A new route maintenance strategy for dynamic source routing protocol

### ABSTRACT

Although DSR can respond a route quickly, it yields a long delay when a route is rebuilt. This is because when source node receives RERR packet, it will try to find alternative routes from route cache. If alternative routes are not available, source node, then, will enter route discovery phase to find new routes. In this paper we introduce a new route maintenance strategy by utilizing location information. We called this new route maintenance strategy as DISTANCE (Distance baSed rouTe maintenANCE). DISTANCE works by adding another node (called bridge node) into the source list to prevent the link from failure. From the simulation result, DISTANCE improves the performance of DSR in terms of packet sending ratio and delay.

**Keyword:** Routing protocol; DISTANCE; DSR