

The graph results shows the variation in route failures is less in AODVLGA while compare to AODV. The network size is kept constant with velocity as 4 meters/second and pause time as 8 seconds. The AODVLGA is less route failure because of two things it avoids route breakage by alternating the route through crossover and mutation and other giving a new optimize route that can retain for longer time. As the availability of additional route in the topology, there are chances of happening frequent switch over. Route failures are also calculate on intentional switchovers.

Conclusion

In this paper, we have analyzed and improved route maintenance phase. During this phase link based prediction model using Newton difference method is modeled by finding the threshold signal time at which link break about to be happen by calculating last three consecutive received packets signal strength. In this simulation, study AODV routing protocol, which is most frequent routing protocol, used in simulation studies. We have enhanced the AODV with link prediction model with genetic algorithm. AODVLGA is enhanced link based Genetic algorithm compared with AODV using simulations. The AODVLGA protocol improves end-to-end delay and lower routing overhead by limiting the controlled messages and increase higher packet delivery ratio. The AODV and AODVLGA simulated with CBR packets against the higher packet generation rate and with different traffic time. Thus AODVLGA model are use whenever we have frequent link break, rediscovery process and large routing overhead.

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