

PERFORMANCE EVALUATION OF AODV AND ZRP ROUTING PROTOCOLS IN MOBILE AD-HOC NETWORKS

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ABSTRACT

An Ad-hoc network is a network in which the locations of the switches, hubs, or routers can be mobile, the number of routers available at an instant can increase or decrease, and the available routing paths can change. An ad-hoc network does not have any centralized server or arbitrator. A mobile ad-hoc network (MANET) is a self-organizing, dynamic network comprising of mobile nodes, where each and every participating node voluntarily transmit the packets destined to some remote node using wireless transmissions. In MANET, each and every mobile node is assumed to be moving with more or less relative speed in arbitrary (random) direction.

Because of that, there is no long term guaranteed path from any one node to other node. In this paper we have compared the protocols AODV (Ad-hoc On-demand Distance Vector Routing) and ZRP (Zonal Routing Protocol) using Packet Delivery Ratio (PDR), End-to-end Delay (E2ED) and Routing Load (RL). The results have shown, the performance of AODV and ZRP routing protocols using PDR, E2ED and RL with graphs.

KEYWORDS: AODV, MANETS, NS-2 and ZRP