Available Online at www.ijcsmc.com

International Journal of Computer Science and Mobile Computing

A Monthly Journal of Computer Science and Information Technology

ISSN 2320–088X

IJCSMC, Vol. 2, Issue. 9, September 2013, pg.29 – 36

RESEARCH ARTICLE

Performance Evaluation of AODV and DSR Routing Protocols with PCM and GSM Voice Encoding Schemes

Osamah Yaseen Fadhil

Department of computer engineering & Eastern Mediterranean University, Famagusta, Turkey
osamahyassen@yahoo.com

Abstract— A mobile ad hoc network (MANET) is one of the narrowest and most specific of research topics in the field of telecommunications. The growth of this type of network, and the large number of applications with mobility requirements, has led to a wider study and research in the analysis and enhancement of the work in this area. In such networks, nodes are communicating with each other without the need of a centralized administration. In this topology, the communication between the nodes is done by pair to pair within the coverage area. The routing is managed and organized by a number of routing protocols. A limited coverage area, collision and power consumption for mobile nodes are the main problems occurring in such networks.

In this paper, two important MANET routing protocols were used, Ad- Hoc on-Demand Distance Vector (AODV) and Dynamic Source Routing (DSR) to analyse their behaviour with two different voice encoding schemes, Pulse Code Modulation (PCM) and Global System Mobile (GSM).

Keywords— AODV; DSR; PCM; GSM; OPNET17.1

Full Text: http://www.ijcsmc.com/docs/papers/September2013/V2I9201324.pdf