CONGESTION AWARE BACKUP ROUTING PROTOCOL IN MOBILE AD-HOC NETWORKS

S. R. KOKATE[1] AND S. A. JAIN[2]

[1] ME Student, MIT Academy of Engg, Alandi (D), Pune University, India
[2] Associate. Professor, MIT Academy of Engg, Alandi (D), Pune University, India

Abstract

Mobility and congestion are the main cause for packet loss in mobile ad hoc networks. Reducing packet loss typically involves congestion control operating on top of a mobility and failure adaptive routing protocol at the network layer. In the current designs, routing is not congestion-adaptive. Routing may let a congestion happen which is detected by congestion control, but dealing with congestion in this reactive manner results in longer delay and unnecessary packet loss and requires significant overhead if a new route is needed. This problem becomes more visible especially in large-scale transmission of heavy traffic such as multimedia data, where congestion is more probable and the negative impact of packet loss on the service quality is of more significance. To overcome these problems in certain degree many congestion aware and congestion adaptive routing protocols are proposed. In this paper, we discuss congestion adaptive backup routing protocol in mobile ad-hoc (CABR) and analyze the performance with respect to end to end delay, throughput, and routing overhead.