Abstract

Wireless communication networks, in particular ad hoc networks have revolutionized the field of Networking with increasing number of commercial and military applications. Establishing communication through portable devices without the dependence on or constraints of any central infrastructural id possible through ad hoc networks. Wireless ad hoc networks models play a predominant role in performance evaluation of many communication systems. In this paper a two zones (single hop) wireless ad hoc network model with homogeneous Poisson arrivals of packets having dynamic bandwidth allocation is introduced for performance evaluation and monitoring of several commercial applications and military applications. The system performance measures of the wireless ad hoc networks are derived explicitly.

References


4. Ying Qiu and Peter Marbach (2003), Bandwidth allocation in ad hoc networks: a price based approach, INFOCOM 2003, proceeding of the Twenty second annual joint conference of the IEEE computers and communications, pp.797-807


Index Terms

Computer Science
Networks

Keywords

Wireless ad hoc networks, performance evaluation, dynamic bandwidth allocation