

Design and performance analysis of routing protocols over WiMAX

ABSTRACT

Mobile WiMAX is a technology which bridges the gap among fixed and mobile access and show the similar subscriber experience for fixed and mobile user, also fast-growing broadband access mechanism which supports low-cost mobile applications. Mobile WiMAX is a technology based on IEEE 802.16 standard advanced as an achievable and attractive key to these problems. It provides integration Orthogonal Frequency-Division Multiple Access (OFDMA) and Multiple-Input and Multiple-Output (MIMO) structures with fast connection. The chosen of a suitable routing protocol is key issue scheming a scalable and effective wireless networks. Nevertheless, the problems happen in message delivering for dynamic WiMAX. In this paper, the performance of the Mobile WIMAX has been studied in different situations using QualNet simulator on two routing protocol namely Dynamic Manet on Demand (DYMO) routing Protocol and Optimized Link State (OLSR) Routing Protocol. The results show that DYMO protocols in performs better than OLSR in different quality of service (QoS).

Keyword: WiMAX; DYMO; OLSR; QualNet