

Abstract

IEEE 802.16e or better known as Mobile Worldwide Interoperability for Microwave Access (WiMAX) has a very important role in the development of Broadband Wireless Access at the moment and the future. This is in line with the increasing needs of data with the greater mobility of the user who is very high. Mobile WiMAX offers several advantages, among which high data rate, wireless access to end user access and can support fixed, nomadic, portable and mobile.

Other characteristics of WiMAX is a guaranteed QoS (Quality of Service). Therefore, the required a mobile WiMAX Scheduling algorithm so that both can support QoS for different services available. Scheduling algorithm that can guarantee the good must be of good use of bandwidth and justice (fairness) to all users.

Basically Scheduling algorithm can be divided into two parts, the old methods such as FIFO, Round Robin and the resulting new method based on the results of research or a new hybrid, the merging of some old methods. Individual Scheduling algorithm that has distinctive advantages and disadvantages.

At the end of this task will be done using simulation uplink Scheduling algorithm with a different analysis of the impact on QoS Mobile WiMAX. The algorithm is compared to MDRR (Modified deficit Round Robin), weighted Fair Queueing (WFQ) and FIFO. Parameters measured are throughput, delay, jitter and delay queue.