

## Abstract

All applications like video, audio streaming, online gaming, videoconferencing, Voice over IP and File Transport Protocol (FTP) need a satisfied QoS in bandwidth and small queuing delay. So we need a technology who can fulfill the criteria. World Interoperability for Microwave Access (WiMAX) can give an alternative solution for any kind of application

To guarantee a service for UE, it needs a technique to manage the pipeline of data. Packet scheduling is the main key in packet transmission. In this final project will analyse the simulation of comparison between Round Robin Packet Scheduling Algorithm and Random Exponential marking packet scheduling algorithm.

In this simulation we know the performance of Round Robin and Random Exponential marking algorithm. In 30 users packet loss for video traffic for RR and REM algorithm is 30,588% and 0%, for VoIP traffic 0% and 0%, and for data traffic 0% and 19,44%. Delay for video traffic for RR and REM algorithm is 9,054 ms and 13,008 ms, for VoIP traffic 6,721 ms and 9,805 ms, for data traffic 34,943 ms and 76,686 ms. Throughput for video traffic for RR and REM algorithm is 261,653 Kbps and 376,943 Kbps, for VoIP traffic is 3,299 Kbps and 4,706 Kbps, for data traffic is 138,245 kbps and 155,231 kbps. So the performance of REM packet scheduling algorithm is better than RR in packet loss and throughput parameter, but in delay parameter RR is better than REM.