

ABSTRACT

Game-online is one of the interactive services that had been used by internet user, where the game played over some form of computer network. Online games can range from simple text based games to games incorporating complex graphics and virtual worlds populated by many players simultaneously. Many online games have associated simultaneously make an impact such as lag on the network.

In this final project is implemented and analyzed several implementation of the bandwidth management scenarios to reduce lag on game-online DOTA. From the scenario that had been implemented would be analyzed the network condition and QoS (throughput and RTT) to know the performance and the need to play game-online DOTA. From several scenarios which one that give the best QoS (throughput, RTT) result for game-online DOTA.

From the analysis, with bandwidth management we get the best throughput for the third and fourth scenario. Where we make the separation between port for DOTA and the others port. From this two scenario we get throughput between 4000-4800 bps and RTT 0,050000-0,060000 s. The MOS we get from the scenario third is 4,49 and 4,39 for the fourth scenario. Meanwhile, for the first and scenario we get the throughput between 600-3000, with RTT 0,100000-0,450000 in which the user have felt lag. And MOS for the first scenario is 2,47 and MOS for the second scenario is 1,46. So, the conclusion is that bandwidth management for game-online DOTA is bandwidth management with port whereas on network or user PC. And the minimum bandwidth for online game DOTA is 3000 bps.

Keywords : Game-online, interactive services, Performance, 'lag'