ABSTRACT

Mobile cloud games is a cloud computing service which is the development of infrastructure as a service cloud computing service model. With the cloud gaming service using open - source server GamingAnyWhere, mobile phone devices with android operating system that works as a client is able to access a server running a game via wireless network (WLAN). Server performs against the frame capture audio and video frame is then encoded and sent to the client. Once the client gets frame A/V, the client will encode frames received so the user can play and perform input control. To get the cloud gaming performance of the system is implemented, tested with three parameters: resource usage, Quality of Service and Quality of Experience.

With the cloud gaming service server, the experience of playing games on the phone with cloud gaming feel lighter and with better graphics. This is evidenced by the resource needs of the client that only uses 10 % of cpu usage, 20 MB of RAM for the game Lego Batman and 3% of cpu usage, 12 MB RAM for Deadpool game. FPS value for the client about 27 for Lego Batman and 14 for deadpool, value for Deadpool is smaller than Lego Batman because the rendering capabilities are less than the maximum server. Responsive delay was satisfactory system that is worth to Lego Batman 0.78 seconds and 0.26 seconds for Deadpool at 3 Mbps bandwidth with the local network topology.

Key Word: Cloud Games, Mobile Cloud Games, GamingAnyWhere, Cloud Computing