**ABSTRACT** 

Games as a means of entertainment are currently growing with a variety of

technologies so that some types of games can become more immersive to be played.

Virtual Reality (VR) technology is present as one of the technologies to make

players can play games in more immersive gaming experience.

To play VR-based games, computer specifications and other devices

O required are much higher compared to other computer games in general.

Cloud Gaming is one of the services in cloud computing that allows computer game

players to play games with a higher minimum specification on lower specs

computers. By utilizing cloud gaming services, a VR headset will be implemented

to play VR games using a low specification computer.

The implementation of the VR headset device for its use on the cloud gaming

platform service that has been done allows players to play it on a lower specs

computer. This can be seen from the results of measurement of resource usage and

Quality of Service (QoS), where the value of CPU usage used by client computers

is quite high at around 91%, RAM usage around 2818 MB. For bandwidth

requirements, a minimum of 15 Mbps is required to be able to play VR games

comfortably with medium quality settings as seen from Frame per Second (FPS),

which reaches 56 FPS. The throughput is up to 16 Mbps with a low delay of around

2 ms.

**Keywords:** cloud gaming, virtual reality, parsec.

vi