

## ABSTRACT

The advancement of games causes players to have computers with high specifications to be able to play high-specification games. Players who have low-specification computers need cloud gaming technology to be able to play high-specification games and players can play the games anywhere on the same network.

Players generally use Steam platform due to more game variations. Steam In-Home Streaming is a feature offered by Steam as a cloud gaming. In this Final Project research, researcher will collect resource usage data and quality of service data when playing Counter-Strike: Global Offensive and The Witcher 3: Wild Hunt. Variation in bandwidth and the distance between client and access point are the test parameters for Quality of Service.

Steam In-Home Streaming is capable of running high-specification games on low-specification computers (clients) characterized by the use of GPU 0%, CPUs for Counter-Strike: Global Offensive worth 32% and The Witcher 3: Wild Hunt worth 20%, memory usage for Counter-Strike: Global Offensive is 1784 MB and The Witcher 3: Wild Hunt is 1986 MB, and frame rate for both games is 30-60 Frame Per Second on server and client. The games can be played by client using Steam In-Home Streaming with bandwidth worth 3Mbps.

**Keyword :** Steam, *cloud gaming, in-home streaming, resource usage, quality of service*