

Cloud Streaming

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Abstract:- The thrill of watching Movies or playing video games has always been one of the better ways people enjoy doing and sharing its best moments with their loved once. From the beginning of early access to old TV's to today's 4K experiences in newer movies and gaming. Now it has reached a higher level of allowing people to enjoy movies and videos with ease and much wider content through cloud servers, as previously, video content crated from localized company infrastructures that required much support. In Today's generation, cloud video platforms and consoles will help brands and businesses get their product to bigger audience without the complications and less money by hosting and streaming video content with local infrastructures. Because cloud video streaming platforms use remote servers and online software, video content creators and broadcasters can access all the resources needed to create and share video content at any time, from any location.

I. INTRODUCTION

Cloud streaming services stream videos using a network of servers to host and deliver videos and gaming content, and deliver it reliably whenever wanted by a user. It can be reached by millions with ease to watch and consume their favorite movies, shows or gaming activities.

II. TECHNICAL BACKGROUND

Cloud streaming software relies on a network of cloud servers that are dedicated to hosting video files and efficiently deliver this content to viewers. Once broadcasters upload files to these cloud streaming servers, they're encoded and transcoded into a variety of formats that are ready for playback.

III. PROS AND CONS

A. Pros:

- Faster access to your library of Games and movies
- Instant experience and without downloading wait
- Cheaper and has lower costs
- Have a better security

B. Cons:

- Require a faster internet connection
- Video compression causes lower resolution

IV. EXAMPLES AND CURRENT USES

A. Gaming

Streaming video games is allowing player to play games remotely without the need to install or download any game, it requires a stable internet connection as games are being rendered from a remote server. This have taking the whole gaming experience to a new better level where you can play the latest games instantly at any time.

B. Videos & Movies

A cloud streaming video services streams and saves your videos (or other content providers' videos) in the cloud. This will insure to host videos and streams them reliably at any time.

A good example of clouds streaming video services are Netflix and YouTube.

Before this service was ever existed, people and companies had to secure servers, storage spaces, technical tools and staff to maintain the quality and service provided for streamers and this was satisfying customers. However, all of these requirements are expensive and adds an additional cost to service providers. So, cloud streaming video services enabled content creators to focus on their videos instead worrying about how their videos are stored and to technically maintain their services.

Netflix went a step further in utilizing cloud services. The streaming company produced the fourth season of the series "The Crown" by adopting a cloud-based workflow on Amazon Web Services. Netflix's in-house VFX team of artists was able to complete more than 600 VFX shots remotely in 8 months during COVID-19 pandemic lockdown. (Source)

V. CONCLUSION

The demand for better and faster streaming services is not slowing down any time soon, The streaming industry is expected to be worth \$330 billion by 2030 according to Cloud Wards [4]. . Even the concept of the metaverse which is not clearly defined at the moment, what we know is that it is the fastest growing technology segment According to a 2021 Bloomberg Intelligence analysis [5]. , and whatever happens in the metaverse it's going to be heavily reliant on cloud-computing and cloud streaming of assets weather they are: virtual worlds, digital goods, videos, photos, music, etc.

It's obvious that streaming is playing an essential role in our lives now and in the near future, the benefits and possibilities unlocked by cloud streaming far outweighs any cons that could be circumvented with future advances in technology. The only remaining question is, are we ready to

utilize these technologies responsibly to enrich our lives with positive experiences?

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