



Online Multiplex Using Cloud Content Delivery Network

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Abstract— *The online multiplex offers a Real Movie Theatre kind of experience online using cloud based content delivery networks and offers this technological platform to Regional movie makers to release their movies worldwide online in a theatre like atmosphere. It will be providing a cloud based platform for streaming high quality movies online. Movies will be available just as in normal physical theatre on pre decided date & time slots and users can buy tickets to watch it in their own convenient slots.*

Keywords—*cloud computing, content delivery network, Infrastructure, service, edge location*

I. INTRODUCTION

Offer a Real Movie Theater kind of experience online using cloud based CDN networks and offer this technological platform to Regional movie makers to release their movies worldwide online in a theater like atmosphere. We will be providing a platform with cloud based CDN network for streaming high quality movies online. This platform will help regional content makers like movie makers, distribution houses to release their content worldwide without much investment using latest cloud based technology infrastructure .NRI community spread across the globe will be the content consumers as they get to see the latest movies online. Movies will be available just as in normal physical theater on pre decided date & time slots and users can buy tickets to watch it in their own convenient slots. Slots will be decided based on various factors like region US, Europe, Middle East, Far East, Pacific etc., Convenient days weekends, holidays etc., convenient time After noon, Evening, Late Night etc..Movie wont available other than this pre-defined date & times, same as you release in a overseas theater. Movies can be made available on demand after 6 months of release date.

II. PROBLEM DEFINITION

Right now new regional movies reach to people living in overseas is limited to some main cities/countries. People living in other parts of the world are denied the privilege of watching latest movies as soon as it released in India. This situation ended up creating a huge piracy racket which upload pirated copies of the movie to internet and people without really any other option either watch it online or download it from pirated websites. Most of these people, barring few percentages, are doing so because they don't have an option to go and watch the same in a nearby theater. Its really difficult for someone who lives far away from cities to watch the movie which typically released in cities like London, Manchester, Los Angles, San Francisco etc. No need to mention about never released European / African countries.

III.MAJOR CONTRIBUTION

We believe best way to fight piracy is to address the root cause which is non availability of content. Provide the content to everyone and make maximum people watch movie in first few week itself to make piracy a redundant option. Provide a technologically well architecture solution to content providers to reach the audience across the globe. Provide a way for audiences across the globe to watch latest regional movies of their choice from the comforts of their homes. We can limit the service availability only to outside of India and even we can delay the availability in countries where there is a theater release of the same movie. Streamed movies on browsers can be streamed to other devices like Smart TV's, TV's with PC extensions, Projectors etc. to have a real theater experience by viewers. Each streaming will be personalized and will be with embedded secret code specific to each user. If someone recorded the movie and upload to any site, we will be able to easily identify the person who did this and take corrective measures to remove it from torrents/file sharing sites. We will warn the viewers about it and inform them well in advance that we have technological tools to trace them individually in case of piracy. We will help the content providers to fight the piracy in case of videos started appearing in internet via a recording from our streaming. Copyright of the content will remain with the provider as we are just a technological provider to streaming their content.

IV. CONTENT DELIVERY NETWORK

A content delivery network or content distribution network (CDN) is a large distributed system of servers deployed in multiple data centers across the Internet. The goal of a CDN is to serve content to end-users with high availability and high performance [4]. CDN serve a large fraction of the Internet content today, including web objects like text, graphics, URLs and scripts, downloadable objects like media files, software, documents, applications like e-commerce, portals, live streaming media, on-demand streaming media, and social networks. CDN nodes are

usually deployed in multiple locations, often over multiple backbones. Benefits include reducing bandwidth costs, improving page load times, or increasing global availability of content. The number of nodes and servers making up a CDN varies, depending on the architecture, some reaching thousands of nodes with tens of thousands of servers on many remote points of presence.

V. OVERALL ARCHITECTURE OF ONLINE MULTIPLEXER

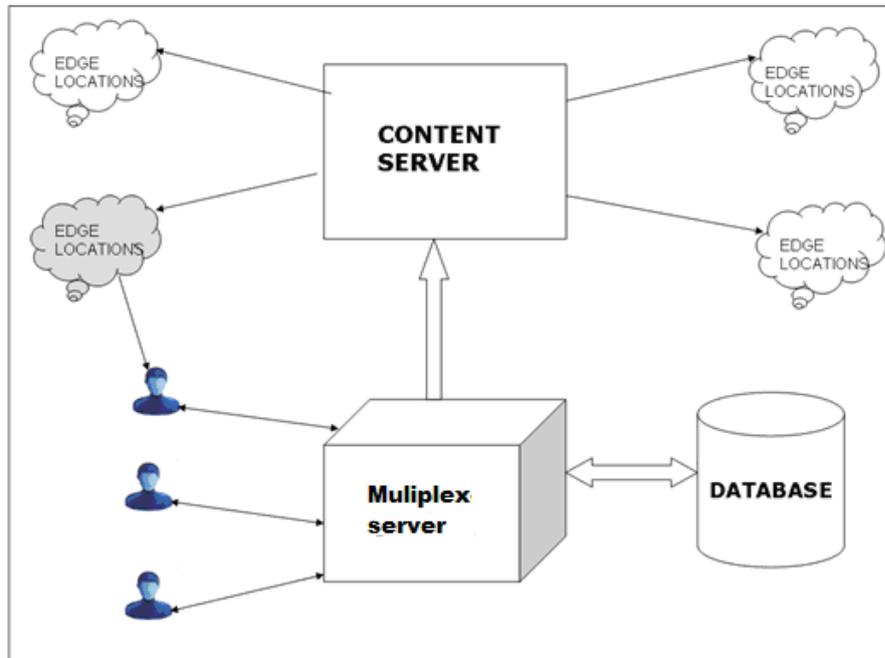


Fig 1 Architecture of online multiplexer

We will create a theater like online platform with Streaming Server Infrastructure, payment gateway integration to pay for tickets and a beautiful UI to give a feeling of real theater. Approach Regional content makers like Movie Producers, distribution houses, title owners etc. Make them release their movie online in our platform. User interacts with the multiplex server for choosing the movie and making payments. Content owners can provide the content which can be uploaded to content delivery network. User can view the movie in their own location. Movie will be streamed from the respective edge locations.

VI. CONCLUSIONS

Online multiplex is a service oriented platform from the cloud. It provides users an easy way to watch movies and also to content provider's the revenue they deserve. In the future, we will extend our research by providing implementations and producing results to justify our concept of online multiplex.

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