Abstract

As computer and network technology advance, multimedia data can be transferred in real time on the internet. The increasing user demands for various multimedia data make VoD (video on demand) services to be developed. Video on demand (VoD) services are being used in lots of fields such as entertainment, distant learning, home shopping, and interactive news. Video-on-Demand (VoD) has been gaining increasing popularity in recent years. The computational problems arising in such systems are very large and require appropriate mechanisms for distributing the data among the processors. The goal is to decide the rank of the videos, the no. of copies and place them on the proxy servers so that the no. of hits is
maximized. In this paper, we focus on various architecture and scheme for video placement, Distributed load balancing and buffer management for video on demand system. We then proposed the Architecture and Mathematical Model for Video placement, Distributed Load Balancing and Buffer Management Scheme for Video-on-demand systems. We then proposed algorithm for calculates the rank of the videos in a novel way. It is very effective as it also calculates the access difference using access rate of 48hr and 24hr. Also the expected bandwidth of a video is changed in every 24 hr. The algorithm also considers size and bandwidth of a video while calculating its rank. This gives optimum solution for short and mostly viewed videos; finally, we proposed the algorithm for Distributed load balancing and Buffer Management.

References

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**Index Terms**

Computer Science
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**Keywords**

Video Placement  Distributed Load Balancing  Buffer Management  Video-on-Demand

NP Hard