Analysis of Distributed Video-On-Demand System Based on Cluster

Zheng Shijue[1,2] Ma Wei [2] Zhang Jiangling[1]
School of Computer Science and Technology, Huazhong University of Science and Technology1
Department of Computer Science, Central China Normal University 2
Wuhan, Hubei 430074, P.R.China
Email: zhengsj@ccnu.edu.cn mw0626@163.com **Email:** jlzhang@hust.edu.cn

ABSTRACT

Video servers are essential in Video-On-Demand and other multimedia applications. In this paper, we propose architecture of the Clustered Video-On-Demand (CVOD) system with high performance, high availability and low cost, which is based on a cluster of personal computers. In this system, we adopt Platform LSF to manage and balance workload of the video servers. It efficiently improves the OoS and optimizes the cost/performance ratio of VOD. This high performance system is mainly designed for a good video education in the university. We present the CVOD architecture and analysis the key factors of the system such as stripping, data placement policy and fault tolerance.

Keywords: CVOD, Platform LSF, Distributed Computing, Server striping policy