A Continuous Media Placement Scheme in Multi-Zone Disks

A systematic continuous data placement scheme in distributed multi-zone disks is developed for video on demand. The developed scheme maximizes not only the averaged data transmitted rate, but also the number of simultaneous accesses. The scheme consists of the following components: (l) the Retrieval Sequential Model to achieve disk load balancing, maximize data throughput, and simplify the issue of admission control; (2) the Idle Round scheme to reduce the buffer size required at the client site for VBR video stream. Finally we perform experimental tests to evaluate the performance of the proposed scheme.