The Cache-Multicast Method of Proxy Cache for Streaming Media

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ABSTRACT

The transmission of large capacity and high byte rate for streaming media becomes a challenging study problem for the Web application. The proxy cache for streaming media is an efficient method to solve this problem. In this paper, we proposed the method of dynamic cache-multicast based on partial cache method such as the segmented cache. The idea of the method is using a dynamic cache to keep partial media object requested by users in an interval time. The advance is that reference frequency of partial media in interval time is higher than that of full media requested by clients. The cache-multicast's method enhances the efficiency of proxy cache for streaming media, mitigates network burden from content server, and saves the traffic resource for network backbone. Event-driven simulations are introduced to evaluate this algorithm is very efficient.

Keywords: Streaming media, proxy cache, dynamic cache.