

Paper study:

Title: Can Internet Video-on-Demand be Profitable

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This paper analyzes the data traced from people's usage of VoD streaming application for MSN video. Though the trace is got from client-server deployment, the user characterizations could be extracted from it. Authors examine distinguished users and streaming sessions, video popularity distribution, user demand and upload resources and user interactivity (pause/resume, skip, fast forward/backward). Having these characterizations, authors argue that peer-assisted VoD will significantly reduce the bandwidth usage of the servers and concurrently increase the traffic of inter-ISPs. The ISP-friendly peer-assisted VoDs are suggested to reduce the inter-ISP traffic though it may increase the server bandwidth costs.

The upload resources of peers will help the server to distribute the streaming segments. Authors develop simple mathematic models to shed insights on peer-assisted VoD. Authors come up with three modes of system and explain how the no-prefetching and prefetching will decrease the servers' bandwidth usage.

To reduce the costs of content service providers, this paper mainly argues that the servers' bandwidth usage could be reduced significantly by peer-assisted VoD and the inter-ISP traffic could be constrained by ISP-friendly protocols. Though there may be some tradeoff between them. So, this paper doesn't analyze the performance of peer-assisted VoD. Some techniques may be used to let us know how the peer-assisted VoD will influence the performance.