**DASH: Dynamic, Adaptive Streaming over HTTP**

server:

divides video file into multiple chunks 将视频分成多个块

每个chunk以不同的rate保存并解析

manifest file告示文件: provides URLs for different chunks

client:

定期测量服务器到客户端的带宽

咨询manifest，一次请求一个块

选择当前带宽(bandwidth)可以承受的最大coding rate

允许用户使用不同的以太网接入速率流式播放具有不同编码速率的视频

“intelligence” at client: client determines

when to request chunk (so that buffer starvation, or overflow does not occur)

what encoding rate to request (higher quality when more bandwidth available)

where to request chunk (can request from URL server that is “close” to client or has high available bandwidth)

**CDN：Content distribution networks**

overview:

store/serve multiple copies of videos at multiple geographically distributed sites

两种不同的服务器安置原则：

深入(enter deep)

在遍及全球的接入ISP中部署服务器集群。closer to users; used by Akami, 1700 locations

邀请做客(bring home)

在因特网交换点(IXP)放置大集群，放置量较少 used by Limelight

