ARQ Scheme in Multimedia Streaming for Hybrid Delivery over Heterogeneous Network

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(Pr9)Abstract—Nowadays, many mobile devices have multiple networking modules to receive data from various networks such as WI-FI, 3G, Wimax, DVB-H, etc. The mobile devices are used to receive multimedia streams through various networking interfaces. However, mobile characteristics can cause loss of packets and needs an effective method to recover the loss to provide high-quality multimedia streaming service. ARQ (Automatic Repeat Query) can be used to re-receive the loss packets that are being delivered. The heterogeneous networks can be used to effectively deliver multimedia stream and also provides ARQ to recover the loss packets. The retransmitted data can be delivered over bi-directional network such as Internet. This paper proposes a hybrid delivery for heterogeneous network environment and efficient ARQ that can be considered for multimedia streaming.

(Pr9)Keyword—Multimedia streaming, Hybrid delivery over heterogeneous networks, Automatic Repeat Query

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Topic of interests includes, multimedia delivery, peer-to-peer communication, multicasting, future network, and Internet routing.