

**The Adaptive Feedback Scheduling Framework for Streaming VBR
Videos with Wireless ATM ABR Service**

Chang, Ing-Chau; Huang, Ming-Hung

Abstract

In this paper, we propose a three-layer adaptive feedback scheduling (AFS) framework to guarantee the quality of service (QoS) of the variable bit rate (VBR) MPEG streaming video for the mobile host (MH) in the wireless ATM network. By considering the bit rate variation of the VBR video and the signal attenuation due to the movement of the MH, the AFS algorithm executed in the proxy server periodically schedules next group of picture (GOP) data of all streaming videos to their MHs through the ATM available bit rate (ABR) service. Comparing to three well-known scheduling algorithms by simulations, the AFS approach not only achieves less loss for the moving MHs but also bounds the loss for the fixed MHs.