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Video delivery over wireless and bluetooth / wi – fi networks.

ABSTRACT

In recent years there has been an increasing demand to deliver high-quality and high-bandwidth video streams over the wireless networks thus making wireless video delivery an active area of research. With the recent advances and proliferation of broadband services, this topic has gained a lot of importance. People at the home or on the move are increasingly relying on wireless media for delivery of information and video actual networks may be hybrid-mix of wired and wireless networks. Techniques for addressing video delivery over wireless need to be encompass losses in the wired and wireless segment. Video traffic is typically sensitive to delay and data loss while wireless networks have variable bandwidth and channel error rate. Therefore transmission of video over such a dynamic channel is very challenging. Thus techniques for video delivery over wireless networks become an ongoing current research topic. Currently the wireless scene is held by three emerging standards: the IEEE 802.15.1 (Bluetooth) and IEEE 802.11 b/g (Wi-Fi) and IEEE 802.15.4 (ZigBee). Here we will look at the technological challenges to the delivery of video over the wireless medium such as Bluetooth, Wi-Fi and ZigBee networks. The goal is to look at the techniques that can improve the delivery of video over the wireless and wired media. Apart from the pure technological challenges we will also focus on the practical utility aspects of the video delivery over the wireless. A Bluetooth video delivery system over J2ME is developed during this work. NS-2 simulations and experiments for video delivery over wireless data networks namely Bluetooth, Wi-Fi, ZigBee are to be carried out to validate, and characterize the performance of our proposed approach.