RANDOM ACCESS LIVE AND PRE RECORDED STREAMING AND NDN

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ABSTRACT

The videos that must be relocation from mobile to television through wireless sensor network and also wired communication .It is using HDMI cable to relocation the video from cell phone to television. HDMI-high definition multimedia interface.There are many protocols using particularly RTSP protocol(real-time transmission protocol) MERVS relocation the video through two different channels: faithful channel and unfaithful channel. Because the importance of the I-frames in terms of video predication, I-frames will be relocation through the reliable channel. The inter frames will be relocation through the unreliable channel, because the indefinite riches of the reliable channel. The Priority Queue, Quick Start and Scalable faithful Channel (SRC) techniques are also integrated to reform the delay of MERVS. Based on the conducted simulation results, MERVS can provide higher predication video streaming comparing to Forward Error Correction (FEC) with the related time delay compared with the RTP/UDP

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1.INTRODUCTION

Wireless communication is the relocation of information between two or many points that are not connected by an electrical conductor. The most ordinary wireless technologies use radio. With radio waves length can be short, such as a not many meters for television or as far as thousands or same millions of kilometers for deep-space radio intercommunications. It bound different types of fixed, cell phone, and portable applications, entail two-way radios, cellular telephones, benefit and wireless networking.another. Somewhat less common methods of achieving wireless intercommunications include the use of more electromagnetic wireless technologies, such as light, magnetic, or electric side or the use of sound.

Streaming media is multimedia that is regularly received by and presented to an end-user while being sent by a worker. The verb "to stream" refers to the operation of hand over media in this manner; the term refers to the portage method of the middle, rather than the middle itself, and is an another to downloading.

A client media player can begin to play the information (such as a movie) before the entire file has been relocation. Distinguishing portage method from the media provide applies specifically to telecommunications networks, as highest of the potage systems are each of two immanently streaming (e.g., radio, television) or immanently non streaming (e.g., books, video cassettes, audio CDs). For example, in the 1930s, elevator music was amid the earliest popularly available streaming media; current treand Internet

television is a common form of streamed media.

2.EXISTING SYSTEM

In our existing we use The Peak Signal-to-Noise Ratio (PSNR) of video streaming on wireless networks. Most of the video streaming protocols do not possess reliability techniques, because reliability is considered to be useless in video streaming and some packet loss is acceptable. However, certain reliability in important parts of the video should be provided to increase the quality of the received video. Transmission control protocol (TCP) can be used to offer reliability in data transmission. However, its poor performance in wireless networks limits its usage on video streaming.

I-Frame: The Intra-frame contains the full information about the image and can be decoded independently.

P-Frame: The Predicted-frame improves the compression by removing the temporal redundancy in the video. Pframe contains only the difference of the I-frame or Pframe directly in front of the current P-frame.

B-Frame: The Bidirectional-frame has to be decoded by two reference frames, where one is from the previous frame and the other one is from the future frame.

By eliminating the temporal error correction data in the video, MPEG-4 reduces the size of the video, which is needed to be relocation. Any received P-frame and B-frame will enhance the frame rate of the video. Spatial scalability is supported by the layered structure video compression in the SVC extension. Each frame is split into several layers in SVC, where the extra layers can improve the resolution of the base layer. H.264/MPEG-4 AVC SVC is suitable for video streaming in wireless networks, because its quality scalability (temporal and spatial) allows video streaming in networks with different qualities.

3.PROPOSED SYSTEM

The videos that must be relocation from mobile to television through wireless sensor network. The protocols using RTSP protocol(Real Time Streaming Protocol). RTSP is network control designed for use in entertainment and communications system to control streaming media servers. The protocol is used for implementing and controlling media sessions between end points.To decrease the burst of data deficit by separating the transmissions of the original message and the redundant information. TCP transmissions can improve the TC performance, which eventually will improve the quality of the transmitted video. Increase the network capacity and improve the overall performance of the protocol.

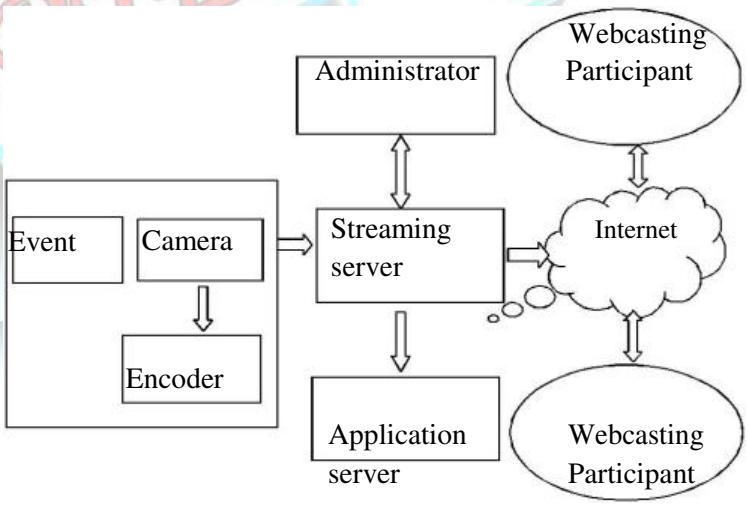

Figure 3: Architecture diagram

4.MODULES DESCRIPTION

4.1 Analysis of Nodes

In this modules used to find the information about nodes. The source node want to select the next transmission node, for sending data with high quality. Source node analyze, the next node is Secure or not and check the reliability of the nearby nodes. This modules analyze all the nodes in network. Using this analysis to find routing path and nodes in network. The Media Delivery Index (MDI) is a set of measures that can be used to monitor both the attribute of a sent video stream as well as to show system margin for IPTV systems by give an accurate measurement of jitter and delay at network even (Internet Protocol, IP), which are the main causes for quality deficit. Identifying and quantizing such trouble in this kind of networks is key to maintaining high quality video delivery and providing trace that warn system operators with enough advance notice to allow corrective action.

The Media Delivery Index is commonly exposure as two numbers separated by a colon: the Delay Factor (DF) and the Media Loss Rate (MLR). A receiver expose the video at its nominal rate must accommodate the varying input stream arrival times by buffering the data arriving before and assuring that there is enough earlier stored information to face the possible delays in the received information (because of this the buffer is filled before displaying). related, the network infrastructure (switches, routers,…) uses buffers at each node to avoid packet deficit.

4.2 Routing Methodology

In this method we used TORA for routing methodology. TORA is a distributed routing protocol based on a link reversal algorithm. It is designed to uncover routes on application provide multiple routes to a destination, establish routes quickly. And minimize intercommunication overhead by center algorithmic reaction to topological changes when manageable.

Route optimality (shortest-path routing) is designful of secondary consequence, and longer routes are often used to avoid the overhead of locate newer routes. Routing is the reaction of selecting best paths in a network. In the past, the term routing also meant promote network traffic amid networks. However, that latter function is better described as promote. Routing is performed for more kinds of networks, including the telephone network (circuit switching), electronic information networks (such as the Internet), and relocation networks. This article is concerned primarily with routing in electronic information networks using packet switching technology.

4.3 Streaming Task Assignment

To partition the video into several streaming tasks for download and forward video data hop-by-hop to the requester.First, will do the basic scheduling and reslove an assignment downtime. The assignment interval is used to decide when the beside streaming tasks assignment progress is triggered again to assign streaming tasks to forward. It provide reliable, in-order delivery of all routing control data from a node to each of its neighbors.

4.4 Packet Forwarding Scheme

The requester determining and assigning streaming tasks to forward, each nearby would try its best to transmit the assigned video data to the destination. All of these video data would be received and transmitted hop-by-hop by forwarders. Since these video data are processed by multiple forwarders, the end-to-end transmission

quality is greatly affected by each forwarder. The objects must be delivered reliably and in order, without any replication. Additionally, all nearby nodes in the ad hoc network must have a consistent data of the network with regard to each destination.

CONCLUSION AND FUTURE WORK

In order to achieve a high-quality and real-time video streaming an error recovery techniquuld be applied to a wireless video streaming. A technique is proposed to decrease the burst of data loss by separating the transmissions of the original data and the redundant data. All inter-frames are transmitted in the UDP channel. The problem of MERVS is the delay of the TCP channel, Simulation results indicate that MERVS with the delay improvements can offer a better relocate video quality compared with FEC and RTP/UDP protocols. In this research, a Multi- channel Error Recovery Video Streaming (MERVS) scheme is planed. The problem of MERVS is the delay of the TCP channel, which is improved by the Priority Queue, Quick Start and Scalable 31 Reliable Channel (SRC Results show that the delay of MERVS with Priority Queue, Quick Start and SRC is as low as that of RTP/UDP in the simulations, and the quality of the transmitted video is just slightly degraded compared with MERVS with only Priority Queue and Quick Start. In this work, the routing and relay selection algorithms are not considered. Those aspects will be considered in the future work. On one hand, a suitable route for TCP transmissions can improve the TCP performance, which eventually will improve the quality of the transmitted video. On the other hand, a multi-path routing technique will utilize extra resources, which can increase the network capacity and improve the overall performance of the protocol. Therefore, the choice of the appropriate routing or relay selection algorithms can enhance the performance of MERVS. For further extension, streaming for 3D virtual environment is one of the possible research areas.

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