

Minimal Cost Clock Synchronization Using a Sender-Receiver Protocol in Wireless Sensornets

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Abstract

Recent years have seen an incredible progress in the advance of small sensing devices talented of data processing and wireless communication through their entrenched processors and radios. Wireless sensor networks (WSNs) are consisting of such devices attainment importance due to their incipient applications. In WSNs, there is a need for a common view of time among the wireless sensor nodes to achieve major tasks such as data fusion. For the inactive nodes listening to a sender-receiver two-way timing message exchange between two nodes in an exponential link delay model, this paper stems a vision of protocol that used to minimize the time needed to achieve clock synchronization between wireless network nodes. this clock synchronization is very smart for the low power demanding WSN scenario due to reduced power consumption.

Keywords: Clock Synchronization, Wireless Sensor Networks, sender-receiver

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Secure Scalable Video Transcoding over Wireless Network

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Abstract

Transmission of secured video stream, from a centralized server to different clients, is performed via a middle-ware named transcoder server. The role of this transcoder is to adapt the contents of a video stream. The adaptation performed in order to fit the client capabilities and to satisfy the channel restriction bandwidth. This process should be performed while preserving the stream security. Selective encryption techniques provide content protection. Just a minor part of the data containing the relevant

features is encrypted. Using the selective encryption techniques save computational overheads while still achieving adequate security. In this paper, we present a new model for three tier transcoding architecture. The outcome of that model is to minimize the overhead processing of the transcoding operations while upholding the security aspect of the stream

Keywords: [scalable coder](#), [secure scalable](#), [transcoding](#), [transcoding parameters encoding](#)

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Selective Encryption for Transcoding Secure Scalable Video Stream across Wireless Network

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Abstract

Securing the entire video stream Transmitted from a centralized server to different clients via a middle-ware transcoder is very costly. This cost is caused due to a Massive amount of stream that must be secured. Selective encryption is introduced to diminish the amount stream that must be secured to fit securing objective. Also, it reduces the overhead caused by full encryption. The selective encryption should be performed while preserving the security of stream contents. In this paper, we present a new technique for securing the effective part of the video stream. The objective of that model is to minimize the securing cost while upholding the security aspect of the stream

Keywords: Transcoding, secure scalable streaming, selective encryption.

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A Transcoding Technique for Secure Scalable Stream

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Abstract

Transcoder is a middle-ware server between the main casting server and their different clients. The role of this transcoder is to adapt the contents of a video stream. Transcoding is performed to fit each client capability according to the change in network conditions. The main problem that obstacle the transcoder operation comes in two parallel ways. First, the problem deals with the ability of transcoder to fit with the network parameters. Second, the ability to perform the reduction for transmitted stream while preserving the security of its contents. In this paper, we present a new model for the three tier transcoding architecture. The objective of this model is to diminish the transcoding process while continuance the security aspects of the stream.

Keywords: Transcoding, scalable stream, streaming, network parameters.

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An Efficient Implementation of Hierarchical Weighted Fair Queuing Packet Scheduler for Multimedia Networking

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Abstract

In this paper, we have proposed an efficient implementation of scheduling algorithms for multimedia network. This implementation has been serviced in two methods. First method use the finish time order only as WFQ service discipline, for both real and non-real time multimedia packets, allowing high amount of share (bandwidth) to achieve guarantee for real time multimedia packets, and overcome the performance degrades due to burst, delay, and jitter. Second method use the delay

bound, to work together with the finish time order to avoid assigning high amount of share to the real time multimedia packet, to achieve guarantee for it.

Keywords: multimedia, WFQ service discipline, bandwidth, jitter, delay bound

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