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Refined adaptive video quality demands over heterogeneous networks (Conference Paper)

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AbstractView references (13)

User demands of video quality are increasing rapidly. Videos streaming providers have been trying hard to fulfill users' requests of best video qualities over heterogeneous networks. However it is extremely challenging to meet adequate bandwidth which guaranty users' pleasance. With current portable devices, users change dynamically their positions and demands, thus anticipating the distribution methods of bandwidths and channel capacities. Two modules are used to perform the quality adaptation: the First Adaptive Video Quality (FAVQ) and the Refined Adaptive Video Quality (RAVQ). Both modules form the algorithms that match the layers with resources available at the peer. On one hand, to determine the highest potential layer which user can retrieve and play, the FAVQ is used and perform at session start. On the other hand, due to the changes in environmental network, the RAVQ is performed regularly to adjust the layer accordingly. JSVM 9.14 was used for performance evaluation of the developed schemes. This study manage to formulate the problem as bandwidth reduction and still achieve short delay and maintain acceptable video streaming quality base on scalable video coding (SVC). © 2017 IEEE.

SciVal Topic Prominence ⓘ

Topic: Video streaming | HTTP | adaptive video
Prominence percentile: 98.739 ⓘ

Author keywords

- FAVQ
- Quality video streaming
- RAVQ and Heterogeneous System

Indexed keywords

Engineering controlled terms:

Bandwidth

Heterogeneous networks

Video streaming

Engineering uncontrolled terms

Bandwidth reductions

FAVQ

Heterogeneous systems

Performance evaluations

Portable device

Quality adaptation

Quality videos

Video quality

Engineering main heading:

Scalable video coding

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