

, , , \*

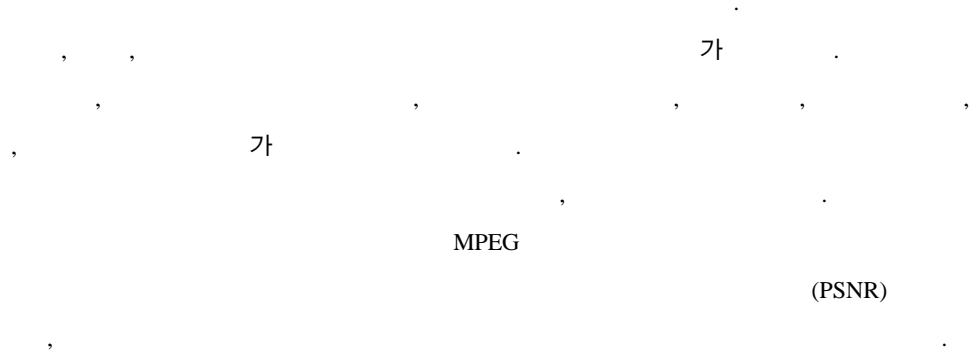
\*

# System Architecture For Real-Time Video Service

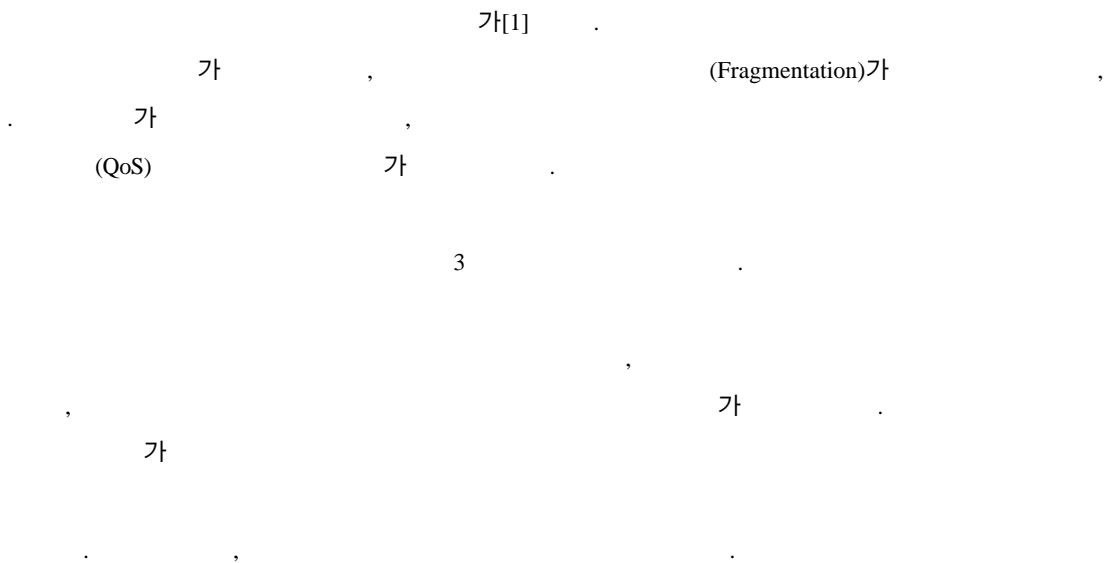
Yongho Seok, Yung Yi, Yanghee Choi, Hyun Park\*

School of Computer Science and Engineering, Seoul National University

\*Electronics and Telecommunications Research Institute



1.



2

가

[5]

, 4

가

5

WFQ(Weighted Fair Queuing) [3]

FB(Flow

Based)WFQ, CB(Class Based)WFQ<

2>, TB(TOS

Based)WFQ

2.

(Active

flow)

가

가

1> MPEG

CBWFQ, TBWFQ

가

3.8Kbyte

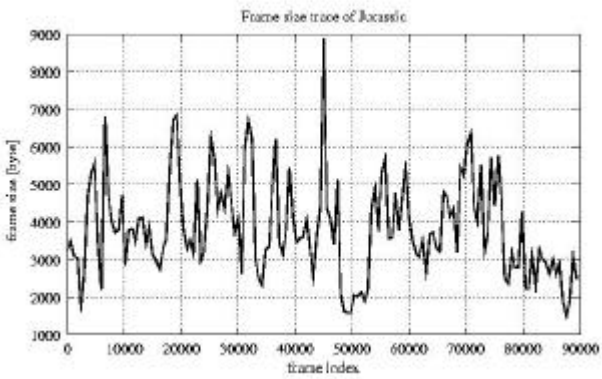
가

가

가

가

가



(Quality)

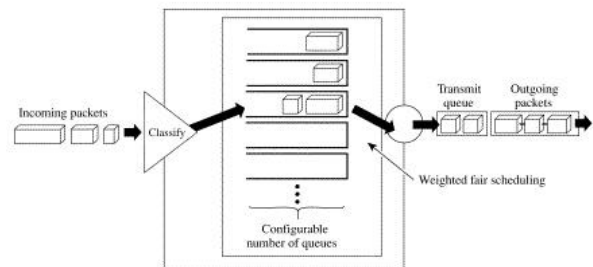
가

CBWFQ

, 64

가

가



< 2>

CBWFQ

4.

WFQ

3.

가

MPEG

, I

가

가

P

, B

(PSNR)

가 < 3>

DropTail, WFQ, AWFQ(Application-aware WFQ)

(PSNR)

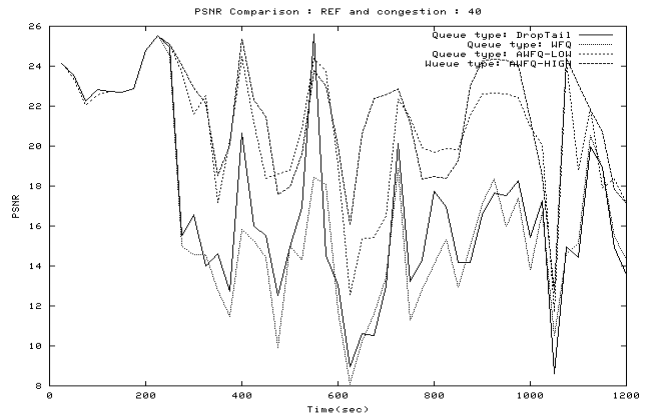
, MPEG

가 (Weight)

가

< 4>

ARED,



< 3>

PSNR

DropRandom

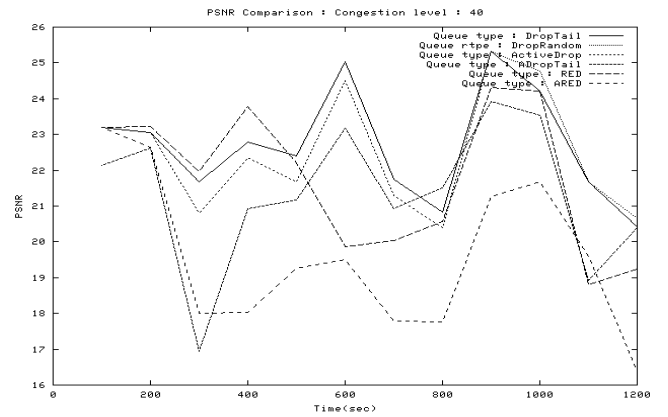
RED, DropTail

, ARED

, DropRandom

가 가

가



< 4>

PSNR

MPEG

가

< 3>

< 4>

MPEG

TOS

IP

5.

가

[1] S.-Y. Wang and B. Bhargava, "A Fragmentation Scheme for Multimedia Traffic in Active Networks", Reliable Distributed Systems, 1998. Proceedings. Seventeenth IEEE Symposium on , 1998, Page(s): 437 -442

[2] Konstantinos Psounis, "Active Networks: Applications, Security, Safety, and Architectures", IEEE Communication Surveys, 1999

[3] J.C.R. Bennett and H. Zhang, "WF2Q: Worst-case fair weighted fair queuing", In Proceedings of IEEE INFOCOM' 96, pages 120-128, San Francisco, CA, March 1996

[4] Gringeri et al., "Robust Compression and Transmission of MPEG-4 Video," ACM Multimedia '99, Orlando, FL, Oct. 1999

[5] Frank H.P. Fitzek and Martin Reisslein, "MPEG-4 and H.263 Video Traces for Network Performance Evaluation", Technical Report: TKN-00-06 October 2000