

QoS Guarantee Method for Real Time Service with Packet Priority in Home Gateway

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(P19)Abstract—In this paper, we propose a Quality of Service (QoS) method for a real time service by using priority-based packet classification method in Home Gateway (HG). A real time service is sensitive to QoS factors such as delay and jitter. On the contrary, A non-real time service is tolerant to above mentioned QoS factors. To improve QoS for the real time service, UDP is granted a high priority compared with TCP in Data Buffer Part (DBP) of HG. We analyze the expected waiting time of priority-based packet by using queueing analysis. The result shows that a significant QoS benefit due to the reduced waiting time for the real time service.

(P19)Keyword—QoS, real time service, priority-based, packet classification, Home Gateway, waiting time



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