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Design of QoS architecture in IEEE802.16d

(Article)

Zhao, H.-W. , Cheng, Y., Li, Z. , Li, Y.-C.

College of Computer Science and Technology, Jilin University, Changchun 130012, China

Abstract

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During the process of wireless video transmission based on IEEE802.16d protocol, how to improve the Quality of Service (QoS) architecture was investigated to meet the needs of real-time data transmission that overcomes the shortage of existing QoS architecture. Improvements were proposed by designing a new QoS scheduling algorithm on the basis of existing QoS architecture. According to the characteristics of four categories of service flow, which are supported by IEEE802.16d, the appropriate scheduling algorithm for each category of service flow was selected to ensure correct data transmission. Simulation results of Unsolicited Grant Service (UGS) and Real-Time Polling Service (RTPS) service flows verify the advantages of the new designed QoS architecture.

Author keywords

Computer applications; Quality of service; Real-time; Real-time polling service; Unsolicited grant service

Indexed keywords

Polling service; QoS architecture; Real time data transmission; Real-time; Service flows; Unsolicited grant service; Wireless video transmission

Engineering controlled terms: Computer applications; Image communication systems; Network architecture; Telecommunication services

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Li, Z.; College of Computer Science and Technology, Jilin University, China; email:lizhuo@jlu.edu.cn

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