

P.O.Box 8718, Beijing 100080, China	Journal of Software, July 2005,16(7):1296-1304
E-mail: jos@iscas.ac.cn	ISSN 1000-9825, CODEN RUXUEW, CN 11-2560/TP
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具有最低竞争吞吐率保证的准入控制算法

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Received 2003-12-22; Accepted 2004-08-10

Abstract

In this paper, the performance of integrating real-time and non real-time traffic in the PCF (point coordination function) mode of IEEE 802.11 is studied, and a novel real-time traffic admission control algorithm is proposed. By changing the admission threshold dynamically according to the current load of non real-time traffic and polling the admitted real-time nodes according to their service index, the proposed algorithm can provide parameterized QoS (quality of service) for real-time traffic, while at the same time, keep the throughput of non real-time traffic at an acceptable level. The validity of the admission control algorithm is verified by simulation.

Fu XR, Zhang LF. An admission control algorithm with minimum contending throughput guarantee. *Journal of Software*, 2005,16(7):1296-1304.

DOI: 10.1360/jos161296

<http://www.jos.org.cn/1000-9825/16/1296.htm>

摘要

研究了IEEE 802.11 PCF(point coordination function)机制下集成实时业务和非实时业务的性能,提出了一种新的实时业务准入控制算法.该算法根据网络中的非实时业务负载情况动态计算准入阈值,并对准入的实时业务结点按服务指标进行轮询,从而在对实时业务提供参数化QoS

(quality of service)的同时,使非实时业务吞吐率保持在可接受的水平上.仿真实验验证了算法的有效性.

基金项目: Supported by the National Natural Science Foundation of China under Grant No.90104015 (国家自然科学基金); the Natural Science Foundation of Tianjin of China under Grant No.043600311 (天津市自然科学基金)

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