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DiffServ中动态优先级调度算法的延迟分析

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摘要 通过对DiffServ体系的4种优先级队列和优先级调度算法的分析，得出了动态优先级调度算法可以解决IP分组转发时的公平性问题。但随之而来的问题是IP分组转发时的超延迟现象。在确定出较精确的延迟门限标准和具体的实现方法后，得出动态优先级调度算法使IP分组的转发不会超出延迟门限。从仿真实验表明，动态优先级调度算法在一般的网络环境和条件下，4种优先级队列分组的公平性转发能够提供QoS保证。

关键词 服务质量 区分服务 调度算法 公平性 网络延迟

分类号

Delay analysis in dynamic priority scheduling algorithm based on DiffServ

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Abstract

Through the analysis of four kinds of priority queues and the priority scheduling algorithm in DiffServ system，the dynamic priority scheduling algorithm is obtained which can be used to solve the fairness problem that occurs when IP blocks are being forwarded.The following problem，however，is the delay phenomenon at the same time.After determining the more precise criterion of delay threshold and the concrete method of realization，find that with the dynamic priority scheduling algorithm，forwarding IP blocks dose not exceed the delay threshold.From the simulations，with the algorithm，it can provide the QoS guarantee that four kinds of priority queues are forwarded fairly.

Key words Quality of Service（QoS） DiffServ scheduling algorithm fairness network delay

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