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适应自相似业务的无线网络自主CAC策略

Self-organized CAC mechanism adopting for self-similarity service in wireless network

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中文关键词: [自组织网络](#) [呼叫准入控制](#) [自相似业务](#) [服务带宽优化](#) [带宽利用率](#)

英文关键词: [self-organized network](#) [call admission control](#) [self-similarity service](#) [service bandwidth optimization](#) [bandwidth utilization](#)

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中文摘要:

为保证QoS的前提下提升无线网络的接纳容量,研究了无线网络业务的自相似特征,将其与QoS参数共同引入到服务带宽的计算当中,提出基于服务带宽优化并具有自主特性的SS-CAC (self-organized based on network similarity call admission control) 策略,用以降低网络带宽利用率及业务阻塞概率。之后对SS-CAC策略进行实现仿真,与在网络中采用传统CAC机制相比,采用SS-CAC不仅可以保证语音业务的质量还可降低2.69%的数据业务平均带宽使用率,同时数据业务的阻塞率和掉话率也在高负载情况下分别下降了0.95%和2.81%。

英文摘要:

To improve the access capacity in wireless network with the QoS ensuring, the service similarity in the wireless network was researched, and the service bandwidth was calal with similarity and QoS parameters. Then an SS-CAC (self-organized based on network similarity call admission control) mechanism based on the service bandwidth optimization was introduced to lower the system bandwidth utilization and service rejection probability. And the novel mechanism was achieved and simulated. Compared with traditional CAC, the results of simulation show the performance of SS-CAC mechanism can not only ensure the quality of the voice service but also reduce the bandwidth utilization of the data service by 2.69%. In addition, it can also reduce the call rejection ratio and call drop ratio by 0.95% and 2.81% respectively in the case of high cell load.

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