数据库、信号与信息处理

P2P社区的信息检索算法设计

王欣惠

北京农业职业学院 信息技术系，北京 102442

摘要   为解决P2P社区的资源定位及信息检索问题，采用混合型P2P网络模型，将社区内的检索划分为本地检索、组内搜索和组间搜索。对于本地检索设计了新的词条权重的计算方法，解决了同构文档集内的文本检索问题。对于组内搜索和组间搜索，通过设计节点选择策略，使一部分与查询相关度高的节点执行查询任务。最后提出结果融合的方法并对特定的实验数据进行测试，实验表明设计的算法在较小的查询开销下，能取得较好的检索效果。
关键词   P2P社区   信息检索   算法设计
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Algorithm design of information retrieval based on P2P community

WANG Xin-hui

Technological Information Department，Beijing Vocational College of Agriculture，Beijing 102442，China

Abstract

  In order to effectively locate resourse and search information in P2P community，a hybrid P2P topology is adopted and the document searching in P2P community is divided into three processes：local retrieval，intra-search and inter-search.In local retrieval，the new term weight calculation method is designed to solve the problem about txt search in homogeneous collection.In intra-search and inter-search，a part of peers which are more relevant to the query to conduct the retrieval task is selected.Experimental results show that this method can get better retrieval results with lower cost.

Key words   peer-to-peer community   information retrieval   algorithm design

通讯作者 王欣惠 wang-xinhui@163.com