# 上海大学学报(自然科学版)



## Journal of Shanghai University (Natural Science Edition)

首页 | 期刊介绍 | 编委会 | 投稿指南 | 期刊订阅 | 下载中心 | 联系我们 | 常见问题 | English Version

上海大学学报(自然科学版) » 2013, Vol. 19 » Issue (1):49-53 DOI: 10.3969/j.issn.1007-2861.2013.01.010

计算机工程与科学

最新目录 | 下期目录 | 过刊浏览 | 高级检索

<< Previous Articles | Next Articles >>

## 基于关系和状态的移动云位置信息服务

向劲锋, 雷州1 张龙, 沈文枫, 段峰

1. 上海大学计算机工程与科学学院, 上海200444; 2. 联想移动通信科技有限公司创新中心, 北京100091

# Mobile Cloud Position Information Service Based on Relationship and State

XI ANG Jin-feng, LEI Zhou, ZHANG Long, SHEN Wen-feng, DUAN Feng

- 1. School of Computer Engineering and Science, Shanghai University, Shanghai 200444, China;
- 2. Lenovo Mobile Communication Technology Limited Haidian District, Beijing 100091, China
  - 摘要
  - 参考文献
  - 相关文章

Download: PDF (1594KB) HTML (1KB) Export: BibTeX or EndNote (RIS) Supporting Inf

摘要 受限的资源、易泄漏的用户信息一直制约着基于位置服务(location-based services, LBS)的应用程序的发展和推广. 通过结合 云计算强大的计算能力和存储能力,以及3G网络发展下的高速移动网络,提出一种移动终端加云服务器端的开发模式. 该模式能够将移 动端中复杂繁琐的计算任务和大量的存储任务交付给具有高速计算能力和海量存储能力的云端执行. 提出一种基于关系和状态的信息推 送策略. 该策略能够很好地保护用户的位置等私密信息,为用户提供灵活的权限设置. 通过一个原型系统的运行,证明系统的可行性和实用性.

关键词: 云计算 移动云 基于位置服务 关系推送 海量存储

Abstract: Limited resources and user information leak restrict the development and promotion of location-based services (LBS) applications. By combining the powerful computing power and storage capacity of cloud computing and the high-speed mobile network in the development of 3G network, a development model with a mobile terminal and cloud server-side are adopted. It can deliver complicated computing tasks and storage tasks at the mobile end to the cloud which has high-speed computing power and massive storage capacity. In addition, this paper proposes an information push strategy based on relations and states, which can well protect the user's location and other private information, and provide users with flexible permission settings. It is showed feasibility and practicality of the system through operation of a prototype system.

Keywords: cloud computing, mobile cloud, location-based services (LBS), relationship pushing,

mass storage

收稿日期: 2012-11-25;

基金资助:

国家科技重大专项资助项目(LX201102103)

通讯作者 雷州(1972—), 男, 副教授, 博士, 研究方向为云计算. Email: leiz@shu.edu.cn

作者简介: 雷州(1972—), 男, 副教授, 博士, 研究方向为云计算. E-mail: leiz@shu.edu.cn

### 引用本文:

.基于关系和状态的移动云位置信息服务[J] 上海大学学报(自然科学版), 2013, V19(1): 49-53

.Mobile Cloud Position Information Service Based on Relationship and State[J] J.Shanghai University (Natural Science Edition), 2013,V19(1): 49-53 链接本文:

http://www.journal.shu.edu.cn//CN/10.3969/j.issn.1007-2861.2013.01.010 或 http://www.journal.shu.edu.cn//CN/Y2013/V19/I1/49

- [1] 肖志辉. 移动互联网研究综述[J]. 电信科学, 2009, 25(10): 30-36.
- 2] 沈晶歆. 移动互联网关键技术及典型业务产品研究[J]. 电信科学, 2010(10): 5-12.
- [3] Michael A, Armando F, Rean G, et al. Above the clouds: a Berkeley view of cloud computing [R]. Berkeley: University of California, 2009.
- [4] Fay C, Jeffrey D, Sanjay G, et al. Bigtable: a distributed storage system for structured data [C]// Proceedings of the 7th USENIX Symposium on Operating

#### Service

- ▶ 把本文推荐给朋友
- ▶ 加入我的书架
- ▶ 加入引用管理器
- ▶ Email Alert
- ▶ RSS

作者相关文章

- [5] Systems Design and Implementation. 2006: 205-218.
- [6] Bogdan G T, Cristian B. A comparison between several NoSQL databases with comments and notes [C]// Proceedings of the 10th Roedunet
- [7] International Conference. 2011: 1-5.
- [8] Dean J, Ghemawat S. MapReduce: simplied data proceedings on large clusters [C]// Proceedings of the 6th Symposium on Operating Systems Design and
- [9] Implementation. 2004: 137-150.
- [10] Mahadev S, Paramvir B, Ram on C, et al. The case for VM-based cloudlets in mobile computing [C]// IEEE Pervasive Computing. 2009: 14-23.
- [1] 周文, 井明洋, 吴辰康, 徐怡秋, 马雯, 郭毅可, 张武.中国云计算产业结构和商业模式[J]. 上海大学学报(自然科学版), 2013,19(1): 26-30
- [2] 郭毅可, 韩锐.云计算中的弹性算法: 概要和展望[J]. 上海大学学报(自然科学版), 2013,19(1): 1-4
- [3] 谢江, 王旻超, 易荣贵, 夏上云, 张武.CPSE-Bio: 基于云计算的生物问题求解环境[J]. 上海大学学报(自然科学版), 2013,19(1): 21-25
- [4] 董贺, 徐凌宇.基于云平台的软件服务流体系结构[J]. 上海大学学报(自然科学版), 2013,19(1): 14-20
- [5] 张惠然, 戴佳筑, 李芝龙, 沈小龙.基于云计算平台的医疗健康监视系统[J]. 上海大学学报(自然科学版), 2013,19(1): 35-38
- [6] 胡冠男, 卢志国, 詹华清, 陆铭, 朱文浩, 刘炜, 王晓伟, 张武.基于动态用户融合的云计算架构[J]. 上海大学学报(自然科学版), 2013,19(1): 31-34
- [7] 蒋永生, 彭俊杰, 张武.云计算及云计算实施标准: 综述与探索[J]. 上海大学学报(自然科学版), 2013,19(1): 5-13
- [8] 王家耀. 智慧让城市更美好[J]. 上海大学学报(自然科学版), 2012,34(3): 139-142

Copyright by 上海大学学报(自然科学版)