

工程与应用

实时交通信息服务数据组织与基于JAVA的系统实现

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摘要 相对于单纯道路网络信息和历史经验交通信息, 实时交通信息对于出行者出行决策具有更为重要的意义。随着实时交通信息获取手段的多样化和普及化, 更富生命力的实时交通服务系统已经纳入应用日程。首先分析总结了公众对于实时动态交通信息的需求状况, 将与导航和出行密切相关的实时道路交通信息分为交通事件和交通流信息两大类, 对交通事件, 根据其几何特征, 进一步分为点事件、线事件、面事件和关系事件。基于J2ME/J2EEE软件开发架构, PostgreSQL与PostGIS的时空交通数据管理模式, 研发了中心式的实时交通信息服务系统原型, 并对典型的交通事件和交通流信息在移动终端模拟器进行了时空表达示例。

关键词 [实时](#) [动态](#) [交通信息服务](#) [J2ME](#) [数据组织](#)

分类号

Push dynamic location based services: real-time traffic information organization and services realization based on J2ME/J2EE

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Abstract

At present, most navigation services are based on static traffic data and generally could not do well as the traffic situation changes fast. With multiple methods widely being used to obtain real-time traffic information, dynamic navigation services based on real-time traffic information are feasible to realize. The research developed a prototype service system of real-time traffic information based on J2ME/J2EEE as basis of dynamic navigation services. First, it summarized the public requirements of real-time traffic information. And it divided real-time traffic information into traffic events, information of traffic flow and information of vehicles. As to traffic events, it can be made up of point event, line event, face event and relation event according to their geometry features. In the second part, it formed data model for real-time traffic information and realized the data visualization, route computing and storage. Linear referencing methods and dynamic segmentation technologies are used for its visualization. In the third section, it discussed software architecture, which the system acquired, based on J2ME/J2EE. PostgreSQL and PostGIS softwares were utilized to manage spatial-temporal traffic information. The prototype system adopted central service structure. After some evaluation of the prototype, some future work is discussed.

Key words [real-time](#) [dynamic](#) [traffic information services](#) [J2ME](#) [data organization](#)

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