

# 面向钻井大数据的数据集成及分析系统的设计与实现

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**摘要:** 长庆钻井公司经历了多年的信息化建设,积累了大量的钻井相关数据,形成了钻井大数据的研究基础.但是长期的分散建设,让海量的数据分布在不同的异构数据源中,难以实现相关数据的综合分析.针对此实际问题,提出了钻井大数据的数据集成及分析系统的设计实现方案,本系统参照本领域的知识,应用 kettle 数据集成工具建立了新的数据仓库,并利用 final report 业务智能工具实现了钻井大数据的按需组织视图,多视角灵活展现,为用户决策提供了强有力的数据支持.

**关键词:** 大数据; 数据集成; 业务智能; 数据仓库

## The Implementation of Data Integration and Analysis System for Big Data of Drilling

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**Abstract:** Changqing drilling engineering company has experienced informatization construction in many years, and accumulated a large number of data about drilling, formed a research basis about drilling big data. But the large number of data distributed in different heterogeneous data sources because of the long-term decentralized construction. So it is difficult to get the comprehensive analysis about the relevant data. This paper introduces the data integration of drilling big data, the methods of designing and implementing the analysis system against this kind of practical problems. The system uses kettle which is a integration tool to establish a new database implementing the data integration, and uses final report, the business intelligence tool, to implement the on-demand organized view of the drilling big data. It also provides a strong data support for user's decision and for the improvement of drilling technology with multi-perspective flexible display.

**Key words:** big data; data integration; business intelligence; database

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