

基于SOA的蒸发岩盆地岩性判别系统

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摘要 蒸发岩盆地岩性判别系统是用来对测井数据进行处理得出地下有利于成盐地层岩性的解释性系统, 由于岩性判别使用的岩性数据库、测井数据库、专家知识库等分布在全国各地, 数据结构和维护系统均不相同, 难以实现实时的岩性判别. 本文建立了蒸发岩盆地岩性判别模型, 提出了基于面向服务体系结构的数据存储、数据处理、应用服务、业务流程、客户应用等五层岩性判别系统框架, 通过地学Web服务组件将多种分布式的地质数据融合起来协同工作. 以羊塔5井测井数据作为基础, 验证系统实现了分布式岩性判别的任务, 并给出了判别结果, 为以后地学领域构建多源、异构的分布式地质数据集成和服务共享提供了一种新型的实现模式.

关键词 [面向服务的体系结构](#), [蒸发岩](#), [岩性判别](#), [地学数据共享](#)

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Evaporation salt basin lithology discriminant system based on SOA

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Abstract Evaporation salt basin lithology discriminant system is used to deal with logging data in order to get the lithology of layer that valuable to generate salt. Lithology database, logging database, expert knowledge repository are not only distributed all over the country, but also their data structure and management system are different too. Thus it is difficult to implement real-time lithology discriminant. This paper build the model of evaporation salt basin lithology discriminant. It supply a lithology discriminant framework based on Service-Oriented Architecture that includes five layers-data storage, data manipulation, application service, business flow and customer application. It utilizes geology Web Service components to fusion all kinds of distributed geology data to work together. Using logging data of YangtaJHJ5 to verify the system can implement the task of distributed lithology discriminant, gives the result of lithology discriminant, and provides a new kind pattern for distributed geology data and application share to build multi-source, heterogeneous geology data integration and application share platform.

Key words [service-oriented architecture](#) [evaporation salt](#) [lithology discriminant](#) [geology data share](#)

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