

Drillinginfo: Database Manager Self Discovery Service

Client:

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Background:

The DI Transform software is a full-featured oil and gas interpretation, visualization, and analysis desktop application written in Java. It stores and integrates data from multiple databases both locally and over networks. Database management is provided through our own toolkit which abstracts out the underlying database. This includes user management, table creation for our data model, data backup and restoration, and table migration between versions and new data model changes. Unfortunately, having an abstracted DBMS layer requires that users configure their clients to be able to locate the corresponding data.

Project Goals:

The main goal of the project is to provide a discovery service that can run behind a firewall, locally or remotely, to provide clients with a description of our database instance. The service will need to be accessible both through our Java application and an HTML5 compatible browser. The minimum requirement is the ability to install and configure the service on one system and detect the identification information on another system. Advanced work includes the ability to use our application jars to authenticate users securely and provide a list of project names and versions the user may access on that instance. Advanced work could also include automatic detection of the database rather than server side configuration of the service. We are looking for an end result that simplifies the user experience for attaching and locating data in our databases.

Suggested Team Size:

2-3 students

Some onsite work (Littleton office)

Skillset:

Java - required

Web services - optional

Potential for continuing work through a summer internship that would involve exposing access to some or all of our DBMS tools through web services.