

Relationally Integrated Computer System, Ohio Department of Natural Resources

The Ohio Department of Natural Resources (ODNR) Division of Oil & Gas Resource Management has asked JMT to build a web based system for them to track their activities, allow for their customers to request permits and provide the public information about Oil & Gas activities in the state of Ohio.

Project Highlights:

- ✓ Customizable workflow platform
- ✓ Turbo Tax like permitting workflows (guided data entry and validation)
- ✓ Customizable routing
- ✓ GIS Integration and rules engine

Tools and Technologies:

- ✓ ASP .NET MVC framework
- ✓ Esri JavaScript API
- ✓ Angular
- ✓ Azure
- ✓ Cosmos DB
- ✓ MS SQL

Services:

- ✓ Business Analysis
- ✓ Data Services
- ✓ GIS Design, Analysis & Implementation
- ✓ Application Development
- ✓ Interactive Multimedia Design

JMT Technology Group created a new system for the Ohio Department of Natural Resources Division of Oil and Gas Resources Management to replace their current RBDMS platform with a web-based system to support ODNR's registration, financial assurance, and permitting activities.

This new relationally integrated computer system (RICS) is first, a platform that allows ODNR to define their workflows, build pages to complete the flows, define the data entities, and deploy those flows. Along with the flow portion of the platform there are components built into the application that those flows can exploit. Specifically, contacts, notes, approval, tasks, emailing, mailing, and payment processing tools. These approval flows take advantage of auditing, multi-user note sharing, and checking the status of where the approval is in the approval flow.

In addition, JMT Technology Group has built components specific to the Oil and Gas industry. These components utilize technology to query applicable GIS data to determine what rules and regulations apply based on where the applicant indicates they wish to build the well. Such conditions include the presence of underground drinking water, underground mines, and other geologic features. The application builds a diagram of the well based on data entered in the application and provides that diagram for applicants and reviewers.

The application integrates data from the division's legacy database with the new cloud-based database system to display data and synchronize data between the systems. The project has also integrated with the State of Ohio's OnBase system for document management utilizing Hyland's OnBase REST API for submitting documents and searching the OnBase database and displaying documents to RICS users in a web-based interface.

With initial development complete, JMT is continuing to work with ODNR to enhance RICS to provide additional capabilities.

