



MODERNSYSTEMS

CASE STUDY

UNITED STATES DEPARTMENT OF ENERGY

MOVING FROM IBM OS/390 WITH NATURAL/ADABAS TO LINUX
PLATFORM WITH ORACLE DATABASE

Introduction

The US Department of Energy's primary mission is to advance the national, economic, and energy security of the United States. The Energy Information Administration (EIA) is the section of the US Department of Energy providing statistics, data, and analysis of resources, supply, production, and consumption for all energy sources. The applications involved in this project are used to collect and process data related to oil and gas resources.

Business Need

EIA has maintained three major oil and gas applications for over 20 years. The applications comprise a number of differing and, in several instances, proprietary technologies – principally Software AG's ADABAS and Natural.

In recent years, EIA has found it difficult to maintain these legacy applications due to a scarcity of programming resources, and the increased costs associated with the aging technology.

However, the business rules at the core of the technology provide effective support to the organization. EIA determined that it would be cost effective to engage Modern Systems to refactor the legacy code and data to the more modern Java and Oracle technologies.

EIA's ultimate goal was to position the applications for future growth and to leverage current and emerging technologies.

Project Details

Source System

IBM OS/390 with:

- ADABAS and VSAM databases
- 1M Lines of Code - Natural/COBOL
- Written in Assembler, COBOL, Easytrieve, FORTRAN, JCL, Natural, and PL/I

Target System

Linux Platform with:

- Oracle database
- Java source code
- JCL migrated to KShell

Timelines

- Modern Systems' delivery of modernized solution: 12 months
- Total time through production implementation: 24 months