

# Case Study

U.S. ENERGY  
INFORMATION  
ADMINISTRATION  
(EIA)

OFFICE OF INFORMATION  
TECHNOLOGY (OIT)



## CONTEXT

OIT provides IT services to EIA customers. OIT is responsible for providing IT infrastructure, application development and support and user services to over 600 Federal and contractor staff.

## PROBLEM

The IG identified a number of critical issues. A key weakness was the lack of a comprehensive and implementable architecture. This resulted in IT investments that poorly aligned to EIA strategic objectives. The CIO recognized the need to migrate from an existing on premise data center with expensive and hard to maintain servers and storage but had no concrete approach to accomplishing this or acquiring the required resources.

## SOLUTIONS

- Identified architecture framework needs. The Open Group Architecture Framework (TOGAF) was selected.
- Developed "as is" architecture team. The team identified and described 42 key business functions, 101 different databases/files in using 20 different DBMSs, 144 business applications, 97 virtual and physical servers, a complex EIA owned and operated network, and rudimentary IT security tools and processes.
- A new platform was specified using COTS. EIA energy modeling app using open source software replaced National Energy Modeling System built with FORTRAN. A hybrid cloud infrastructure was identified to allow OIT to decommission the on premise resources and move IT and platform services to cloud. A transition plan was created to support IT investment planning and budgeting.
- Implemented an enterprise architecture tool (iServer by Orbus) to support maintenance and use of EIA enterprise architecture

## CAPABILITIES



Enterprise  
Architecture



Architecture  
Tools



Migration  
Planning

## OUTCOMES

- Strengthened IT investment planning
- Planned for modernizing EIA business apps and IT infrastructure (migration to a hybrid cloud)
- Created an info base that makes decisions on acquisition of IT software and infrastructure products.