



# Mendix Application Development for Middle Eastern Government Services

Digital  
Services

Success Story

## Status Quo

The client is a Middle Eastern government organization who uses sophisticated technologies to track and manage their services to the public. To provide better service to their end users they decided to enhance one of their legacy systems by migrating to a more advanced technology which can accommodate the current process and new process to be added in the future.

## Application Overview

The client intended to migrate all their existing services and online functionalities to the Mendix platform. The plan was to leverage the Mendix 8.5 version, for which Indium provided the technical expertise to overcome the complexities of the migration process. The process involved efficient management of large volumes of semi-structured data in the form of PDF files. The Mendix application was built on both hybrid and web, based on the functionalities.

## Business Requirements

- To replicate all the existing and new functionalities in the Mendix 8.1 platform
- Handle JSON files and file path of their active directory
- During the engagement, the requirement evolved to migrate from Mendix 8.1 to 8.5
- The applications involved the use of large volumes of semi-structured data in the form of PDF files, which required efficient management via the Mendix Application
- Implement the application on both Hybrid and Web, according to the functional requirements
- Enable secured login for users accessing the hybrid application

## Our Solutions

To efficiently implement the system, Indium proposed the following:

- Leveraged MongoDB, to store the semi-structured data files that will primarily be flowing through the system, which was then integrated with the Mendix application
- Integrated PDFtron with Mendix to efficiently handle the PDF files
- Outlook and Calendar were integrated

- Biometric authentication feature was enabled and made available for Hybrid applications which enabled the secured login for the users
- Developed the workflow engines to create multiple forms dynamically
- Chat features were configured in the application

## Business

Application Services, Mendix

## Domain

Government / Public Services

## Technology

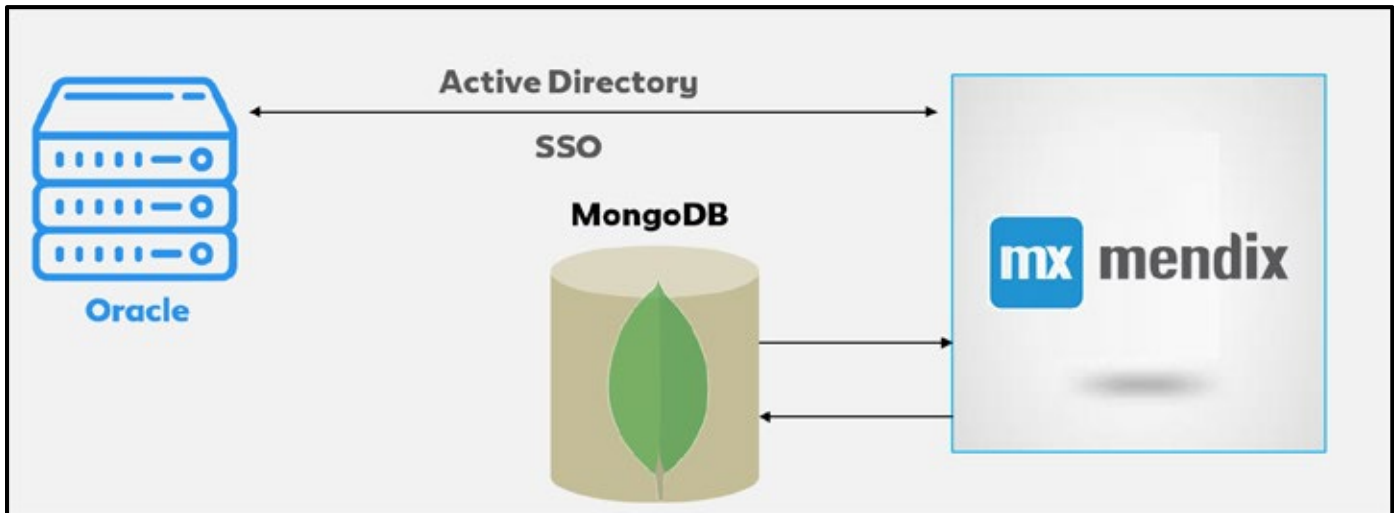
Mendix 8.1, 8.5, Oracle, MongoDB, PDFtron

## Key Highlights

- 6X reduction in time taken to create a form using the new Mendix workflow engine
- Reduced the application maintenance and enhancement effort by nearly 50%
- Enhanced security from Biometric authentication features

## Business Impact

- **Efficiency:** The time taken to create a form using the newly develop workflow engine in Mendix reduced by 6X, compared to the legacy application
- **Robust Application Development:** Mendix migration of existing and new features reduced the application maintenance and enhancement effort and timelines by nearly 50%
- **Security:** Biometric authentication feature enhanced the security of the applications
- **Cross-platform:** Leveraging Mendix to rapidly develop both web and hybrid applications made it more efficient for all stakeholders to access data and information



High-level Architecture



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