



Migration to .NET Reduces  
Operating Costs and Improves  
User Experience.

Case study





Pension applications rehosted by Raincode's COBOL compiler resulted in better service for Czech citizens and dramatically reduced CSSA's operational costs.

## The Customer

The Czech Social Security Administration (CSSA) is the largest public organization in the Czech Republic, with an annual budget of almost CZK 750 billion (approx. € 30B). One of its main tasks is to collect funds for pension, health insurance, and employment insurance and redistribute them to over 8.5 million citizens.

## The Problem

As citizens become more and more concerned with their income level and future pension status, they desire more frequent account updates and the ability to monitor and modify their account in real-time via mobile web applications. The priority for the CSSA was to respond to this growing demand and offer Czech citizens innovative applications and services which are mobile, flexible, accessible, and interactive.

The computational engine had been developed and fine-tuned in COBOL over the course of several decades and executed on a Fujitsu (BS2000) mainframe, but it was not designed to be accessed on mobile devices.

To improve the level of service for its users, the CSSA wanted to enable the simulation of pension calculations through a web-based application.

For consistency, it was crucial to reuse the existing computation engine, originally developed in COBOL for the mainframe, and deploy it on Microsoft's .NET platform, without re-development or functional change.

## The Solution

In order to make it available through the CSSA ePortal, the pension computation engine was recompiled using Raincode's COBOL compiler, deployed on .NET running on Intel servers and accessed through a web-based application.

The core engine is still developed and maintained on the mainframe, and new releases are compiled and deployed on .NET periodically.

## The Result

**Empowered employees.** Thanks to the bimodal Raincode compiler, the COBOL development team and the C# team were able to work together to create a robust and agile solution.

**Engaged citizens.** All Czech citizens can now access the CSSA ePortal to manage their insurance disputes in an integrated web application.

**Optimized operations.** The COBOL code was recompiled "as is" on the .NET platform and is now running on Windows Servers to serve Internet and mobile requests at a fraction of the cost of a mainframe infrastructure.

**Products transformed.** The insurance disputes application has been modernized and is now running in the .NET environment. Visual Studio and C# are used for maintenance and enhancements in a much more agile fashion, making these applications totally future proof.

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# CSSA's legacy mainframe applications are future proof on .NET.

Raincode COBOL Compiler facilitates new development in C# and eliminates the burden of COBOL licensing costs.

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Mainframe to .NET and Azure