



# Platform Migration: Controlled and Smooth with SCORE Data Architecture Integration

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> ERIC MARTENS, PROJECT MANAGER RDW, THE NETHERLANDS

## **RDW ICT**

RDW ICT is the independent IT service provider of the national vehicle authority of The Netherlands. Their main tasks include vehicle approval and inspections, market authorisation of vehicles, administration of licenses, information services for the police as well as for the safety and environmental monitoring - in total more than 300 million transactions annually.

RDW repeatedly has been awarded as the best and most innovative government organization, for best management and best annual results.

# PLATFORM MIGRATION: SMOOTH & SECURE

#### BRIDGING PLATFORM BORDERS WITH DATA-SERVICES

SCORE Data Architecture Integration has played an important role in RDW's platform migration from Unisys OS 2200 to Microsoft Windows. The original application consisted of a one-tier architecture accessing the RDMS database via RSA CALL interface.

#### Marcel Rozema, Senior Architect, RDW:

"When Delta suggested using SCORE Data Architecture Integration to develop data access services instead of changing the existing SQL CALL interface code in our existing programs to Embedded SQL, we first had to think about that.

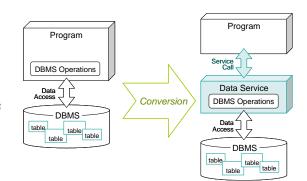
*In the end the solution has proven to be a key factor that enabled us a smooth step by step migration.* 

Besides, the automated approach that comes with SCORE Data Architecture Integration has improved the quality of the data accesses in our programs."

During the first steps of the platform migration RDW discovered that the existing application had such a heavily intertwined use of the data that it seemed impossible to define clusters of data and applications that could be migrated separately. The only remaining strategy seemed to be a big bang approach which means that both - the old and the migrated new systems had to be maintained and operated in parallel during the testing phase. This was considered much too complex and risky in RDW's 24x7 business.

#### Eric Martens, Project Manager, RDW:

"Delta proposed a completely different scenario. They suggested producing with SCORE Data Architecture Integration one data service for each and every program, in a first step even for our old Unisys OS 2200 platform. Our applications would access the RDMS data on Unisys OS 2200 through these services only.



This also meant that we started our project with a modernization phase on the existing platform."

#### FREE CHOICE AND FLEXIBILITY THROUGH SINGLE-SOURCE AND MULTIPLE TARGET GENERATION

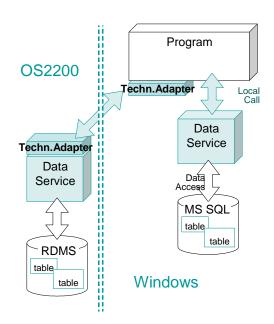
SCORE Data Architecture Integration, like most of Delta's products, uses generator technology to produce from models the platform specific code that is necessary for the implementation. This enables customers to use one data service model to support multiple database targets ("single source – multiple targets").

In RDW's case the data access services were generated to be used on different platforms and in different constellations:

- The Unisys OS 2200 only situation accessing RSA RDMS
- The remote access situation still accessing RSA RDMS, being used by migrated applications already running on Windows
- Microsoft SQL Server on Windows for the landing platform Windows

#### Eric Martens, Project Manager, RDW:

"After our application architecture had been modernized that way, the next step could take place: Moving our applications to the new Microsoft Windows platform but leaving the data access services on the Unisys OS 2200, accessing them through the remote access options of SCORE Data Architecture Integration. As programs modernized to use the SCORE data services for the data accesses and non-modernized programs interoperated perfectly by means of automatically produced facades, we were able to modernize small clusters one after each other bringing them into production.



This made it possible to start our migration project without the need of having the landing platform defined and available at this phase of our migration."

#### PERFECTLY FITTING SOLUTION THROUGH METHODIC CONFIGURATION

The SCORE Data Architecture Integration solution that RDW uses is not an off-the-shelf solution.

#### Marcel Rozema, Senior Architect, RDW:

"SCORE's configurable nature enabled us to implement a database error handling registration that cooperated with our old error handling. Modernized and not yet modernized programs did share that part of their functionality. Also the fact that we could decide how and with what middleware the remote solution would be implemented was an important bonus for us."

#### IMPROVED QUALITY THANKS TO THE AUTOMATED APPROACH

The effect on the migration strategy was not the only advantage SCORE Data Architecture Integration brought for RDW.

#### Wiebrand Rispens, Senior Architect, RDW:

"SCORE Data Architecture Integration also influenced the quality of our software development. In the old situation our programmers had to decide what programs were affected by a database change and had to implement the changes by hand. Using SCORE with its automated approach all relevant data access services are checked against a change in the data model and only if there is a compatibility issue a programmer is needed to carry out the necessary changes. As a result of this we have much more certainty that our programs are correctly using the database."

In the end, RDW migrated 14,400 software objects originally containing over 12 million lines of COBOL source code from Unisys OS 2200 RSA RDMS to Microsoft Windows managed .NET with Microsoft SQL Server as database. 3,200 data access services have been automatically generated with SCORE Data Architecture Integration.

#### Eric Martens, Projektmanager, RDW:

"The fact that we did platform, database and application architecture transformation in one step was way beyond what we expected to be possible. SCORE Data Architecture Integration solution proved to be the robust and reliable product we needed to keep our data secure and available during this project."

# **SCORE DATA ARCHITECTURE INTEGRATION**

SCORE Data Architecture Integration delivers exactly what is needed – data as real business services, completely generated, clearly encapsulated access code to process the information, without any pseudo-SQL interfaces.

Working with SCORE is easy. SCORE ensures that even the most complex heterogeneous data environments can simply be used as services. Even different TPMS and languages are supported, without the service consumers having to know or care about the specifics of the respective environment:

For the service consumer there is no difference between data, functions, or a combination of both – a service is a service!

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