



URL: <http://www.bmw.de>  
 Industry: Automotive industry  
 Country: Germany



## BMW

### Car manufacturer modernizes central legacy application

#### Challenge

Internal analysis showed the incumbent Unisys system would not meet BMW’s IT development plan. The analysis also identified potential for cost reductions by standardizing hardware and operating processes.

#### Solution\*

- > Micro Focus Enterprise Developer
- > Micro Focus Enterprise Server

#### Successful modernization

By migrating an important legacy application from a Unisys host to Suse Linux, BMW successfully replaced a proprietary technology. msgGillardon and Micro Focus carried out the modernization of this application.

For a long time, BMW in Munich operated a central contract administration system on a Unisys mainframe. It administers many leasing contracts in Germany, and it is essential that the application functions without any problems. Programmed in COBOL, the application, based on a mixed hierarchical-relational database system, had been built on since the mid 1980s, ultimately comprising more than 2.5 million lines of code.

In late 2009, the IT consultancy msgGillardon, in partnership with Micro Focus, was asked to migrate the application from the Unisys host to a virtual Linux environment, with the intention of shutting down the host at the end of 2010.

The aim was a 1:1 migration of the application. Full business functionality had to be maintained while simultaneously changing to state-of-the-art technology. In addition, the data management system was to be replaced by a relational Oracle database. The output from the old system and the modernized application had to be identical. Even the character-based presentation of the online screens was retained so that the end user would not notice the change in platform.

#### Highlights

- > Modernization of central legacy application
- > Enhanced performance
- > Clear annual savings

**“We have succeeded in meeting the highly ambitious schedule of one year including all tests.”**

**Peter Dietrich,**  
 member of the Board of  
 Management at msgGillardon

## Migration to Linux

Considering the business critical nature of the application and the technical challenge, it was absolutely essential that the modernized application was available and fully functional after the deadline.

The two companies defined milestones and metrics to measure the project's progress and success: Proof that the data transfer was feasible had to be provided after three months, and four weeks later proof that it was technically feasible to modernize the application was required. The project plan specified the "point of no return" after five months, when a contract for the host system needed to be extended, a costly fall-back option. All milestones were met successfully.

msgGillardon then started the subproject "Integration of the modernization results" by connecting the interfaces. The system tests in the subproject "Tests" started at the same time.

In addition to being the general contractor, msgGillardon was in charge of the project management, interface integration and managing the rollout. Micro Focus was responsible for the code and data conversion.

Thanks to its rule-based modernization tools, Micro Focus could carry out the conversion automatically. This included the transfer of data from the Unisys system to Oracle, replacement of the Unisys transaction system by implementing the CICS contained in Micro Focus Enterprise Server and replacement of the batch system by central control of the Unix shell script via TWS, as well as the conversion of the Unisys system online screens. In the new application infrastructure, Micro Focus Enterprise Server acts as central middleware under Linux.

The scope of the modernization work was considerable: A total of 900 COBOL programs, 75 COBOL subprograms, 330 screens and 1770 batch jobs were converted. Micro Focus' technical expertise and msgGillardon's many years of project experience were vital to the project's success.

After successful testing the host system was switched off at the beginning of January 2011. The modernized application has been running ever since with great stability on virtual servers maintained by IBM in the BMW AG data center.

The application performs even better in the new environment, with daily batch processing completed about two hours faster than before. Enhanced performance was not, however, the main purpose of the modernization process. Other criteria were more important — and they, too, were met in their entirety. The departure of a proprietary system environment was achieved, putting an end to dependence on one manufacturer. In addition, the platform change brought about a significant cost benefit compared to the previous host system. The annual savings are very clear.

## About Micro Focus

Companies can use the solutions and services from Micro Focus for enterprise application modernization, testing and software management to modernize and optimize their applications. By integrating new technologies and using modern platforms, IT costs can be reduced in the long term.

Micro Focus is listed in the FTSE 250 Index on the London Stock Exchange. The company now employs 1200 people worldwide. Its headquarters are in Newbury, United Kingdom; the German office is in Ismaning near Munich. Further information can be found at [www.microfocus.com](http://www.microfocus.com).

\*Micro Focus Enterprise Developer and Micro Focus Enterprise Server are the current names for products used in this project.

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