



Migration Case Study



Business Problem

Ford Credit Asia Pacific, the regional finance arm of the Ford Motor Company, was a user of Linc and then EAE for many years. Ford Credit was very successful in assisting customers to buy Ford vehicles and the Linc loan administration system was highly efficient in supporting the business.

Ford's main issues were cost and support. Since the system was implemented in many different countries within the region it was difficult to provide a consistent level of support on a non-standard platform. They solved this problem partially by moving from mainframe Linc to EAE on Linux in the late 90's but still had a non-standard architecture which was not seen as having a long-term future.

Ford wanted a more modern platform that would conform to their global IT strategy and provide more flexibility and better development options without having to replace the existing hardware.



Business Solution

Ford studied the options open to them, including commissioning Gartner to report on Agility Business Suite as a future path for the system. The conclusion was that the optimum platform would be an industry-standard JEE system deployed on the existing IBM X Series Linux machines already in place.

Ford approached MSS to perform a migration away from EAE to their corporate standard of Java/Oracle on the Linux open source platform.

The migration project was conducted entirely remotely with MSS running the project from the UK in conjunction with the development centre in Melbourne, Australia and the users in 5 different countries in the region. The system went live in phases, one country at a time and, over the space of a 4 month period, all the Ford divisions in the region were using the new system. Because great attention was paid to giving the programs the same look and feel as the originals, no user retraining was necessary.

Overview

Ford wanted to replace their EAE platform with one that would be more modern and flexible, conform to corporate strategy and be more cost-effective with no loss of reliability. They had already undertaken a lengthy conversion themselves to move from the original mainframe Linc system to the Linux EAE platform. The experience had shown that such transformations are often much more difficult and take longer than planned without specialist expertise available. Thus they were very happy to engage MSS to move from the Linc language to Java as the final step in their transformation.

Having been enthusiastic supporters of Linc for a long time they thoroughly investigated the route of going to Agility Business Suite, the successor product to EAE. However, the conclusion that they reached was that AB Suite was not a future-proof strategy and did not fit with the overall corporate direction. MSS presented the corporate IT Architecture group, based in Dearborn, USA, with a flexible solution that would enable them to retain the Ford User Interface (FUI) and implement the business logic in Java, the corporate standard. The chief architect is quoted as saying “... looks like we would have a lot of flexibility and options in the migration and can choose what makes the most sense for us”

MSS used the migrate!LINC product to transform the Linc system into a JEE Java application with the screen presentation conforming to FUI supported by MSS’s WebManager software. The online logic modules were deployed as Java EJBs and the batch programs as freestanding Java programs, each running in its own JVM.

Challenges

The users of the system are distributed over a wide area and have local issues, for example the Chinese character set used by the Taiwanese subsidiary. In addition communication over the different time zones presented a problem.

However all of the technical issues were dealt with satisfactorily and overcome using standard techniques, and the communications issues proved not to be as severe as might be thought. Centralizing problem reporting and tracking using the MSS Bugzilla web site worked well and working remotely proved entirely feasible. In fact no MSS staff were required to travel to the user sites during the entire project.

Testing was accomplished in the usual way by comparing a baseline created on the original system with results from the Java implementation. One unique feature was that Ford initially required MSS to produce screens identical to the original, down to the individual pixel level, so as to be able to use existing Rational Robot regressions tests. This was accomplished in the main by configuration of the CSS/XSLT processing that is a standard feature of the MSS migration path.




Results

The migration project was initiated in October 2009 and completed in 2011 – the first subsidiary went live in the January with others scheduled at intervals thereafter. The system proved to be very stable and performed well.

Ford is very happy to have a key system transformed from a legacy architecture into one fully conformant with global IT strategy in completely current technology.

The project was completed in March 2011 and Ford management were extremely happy with the result.



“We are very pleased to report the application is performing within our predefined Service Level Agreements for performance and availability and we have no significant issues impacting our Business operations in the five Locations (Argentina, Australia, China, Mexico and Taiwan).

We would like to thank you and your team for all the time, effort and expertise they contributed in assisting us in achieving the transition from our previous Unisys Linc development environment to an industry standard Java environment.”

Dave Crisp, Ford IT Project Director