



Migration Case Study

Business Problem

Wakely Insurance, now known as Insurance Administrative Solutions (IAS), is a provider of services to the insurance industry in the United States. Based in Tampa, Florida, Wakely is a Third Party Administrator (TPA) serving many partner organizations and covering more than 240,000 policyholders. Wakely processes more than 5 million claims annually, and manages over \$390 million in annual premiums.

Wakely's key advantage over their competition is their sophisticated proprietary technology, processes, and administrative protocols which are unmatched by any other third party administrator. Wakely has the ability to customize services to fit particular client needs, providing maximum economies of scale.

However, the technology that the application was originally written for (Unisys MCP-based mainframe) was expensive and holding the company back from expanding as rapidly as it would like.

Wakely had very competent support for both the Windows systems that were becoming the standard within the organization and the Unisys platform. However the key Unisys expert was approaching retirement and it was obvious that finding experienced mainframe/Cobol/DMSII developers would be a problem. Not only were they easier to support but the Windows platforms were vastly more cost-effective to run.



Business Solution

Wakely approached MSS through ESI, a long-standing partner of MSS based in Tallahassee, Florida, to perform a migration away from the mainframe to the Windows platform.

The migration project was conducted during 2008 and went live in early 2009. The end result was a system running faster than before on commodity hardware and low-cost software. The system integrated well with other Wakely systems and activities and resolved all the staffing issues that had been worrying management.

Overview

Wakely wanted to replace their Unisys MCP platform with one that would be easier to support and would conform to corporate strategy. They had already taken the decision to move another (HP-UX based) application to Windows and were running extensive departmental operations on that platform. Thus Windows (server 2008) was a natural choice of target system.

Wakely were happy with Cobol as a development language but were wary of run-time license costs associated with the standard target of Micro Focus Cobol on Windows. They chose Fujitsu NetCobol as their compiler for Windows primarily for cost reasons.

Having been users of SQL Server for a long time they opted for the Microsoft database to replace DMSII.

MSS used the migrate!COBOL product to transform the Cobol system into a NetCobol application with browser-based screen presentation supported by MSS's WebManager software.

Challenges

The database had several datasets defined using a general-purpose approach to the content, i.e. records containing a key plus a large alpha data item which would be remapped using a Cobol record layout in a user program. This approach gives flexibility in terms of the database technology used (the original design aim) but means that the data cannot be used by normal query tools and is only accessible by Cobol programs. MSS dubbed this type of usage “opaque data” and, at Wakely’s request, developed a special extension to the migrate!DATA product to handle the conversion to "real" data items. Using the tool MSS produced a SQL schema using columns based on the Cobol field definitions and resolving some inherent duplicated naming (in the programs as well as the database definition).

To be able to reproduce the data as the programs expected it, MSS also created special data access code to re-group the individual fields back into their original form. And in addition, when it was found that some of the records in the database contained unexpected data, MSS and Wakely developed techniques and queries to validate the data. Following this data cleansing exercise a new level of confidence in the operational data was established.

Challenges cont.

The final result was that the SQL database was defined correctly, using meaningful column names, was thus far more usable than previously and was much cleaner than before. The screen handling was a locally developed system involving holding layouts in flat files read by the programs and displayed on T27 (emulation) 'green screen' terminals. MSS used WebManager to interpret the data stream at run-time and produce a screen layout similar to the original but presented within Internet Explorer.

Testing was accomplished by comparing a baseline created on the original system with results from the Windows implementation. MSS and Wakely developed scripts to perform the data comparison using features of MSSQL.

Results

The migration project was initiated in August 2008, substantially completed by 2009 and went live in May 2009. The system proved to be very stable and performed well.

Wakely is very happy to be able to focus on Windows as its only technology and is able to develop its key asset in a much more efficient manner than before.

Migration Summary

ENVIRONMENT	SOURCE	TARGET
CPU:	Unisys Libra CS400	Windows
Database:	DMS II	SQL Server
Language:	Cobol74	Fujitsu Cobol85
Data Comm:	COMS	MCS!Lite