Case study

Irish Life migrates from mainframe to save €2.5 million a year

New HP blade platform reduces batch run times by 75 per cent

Industry
Life assurance and pensions

Objective
Re-platform core business application to reduce IT costs and combat the poor economy

Approach
Conducted proof-of-concept (PoC) tests on a possible database program and ran benchmarks on potential hardware

IT matters
• Reduces batch runtimes by 75 per cent to increase online system availability
• Delivers consistent response times to cope with peaks in business demand
• Increases upgrade options to provide more flexible business support
• Eases the IT management burden with a single set of tools and skills

Business matters
• Achieves hardware and licence savings of up to €2.5 million a year to help Irish Life combat the adverse economy
• Reduces cost-per-policy by eliminating expensive mainframe upgrades
• Supports vital business expansion in difficult trading times

“It says a lot about our faith in HP servers that we are now happy to move our core business system onto HP kit.”
– Barry Ryan, chief technical architect, Irish Life Group

Leading insurance company takes a brave step
To combat the poor economy, leading life insurance and pension provider, Irish Life, migrated its core business system from an expensive mainframe platform to HP blade servers. This ambitious re-platform brought significant savings, and also delivered many other benefits.
Challenge

Need to reduce cost
Enterprises have different ways of coping with the challenges of a financial downturn. One of the routes chosen by Ireland’s leading life assurance and pension provider, Irish Life, was to seek a more cost-effective platform for CLOAS, its business critical insurance administration application.

The Irish Life Group has more than 2,000 staff and a million customers and has provided the people of Ireland with risk protection, pensions, savings and investment products since 1939. Because the Irish economy has been in recession for the past four years, the market for retail life insurance and pensions has fallen by more than 65 per cent so action was needed to counteract this trend.

The key CLOAS system is a mainframe-based and heavily customised version of a package from IT solutions provider CSC. In addition to internal policy administration, it is also used online by customers for self-service policy administration.

“This system represents a significant element of the company’s total operating costs,” says Brendan Healy, chief information officer for Irish Life Group. “We were paying a premium for the mainframe environment it was based on.”

Complex system
Upgrading the mainframe environment meant that these costs were constantly forced up as the business grew but economic worries were not the only basis for change. The CLOAS system includes unique intellectual property captured in over three million lines of COBOL code and was supported by a number of home-grown satellite systems and 67,000 files. The result was that Irish Life did not feel ‘future-proofed’ because of the complexity at the heart of the system. Also, the system’s underlying single-threaded batch architecture was not flexible or efficient, with nightly batch processes routinely taking eight hours or more to complete.

“It was quite often the case that on some key nights during the month there would be nervousness as to whether the batch would finish in time for the online system to be brought up the following morning,” says Barry Ryan, chief technical architect with Irish Life Group.

Other challenges also affected the decision to re-platform CLOAS. Staff were difficult to recruit because college graduates did not want to work on 50-year old technology; there were no interactive de-bugging or tracing tools on the mainframe; IBM Information Management System (IMS) data was not easily accessible and a specialist team was needed to manage and support the mainframe infrastructure and its batch runs.

75 per cent reduction in batch processing times.
Solution

Successful tests
Irish Life first conducted proof-of-concept (PoC) tests to compare its existing Oracle database technology with Microsoft® SQL Server and decided that SQL Server would deliver long term cost and technology advantages. It then needed to find a hardware platform that could be trusted to efficiently run the critical CLOAS application.

“We had been running mainframes for 40 years. We had two IBM mainframe platforms and a Unisys based mainframe platform and we did a generic study to decide which we would re-platform. Ultimately we decided to do the one running the core life business and CLOAS, “explains Ryan. “HP is our preferred supplier for UNIX®-based systems and for a long time we had run Oracle and a number of other platforms on HP-UX. HP is also our primary supplier of Wintel or Intel®-based hardware. We were happy with the HP technology so they were a natural choice when we looked to re-platform our mainframe.

“We went to the HP site at Boeblingen, Germany, to benchmark HP servers in generic tests on our core banking system. Based on our mainframe workload we got extremely good results on both the SQL Server back end and the application servers. We were very impressed by the performance results.”

Irish Life also worked with HP and IT service partner, Ergo, to agree the optimum configuration and to provision the server estate.

According to Pat Walsh, Ergo’s senior account manager for Irish Life: “the challenge faced by Irish Life’s IT department to reduce costs by 20 per cent typifies what we have been hearing from our customers for a number of years now. CIOs are increasingly being asked to achieve savings whilst running a more efficient and flexible environment. Building on our existing six year relationship, we will continue to work with Irish Life to identify and implement cost saving projects, using innovative technologies from partners such as HP and Microsoft.”

Now, the production environment in Dublin consists of five servers in two clusters. The application cluster includes two active and one passive server while the database cluster is one active and one passive server. A remote Disaster Recovery site houses one active and one passive server at the application level and a database cluster of one active and one passive server. All servers are ProLiant BL460C Blades with two X5675, 3.07Ghz cpus.

Specialists from HP Technology Services were involved in the design and build of the new environment and in on-going support.
Generic server platform
The complex re-platform was carried out primarily by Irish Life's internal team with the help of application modernisation specialist, Micro Focus, and occasionally some SQL Server help from Microsoft. Irish Life decided to reuse the existing COBOL code and achieve this with Micro Focus Enterprise Developer software and the Micro Focus Enterprise Server production deployment environment. Because the new HP platform was a vanilla environment composed of generic servers, the company did not need specific HP skills to achieve the migration.

“We were able to just take HP commodity enterprise server solutions and replace our mainframe with them,” adds Ryan.

The new CLOAS went live with no system downtime and no disruption of service.

Benefits
Significant savings
The first and most important benefit for Irish Life is that it has far exceeded its forecasted saving of €1.5 million per annum, achieving an annual saving of €2.5 million in licensing and hardware costs. Cost avoidance was a major element. Various events have brought a significant growth in the policy books administered by Irish Life and this would have involved a very large investment to scale up the mainframe and keep the batch window manageable. Not having to make this investment means no incremental spend to cope with business growth.

Improved performance of the HP servers also means that batch runtimes have been reduced by 75 per cent, from eight hours to two. Both internal and external users can now be confident that the systems will be fully accessible each morning and application availability can also be extended at weekends, supporting longer working hours at peak business times and ensuring solid self-service capabilities for customers.

HP converged infrastructure has brought other benefits
“We use a single set of management tools and have a single set of skills around managing the HP blades and the HP rack servers so we have benefits across the whole platform rather than needing specialist mainframe skills,” says Ryan. “We also have a lot more options for upgrade paths. We can put the newer kit in under CLOAS and reuse older machines on other systems because it’s all commodity kit.”

Supports business expansion
The new HP-based system also copes better with peaks in demand, as Ryan explains: “our old mainframe has four engines but in each HP box we have 24 cores so it means that throughout our online day we are seeing a lot more consistency of response times. Previously, peaks of activity meant that online response times might have degraded because there were a lot of people competing for a scarce number of processors or memory. We now have a lot more capacity resulting in improved consistency of service. We were also able to build in redundant machines to protect high availability.

“The new HP-based system means that as the business expands and we increase the number of policies we do not have to invest in bigger and bigger systems so our per-policy cost actually reduces.”

Learn more at hp.com/go/bladesystems

© Copyright 2013 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Oracle is a registered trademark of Oracle and/or its affiliates.

Microsoft is a U.S. registered trademark of Microsoft Corporation.

Intel is a trademark of Intel Corporation in the U.S. and other countries.

UNIX is a registered trademark of The Open Group.

4AA4-8410EEW, October 2013