Case Study

Bank of London and the Middle East plc

In July 2007, the Bank of London and the Middle East plc ("BLME") launched as a fully Sharia'a compliant wholesale bank, based in the City of London. BLME offers a range of high-quality Sharia'a compliant banking services and advice to businesses both in Europe and the Middle East and Northern Africa region which wish to access innovative Islamic financial products.

Before BLME began trading, it deployed a high-availability IBM-based solution to run specialist banking software. Thanks to Bell Micro Partner Services and Repton, the bank now has the computing power, resilience, and capacity needed for rapid business expansion.

For the Head of Information Technology, William Purdy, setting up the bank's new IT infrastructure has been a demanding exercise. Banking software is always considered a mission-critical application which requires high-availability hardware from proven vendors. Compliance to stringent Financial Services Authority regulations alongside tight internal auditing control are also essential.

"We needed to have systems that were fit for purpose and demonstrated that control," said Purdy. "It was necessary to identify an application that would give us the right facilities now and well into the future."

Facing tight timescales from the launch date, the bank searched for an off-the-shelf application that supported Islamic banking practices. It quickly found Kuwait-based Path Solutions offered iMAL, an enterprise solution for banking, investment, Islamic financing, and treasury operations. iMAL used the Sybase database which supports high availability systems with failover procedures.

"Once you've identified the application software and database, then that is the main driver for the hardware requirements," said Purdy. "We undertook a sizing exercise to see how capable the system actually needed to be, and then started on the actual hardware selection."

All the technical objectives revolved around system processing power, capacity, reliability, and resilience. Like any new business, the bank based its initial sizing requirements on its plans for growth, allowing plenty of room for easy future expansion. UNIX-based platforms from HP, Sun and IBM soon topped the list for the three servers intended for production, high availability, and disaster recovery.

"We needed hardware which had high performance, good value for money, and a great return on investment. It had to be something we could easily manage in-house too," said Purdy.

The bank soon found that IBM offered the "most cost-effective solution" based on the total cost of ownership including the initial software outlay. IBM then recommended Repton Computer Products Ltd, an IBM premier partner, to fulfill the project. To help provide professional services against a tight timetable, Repton turned to Bell Micro Partner Services for the installation and configuration work including system definition, sizing, and systems software familiarisation.

> " Having called in expertise to help configure our new systems and do the failover testing, the project went very well – to time and on budget. "
>
> **William Purdy,
> Head of
> Information Technology**

IBM P52a clustered servers running AIX were selected to provide the processing power along with SAN storage, network switches, and a tape library. Bell Micro consultants installed the hardware and the AIX operating system including High Availability Cluster Multi-Processing (HACMP). One of the most important tasks of a well-managed implementation plan was testing the high availability failover routines.
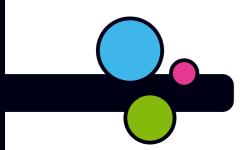
"Bell Micro understood what we wanted to achieve and provided comprehensive scripts for failover testing. We found that the new system is very stable and, having thoroughly tested many failure permutations, we know how to handle them too. Bell Micro were very good in helping us," said Purdy.

Another key area of the project was security penetration testing, conducted by an independent company. This pinpointed some vulnerabilities associated with open logical ports in the AIX operating system which were then closed by Bell Micro consultants. Finally, Bell Micro ensured proper skills transfer and provided a "very good" configuration document for the final handover.

"Having called in expertise to help configure our new systems and do the failover testing, the project went very well – to time and on budget," said Purdy. "We explained to Bell Micro's consultants what we needed to achieve in terms of high availability, and they gave us continuity of people throughout the project. We could see the quality of the expertise and had no concerns when they passed on the technical knowledge to us. It was a job well done and we have obtained good value in terms of systems performance."

The bank's new systems went live in July 2007 following the installation by Path Solutions of the iMAL application software and its Sybase database. Running carefully worked-out daily housekeeping tasks will now help ensure the system's future stability with IBM's three-year hardware warranty providing further reassurance. The close-working partnership between IBM, Repton, and Bell Micro has delivered a solution that's met all expectations and is ready for the future too.

"There is a great deal of resilience built-in with a lot of contingency from the way the systems and infrastructure has been designed," said Purdy.

Business profile

The Bank of London and The Middle East plc ("BLME") launched in the UK on 9 July 2007, having received FSA authorisation to launch as a standalone, wholesale, Sharia'a compliant bank based in the City of London.

BLME is focused on four main business lines: Islamic Treasury and Financial Institutions, Corporate Banking, Private Banking and Investment Management, Investment Banking.

To ensure tht all BLME's services and operations are wholly Sharia'a compliant, BLME has a dedicated Sharia'a Supervisory Board whose role is to review contracts and agreements relating to all of BLME's transactions to ensure they are consistent with the principles of Islamic jurisprudence.

Solution

- IBM P52a Servers
- IBM HACMP
- IBM DS4700 SAN storage
- IBM SAN switches
- IBM TS3100 Tape library

Benefits

- Cost-effective solution
- High availability platform
- Future expansion capability

About Repton

Repton offers IT solutions and services to the medium and large organisations including the financial, telco, gaming, retail, and general sectors. Formed in 1990, it employs more than 60 staff and has a turnover of £40 million.

"We were introduced to the Bank of London and the Middle East plc by IBM but, knowing we had to turn around the project very quickly, we engaged Bell Micro Partner Services to help us. Using their services, we were able to put together the right configuration for an IBM-based high availability solution and then quickly implement it. By working closely with Bell Micro, we met all our customer's expectations for the delivery of hardware and services – on time and to budget.**"**

**Charles Green
IBM Sales, Repton**