



Overview

Country or Region: United Arab Emirates

Industry: Financial Services

Customer Profile

Mashreqbank is the largest private sector bank in the United Arab Emirates. It offers a range of products and services from retail banking to treasury management.

Business Situation

Support for the Mashreqbank mainframe computing environment was coming to an end. In addition, the system was holding back new product development.

Solution

Mindscape IT migrated Mashreqbank applications to a new architecture, which runs on the latest Microsoft® technologies, including Microsoft Windows Server® 2003.

Benefits

- Mainframe applications migrated with low risk.
- IT architecture meets business aims.
- Batch processing times halved.
- Faster development of new products and applications helps bank meet market demands.

Bank Migrates from Mainframe System to Align IT resources with Business Objectives

"With the new solution we are in total control of what we can develop for Mashreqbank. It means a faster product development cycle and increased competitive advantage."

Asad Sagheer, Vice President of Architecture, Mindscape IT

Mashreqbank, the largest private bank in the United Arab Emirates, ran its core banking applications in a Unisys mainframe computing environment. At the end of the support cycle for this technology, the bank made the strategic decision to replace its mainframe with systems based on open standards. IT services and consulting division Mindscape IT rolled out the new infrastructure with support from Microsoft® and HP. After a two-week proof of concept at the Microsoft Technology Centre in Dubai, it implemented a solution based on Microsoft Windows Server® 2003 64-bit, Microsoft SQL Server™ 2000 64-bit, and Microsoft Operations Manager 2005. As a result, Mashreqbank has halved batch processing times. Plus, product development is faster, ensuring the bank continues to meet customer needs.



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Asad Sagheer, Head of Architecture & Standards, Mindscape IT

Situation

Many financial services providers are examining the system architectures that support their core retail and commercial banking processes. This process is driven by the need to respond to rapid and unpredictable changes in demand, customer requirements, and channel offerings.

These are some of the challenges facing Mashreqbank, the largest private bank in the United Arab Emirates with assets of U.S.\$13,560 billion and a strong brand identity in the Middle East. The organisation needs state-of-the-art IT systems to support its innovative products and services and relies on its own IT division, Mindscape Information Technology (IT), a Microsoft® Certified Partner, to maximise the value of its technology investments.

Approximately two years ago, Mindscape IT reviewed its strategy. It identified the need to upgrade the existing Unisys mainframe environment, which historically ran core banking applications.

Asad Sagheer, Head of Architecture and Standards, Mindscape IT, says: “Upgrading would have cost a great deal of money. We saw an opportunity to make a significant cost saving and increase our independence by moving away from mainframe technology and rolling out systems based on open standards.”

The final decision to upgrade or deploy open standards-based systems was based on the following criteria:

- The ability to handle current volumes and SLAs.
- Enhanced system performance.
- Improved user response times.
- Minimised total cost of ownership.
- Support for future growth.

Mindscape IT explored the option of upgrading the mainframe technology with the existing supplier; however, the team identified a number of disadvantages. These included high implementation costs, reduced return on technology investment, possible lack of integration with other internal systems, and continued lock-in with a proprietary solution provider.

Vijaykumar Kunnath, Program Manager, Mindscape IT, says: “Ultimately, migrating to an architecture based on open standards was attractive because it gave us full control over our IT landscape. We avoided dependency on a single, proprietary technology provider, and gained more control over primary programming work. This would result in the ability to develop new applications and launch new products more cost effectively.”

Solution

Once the decision had been made to migrate the Unisys infrastructure to open-standards based technologies, Mindscape IT engaged Dutch mainframe migration specialist Asysco. Its LION technology takes applications written in COBOL or LINC and translates them for use in open environments, including Microsoft Windows Server® 2003. Mindscape IT then approached Microsoft and HP and asked them to work in partnership with Asysco and support the project.

Sagheer says: “We wanted assurances that mainframe service levels could be maintained with a Microsoft and HP platform. We also had a number of questions regarding the overall architecture, including which software and hardware solutions would deliver optimum performance.”

Given the critical nature of the applications running on the Mashreqbank mainframe in the United Arab Emirates, Mindscape IT decided to run an in-depth product strategy and roadmap session, followed by a proof of

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Asysco

concept (POC) with Asysco, Microsoft, and HP. These sessions took place at the Microsoft Technology Centre (MTC) in Dubai and evaluated Windows Server 2003 Enterprise Edition (64-bit) integrated server software and Microsoft SQL Server™ 2000 Enterprise Edition (64-bit) database technology, both running on the latest HP hardware. Microsoft Operations Manager 2005 also ran as part of the new environment, monitoring performance and completing routine management tasks.

The two-week POC began with a partial test of the core banking applications to ensure the successful translation of LINC and COBOL applications. Mindscape IT and Asysco then ran a series of batch loads and scenarios, with Microsoft and HP helping to fine tune the solution in a simulated production environment.

Jan von Rouwendal, Chief Executive Officer, Asysco, says: “Moving from a mainframe to a Microsoft-based platform, Mindscape IT was concerned that it might not be able to maintain application performance. The testing at MTC dispelled these fears and proved that moving away from Unisys increased performance and opened up a range of new opportunities for the bank.”

The POC gave Mindscape IT the chance to evaluate a range of hardware configurations. Sagheer says: “Our operations mainly run on HP hardware and we have great experience of using its technology. We wanted to continue the strong relationship we have with the company and enjoy the benefits of using Microsoft and HP technologies together. This combination was a very strong foundation for such an important system.”

Based on the results from testing at MTC, Mindscape IT decided to install HP ProLiant BL 25 and BL45 blade servers running AMD dual-core Opteron x64 processors. Farid

Gemayel, Financial Services Sales Manager at HP says: “The proof of concept was very successful and showed the excellent performance of the HP servers, AMD processors, and Microsoft software solutions.”

The roll-out of the new environment was well-coordinated. Mindscape IT first migrated the branch operations of Mashreqbank in Doha and Qatar using Asysco LION technology. The bank’s finance subsidiary Osool Finance then also migrated. These implementations included Windows Server 2003 Enterprise Edition and SQL Server 2000 Enterprise Edition. They preceded a later migration of the Mashreqbank data centre.

Benefits

By migrating Mashreqbank core banking applications from mainframe technology to an open architecture based on Microsoft software, Mindscape IT is helping the bank align its IT strategy with key business objectives. This will help the organisation meet customer demands more efficiently and increase its competitive advantage.

Reduced Mainframe Migration Risks

Mindscape successfully converted all of the LINC and COBOL applications, including large production and historic database programs, using Asysco LION 5.2. During this process, there was no need to reengineer applications or rewrite a single line of code.

The project was delivered on time and on budget, taking just two days to fully convert and migrate the core banking applications. It went live in January 2006, and today around 1,500 end-users in 60 branches throughout the United Arab Emirates and Qatar turn to the new system to handle more than 1.5 million transactions daily.

Jan von Rouwendal says: “Some banks don’t believe these large mainframe applications

“Blade servers built on AMD processors offer powerful application performance and a low total cost of ownership.”

Asad Sagheer, Head of Architecture & Standards, Mindscape IT

with millions of lines of code can run in a Microsoft environment. We have delivered a 99.99 per cent automation level with a like-for-like migration. This significantly reduces risk because we're not trying to reinvent applications.”

For Mindscape IT, the new environment provides reliability to match the mainframe legacy system. Gemayel says: “HP promises 99.95 per cent uptime for the new system and since January 2006, it has been running around-the-clock without any service interruption.”

Excellent Performance Halves Times for Batch Processing

With the new solution, daily batch processing times have fallen from six hours to three hours. Furthermore, end-of-month processing times have gone down from nine hours to just five hours.

The most telling performance figure is CPU utilisation, which has been reduced from 90 per cent on the Unisys mainframe, to around 20 per cent using Windows Server 2003 running on HP blades. This increases the amount of time a server has for other requests, improving network efficiency and reducing demands on server resources. The blades have delivered increased application performance, while consolidating the number of servers in the data centre.

Sagheer says: “Blade servers built on AMD processors offer powerful application performance and a low total cost of ownership.”

Delivering Value Through Increased Productivity

The value of the new solution to Mashreqbank goes far beyond return on investment. It includes reducing time-to-market for new solutions and adding value to its existing investments.

Sagheer says: “With the new solution we are in total control of what we can develop for Mashreqbank. It means a faster product development cycle, which delivers a competitive advantage to the bank.”

Vijaykumar Kunnath says: “The LION development environment gives us a lot of flexibility in terms of version control and multiple generation sets. This has resulted in productivity improvements within our team. The LION Developer software is very easy to learn, and both mainframe and Microsoft Visual Basic developers have adapted to this new environment pretty quickly.”

The flexibility the new infrastructure has introduced will help Mashreqbank adapt more efficiently to new challenges and demands. Sagheer says: “The new architecture is helping us to build a cohesive strategy to support our operations. It is not a question of completing this project and leaving it at that. Instead, we have laid the foundations for the development of Mashreqbank, its continued innovation, and its success in a highly competitive market.”

Trusted Technology Partners Support Strategic Objectives

By forming an alliance with Microsoft, HP, and Asysco, Mindscape IT has deployed a new architecture, which supports the strategic objectives of the bank. The environment was only rolled out after extensive testing carried out by all partners over a two-month period. Employees from each partner visited Mashreqbank on a regular basis to design and test the architecture before the proof of concept began. Due to the nature of the project, Mindscape IT had to eliminate all migration risks.

Sagheer says: “This project far outweighed anything we had done before in terms of

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importance. All our questions had to be answered up front because we had to be sure that on January 9, when we migrated to the new environment, the bank continued to do business. All of our partners did a fantastic job of providing support very early in the process, giving us the confidence that made this project such a success.”

Fast Delivery of New Products

By moving to open-standards, Mindscape IT can look to the future with confidence. It is developing a POC for migrating Mashreqbank to Asysco LION 5.3, which supports SQL Server 2005 and will subsequently move to the Microsoft .NET Framework development environment.

Sagheer says: “We are continuing to work with Microsoft, Asysco, and HP, testing new beta products, and taking part in early adopter programmes. I think we will see many advantages over the next five years from our involvement with all of these companies.”

Microsoft Server Product Portfolio

For more information about the Microsoft server product portfolio, go to: www.microsoft.com/servers/default.aspx

Software and Services

- Microsoft Server Product Portfolio
 - Microsoft Windows Server 2003 Enterprise Edition 64 bit
 - Microsoft SQL Server 2000 Enterprise Edition 64 bit
 - Microsoft Operations Manager 2005

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Document published August, 2006

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