FUJITSU

Case Study
National Bank of Abu Dhabi

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Hossam Elkobrosy, Head of IT Infrastructure, NBAD

THE CUSTOMER

Country: United Arab Emirates (UAE)
Industry: Financial Services
Founded: 1968
Number of employees: over 6,000
Website: www.nbad.com

THE CHALLENGE

In order to cope with expansion rates of 25 percent, NBAD needed a new data center solution that would reduce energy, space and cooling requirements while improving performance.

THE SOLUTION

The company partnered with Fujitsu to deploy 62 blade servers hosting over 800 virtual servers on VMware and delivering applications to over 6,000 staff across the Middle East.

The customer

The National Bank of Abu Dhabi (NBAD) has one of the largest networks in the United Arab Emirates (UAE) with an expanding network of 125 branches and cash offices and more than 585 ATMs across the country. Its growing international network consists of over 60 branches and offices in 17 countries stretching across five continents from the Far East to the Americas, giving it the largest global network among all UAE banks. Since 2009, NBAD has been ranked one of the World's 50 Safest Banks by the prestigious Global Finance magazine, the safest bank in the Middle East and the safest bank in the Emerging Markets.

The challenge

Over the past three years, NBAD has undergone tremendous expansion leading to increasing strain on its IT infrastructure. The company began to struggle with supplying adequate space, power and cooling and needed to find a new solution that would enable it to cope with continued growth without compromising performance or security.

"We are growing at a rate of 25 percent per year which our existing architecture simply could not handle," explains Hossam Elkobrosy, Head of IT Infrastructure, NBAD. *"We audited the CPU usage and discovered that utilization across 600 servers was less than ten percent so we clearly needed to optimize our data center. Moving to a virtualized server environment seemed like the best approach."*

NBAD contacted a number of analysts to explore the best way to migrate from a physical to a virtualized server platform. It then invited several vendors to tender for the project with the key criteria being performance, memory and cost. It wanted a solution that would tie software, hardware, storage and the network together under one managed contract.

"We already use Fujitsu hardware and were very happy with its performance. We also knew the local team and trusted them to deliver," adds Elkobrosy. *"Two of the other main vendors were in the process of changing their server platforms to relatively untested technology so Fujitsu seemed to be the best, most reliable option."*

THE BENEFIT

- Temperature has been reduced by five degrees in the data center, making cooling less of an issue
- The total power load has decreased by 25 percent, saving money and lowering the environmental impact of the data center
- NBAD has gained 20 percent more space, giving it room to expand
- System utilization has increased from 6 to 45 percent, making the data center more efficient
- Performance has been improved and downtime reduced to a minimum each year

PRODUCTS AND SERVICES

- Fujitsu Server PRIMERGY BX900
- Fujitsu Server PRIMERGY BX922
- Fujitsu Server PRIMERGY BX924

The solution

NBAD worked with Fujitsu to deploy new PRIMERGY servers hosting 800 virtualized servers on VMware. NBAD now has 34 Fujitsu BX900 and BX924 blade servers in production and a further 28 in disaster recovery. This constitutes 80 percent of the total server estate.

"Most banks only virtualize around 50 percent of their servers because there are some applications and services which do not lend themselves to virtualization," says Elkobrosy. *"However, we have managed to migrate 80 percent to a virtual environment, reducing the overall complexity while increasing availability."*

The new solution makes the provisioning of applications quick and simple and reduces operating costs as well as minimizing space, power and cooling requirements. Application migration was handled by NBAD's in-house team with Fujitsu providing certification and support.

"The new solution is much more resilient as we can easily and rapidly switch between different blades depending on resource requirements. It is primarily a Windows environment and includes our treasury system, workflow applications, intranet and financial service servers," continues Elkobrosy. *"1,500 employees here in the head office and over 120 regional branches all rely on the virtualized environment to deliver the applications and services they need to work effectively."*

The benefit

The new approach has paid off according to NBAD's original objectives. Temperature has been reduced by five degrees in the data center making cooling less of an issue. The total power load has decreased by 25 percent, saving money and lowering the environmental impact of the data center. NBAD has also gained 20 percent more space, giving it room to grow further while increasing system utilization from 6 to 45 percent.

"Power, space and cooling were the original drivers behind the project so we are delighted to have had such an instant and positive impact on those areas but the project has delivered so much more," comments Elkobrosy. *"Performance is vastly improved and uptime has also increased, giving a better user experience. Previously, it would take 20 minutes to reboot a Windows server, with VMware on Fujitsu blades, it takes one minute. That makes solving issues much quicker and less frustrating."*

Thanks to patch management, quicker application deployment and the ability to near instantly return to a restore point the downtime each year has been significantly reduced. In addition, the time to market for new applications has been greatly improved.

"It used to take us over six weeks to deploy new services; now we can do it in a single day. That clearly makes for a more efficient business and enables us to react more quickly to market changes and demands," says Elkobrosy. *"Essentially, the new virtualized environment from Fujitsu is making us more agile, more productive and more innovative while reducing costs. It's win-win all round."*

Conclusion

Ivan Shishkov, the Fujitsu Account Manager who led the project, concludes: *"NBAD has been a strategic partner for us in the Middle East for over ten years so naturally we are delighted with the success of this data center virtualization program. We look forward to continuing to work closely with NBAD to introduce new innovations across the company."*

With the new data center up and running and delivering significant benefits across the business, NBAD is looking to the future and where else it can make savings while increasing effectiveness. Automation, chargeback, self-provisioning and virtualizing the network and storage environments are just some of the areas up for discussion.

"This project has opened the door for us to further explore new technologies with Fujitsu. Together there is still so much we can do to increase our efficiency while reducing costs and improving the end-user experience."

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