National Bank of Pakistan deploys FIS Profile on HP

HP Integrity and HP Mission Critical Services ensure processing power and 99.99% availability for core banking system

Industry
Banking

Objective
Achieve required performance, availability, and scalability for a new, centralized FIS Profile core banking system

Approach
Implement core banking solution on HP Integrity Superdome 2 servers running HP-UX with HP Mission Critical Services support

IT matters
- Ensures 99.99% availability for mission-critical FIS Profile core banking solution
- Achieves space and budget savings to enable IT team to initiate additional projects

Business matters
- Provides processing power and response times essential for key banking solution
- Reduces power costs by approximately 25%
- Enables vital business efficiencies across bank's approximately 1,290 branches
- Creates foundation for expanded banking offerings including mobile applications

"FIS Profile core banking and other solutions are fundamental to the operation of an organization of the stature and size of the National Bank of Pakistan. Running FIS Profile on HP technology provides the processing power, high performance, and scalability we require."

— Mahmood Siddique, CIO, National Bank of Pakistan

The National Bank of Pakistan (NBP) planned to deploy a centralized core banking solution and upgrade platforms for other key applications. NBP implemented FIS Profile on HP Integrity Superdome 2 servers with Intel® processors running HP-UX with HP Mission Critical Services support. NBP also migrated multiple databases and applications to HP ProLiant BL460c and HP ProLiant BL680c Server Blades running Red Hat Enterprise Linux 5.6 and Microsoft® Windows® 2008 with Microsoft Hyper-V Server enabled. The HP platforms provide the processing power, performance, and availability required for vital banking systems.

Owned by the government of Pakistan, the National Bank of Pakistan (NBP) provides services to individuals and corporate entities in addition to government agencies. NBP has a diversified business portfolio and competes in arenas including the debt equity market, corporate investment banking, retail and consumer banking, agricultural financing, and treasury services. The Bank has approximately 1,290 branches in Pakistan and operates in major business centers across the globe.

As NBP has expanded beyond public sector services and focused on providing a wide range of financial products to people and organizations, advanced technology has been a key facilitator.

"One major step was selecting and implementing a core banking solution," said Mahmood Siddique, CIO, National Bank of Pakistan. "In the past at NBP, core banking functions were performed by legacy systems that were not fully integrated and often required manual work. We initiated a project to identify a single core banking system with the sophisticated capabilities we need for everything from calculation of profit and loss and interest to supporting real-time online banking functions.

"At the same time, the Bank needed to upgrade aging platforms for vital solutions—including critical applications and databases for HR, financial, and banking support functions. Some of this technology was at end of life, and that offered an opportunity to evaluate alternatives and choose the best hardware solution based on performance and price," Siddique said.

HP Integrity Superdome 2 selected as core banking platform

For its mission-critical core banking requirements, NBP chose the FIS Profile solution and its integrated GT.M database engine. The plan is to centralize FIS Profile in the bank's main data center in Karachi to provide the same advanced core banking application across all of the bank's branches.

As an existing technology partner at NBP, IBM supplied the IBM P550 development server on which the Bank tested the FIS Profile application on the AIX platform and performed a pilot for a few selected bank branches over a two-year period.

"When we published the request for proposal for the production environment for FIS Profile, we felt as we had with other applications that

this is an open system and we welcomed bids from many vendors," Siddique said.

HP and partner Mushko Electronics of Karachi proposed HP Integrity Superdome 2 servers with Intel processors running HP-UX 11i V3. After evaluating a range of offerings, NBP purchased this HP solution based on its performance and total cost of ownership (TCO), according to Siddique. "We were convinced that the HP technology could deliver the best price-performance ratio," he said.

"Two Integrity Superdome 2 Servers are now deployed at our Data Center at Head Office in Karachi, one for production and one for testing and staging," Siddique said. "The installation and migration from AIX to HP-UX were smooth and timely and IT team training is going very well.

"We have run the HP Integrity configuration for several months for our mission-critical core banking solution, and we have had absolutely no problems with the HP Integrity Superdomes. Currently we are completing the rollout to our branches," Siddique stated.

HP ProLiant platform chosen for key databases

In addition to the strategic deployment of the FIS Profile solution, NBP migrated multiple databases and applications running on a Microsoft SQL and Oracle platform to HP ProLiant BL460c and HP ProLiant BL680c Server Blades. The HP Blades run Red Hat Enterprise Linux 5.6 and Microsoft Windows 2008 and Microsoft Hyper-V Server is enabled.

"The HP blades have improved the response times in the production environment and greatly increased capacity," Siddique stated.

NBP now has 23 HP ProLiant blades installed in eight HP BladeSystem c7000 Enclosures, and is looking to fully populate the enclosures in approximately one year. "We've also migrated several other banking applications from IBM and Dell platforms to HP blades and the HP technology has increased response times much more than we had expected for some of these applications," Siddique said.

POC proves HP performance for core banking

"Early in the discussions about a platform for core banking, issues were raised about porting FIS Profile from AIX to HP-UX and whether the solution would run smoothly on HP Intel-based

technology," Siddique said. "To resolve this, we requested an on-site proof of concept (POC) from HP and Mushko."

"To compete against the IBM P550, we provided an HP Integrity BL870c i2 server blade with 16 cores and 32 GB of memory," said Kashif Naseer, enterprise sales and support manager, Mushko Electronics. "Working closely with the HP team, we confirmed that the FIS application installed smoothly on HP-UX, data copied smoothly and was accessible, and every FIS module ran well on HP-UX.

"We tested all processes including computational time, data migration, and I/O, and the HP Integrity server blade outperformed comparable IBM technology in all cases. This was a convincing demonstration that HP Integrity architecture could provide the performance that NBP needed, and they ultimately placed an order for HP Integrity Superdome 2 Servers," Naseer said.

"While some people had a question mark about porting FIS Profile from AIX to HP, the POC proved that this was not an issue: it ported very smoothly," Siddique said. "And we had heard that the performance on Itanium was considered a risk, but the POC did not find any issue with that: the solution performed perfectly fine on the HP technology, exactly as expected."

HP Mission Critical Services for 24x7x365 availability

"In addition to HP technology, we selected HP Mission Critical Services to ensure that NBP can provide superior service to everyone from our individual customers to the Bank's international financial partners 24x7x365," Siddique said.

HP Mission Critical Services provides both proactive and reactive solutions to help NBP operate efficiently and maintain vital availability for the FIS Profile core banking solution.

"Because the National Bank of Pakistan is the largest bank in the country, many people, organizations, and government entities rely on us. With HP Mission Critical Services, we know we will get help with any problem so that we can be available for our customers and partners 99.99% of the time," Siddique said.

Cost savings and excellent TCO

"From a TCO perspective, HP technology is excellent," Siddique said. "By moving from IBM RISC technology to HP blades, we have made room in our budgets to initiate more projects including some that are already in the pipeline."

The fact that NBP did not need to hire more IT personnel added to the overall cost savings. "We are rolling out the HP technology to add a totally new solution to our IT environment—FIS Profile—without adding more staff to manage it," Siddique said.

"We plan to do multiple partitions on each server so that we can run multiple functions on each one. We also plan to manage the entire core banking solution through one hardware box, and this, too, will streamline management," Siddique stated.

Space and power savings

"NBP is in the process of building a new data center, and some projects had been put on hold until that was completed because there was no room for more racks," Siddique said. "The consolidation inherent in blade technology has opened up space to move ahead with some of those projects now in the existing data center."

"In addition to making the best use of limited space, the HP technology has an impact from a cooling and power point of view," Siddique said. "We expect to reduce power usage by approximately 25 percent."

Competitive advantage today and in the future

"Commercial banking is a competitive business like any other in that operational efficiencies and expanding services to clients are key to success," Siddique said. "For National Bank of Pakistan, having faster, newer servers for our production environment and an HP Integrity platform for our core banking solution provides the processing power and excellent response times that are mission critical."

"HP technology in combination with applications like FIS Profile are completely changing the way NBP's personnel do their jobs, and as the core banking solution is rolled

out across all of the NBP branches, we expect to see considerable business efficiencies across a wide range of tasks," Siddique said.

"Looking ahead, NBP is targeting expanded online banking offerings and making plans for other channels including mobile banking applications. The HP platform provides the capacity, scalability, and TCO that help make initiatives such as these a reality," Siddique stated.

About National Bank of Pakistan

The National Bank of Pakistan (NBP), headquartered in Karachi, is among the largest banks in Pakistan. While NBP acts as trustee of public funds and as the agent to the State Bank of Pakistan (SBP) in locations where SBP does not have a presence, NBP has expanded its role to include services to individuals and corporate entities. The Bank has a growing domestic branch network and has representative offices in major business centers worldwide.

Customer at a glance:

Our partners support

(intel®)

Primary Application
FIS Profile core banking solution

Primary databases
• GT.M database (FIS Profile)

Services
• HP Mission Critical Services

Primary hardware
• HP Integrity Superdome 2 with Intel® Itanium® processors
• HP ProLiant BL460c Server Blades with Intel® Xeon® processors
• HP ProLiant BL680c Server Blades with Intel® Xeon® processors
• HP BladeSystem c7000 Enclosure

Primary software
• HP-UX 11i v3
• Red Hat Enterprise Linux 5.6
• Microsoft® Windows® 2008
• Microsoft Hyper-V Server

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