Leading South African bank entrusts point-ofsale (POS) processing operations to HP Integrity NonStop systems

A performance jump of 300% helps First National Bank handle growing transaction volumes

"The performance has increased by more than 300%, right along with the 27–30% year-on-year growth in FNB's POS transaction volume. Our new Integrity NonStop NS2004 systems will continue this positive price/ performance trend."

—Gary Rosslee, technical support manager, FNB Merchant Services in South Africa

HP customer case study

Mission-critical POS operation using HP Integrity NonStop Servers and HP Virtual Tape Server.

Industry Financial services

Objective

Keep up with ever-increasing transaction volumes to boost efficiency and ensure exceptional customer service of First National Bank's point-of-sale (POS) operation

Approach

Stay with the stable, reliable platform technology that has proven itself for over 10 years in terms of performance, uptime, and high customer satisfaction

Technology improvements

- Greater than 300% performance improvement, from 50 to over 180 transactions per second, with new Integrity NonStop system expected to continue the positive trend
- Smooth migration to new Integrity NonStop systems final switchover took just 20 minutes, with no downtime and minimal effect on service
- Move toward converged infrastructure with planned deployment of HP Insight Remote Support
- Backups and restores reduced from hours to minutes with HP Virtual Tape Server

Business outcomes

- Ability to keep up with business growth as POS transactions increase between 27–30% year-on-year
- Lower operational costs—and support for green IT—with smaller data center footprint and less power consumption
- Continuous availability to help attract and keep major retail clients
- Significant reduction in support costs with newer Integrity NonStop technology

First National Bank (FNB) is one of South Africa's "big four" banks. It is part of the FirstRand Group (FSR), which trades on the Johannesburg Securities Exchange. The bank provides personal, commercial, and corporate banking services to more than 6 million customers across South Africa and is the single largest contributor to FirstRand's bottom-line. One of FNB's profitable operations is its FNB Merchant Services product house, which manages point-of-sale (POS) processing exclusively on HP Integrity NonStop servers.

Gary Rosslee, the technical support manager for NonStop systems at FNB Merchant Services, has decades-long experience with multiple platforms, including Stratus, IBM, ICL, Siemens, and HP NonStop servers. For Rosslee, NonStop technology is the right answer for the bank's POS processing challenges, which include rapid growth in transaction volume and the need to maintain 24x7 uptime.

Rosslee says there is a direct link between reliability and profitability. "The stability and reliability of this platform contributed to the product house going from strength to strength in volumes growth and service delivery. The stability and reliability of the HP NonStop platform assisted in attracting and retaining large retailers."

The bank started by moving all POS processing from Stratus onto the NonStop K-series platform several years ago. At the time, FNB's POS channel was executing around 50 transactions per second. Once the platform was upgraded, transaction processing per second rose to around 180. "The performance has increased by more



Customer at a glance

Name

First National Bank

Headquarters

Johannesburg, South Africa

Founded

1838

Telephone

0860 11 22 44 (local); +27 11 369 1088 (international)

Number of employees

26,900

Annual revenues

FSR ZAR9.96bn (as at June 2010 financial year-end)

URL

www.fnb.co.za

than 300%, right along with the product house's 27–30% year-on-year transaction volume growth," says Rosslee.

"Our new Integrity NonStop NS2004 systems will continue this positive price/performance trend, especially when they go to quad-core microprocessors within a few months. And, of course, the support costs have come down significantly as a result of moving to the newer technology," he adds.

In addition to the two HP Integrity NonStop NS2004 Servers for production and backup, FNB Merchant Services uses an Integrity NonStop NS2002 Server for test and development.

HP always there to help

Preparation for the traditional December holiday peak for transaction processing systems called for some creative thinking at FNB Merchant Services. Already pushing the limits on its existing NonStop S-series system, the bank was nonetheless reluctant to migrate processing to production on the new Integrity NonStop servers at the same time as another major backend system change.

"To help us through this period, our HP representative obtained some HP NonStop S88000 server CPUs," recalls Rosslee. "The more powerful CPUs were successfully implemented and ensured that we were able to effectively service increased volumes over the Christmas period. This demonstrates the scalability of the NonStop platform."

In the meantime, FNB Merchant Services was setting up the development and backup Integrity NonStop systems. Usage of the development server started in December, with the rest (production and backup) of the system coming online two months later in a seamless migration. "The migration only required 20 minutes of downtime," says Rosslee. "Our management was grateful for the smooth and transparent migration."

HP support goes well beyond stepping in to resolve a difficult situation. With HP Proactive 24 Service, Rosslee and his team can get the help they need at any time, day or night. "There's always somebody available when you contact them, and they ensure you are put in contact with knowledgeable HP staff," he says. "The HP staff is very service-oriented."

NonStop holds its own in a "blue" shop

"FNB Merchant Services has relied on the Integrity NonStop platform to attain business success, and the product house will do so for the foreseeable future," says Rosslee. "First National Bank is also a large IBM user, and therefore running a critical process on HP NonStop is an accomplishment."

Along with the new Integrity NonStop system, FNB Merchant Services acquired the HP Virtual Tape Server (VTS). "Instead of going directly to tape, we now back up our NonStop systems to the VTS and write the data to cartridge every six months," says Rosslee. "This approach increased the speed of system backups and restores. Using VTS decreased the backup time by around 60%."

In an important step toward creating a converged infrastructure, FNB Merchant Services also implemented HP Insight Remote Support. This solution monitors all HP systems within the bank; any outages are reported to the appropriate support staff. This capability further enhances the turnaround time of possible outages.

Streamlining IT resources with open, modern development tools

Rosslee values the manageability of the Integrity NonStop system. "HP NonStop requires less staff to manage the environment compared to other technologies such as IBM," he says. "Everything such as storage management, load balancing, hardware, operating system, etc. is the responsibility of the HP NonStop server engineer/administrator analyst, where other technologies require separate skilled staff per function."

Advances in NonStop technology over the years also support the bank's commitment to green IT. Says Rosslee, "The actual hardware has reduced in size, which frees up valuable floor space and also lowers power consumption. This is just another example of how HP is continually improving the NonStop technology."

Enabling geographic expansion

At the end of the day, it is the unmatched reliability of NonStop systems that makes FNB Merchant Services a loyal user of HP technology. The business benefits are clear: As well as helping to attract and retain major retail customers, the stability of the NonStop platform enables FNB Merchant Services to expand to other territories. "We already process POS transactions for 4–6 African countries," says Rosslee. "The increased processing power and capacity (enhanced operational efficiency) from the Integrity NonStop servers gives us the confidence to take on future additional volumes." FNB Merchant Services also services China Union Pay cardholders.

"The acquiring market in South Africa is very competitive," concludes Rosslee. "To successfully acquire large retailers, we believe our usage of the reliable HP NonStop technology is critical. I enjoy working on a platform as stable as the HP NonStop system."

Customer solution at a glance

Primary application

Point of sale

HP Services

- HP Installation
- HP Training
- HP Proactive 24 Service

Primary hardware

- HP Integrity NonStop NS2004 Servers
- HP Integrity NonStop NS2002 Servers for test and development
- HP Virtual Tape Server

Primary software

- ACI BASE24
- HP NonStop Peruse, ASAP, ViewPoint, HP Enterprise Management Systems (EMS)

Get connected

hp.com/go/getconnected

