EMC Symmetrix VMAX provides needed stability, increased performance, and improved end-customer experience

Alexander Forbes is a leading international provider of financial and risk services, including investment, insurance, and financial solutions. The South Africa-based company was experiencing recurring outages within its existing storage infrastructure. The outages were disrupting critical customer-facing online services.

The company’s solution provider at the time advised Alexander Forbes to manually handle the load balancing to avoid outages.

“Manual load balancing is time-consuming,” says Sai Edara, an Alexander Forbes solutions architect. “We had to manually present selected LUNs to specific controllers to achieve required IOPS. And timeouts were also expensive. Because timeouts occurred after hours, we’d have to call in engineers and pay them overtime to fix the problem and conduct health checks. Between the overtime costs of engineers and the poor customer online experience, it was costing the company a great deal of money.”

Alexander Forbes had been using a large complement of products from other storage providers to support its move to virtual cloud computing. When the company couldn’t find a permanent fix to the problem, it turned to its local storage solutions partner, Dimension Data. Dimension Data recommended EMC® Symmetrix® VMAX® to resolve the company’s issues.

“We went with EMC because they were highly recommended, and a known leader in the industry,” explains Edara.

STABILITY, SCALABILITY, AND SUPPORT

The IT department migrated 80 TBs of data from its legacy solutions to the Symmetrix VMAX. That migration included the company’s Oracle and Microsoft® data and applications, as well as 300 mission-critical virtual machines. Because EMC Symmetrix VMAX is integrated with VMware® and fully supports virtualized environments, Alexander Forbes has achieved the stability that it was seeking.

“Our primary driver for purchasing the VMAX was to bring stability to our virtual environment and help eliminate the chaos that we’d been experiencing,” Edara states.

To illustrate the point, Edara explains that EMC customer support provides quick response in the event of a query or issue.

“We had a recent issue and EMC customer support logged in remotely to the system to conduct a health check,” says Edara. “They came back to us with a health check report in only an hour. Since installing VMAX, we no longer incur the costs or performance issues associated with frequent downtimes.”

Edara has also been impressed with VMAX scalability.

“Our initial data storage on the VMAX was 96 TB, but we wanted to add an additional 15 TB,” he says. “We did it in only two weeks—we ordered the new capacity, slotted it in, configured it, and it was ready to go.”

Edara has also been pleasantly surprised by the accessibility of EMC support.
When we installed the new storage, we did have one problem: we were using striped LUNs and for some reason, we couldn’t allocate data properly,” he explains. “EMC support operates on a 24/7 basis. They came back with a workaround and we were up and running quickly.”

FULLY AUTOMATED STORAGE TIERING FOR HIGH PERFORMANCE

While infrastructure stability and reliability were the primary drivers behind the VMAX deployment, the company is also enjoying the high performance that the solution provides. The company has seen a 10 to 20 percent performance increase with VMAX.

Performance has been further enhanced through EMC FAST VP (Fully Automated Storage Tiering for Virtual Pools) integrated into the VMAX solution. “Hot” data migrated to Flash drives within VMAX is now available in 1.5 seconds, compared to the two to three second availability with the legacy solution. This speed has enhanced internal productivity.

“FAST will understand what data and applications are hot and which are not,” Edara explains. “Hot data and applications will automatically be sent to Flash SSDs for high availability, while lower use applications and data will be placed on SATA drives.”

Alexander Forbes also uses EMC Symmetrix Management Console and EMC Symmetrix Performance Analyzer to ensure smooth performance.

“These tools tell us what’s happening on a realtime basis,” states Edara. “We can quickly gain a view of load balancing among controllers, IOPS, and similar information. Should FAST policies need to be adjusted, it’s quite easy to do so.”

TRUSTED DISASTER RECOVERY

Satisfied with the stability and performance of VMAX, Alexander Forbes is in the process of implementing EMC Symmetrix VMAXe® for DR and testing. The company has also deployed EMC Centera® and EMC SourceOne™ for data retention and archiving purposes to meet compliance requirements.

“Active data will be replicated and backed up from the VMAX to the VMAXe using Symantec Netbackup,” Edara explains. “In the event of an issue, we will failover to the VMAXe, and also recover data back to the VMAX from the VMAXe.”

Alexander Forbes chose EMC Symmetrix VMAXe for its DR and testing environments because its features are very similar to VMAX—it can easily scale to handle growing backup needs and also has FAST capabilities, but VMAXe is more cost-effective.

“The VMAXe will have dual roles, but its primary purpose is DR,” says Edara. “Now if we have a complete failure, all we have to do is restore production and LUN data.”

SUPPORT FOR THE FUTURE

Edara has been pleased with Alexander Forbes’ experience with EMC thus far. “We’re very pleased with EMC support because support personnel can log in remotely to provide firmware updates, conduct health checks, and otherwise assist us.”

He continues, “EMC support has helped us to fully understand how VMAX, VMAXe, and Centera work, and what we need to do to maximize stability and performance. They made it simple. Due to our positive experience with EMC VMAX, we hope to replace all of our mid-tier storage systems with EMC solutions.”