VBLOCK DELIVERS PERFORMANCE AND VALUE IN ORACLE DATABASE MIGRATION

BENCHMARK DEMONSTRATES VBLOCK ADVANTAGE OVER LEADING COMPETITOR

One of the world’s leading service providers faced a challenge when the servers for some of its core Oracle databases were nearing end-of-life. Seeking a replacement, the company benchmarked four leading server and storage combinations including Vblock™ Systems from VCE.

VCE ran the database without changes to the application to demonstrate performance and rapid time to market. The Vblock System achieved a performance equivalent to 94 percent of that of the leading competitor. While the quote for the integrated architecture came in at around half the price of the competition, the Vblock System offered a level of flexibility and administrative simplicity that no competitor could match.

The Challenge

This world-leading service provider relies heavily on Oracle-based network planning systems. Historically, these databases resided on Unix-based servers that, over time, were failing to deliver the performance needed by the business. With the servers reaching end-of-life, it was clear that the company needed to upgrade to a new infrastructure that could improve performance while delivering rapid return on investment.
The Solution

The service provider used its own expertise to benchmark three technology options over a nine-month period. Of these, two were hybrid systems featuring more than one vendor, and one was an integrated platform whose vendor was given free rein to customize the databases to suit its technology. Because Vblock Systems brought into consideration later in the process, VCE decided to run the benchmark on a bare-metal, four-socket blade server without the benefit of modifying the application to suit the hardware.

For the test, VCE put together a Vblock System 300 featuring two Cisco Unified Computing System B440 Series Blade Servers, each with four 2.26GHz 10-core CPUs with 256GB of memory, combined with EMC VNX 7500 Series Unified Storage Systems. Switching and routing used Cisco Nexus 5000 and 6000 Series Switches and Cisco ASR 9000 Series Aggregation Services Routers. The Vblock System supported Oracle Database 11g Release 2 on a Red Hat Enterprise Linux 5.5 OS.

The Results

All four systems tested by the customer achieved more than a 90 percent improvement over its existing infrastructure.

In one critical benchmarking test the processing time for a critical application was running at 12.67 hours with the legacy system. The Vblock System reduced that to just 2.03 hours, without any database optimization, whereas the competitor system achieved 1.30 hours with extensive prior database and platform optimization. In other words, a standard Vblock System installation achieved 94 percent of the performance improvement of the optimized competitor system.

During the selection, the company had been won over by the idea of having an integrated platform instead of a hybrid system because it simplified purchasing, contracts, and maintenance. That left only the Vblock System and one other competitor in the running. Of those two, VCE offered a significant number of added benefits including:

- The customer’s Oracle databases could run straightaway on the Vblock System without any customization
- The Vblock System could also host tiered web and desktop applications, delivered over Citrix, while the competitor’s infrastructure could only be used for databases
- The Vblock System used in the benchmark had not been optimized so further performance enhancements could be gained with new CPUs easily integrated into the infrastructure
- Unique Vblock System features, such as the ability to create Oracle backups without loading production servers, offered large savings on database administration time and effort
- Built on industry-leading technologies from EMC, Cisco, and VMware, the Vblock System did not need the company to acquire new specialist expertise, avoiding a skills silo.

Perhaps the biggest advantage, however, was the return on investment offered by the Vblock System. VCE’s strategy of delivering factory integrated standardized infrastructure with lifecycle assurance means the Vblock System would cost significantly less to purchase, deploy, and operate.

In the final analysis the service provider chose Vblock Systems because it could achieve 94 percent of the performance improvement of the leading competitor, with significant cost benefit.

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