



Stantec picks all-flash for mission-critical environment

HPE 3PAR for Oracle E-Business Suite ensures performance, availability, stability

Objective

Deploy a storage platform that exclusively supports mission-critical financials while addressing key performance and cost challenges

Approach

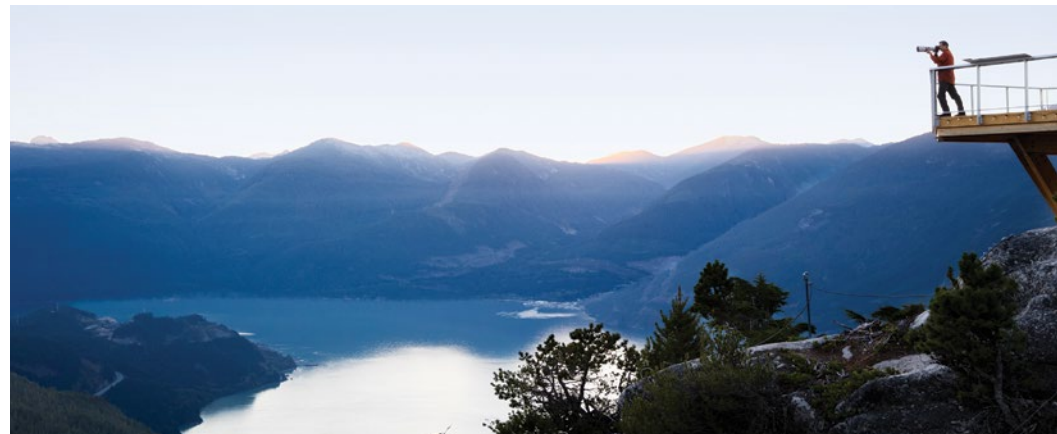
Transition from a mature, disk-based storage platform to an all-flash solution

IT Matters

- Ensure the stability, availability and performance of mission-critical ERP software
- Shorten snapshot and restoration processes that were taking up to several hours
- Provide outstanding and seamless support for the critical data storage underlying Oracle E-Business Suite

Business Matters

- Maintain an agile infrastructure to streamline the integration of acquired companies
- Avoid significant cost increases as mature storage systems reached end-of-support



Stantec designs for the community.

Based in Edmonton, Canada, the firm provides architectural, engineering, and environmental services to clients across the globe. Stantec's projects range from road, rail and transit systems, to infrastructure for mining and the energy industry, to facilities for healthcare, education and commercial uses. From 2011

to 2015, revenues almost doubled, from \$1.7 billion to nearly \$3 billion.

A growth strategy based on acquisitions

As CIO Chris McDonald explains, much of that growth comes through acquisitions. "Stantec has acquired a lot of firms over the years - well over 40 since 2007 and cumulatively over 100," he says. By way of example, he points to Stantec's largest acquisition to date, the 2016 purchase of MWH Global, an engineering and construction firm specializing in water infrastructure, which has 6,000 employees and 187 offices in 26 countries.

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– Chris McDonald, CIO, Stantec

“We’ve developed a disciplined IT systems and data integration methodology that allows us to bring these kinds of acquisitions in-house and rapidly absorb them into our business model, including integrating them on our mission-critical Oracle E-Business Suite,” says McDonald. “Needless to say, the storage platform underpinning our Oracle E-Business Suite is a critical element of our infrastructure, enabling us to deliver on our SLA’s by ensuring the stability, availability and performance of our ERP.”

Time for a storage makeover

Stantec had a legacy storage environment that was roughly 10 years old and had cycled through several product generations. With its systems reaching maturity, Stantec faced significant renewal charges and licensing issues while grappling with age-related performance concerns. Most notably, the Oracle environment required frequent patches and upgrades which, in turn, required a larger number of snapshots and corresponding storage space than the existing solution could accommodate. “Not being able to take snapshots at the times needed put the database and system at risk of being corrupted,” explains Lloyd. “If it was corrupted it would take a long time to rollback the system to the start, and we would have to redo the project at another time.”

“The first measurable improvement we noticed was a roughly 20% reduction in our batch times. The guys who run the batch jobs were saying, ‘What happened? These things are fast!’ In the past, network flooding caused the system to become I/O-bound. We aren’t seeing that anymore.”

– Clifford Lloyd, Vice President of Advanced Technologies, Stantec

With the goal of implementing a modern storage architecture and a new platform that would exclusively support Oracle E-Business Suite, Stantec conducted a proof of concept (POC) to compare the offerings of two incumbent vendors: Hewlett Packard Enterprise and NetApp. Stantec saw the POC as an opportunity to evaluate the reliability of flash arrays. “Flash is the wave of the future,” says Clifford Lloyd, Stantec’s Vice President of Advanced Technologies. “But we were concerned about whether it would be reliable enough for a mission-critical environment.

Case study

Stantec

Industry

Architectural,
Engineering and
Environmental
Services

Customer at a glance

Application

Deployment of a new, all-flash storage platform devoted exclusively to running Oracle E-Business Suite

Hardware

- Two HPE 3PAR StoreServ storage systems, each with 24 3.84TB SSDs

Software

- HPE 3PAR Remote Copy software
- Oracle Replication Software

Services

- Proactive Care Support with an Account Support Manager (ASM)

Were we going to experience read/write errors or modules going down and being taken out of service? The proof of concept convinced us that 3PAR All-flash is, in fact, reliable for a mission-critical environment.”

“Many vendors lose sight of how important support is. During our proof of concept, the quality of support was a real competitive advantage for HPE. Sure, it’s nice to have the fastest sports car, but if you don’t also have the best mechanics, you’re going to run into problems.”

– Clifford Lloyd, Vice President of Advanced Technologies, Stantec

Support seals the deal

To ensure the success of the POC, HPE brought in a third-party Oracle subject matter expert and arranged for a temporary critical support environment. Noting that each vendor brought different strengths to the POC, Lloyd says the level of support provided by the HPE team was, by far, the most significant factor in Stantec’s decision to choose an HPE solution. “They had people dedicated to our account,” he says. “They always knew what was going on with the POC. If we had any concerns, they’d say ‘We’ll take care of it right away,’ and boom, it was done.”

Other pluses for HPE 3PAR All-flash included seamless integration with the Oracle E-Business Suite software that was running on two different platforms (Linux and HP-UX Itanium) and greatly improved performance for snapshots, which were reduced from hours to minutes in most cases.

Going “all in” with flash arrays

Based on the test results, Stantec decided to deploy a HPE 3PAR StoreServ All-flash solution as its sole storage platform for production Oracle E-Business Suite. Two HPE 3PAR 8400 systems with 24 3.84TB solid state drives (SSDs) were deployed in separate data centers: one for production and the other for recovery.

“The first measurable improvement we noticed was a roughly 20% reduction in our batch times,” says Lloyd. “The guys who run the batch jobs were saying, ‘What happened? These things are fast!’ In the past, network flooding caused the system to become I/O-bound. We aren’t seeing that any more. Instead, we’re CPU bound. The SAN can send data as fast as the servers need it and sometimes too fast.” In addition increased storage density resulted in a roughly 85% reduction in storage space for Oracle data. “Beyond those improvements, SAN maintenance is much easier on the new arrays, compared to the old environment”, says Lloyd. “Snapshotting is simpler, and managing the system is easier.”

Learn more at
hpe.com/go/flash



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4AA6-6713ENW, August 2016