LUSH FRESH HANDMADE COSMETICS

Objective
Experienced storage performance issues and was rapidly running out of capacity

Approach
Hobbs asked LUSH's North American IT reseller to present several different storage options to replace the legacy systems.

IT Matters
- Obtained faster performance compared to legacy 15K RPM drives
- Gained the ability to resolve issues without having to call a support center

Business Matters
- Enabled more accurate capacity planning
- Obtained ample capacity and the ability to non-disruptively scale to meet requirements
- Shortened software build times from 14 hours to just 25 minutes

Nimble provides high performance and scalability for LUSH Cosmetics

Adaptive Flash Platform enables accurate capacity planning for fast-growing cosmetics company

LUSH Fresh Handmade Cosmetics is a worldwide producer of high-quality, green cosmetics products. Founded in 1995 in the United Kingdom, the company has expanded rapidly. LUSH now sells a wide variety of cosmetic products – including soaps, shower gels, shampoos and hair conditioners, bath bombs, bubble bars, face masks, and hand and body lotions for various skin types – from over 800 stores in 51 countries.

Challenge

Outgrowing capacity
Dale Hobbs is the network and security team manager for LUSH Cosmetics North America. He is responsible for managing the IT infrastructure for LUSH's 250 retail outlets located across the United States and Canada.

"We purchased our previous storage systems in 2013," Hobbs reports. "We tried to size the environment with enough capacity to accommodate growth for several years, but we outgrew those systems in just six months. We were also experiencing a lot of performance issues on that platform, so we knew it was time to look for a more powerful storage solution."

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– Dale Hobbs, network and security team manager, LUSH Cosmetics North America

Looking at the alternatives

Hobbs asked LUSH's North American IT reseller to present several different storage options to replace the legacy systems. "Nimble Storage was the clear leader for our IT requirements," Hobbs says. "The Nimble Adaptive Flash architecture has literally blown us away with its performance, reliability, and end-user functionality. We chose the Nimble systems and haven't looked back since."

Solution

Faster deployments and migrations

It used to take over a day to set up new systems in LUSH's previous storage environment, according to Hobbs. "Nimble deployments are much simpler and faster. It only took an hour from when we opened the box to when the arrays were up and running. We started moving our production data over to the Nimble arrays within 48 hours of testing our migration path."

LUSH Cosmetics now has eight VMware® servers that host over 100 virtual machines.

All of the company's VMs, MS SQL databases, MS Exchange, ERP platform, and standard domain controllers are now running on the Nimble arrays. "We moved our entire infrastructure from the existing storage arrays onto Nimble in just one week. We could have done it even faster, but we took our time since the environment was new for us and we were being a little cautious. Once we got the first three machines over to Nimble and saw the amazing performance improvements, we moved the rest of our workloads over in a rapid-fire approach."

LUSH North America recently upgraded from 1Gb to 10Gb network infrastructure. "The only challenge we had during the Nimble launch was figuring out how to move everything from the old network to the new 10Gb network. It was a lot simpler than we thought it would be on the Nimble platform," Hobbs explains.

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Easy upgrades and scalability

Hobbs and his team were impressed with the ease of scalability provided by the Nimble platform. "It is remarkably simple to upgrade the Nimble arrays," reports Hobbs. "When we need more capacity, we just add more storage. When we need to upgrade the CPU, we just add more controller cards. When we need more network, we just pop the NICs out and put different ones in. Hardware changes and upgrades caused a lot more disruption with our previous storage solution. With Nimble, we don't have to take all of our infrastructure off-line to swap out infrastructure anymore."

Higher performance

"The Nimble architecture is fundamentally different than the other vendors' technologies," notes Hobbs. "The way that the CASL architecture determines what data sits in cache is very appealing. The performance we are getting from the Nimble RPM drives completely blows away our old legacy systems running 15,000 RPM disks. My colleagues don't believe me when I tell them how many IOPS we are getting from our Nimble drives. When I pull up the interface and show them the actual statistics – they are floored by the results. We are averaging around 3,500-4,000 IOPS on a steady rate. We have spikes that occasionally reach 12,000, but they are nowhere near the 90,000 IOPS ceiling the Nimble array is rated for, giving us lots of room to grow."

The Nimble systems are providing high performance for LUSH's most demanding applications and workloads. "Our email, ERP, point-of-sale, manufacturing applications, and financial systems are all used quite heavily by all of our stores and administrative staff," Hobbs states. "We are now migrating many of these separate systems onto one unified ERP platform. Nimble can easily deliver the IOPS that application requires."

Using Nimble snapshots

LUSH Cosmetics is using the space-efficient Nimble snapshots for backup and recovery. "We have been able to dial back our traditional backup strategy with Nimble," notes Hobbs. "We are slowly becoming less dependent on our old backup system and more dependent on our Nimble array from a bare metal standpoint. We were backing up our data warehouse and domain controller several times a day, now we really only need to do that once per day on Nimble.

"We never used the snapshots with our previous storage systems," Hobbs admits. "We were concerned that the snapshots would consume 50GBs of backup space for 50GB of data. That's clearly not the case with the space-efficient Nimble snapshots. We now take snapshots once a day and keep them for a week."

Customer at a glance

HPE Solution:
- Nimble Storage Adaptive Flash Arrays
- Nimble Storage InfoSight

Benefit

Relying on Nimble InfoSight

Hobbs and his team are using Nimble InfoSight to monitor the company's storage environment. "InfoSight automatically opens and resolves support cases for us without having to call into the support center," Hobbs reports. "We recently received an email from Nimble saying, 'We found a problem in your environment, but we already fixed it'. It turned out that we had accidently overloaded one of our controllers – it was a vMotion task that went awry and had overwhelmed the number of sections. We didn't realize it was failing over behind-the-scenes. The fix happened before we even knew we had a problem.

"When we first got Nimble InfoSight, we used it every day because it was a 'new flashy toy' – we wanted to see everything it could do. After a few weeks, we realized that there wasn't much we needed to look at on a daily basis. We now check InfoSight once per week to monitor performance. InfoSight recently indicated that one of applications was running slowly, so we looked at the information in the portal. The data store had a 95% cache hit ratio, so we knew it wasn't a Nimble issue, it was a problem with the application itself. But we were able to troubleshoot and fix the issue quickly with InfoSight."

InfoSight is also enabling LUSH Cosmetics to more accurately plan for the future. "InfoSight shows that we currently have 3.2TB of cache and is recommending that we double that amount," Hobbs says. "It's on our roadmap to add more cache, but since everything is still performing extremely well, it isn't an urgent fix. The InfoSight portal also showed us that we have saved 73% of space using Nimble's compression. That's an impressive amount of space that we can use for expansion."

Final thoughts

"We are very happy with our decision to switch to the Nimble arrays," concludes Paul Jackson, director of IT at LUSH Cosmetics. "We are getting the high performance we need for our critical applications and ample room to grow. With Nimble, we are confident that our IT infrastructure will be able to support our rapidly expanding business for years to come."

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