

# Hewlett Packard Enterprise

stella & dot

## Stella & Dot speeds business growth with flash

HPE 3PAR StoreServ supports 30,000 fashion-focused owners worldwide

### Objective

Provide reliable, efficient storage in support of pre-production and production systems for global e-commerce and direct sales

### Approach

Implemented HPE 3PAR StoreServ 7450 all-flash storage array with complementary HPE 3PAR software

### IT Matters

- Supports high write/low read ratio flexibly at 50% savings
- HPE 3PAR StoreServ 7450 quad controller architecture ensures fast performance even in the unlikely event of a controller failure
- Flexibly supports variety of I/O profiles
- 3PAR Virtual Copy software saves over a day for development using snapshots
- Provides significantly smaller footprint
- 3PAR cMLC SSDs offer 100% endurance with five year warranty

### Business Matters

- Supports weekly releases for faster-to-market advantage
- Scalability provides significant savings over competitive systems
- Performs 20 times faster than legacy storage
- Smaller footprint and lower power costs save money



Stella & Dot, a rapidly growing online fashion jewelry, accessories and cosmetics company, finds a long-term storage solution with HPE 3PAR StoreServ. HPE 3PAR StoreServ quad controller all-flash storage provides leading-edge performance with proven, mature reliability, and more than enough headroom to support the company's fashion-trending growth.

Stella & Dot, an Inc. 500 Fastest-Growing Company, is a San Francisco-based social-selling fashion accessories and cosmetics company that creates flexible entrepreneurial opportunities for women. The company utilizes "Independent Business Owners" to sell products to consumers through at-home trunk shows and socials and its e-commerce websites. The number of worldwide Independent Business Owners has skyrocketed to more than 30,000 in countries ranging from the United States and Canada, to the United Kingdom, Ireland, France and Germany.

The Today Show, Wall Street Journal and The New York Times have praised Stella & Dot for its innovative social shopping concept, which brings together the best of ecommerce, social media, and personal service to meet the needs of today's fashionistas.

Stella & Dot wanted the best available storage to ensure reliability and high performance for its huge cadre of Independent Business Owners and e-commerce sites. Four plus years ago, the company brought Nate Amsden on board as principle systems engineer, specifically due to his extensive experience with HPE 3PAR StoreServ Storage. His first task was to transition the growing company away from a less effective cloud-hosted storage experience to the more reliable HPE 3PAR StoreServ storage technology. Under Nate's guidance, Stella & Dot invested in an initial HPE 3PAR F200 Storage System and has never looked back.



“HPE 3PAR StoreServ greatly reduced our overall storage requirement through the use of thin provisioning,” recalls Amsden. “To achieve a similar storage profile on the closest competitive system at the time, would have cost 50% more, needed additional equipment with a larger footprint, as well as correspondingly higher power usage.”

### **Fashioning the most flexible storage possible**

Flexibility was a key driver for purchasing HPE 3PAR StoreServ storage. At that time, the I/O footprint for the company’s pre-production and production systems wasn’t yet fully understood. Amsden knew from experience that HPE 3PAR StoreServ had the flexibility and scalability to conform to whatever the Stella & Dot read/write I/O profile needed to be—without additional expense. The initial estimate was 70% read/30% write. After measurement, the true profile turned out to be 92% write and only 8% read, which can be a very expensive I/O profile. True to design, the HPE 3PAR StoreServ performed the needed read/write profile without any additions. Amsden recalls that other systems on the market would have required costly additions to handle the load.

Stella & Dot set up a European-based data center utilizing the smaller profile HPE 3PAR StoreServ 7200 storage system to process transactions locally.

“We count on HPE 3PAR StoreServ reliability. It’s a key requirement,” says Amsden.

“HPE 3PAR StoreServ diagnostics and instrumentation leads the pack. The ease of management is light years ahead of other systems evaluated. We also use HPE ProLiant servers for the same reasons.”

### **Providing long-term business value through scalability**

Amsden understands the need and benefits of scalability for Stella & Dot, with its considerable media attention and fast-paced growth rate. When it came time to expand the company’s legacy storage capability, Amsden diligently surveyed the field, checked in with Hewlett Packard Enterprise (HPE), and found that the latest HPE 3PAR StoreServ all-flash array was, as expected, the best offer in town.

“Our decision to expand to the HPE 3PAR StoreServ all-flash is a testament to the past three and a half years of HPE 3PAR StoreServ performance, reliability and support,” emphasizes Amsden. “As the incumbent, HPE maintains our relationship at a top level, continually proves value-add and offers the best comparative technology by far. The HPE 3PAR StoreServ 7450 offers 4-nodes, whereas, competitive systems are still sporting 2-node models. HPE is a vendor we count on to be leading-edge and reliable.”

The economy inherent in the HPE 3PAR StoreServ 7450 system made the decision an easy one to justify. According to Amsden, the HPE 3PAR StoreServ 7450 came in at lower cost than the legacy system while offering significantly greater performance and functionality.

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— Nate Amsden, principle systems engineer, Stella & Dot

Amsden was determined to implement a 4-controller storage architecture to ensure smooth operations and business continuity. The HPE 3PAR StoreServ 7450 quad controller array maintains high and predictable service levels always. With HPE 3PAR Persistent Cache, performance is protected and cache write through mode is avoided, even in the unlikely event of cache or a controller failure.

“Our I/O profile is over 90% write, so if one node goes down in a 2-node storage system, our e-commerce customer sites, as well as development sites, which directly affect revenue, will grind to a crawl until repaired,” explains Amsden. “We don’t want even 5 minutes of downtime. The HPE 3PAR StoreServ quad controller array maintains business continuity while ensuring strong performance. It handles any combination of workloads we throw at it. HPE is still the only vendor with this level of technology.”

Amsden also cites enough storage capacity to last the lifetime of the system, as a reason for acquiring the HPE 3PAR StoreServ 7450. It sports just under 1PB of raw capacity and

more than 5TB of usable capacity with 3PAR Thin Deduplication and Thin Provisioning, lots of head-room to grow, and a cheaper power bill than the legacy storage. He maintains that the new storage system will provide all the room needed over its entire lifespan, with no need to upgrade, and no additional costs down the years. Stella and Dot launched two new business lines in the last year, Keep Collective, and EVER Skincare, and had plenty of storage room.

“The kicker is the expansion on the HPE 3PAR StoreServ 7450,” he says. “We can go to a full 96 drives, or almost 1PB of raw flash, and total power usage stays below 2,000W. Competing storage systems offer a tiny fraction of this capability. What HPE 3PAR StoreServ managed to accomplish over the past two years with its flash storage, has really impressed me, and gives me confidence that 3PAR architecture has many years of life left.”

To round off the list of his favorite benefits, Amsden notes that the all-flash array is 20 times faster and fits into only 8 rack units, versus the 19 required by the previous system.

## Case study

Stella & Dot

## Industry

Online social-selling fashion accessories and cosmetics company

## Customer at a glance

### Application

Utilize HPE 3PAR StoreServ all-flash storage and HPE 3PAR software in support of pre-production and production systems for e-commerce as well as support of over 30,000 Independent Business Owners worldwide.

### Hardware

- HPE 3PAR StoreServ 7450 quad controller all-flash array
- HPE 3PAR 7200 StoreServ Storage System
- HPE ProLiant DL 380 and DL385 (Gen7, 8, 9) running VMware® ESX® 5.5

### Software

- HPE 3PAR Data Optimization Suite
- HPE 3PAR Application Suite for VMware
- HPE 3PAR Application Suite for Oracle

### Services

- HPE Care Pack 6-Hour Call-To-Repair Collaborative Support (extended service agreement—5 years)

## Faster time-to-market with HPE 3PAR software

The fashion world waits for no one. Popular trends can come and go in an eye-blink. It's critical to respond to market demands with lightning speed. The HPE 3PAR software helps the Stella & Dot development department get competitive new e-commerce features and products to market quickly. With over 30,000 Stella & Dot independent business owners to support worldwide, it's critical to constantly provide quick development and release turnaround.

"HPE 3PAR Virtual Copy software allows the IT staff to create a production snapshot for development for testing in under two hours, versus a day and a half using previous methods," stresses Amsden. "The software automates a 250-step process and also saves significantly on I/O. Previously, we had to write out 2TB of data, for example, whereas with snapshots, we may only need to write out 20GB. We've upped our release schedule to more than twice a week, and we're considering daily releases in the future. This helps us stay competitive and keeps our independent business owners well informed, which translates directly into higher sales revenue, and higher customer satisfaction."

## HPE 3PAR StoreServ reliability and endurance stands above the competition

Over the years, Amsden has learned the hard way, that the most critical feature a storage solution must possess is basic reliability. If storage fails, the business is severely impacted. Reliability is a direct function of system maturity. Amsden is very visible and active in the storage community, and is a recognizable voice with his active blog. He cites a recent and unfortunate example of a top storage vendor that required its customers to erase their existing storage data and then rewrite it in order to upgrade to

its latest model. He chalks this up to simple immaturity, something that doesn't happen with HPE 3PAR StoreServ architecture.

"HPE 3PAR StoreServ is clearly the most mature storage platform available, with over a decade of experience as a leader in cutting-edge storage technology and design," confirms Amsden. "We depend on HPE storage to keep our growing business reliably available and performing well. Successful sales depend on it."

HPE 3PAR cMLC SSDs also rate a mention by Amsden's as another example of HPE 3PAR StoreServ maturity as a platform. Utilizing HPE Adaptive Sparing technology, HPE not only brings the effective cost of flash media down but also offers a five-year warranty.

"We have been up and running since early in the year, and the system reports all of the SSDs have either 99% or 100% of their endurance life left in them," reports Amsden.

"I am happy to know that with our intensive 90% plus write workload, that we have at least 5 years before having to worry about endurance on the flash, since HPE will replace anything that wears out prematurely regardless of endurance level."

The last—but not least—requirement for a successful storage solution doesn't have anything to do with the hardware, or leading-edge research. It's plain and simple, roll-your-sleeves-up support.

"Ever since I began using HPE 3PAR storage solutions, HPE has provided very responsible and responsive support," concludes Amsden. "It's a fact that everything will not always be perfect. HPE is there when needed. About six years ago, we required 25 new drives from HPE to resolve a critical problem, and we needed them fast. I'll never forget that the VP of customer support drove them to us on a Sunday, when the office was closed. Reliable and innovative storage technology combined with integrity—that's why I'm still with HPE."



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