PURESTORAGE

Smaller FOOTPRINT + FROM 300 MILLISECONDS TO <1ms Latency = $200,000 SAVINGS IN HARDWARE

COMPANY:

Sierra Nevada
www.sierranevada.com

CHALLENGE:

- Slow performance hinders business growth
- Major storage overhaul for every upgrade

SOLUTION HIGHLIGHTS:

- Latency drops from 300 milliseconds to less than 1 millisecond
- Data footprint reduced by storing 35TB of data in 7.5TB of capacity
- Energy costs now one-tenth the cost of operating standard spinning disks
- No more forklift upgrades with Forever Flash

USE CASE
VDI

GEO
North America

INDUSTRY
Retail, Manufacturing

SIERRA NEVADA BREWING CO. SPEEDS DATA PERFORMANCE USING PURE STORAGE

PURE STORAGE FLASH ARRAY HELPS CRAFT BREWER DRAMATICALLY REDUCE LATENCY AND SHRINK DATA FOOTPRINT

Sierra Nevada Brewing Co., based in Chico, California, is one of America's first craft breweries. The company has set the standard for artisan brewers worldwide, and is the winner of numerous awards for its wide variety of beers, including its flagship Pale Ale.

SLOW PERFORMANCE HINDERS BUSINESS GROWTH

Since Ken Grossman started Sierra Nevada Brewing Co. in 1980, the craft brewery's beers have been in high demand—its Pale Ale is now the second most-sold craft beer in the United States. To keep up with production, the company recently added a second brewery in North Carolina, and expanded its data servers from 7 to 25 over the past several years.

Along with growth in facilities and servers, the company has seen its data grow 30% annually, increasing the challenges of keeping data available and accessible. In addition, Sierra Nevada began using VDI, SQL Server-based applications, additional VMs and a growing Microsoft Exchange farm, which put pressure on their existing traditional mechanical disk array.

As data requirements increased, the company began to experience slowdowns in performance that affected how employees did their jobs. For example, Sierra Nevada wanted to give its workers access to virtual desktops, but noticed performance issues. It was clear that its conventional spinning disk storage array weren't up to the requirements of a company that needed fast access to its information.

"Technology is heavily integrated into our manufacturing processes—from our process control systems to our data acquisition network, which captures data from nearly every device in our facility," explains Justin Ainsworth, Information Systems Manager at Sierra Nevada. "Is the pump on or off, and is the conveyer belt moving? Any delay in obtaining these answers can slow down our production."

PURE STORAGE FLASHARRAY MORE COST-EFFECTIVE AND ENERGY-EFFICIENT

Sierra Nevada's information services team decided that flash-based memory would solve its performance and latency problems. It chose Pure Storage FlashArray, which provides consistent I/O latency for read and write and the best possible performance, without needing to ever worry about complex tiering policies, caching, disk or RAID type configuration.

Pure Storage FlashArray was a smart choice for many reasons, says Ainsworth, but cost and energy savings were key reasons for selecting Pure Storage over other flash array providers.

"We were able to save more than $200,000 in hardware costs, since we would no longer have to rely on spinning disk systems," says Ainsworth. "Also, from a heating and cooling perspective, we're probably using about one-tenth of the power for Pure Storage FlashArray, compared to what we needed to run our spinning disks. Not only is that good for our bottom line, it helps us meet our sustainability goals and reduce our carbon footprint."

Another benefit, the Forever Flash program guarantees Sierra Nevada the latest hardware. This allowed Sierra Nevada to upgrade to the latest Pure Storage controller technology at no additional cost for hardware or services. Sierra Nevada moved from the previous generation FA-320 to a FA-420, nearly doubling performance while also enabling them to take advantage of such new features as FlashProtect, offered in Purity 4.0. By choosing Forever Flash, Sierra Nevada will never have to go through a major storage overhaul to get the latest and greatest technology.

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>
> Justin Ainsworth, *Information Systems Manager*

BIG REDUCTIONS IN LATENCY AND DATA FOOTPRINT

With Pure Storage FlashArray in place, latency dropped dramatically: from 300 milliseconds to less than 1 millisecond. "Our users noticed the performance improvement right away—saving 300 milliseconds with every data request really adds up," Ainsworth says.

When Sierra Nevada opened up its North Carolina brewery, the team was able to run applications within just a few months, thanks to Pure Storage.

The array has also helped Sierra Nevada reduce its data footprint, storing about 35TB of data in 7.5TB of capacity, thanks to data deduplication, compression, and pattern removal.

"Pure Storage FlashArray is helping us capture data reliably and store it reliably," says Ainsworth. "It's playing a critical role in supporting the Sierra Nevada production process—if we're down, beer is not coming out the door."

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