

Fueling world-class craft beer brewing

New Belgium Brewing achieves superior system performance and actionable business intelligence by making IT more agile and efficient on a hyperconverged infrastructure



Food & Beverage

United States

Business needs

New Belgium Brewing aims to ensure that Microsoft SQL Server and other business-critical applications run at optimal performance and with uncompromised reliability. The company also wants to achieve a greater business contribution from IT.

Solutions at a glance

Hyperconverged Infrastructure

- [Dell EMC VxRail](#)

Networking

- [Dell EMC Networking S4048-ON switch](#)
- [Dell EMC PowerSwitch S4128F-ON](#)
- [Dell EMC Networking S6000-ON switch](#)

Business results

- Completes an ETL workload in 45 minutes instead of 7 hours
- Runs 200 SQL Server databases and 100 virtualized servers on 1 hyperconverged system
- Improves database performance while workloads increase
- Cuts data-center costs by about 80%, compared to lease arrangements
- Frees up IT time that can be used to move the business forward

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Adam Little
Senior Systems Administrator, New Belgium Brewing

With distribution nationwide, New Belgium Brewing is the fourth-largest craft brewery in the U.S. Among the company's most popular products are Fat Tire Amber Ale, Voodoo Ranger IPA and Mural Agua Fresca Cerveza. New Belgium Brewing maintains production and business operations, along with data centers, in Denver and Fort Collins, Colorado, and Asheville, North Carolina.

For years, New Belgium Brewing has been an enthusiastic Dell Technologies customer of server, networking and infrastructure solutions. The two companies share many of the same values of sustainability and corporate social responsibility. Adam Little, senior systems administrator at New Belgium Brewing, says, "We have an authentic relationship with Dell Technologies. They care about our values and what we stand for. They're a true partner in addressing our business needs."

Journey to the hybrid cloud

Brewery executives are advancing a hybrid-cloud strategy for the growing business. Currently, New Belgium Brewing is designing a hybrid-cloud infrastructure that incorporates Dell EMC VxRail hyperconverged infrastructure and Dell Technologies Networking solutions to take system performance and availability to a higher level.

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Great performance for critical workloads

New Belgium Brewing first implemented a four-node cluster of VxRail at its collocated data center in Denver, replacing a hybrid virtualized and physical infrastructure that was unreliable and presented clustering problems. This upgrade quickly generated remarkable cost, space and energy savings. It also greatly improved the performance of critical applications like Microsoft SQL Server and Microsoft Dynamics ERP and CRM systems. Microsoft Power BI, the sales system and other applications connect to SQL Server to meet the company's complex analytical needs. Close to 200 SQL Server databases and 100 virtualized servers run on a single VxRail system.

Little says, "Compared to our former three-tier architecture, the performance of Dell EMC VxRail is incredible. Business stakeholders asked for their applications to be moved to the Denver data center because of the great VxRail performance."

Easier database management

New Belgium Brewing resolved vexing database management issues with VxRail, making more database copies available for testing and development. "The all-flash technology in VxRail allows us to decompress and deduplicate ever-larger databases, which had been a challenge for years," Little says. "When we saw how well Dell EMC VxRail accommodates database growth, we were able to reassign a full-time database administrator to the business intelligence team."

VxRail storage plays an important role in managing demanding systems and use cases. Little explains, "The more applications and workloads you layer onto VxRail, the more of an impact you achieve from deduplication and compression. It's impressive to see that level of storage savings while also realizing outstanding performance. VxRail has been able to support any workloads we added to it."

Freeing up time to support the business

Continuing to boost system performance and manageability, New Belgium Brewing deployed a five-node VxRail cluster at the data center in Asheville and is planning one for the Fort Collins location. Says Little, "We're all about performance and ease of management. For instance, scripted upgrades for VxRail nodes that we can easily implement during the day are a huge time-saver for our team. We can be both more up-to-date and secure."

Time savings for IT translate into increasing the value of technology investments for the brewery. "When we gain time thanks to the performance of our Dell Technologies infrastructure and networking, we can do more to improve communications, sales outcomes or business intelligence. That has changed the perception of the IT department from being seen as a cost center to becoming a value-adding resource."

In one eye-opening undertaking, Little's team ran a SQL Server extract, transform, load (ETL) workload to see how VxRail would execute it. "An ETL operation that used to take up to seven hours completed in 45 minutes on VxRail," Little says. "Our analytics specialists thought it had failed, because they couldn't believe it took that little time."

The brewery's business development team benefits from the VxRail performance. "It's evident in SQL Server and our other applications that there's almost no response latency in VxRail. This platform has definitely enabled us to segment and process data much quicker, which means we can provide better support to the sales team and help generate revenue faster."

Networking solutions augment infrastructure technology

For the brewery, Dell Technologies Networking solutions are as critical as hyperconvergence with VxRail in moving its cloud strategy forward. In the data centers, the two technologies complement each other as the company strives for further performance improvements and efficiencies.

New Belgium Brewing IT has deployed several Dell Technologies Networking solutions. Little says, "We first implemented a pair of Dell EMC Networking S4048-ON switches and they worked great. That was also a good experience because Dell Technologies consultants took great care of us to help address our networking challenges."

The company decided to replace remaining Cisco products with Dell Technologies Networking. "First, we adopted Dell EMC networking switches to go with VxRail, and now we are deploying them throughout the data centers," Little says. "The main reasons for this change are cost savings and support. The support we receive from Dell Technologies is second to none in the industry."

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When New Belgium Brewing expands the hyperconverged infrastructure, it will use Dell EMC Networking SmartFabric Services for VxRail, a network orchestration tool jointly developed with VMware. That will make it possible for administrators to configure a networking switch in a single step.

Cutting data-center costs by about 80 percent

One reason for the brewery's cost savings is that it acquires Dell Technologies solutions directly instead of the past practice of leasing equipment. Little says, “Leasing hardware was roughly five times more expensive than what we paid for VxRail.” Additional financial savings result from the manageability of Dell EMC Networking and VxRail and because IT can now take care of issues instead of waiting for the company that used to lease the equipment. “Instead of waiting a day or two, we can take care of many issues in 10 minutes and get back to what we were working on.”



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