The perfect recipe for world-class beer

New Belgium Brewing tries cloud and finds out why craft brewing requires an on-premises ingredient.

Business challenges
The craft beer industry is growing rapidly. New Belgium Brewing must continuously evolve to stay ahead of competitors. The brewer uses technology to develop their world-class craft beers like Fat Tire Amber Ale. They tried running everything in the cloud, but quickly found it inadequate.

Solutions at a glance
• Dell EMC PowerEdge servers
• Dell EMC OpenManage Systems Management
• Dell EMC iDRAC
• VMware vSphere

Business results
• Significantly reduced costs compared with cloud options
• Minimized the latency inherent in off-site solutions
• Simplified management through easy-to-use tools
• Ensured the highest safety, security and data integrity
• Delivered exceptional performance and network throughput

lower costs on-premise vs. cloud

25% increase in production capacity with data analytics
Using technology to produce better beer

New Belgium is passionate about brewing, while adhering to a socially responsible, sustainable business model. IT plays an essential role in every phase of beer-making: from procuring the raw materials, to maintaining exceptional quality control, marketing the beer, and managing the business.

“One of our biggest challenges is to get the right information to the right people at the right time,” says Travis Morrison, director of IT for New Belgium. “It’s critical that we enable people to make better decisions for optimum results.”

With the company growing by double-digit percentages annually, Colorado-based New Belgium decided to open a second brewery in Asheville, North Carolina. To meet its expanding technology needs, the company initially turned to cloud computing. But it soon became clear that New Belgium needed a high-performance, on-premise solution.

“Our most mission-critical workloads simply must be run locally,” adds Adam Little, senior systems administrator.

“With the outstanding data analytics capabilities of PowerEdge, we decreased production downtime and boosted capacity on our bottling line by 25%.”

Ray Matthews, Automation Engineer, New Belgium Brewing

Cutting costs and ensuring data integrity

In the highly competitive craft beer landscape, improving efficiency and achieving cost savings are key for success. New Belgium constantly looks for ways to make better use of materials, reduce energy consumption and minimize its impact on the environment.

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<tr>
<th>Metric</th>
<th>Improvement (%)</th>
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<td>66% operational cost</td>
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<td>Provisional time has</td>
<td>90%</td>
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<td>Support resolution time</td>
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New Belgium Brewing is an American craft brewer. Founded in 1988, the employee-owned brewery sells beer in all 50 U.S. states and a handful of other countries including Canada, Sweden, Norway, South Korea, Japan and Australia. New Belgium produces nearly one million barrels of beer annually, making it the nation’s fourth largest craft brewer, and the 11th largest brewery overall.
PowerEdge servers have allowed the brewer to handle exponential increases in data, while maintaining the highest data integrity, safety and security together with the lowest latency. Workloads range from production applications to ERP and CRM systems, SQL databases, SharePoint, and Skype for Business.

New Belgium’s on-premise servers and timesaving management tools – including Dell EMC OpenManage and iDRAC – have also cut costs substantially compared to an off-site cloud facility. Further, the company has overcome production constraints to meet rapidly rising demand. “With the outstanding data analytics capabilities of PowerEdge, we decreased production downtime and boosted capacity on our bottling line by 25%,” notes Ray Matthews, an automation engineer for New Belgium’s production applications.

Creating a “brewery in a box”

In 2016, when New Belgium was building its second brewery in North Carolina, it needed to develop and test the production applications while construction proceeded. To do this, the brewer tapped a modular PowerEdge VRTX server to create what it dubbed a “brewery in a box.”

Containing up to 30 virtual machines (VMs), New Belgium’s PowerEdge VRTX integrates servers, storage, networking, and management to support production and other applications. The company shipped its brewery in a box overseas to get software installed and then was able to immediately stand it up and begin using the box at its Asheville plant.

“The PowerEdge VRTX held everything required to run a brewery,” says Erin Williams, senior systems engineer at New Belgium. “We could develop and test, and then migrate the apps into our production environment.”

Working with a true partner

New Belgium’s employees are a unique set of folks who work hard and love to create distinctive, delicious craft beers, according to IT director Morrison. He sees his role as providing innovative technology solutions, so New Belgium can meet market demands. “I appreciate the way Dell EMC takes the time to understand our needs and partner with us to achieve our goals,” Morrison concludes.

“PowerEdge servers are the foundation of our brewing process. They handle everything from helping us tweak recipes to opening and closing valves.”

Erin Williams, Senior Systems Engineer, New Belgium Brewing

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