



## Supporting Ten-fold Growth through a Faster, Smoother Kubernetes Migration



Careforth provides emotional support, coaching, and financial assistance for families caring for their loved ones at home, including seniors and those with disabilities. The privately owned, Boston-based company works with state Medicaid agencies and insurance companies in its quest to coach families on how to keep loved ones safe, comfortable, and well and to achieve better outcomes. Careforth uniquely focuses on caregivers as a key part of the care team, through a staff of care managers, care coaches, and nurses dedicated to helping families manage the health of loved ones at home.

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### CHALLENGES

- Static infrastructure with limited flexibility and scalability
- Difficulty managing and monitoring workloads and system health
- Desire to integrate Kubernetes with blue/green processes
- Lack of Kubernetes expertise to complete the migration effectively

Tasked with creating and maintaining an environment to support the company's SaaS offering, the Careforth software engineering team was encumbered by spikey workloads and a static infrastructure that didn't offer the flexible scalability they wanted to provide to their customers. Careforth was eager to move from the EC2 platform to a more dynamic infrastructure based on Kubernetes but kept running into challenges with the migration.

“We were looking for a partner to help bring us to the next level,” said Mike Staron, Principal Solutions Architect. “We'd gotten things 70 percent of the way there, but they weren't ready for production. We wanted to make sure we were providing the most mature environment we could.”

Careforth realized it **needed a partner with deep Kubernetes expertise to help push the migration over the finish line faster and more effectively**. Since SuperOrbital had provided training on Kubernetes for the Careforth staff in 2022, the vendor was a natural choice to jumpstart the migration.

### THE RIGHT PARTNER TO TACKLE TOUGH CHALLENGES

Careforth was eager to lean on SuperOrbital's Kubernetes experience and track record to address several challenges with its environment. One was the need to adapt its existing blue/green process to Kubernetes. “We wanted to leverage the strengths of Kubernetes to do a safe deployment, where we could maintain reliability and security while using Kubernetes properly,” Staron said.

Careforth also needed a more efficient way to monitor workloads and system health, along with greater flexibility and scalability than the EC2 platform supported. “What we have is reliable, but it doesn't allow us to do truly flexible, scalable systems,” he said. Rather than pay for performance it didn't need, Careforth wanted the ability to “tune the dials” and develop workloads as needed.

Careforth also sought to tap into more in-depth networking experience than it had in-house, which was critical for a migration of this type. “We're a small team,” Staron said. **“By working with SuperOrbital, we knew we would access much deeper knowledge and grow our internal capabilities.”**

### A COLLABORATIVE, FOCUSED PROCESS YIELDS FAST GAINS

Through four weeks of half-day sessions, SuperOrbital equipped Careforth with a path and a plan to migrate to Kubernetes effectively and achieve its goals.

SuperOrbital's team got deeply immersed in the company's current deployment

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### VALUE CREATED

- The plan and tools to move forward independently
- Path to a dynamic infrastructure that can scale to support ten-fold growth
- Rapid launch of two pilots, exceeding expectations

processes, the key pain points, and the desired future state. Then he and the engineering team worked collaboratively to move the effort forward.

“Sometimes the SuperOrbital engineer worked independently; other times he strategized with cloud operations or development,” Staron said. “Then he’d walk us through his work and show us how to evolve our processes, point by point. We’d discuss whether it was the right approach and how to move to the next level.” Daily stand-up meetings kept the project on track and everyone informed.

**“The engagement completely kickstarted us by getting us out of analysis mode and into working and deploying,”** Staron said.

Beyond setting up processes and workloads to work within Kubernetes, Careforth realized other valuable advantages.

“For example, we understood how things came into the networking pipeline, but not how they came out,” Staron said. With SuperOrbital’s help, the engineering team gained a better understanding of the egress side and realized they had the technology to do what they hoped. They learned how to monitor workloads and system health more efficiently by zeroing in on high-value, high-leverage areas. And they discovered proven ways to optimize the production environment’s stability and responsiveness.

Throughout the project, the Careforth engineering staff offered nothing but high praise. “Their engineer was very insightful, he knew the subject matter, and he was rooting for us to succeed,” said Vidya Hariharan, QA Lead. “He worked to understand our processes and help us get the solution we were looking for.”

Lead Software Engineer Roman Sichnyi appreciated that SuperOrbital worked within Careforth’s current deployment approach. “We weren’t fed pre-made solutions; we got solutions tailored to our situation and existing processes,” he said. “Now we have a better plan and a better understanding of exactly what we need to do to move forward faster.”

## UNLOCKING THE DOOR TO MIGRATION SUCCESS

**With SuperOrbital’s help Careforth got further with its migration, sooner than it expected.**

“They unblocked our Kubernetes deployment,” Staron said. “I had high hopes, but they were exceeded in every way.” Just weeks after the engagement ended, Careforth launched pilots for moving each of its two main languages (Go and Python) to Kubernetes. And the team now has a strong path to production, smoothing new

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## SOLUTIONS

- Four-week engagement of half-day sessions
- Deep immersion in the current processes and pain points
- Collaborative approach that leveraged internal knowledge
- Tailored solutions that worked with existing processes

rollouts and upgrades. “We have the recipe to follow until we eventually have a full Kubernetes cluster,” said Staron.

Along the way, the engineering team expanded their use of GitHub workflows and gained insights on how to create the “DevOpsy” culture they’re striving for. “They showed us how to use the tools we already had to accomplish our goals,” Staron said. “Anytime we don’t have to learn, build, and buy something else, it’s a huge win.”

The engagement even had a big impact on the engineering department’s mindset. “It re-energized us,” Staron said. “We knew we could get there, but now we’ve been shown the yellow brick road.”

With a plan and the tools to work independently, the team feels it can get the migration over the finish line in four to six months, setting a foundation to support rapid expansion. Once completed, the migration will give Careforth the flexibility to scale without sacrificing redundancy or reliability. “We can react to increased workloads as they happen, instead of oversubscribing to ensure we don’t lag behind or experience performance bottlenecks,” he said.

Given the massive business impact of the Kubernetes migration, getting the process right with SuperOrbital’s help was vital. Before, Staron was confident that EC2 could support at least doubling the installed customer base in the next six months. “**With the move to Kubernetes, we believe we can support growing our business in the same time frame and support future growth easily,**” he said.



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