

# Vodafone Group Services' Smart Container Journey

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Migrating a Legacy Monolith to Kubernetes



# Migrating a Monolith to Kubernetes

## Business Challenges

A business critical system was running on middleware and architected as a monolith. The middleware had reached end-of-life. Upgrading was too costly and risky due to a large upgrade deficit. This became an actual **operational and security risk**.

Staying on and extending the monolith was not an option. The solution was to migrate off the middleware. This introduced the opportunity to move to a **microservices architecture**. This was an opportunity to use a new technology - containers, and run it at scale. This could be achieved safely with the proper partnership.

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We could not move a business-critical system on to something we were unfamiliar with, so we partnered with someone who knows how to run containers at scale.

- Markus van Laak, Principal Manager  
Digital Enablers, Vodafone Group

## Business Solution

The selection criteria were fulfilled by involving hands-on containers experts that have experience running containers at scale. Giant Swarm provided a **highly automated control plane** to manage Kubernetes. This product comes wrapped in a service that increased our peace of mind while adopting Kubernetes. The partnership with Giant Swarm **eased the ramp up** to cloud native architecture. There was available portability with no lock-in, providing an easy pivot in case of failure. This safe starting point enabled Vodafone to take the leap into microservices architecture. It also eliminated the challenges of running on an environment that was not well-known to the Vodafone staff.

The first iteration of the solution was Kubernetes on-premises. The second iteration was moving that implementation to AWS. Both of which were managed by Giant Swarm.

The portability of using vanilla Kubernetes reassured Vodafone that there would be limited throwaway. This portability proved itself in the ease of migration from on-premises to AWS.

# A Smart Journey to Containerization

## Business Results

Time to value was immediate. **Within 6 weeks** of moving to AWS, Vodafone had a working and testable environment.

Finance was a key stakeholder in the project milestones. The project was judged by how the budget was managed. The achievements were measured based on the investment. The continued funding of the project indicates that it has proven its worth.

Due to proven business value, high degree of automation and speed to onboard more projects Giant Swarm was chosen over other alternatives as the platform for Vodafone Group's Digital Technology Stack, in multiple projects.

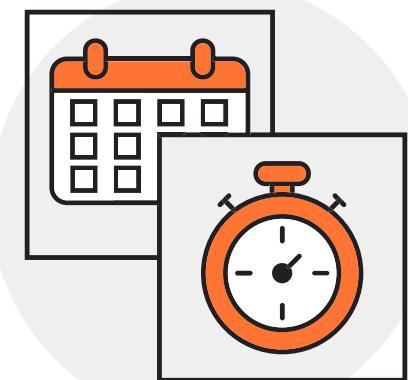


The managed services provided by Giant Swarm have more depth than other providers in the space. It is a true managed service - no ticketing system or bots.

- Nelson Joaquim, SME Containers and Kubernetes, Vodafone Group Services

## Ramp up time from months to minutes

Stakeholders were truly surprised that it **takes 10 minutes** to spin up a cluster and a project can start working **within 15 minutes**. Their effort estimation showed the same thing could take up to a quarter.



# About Vodafone Group Services

Vodafone plc is a British multinational telecommunications conglomerate. Vodafone Group Services GmbH provides data center services as well as supporting business processes. Vodafone Group Services GmbH operates as a subsidiary of Vodafone Group Plc.



**Established:** 1985

**Headquarters:** Newbury, United Kingdom

**Number of employees:** ~100,000

# About Giant Swarm

Founded in 2014, Giant Swarm provides the premier managed cloud native platform. We empower businesses to easily provision and use Kubernetes at scale. We provide a wide set of managed services on top. Giant Swarm continuously updates the platform and all its customers tenant clusters. We take full responsibility that the cloud native infrastructure is operational at all times. Giant Swarm provides its customers with real-time, hands-on expert support.

Giant Swarm accelerates time-to-market, increases developer productivity, ensures your applications' resiliency and scalability. We do this while saving you both operational and infrastructure costs.

Our goal is your cloud native success.