

How Fastweb Enriched its FASTcloud Platform with Kubernetes and Clastix Multi-Tenancy

Deploying hyperscale-like KaaS for hundreds of customers with upstream Kubernetes and Clastix Capsule.

COMPANY

Company: Fastweb S.p.A.
Website: <https://www.fastweb.it>
Headquarters: Milan, Italy
Industry: Telecommunications / Cloud Services
Employees: ~7,000
IT environment: FASTcloud, private, public and multi-cloud
Clastix offering: Capsule & Clastix Care
Use case: Container-as-a-Service - Multi-tenant Kubernetes

AT A GLANCE

Challenge

Traditional cloud architectures were too expensive and slow to operate at Fastweb's scale.

Solution

A hyperscale-like Kubernetes platform with Clastix multi-tenancy serving hundreds of tenants from one architecture.

Outcome

Unprecedented operational agility and scalability at a fraction of the previous infrastructure cost.

OVERVIEW

Fastweb, a leading Italian telco and cloud provider, needed to evolve its FASTcloud platform beyond traditional, enterprise-first architectures that were too expensive and slow to operate at cloud-native scale. Partnering with Clastix, Fastweb built a hyperscale-like Kubernetes platform powered by Clastix Capsule, enabling container-as-a-service for hundreds of customers from a single multi-tenant architecture, with strong tenant isolation, self-service provisioning and full GitOps automation.

Two decisions were taken at the front end of the project: to improve efficiency by leveraging a modern, highly automated hyperscale-like approach running on Kubernetes, and to architect multi-tenancy from the start rather than retrofit it. The journey from concept to validation to production was made with Clastix engineering, from consultancy through to implementation of the Capsule multi-tenancy operator, on Kubernetes clusters running Canonical Ubuntu across Fastweb's certified Tier-IV data centres.

Fastweb has since entered production with new services on a modern container platform. The extensive automation enabled by Kubernetes and Clastix's multi-tenancy solutions lets it manage hundreds of customers with fewer hardware resources and far less operational effort - hyperscale-like agility without proprietary vendor lock-in.

KEY REQUIREMENTS

- Self-service provisioning without manual intervention
- Hard multi-tenancy with strong resource isolation
- Upstream Kubernetes - no vendor lock-in
- GitOps-ready, declarative automation
- Support for a multi-cloud strategy across private and public estates

KEY OUTCOMES

- Hundreds of customers served from one multi-tenant architecture
- Hyperscale-like automation without vendor lock-in
- Reduced hardware footprint through multi-tenancy - more customers, fewer resources
- Operations teams freed for higher-value services work
- A full GitOps-ready model from day one

"We are proud of the step forward we have taken with the new architecture, and we are very pleased to have partnered with the Clastix team for their deep expertise and unique approach to Kubernetes. Implementing cloud native services with Clastix has been a great experience, and we look forward to continuing to grow with it."

Luca Tagliavia, Head of ICT Multicloud BU - Fastweb

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