

Bundesagentur für Arbeit

Kubernetes Storage: Ceph-Power



With the introduction of Ceph as its Kubernetes storage solution—implemented by Fsas Technologies and CLYSO—the Federal Employment Agency (BA) has taken a major step towards its goal of operating a future-proof, sovereign, and highly flexible IT infrastructure.

A Synergy of Decades-Long Partnership and Cutting-Edge Software-Defined Storage Expertise

Fsas Technologies has supported the Federal Employment Agency for many years as a trusted solutions partner. To meet the growing demand for a cloud-native, open-source-based storage strategy, this partnership was strategically expanded to include CLYSO. This collaboration enabled existing structures to evolve and integrate a modern, software-defined storage architecture. The result is a future-proof storage platform that combines high stability, security, and digital sovereignty.

"With CLYSO's expertise, we can perfectly implement our high standards for stability, security, and scalability. We now have a reliable partner by our side to future-proof our Ceph infrastructure."

Frank Bayer, Technical/Functional Lead – IT-Systemhaus - Bundesagentur für Arbeit

Industry:
Public Sector
Country:
Deutschland
Employees:
approx. 120.000

The Customer

Headquartered in Nuremberg, the Federal Employment Agency (BA) is a self-governing public body with a vital social mandate. As a leading expert in job placement and vocational training, the BA provides comprehensive career advice and supports citizens with financial benefits such as unemployment and child allowance. To deliver these services, the BA operates one of the largest IT landscapes in Germany.



Case Study facts

The Challenge: Adaptability and Stability

The Federal Employment Agency (BA) operates one of Germany's most powerful IT environments, safeguarding critical data assets to the highest standards. A large share of its containerised applications already runs successfully on Kubernetes. Seeking a storage system that perfectly aligns with its open Kubernetes strategy, the BA chose Ceph—a forward-looking, open-source-based Software-Defined Storage (SDS) solution that delivers maximum flexibility and scalability.

The Solution: Fsas Technologies and CLYSO

From the outset, the BA's Kubernetes team prioritised native Ceph operations without any proprietary, closed-source components, while actively building in-house expertise. Together with Fsas Technologies and our Ceph specialist, CLYSO, a successful Proof of Concept (PoC) was achieved in a very short timeframe, impressively demonstrating the platform's capabilities without the need for lengthy training programmes.

CLYSO supported the BA throughout the entire journey—from the initial design of the Ceph clusters and the PoC to full production operations. This close collaboration empowered the BA to build its clusters independently and tailor them precisely to the organisation's strict security requirements.

The Outcome: Thanks to Ceph's scalability and flexibility, both block storage (RBD) for Kubernetes workloads and S3 object storage are delivered from a single cluster. Maximum operational reliability is ensured around the clock by CLYSO's 24x7 Ceph Enterprise Support.

The Result: Sovereignty and Stability through Open Source

- **Advanced Integration:** The adoption of open-source Ceph technology allows for faster, seamless integration into the existing container environment, while delivering proven future-proofing, stability, and high performance.
- **Digital Sovereignty:** By successfully deploying open-source technology at the storage layer, the BA has moved a major step closer to full digital sovereignty.
- **In-House Expertise:** The BA's IT System House successfully built up internal knowledge during the PoC and is now fully capable of managing and expanding the Ceph environment independently.
- **Round-the-Clock Security:** CLYSO's 24x7 Enterprise Support secures production operations 24 hours a day, 7 days a week.
- **Unified Storage Strategy:** The implementation of Ceph storage technology allows the Federal Employment Agency to provide both block and object storage within a single, unified platform—perfectly tailored for Kubernetes workloads today, with the potential to support other workloads in the future.