

Application contact emails

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Also see [OpenEBS project leadership Maintainers team](#)

Project Summary

Cloud native storage

Project Description

OpenEBS was accepted as a Sandbox project in 2019, then moved to archive in Feb 2024. For background on why, see [OpenEBS - why we were archived](#). The project team and sponsoring company have made changes in order to ensure the long term sustainability of OpenEBS. We are asking to unarchive the project, and are challenging ourselves to move forward in the CNCF maturity process.

OpenEBS provides enterprise grade block storage for Kubernetes, enabling persistent resilient cloud native storage (storage is managed-from and contained-within a Kubernetes cluster). OpenEBS is popular, with >25,000 new clusters installed every month.

This is a re-application to Sandbox. Project was archived Feb 2024 after [TOC vote on 1051](#). The team has listened to TOC feedback, [has made changes](#), and is now seeking readmission to Sandbox.

Changes include:

- Archived older storage engines and consolidated engines from 11 to 4 (75 repos to 38), these are the actively maintained repos that will be further developed in the future.
- Reworked documentation
- Reworked all governance docs, and centralized to umbrella Community repo
- Rewrote project docs including Vision.md, Governance.md, Contributing.md
- Instituted processes inside the project, so people abide by the project docs
- Engaged with Linux Foundation brand counsel (DanielC) to bring DataCore's commercial offering into compliance
- Project members attended KubeCon Paris, in order to engage with the community on how best to proceed reapplying for sandbox in the most efficient manner

possible - the OpenEBS team has been working with the CNCF Projects team to help meeting the requirements. (ChrisA and JorgeC)

- Educated the sponsoring organisation on open source and CNCF policies and procedures
- Assigned a CNCF liaison (Ed Robinson), to represent the project and take guidance from the TOC

The team hopes to gain admission to Sandbox soon, then work with CNCF towards incubation, then graduation.

Org repo URL (provide if all repos under the org are in scope of the application)

<https://github.com/openebs>

Project repo URL in scope of application

<https://github.com/openebs/openebs>

Additional repos in scope of the application

The new OpenEBS project consists of 5 Storage Engines. The strategy is to eventually unify all 5 into 1 platform. There are sub repos & dependencies, 1 sub project & 1 critical external fork dependency. The Team took advice from TOC, and advised community, then deprecated, then moved tech-debt of 44 legacy repos to [openebs-archive.org](#) based on guidance from [@caniszczyk](#) and [@castrojo](#). - The new [repo structure](#) is listed below, with engines listed in order of User Adoption:

| Name | Project Repos |
|------------------------|---|
| Community | https://github.com/openebs/community/ |
| Local PV Hostpath | https://github.com/openebs/dynamic-localpv-provisioner |
| Local PV ZFS | https://github.com/openebs/zfs-localpv |
| Local PV LVM | https://github.com/openebs/lvm-localpv |
| Replicated PV Mayastor | https://github.com/openebs/mayastor |
| | https://github.com/openebs/mayastor-control-plane |
| | https://github.com/openebs/mayastor-extensions |
| | https://github.com/openebs/spdk-rs |

SPDK fork w/OpenEBS
patches

<https://github.com/openlibs/spdk>

Local PV RawFile

<https://github.com/openlibs/rawfile-localpv>

Note: SPDK patches are available to the community

Website URL

<https://openlibs.io>

<https://openlibs.io/docs>

Roadmap

<https://github.com/openlibs/openlibs/blob/main/ROADMAP.md>

Roadmap context

The new project roadmap & strategy is to eventually unify 5 Storage Engines into 1 single Storage platform. This is a major project change compared to the old roadmap, which did not provide enough attention and focus on the 4 Local PV engines. The team acknowledges this lack of focus which created a stale & disappointed community with low contributions.

The Team has defined a [VISION doc](#) as part of the new GOVERNANCE structure that supports the roadmap and helps guide the Team, the contributors and the community.

The new Roadmap + [VISION doc](#) defines a commitment to all 5 Storage Engines and the entire user community.

Contributing Guide

<https://github.com/openlibs/community/blob/develop/CONTRIBUTING.md>

Code of Conduct (CoC)

https://github.com/openlibs/community/blob/develop/CODE_OF_CONDUCT.md

Adopters

<https://github.com/openlibs/community/blob/develop/ADOPTERS.md>

Contributing or Sponsoring Org

<https://www.datacore.com/>

Maintainers file

<https://github.com/openebs/community/blob/develop/MAINTAINERS>

IP Policy

If the project is accepted, I agree the project will follow the CNCF IP Policy

Trademark and accounts

If the project is accepted, I agree to donate all project trademarks and accounts to the CNCF

Why CNCF?

OpenEBS was accepted as a Sandbox project in 2019, then moved to archive in Feb 2024.

The Team has re-examined why we want to continue to contribute to CNCF. Here is why:

- CNCF as an organization is able to protect, guide and nurture the Kubernetes open source platform.
- Under CNCF's guidance & governance OpenEBS aims to democratize persistent storage for K8s for a wide range of use cases.
- Aligning with CNCF's mission, OpenEBS can leverage CNCF's community and guidance to drive innovation, adoption, and growth.
- Thousands of clusters trust OpenEBS to reliably manage persistent data in K8s.
- The Team is proud of the progress, and being able to work with cloud-native adopters, together we are innovating and enabling the community for the future.

Benefit to the Landscape

Key benefits of OpenEBS are:

- Resilient and reliable data management capabilities within Kubernetes
- Software-defined, container-native and device agnostic
- Seamless migration capabilities of legacy deployments to Kubernetes

Cloud Native 'Fit'

OpenEBS is cloud native storage which enables K8s stateful apps with persistent block storage.

Cloud Native 'Integration'

Kubernetes

Containerd

KubeVirt

Kubernetes

Etc

NATS

HELM

gRPC

Jaeger

OpenTelemetry

Prometheus

Open Telemetry

Cloud Native Overlap

Longhorn (storage)

CubeFS (storage)

Rook/Ceph (storage)

Similar projects

Longhorn (storage)

CubeFS (storage)

Rook/Ceph (storage)

Landscape

Cloud Native Storage

Business Product or Service to Project separation

The sponsoring company, DataCore offers premium support services to OpenEBS adopters and production users.

The company plans to release a future offering to provide enhanced enterprise management solutions complementing OpenEBS.

The prior commercial offering “openEBS Pro” had trademark issues with Linux Foundation and has been withdrawn.

Project presentations

Prior to project-archiving, OpenEBS has participated with TAG Storage. The Team met once with TAG Storage post archiving in July 2024.

Project champions

Jorge Castro
Chris Aniszczyk

Additional information

OpenEBS production installations

- Microsoft uses OpenEBS in Azure Container services
- CIVO uses OpenEBS as the basis for their CSP offerings
- Flipkart, India’s largest eCommerce service has relied on OpenEBS for their storage
- Replicated's Embedded Cluster and kURL products use OpenEBS as the default storage provider.
- ... and more

The Team has accepted the feedback and adopted changes recommended by the TOC in February 2024.

While OpenEBS is in Archive, the users are uncertain of the project’s future, and the future of their own software that depends on OpenEBS.

We request TOC to consider OpenEBS for a promotion to Sandbox, the Team commits to work with CNCF guidance to develop and execute a plan to move the project to its next level.