



KubeCon



CloudNativeCon

China 2018

Intro: CNCF Storage WG

Quinton Hoole & Xing Yang, Huawei

(based on deck prepared by Alex Chircop, Storage OS)



Storage WG

The Storage Working Group meets on the **2nd and 4th Wednesday** of every month at 8AM PT (USA Pacific) (join: <https://zoom.us/my/cncfstoragewg>)

Further details :

<https://github.com/cncf/wg-storage>

Meeting minutes: <https://goo.gl/wRqerO>

Mail list: <https://groups.google.com/forum/#!forum/cncf-wg-storage>

Over 30 members from many companies (and individuals) including:

Datera, Dell, Diamanti, Docker, DriveScale, Google, HPE, Huawei, IBM, Iguazio, Infinidat, Mesosphere, NetApp, OpenEBS, OpenSDS, PortWorx, Pure, Quantum, RedHat, StorageOS, Upbound, Western Digital, VMware

Why is storage critical?

- There's no such thing as a stateless architecture, **applications store state somewhere.**
- Cloud native is about supporting patterns such as **portability**. Containers on their own do not enable portability.
- **Interoperating** with storage increases cloud native's relevance and leads to better applications.

Goal of storage in CNCF

- In order to drive ubiquity of cloud native computing, the CNCF intends to enable a thriving **storage eco-system** that is vendor and platform neutral and **interoperable for applications**

Storage WG Mandate

Primary Priority:

- Clarify **terminology** and **landscape**
- How components are used in clouds
- Compare and contrast with regards to **attributes**, i.e.: availability, durability, performance, scalability, consistency

Projects

Over the last year, several projects have presented at the WG and collated feedback including :

CSI, Rook, REX-Ray, TiKV, Dotmesh, Yugabyte, OpenEBS, Open Services Broker, Vitess, Minio, OpenSDS, Redfish/Swordfish

Storage projects accepted by the CNCF TOC:

- **Rook** accepted as an Sandbox Project, now is an Incubation Project
 - Minio is supported by Rook
- **Vitess** accepted as an Incubation Project
- **TiKV** accepted as an Sandbox Project

Storage Landscape White Paper Outline



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- Definition of the attributes of a storage system
- Definition of the layers in a storage solution with a focus on terminology and how they impact the attributes
- Definition of the data access interfaces in terms of volumes and application APIs
- Definition of the management interfaces

White Paper Authors



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Next Steps

- Deep dive session to present findings in CNCF Storage Landscape draft white paper.
- Identify gaps in the landscape white paper
- Final paper complete by KubeCon Seattle
- Investigate and publish case studies on how storage is used in the real world
- Solicit feedback from audience on what they want to see from this WG

Other sessions while you are at Kubecon



- Protecting Stateful Workloads with CSI Snapshot – Jing Xu and Xing Yang
- Deep Dive: CNCF Storage WG – Quinton Hoole and Xing Yang
- Running Vitess on Kubernetes at Massive Scale: JD.com Case Study – Jiten Vaidya and Xin Lv
- Intro: Rook - Jared Watts
- Deep Dive: Rook - Jared Watts

Questions?

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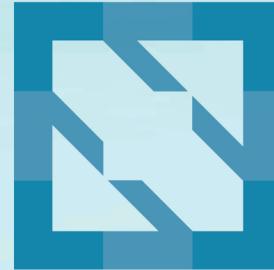
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THANK YOU

