Intro: CNCF Storage WG
Quinton Hoole & Xing Yang, Huawei
(based on deck prepared by Alex Chircop, Storage OS)
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
• 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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THANK YOU