



KUBERNETES FUNDAMENTALS (LFS258)

SUPPORT

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KUBERNETES ARCHITECTURE

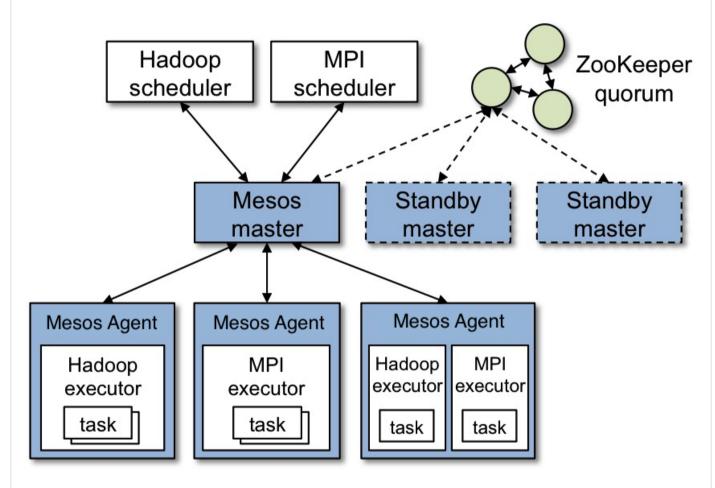
Kubernetes Architecture

Mesos

At a high level, there is nothing different between Kubernetes and other clustering systems.

A central manager exposes an API, a scheduler places the workloads on a set of nodes, and the state of the cluster is stored in a persistent layer.

For example, you could compare Kubernetes with Mesos, and you would see the similarities. In Kubernetes, however, the persistence layer is implemented with etcd, instead of Zookeeper for Mesos.



Mesos Architecture

The Apache Software Foundation Retrieved from the Mesos website

You should also consider systems like OpenStack and CloudStack. Think about what runs on their head node, and what runs on their worker nodes. How do they keep state? How do they handle networking? If you are familiar with those systems, Kubernetes will not seem that different.

What really sets Kubernetes apart is its features oriented towards fault-tolerance, self-discovery, and scaling, coupled with a mindset that is purely API-driven.

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