sodacon 2020

DATA CONNECTED

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ChubaoFS – an on-premise distributed storage solution for large scale container platforms

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What is ChubaoFS

Core Objective

- Provide distributed storage service for cloud-native applications deployed in large scale container platforms

Achievements

- One cluster, multi-tenancy
- Support 100k+ clients simultaneously
- Scalability for meta data both capacity and performance wise
- Easy elasticity
- Optimized resource utilization
- Friendly to both large and small files
- Converged file system and S3 interfaces

Design Essentials

Eliminate Bottlenecks

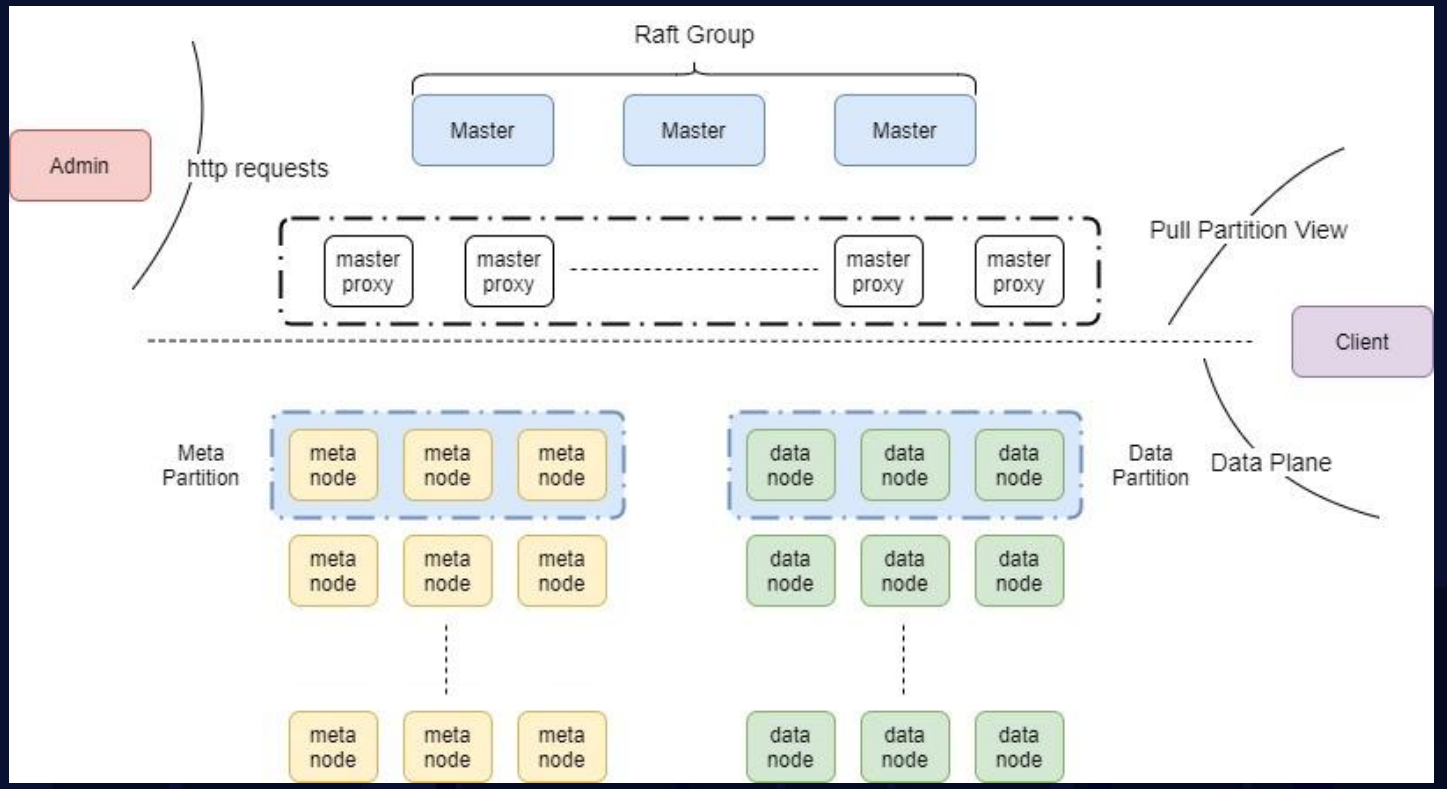
- Highly scalable meta subsystem
- Separated control and data plane
- Master proxies to balance the partition view pulling pressure

Improve resource utilization ratio

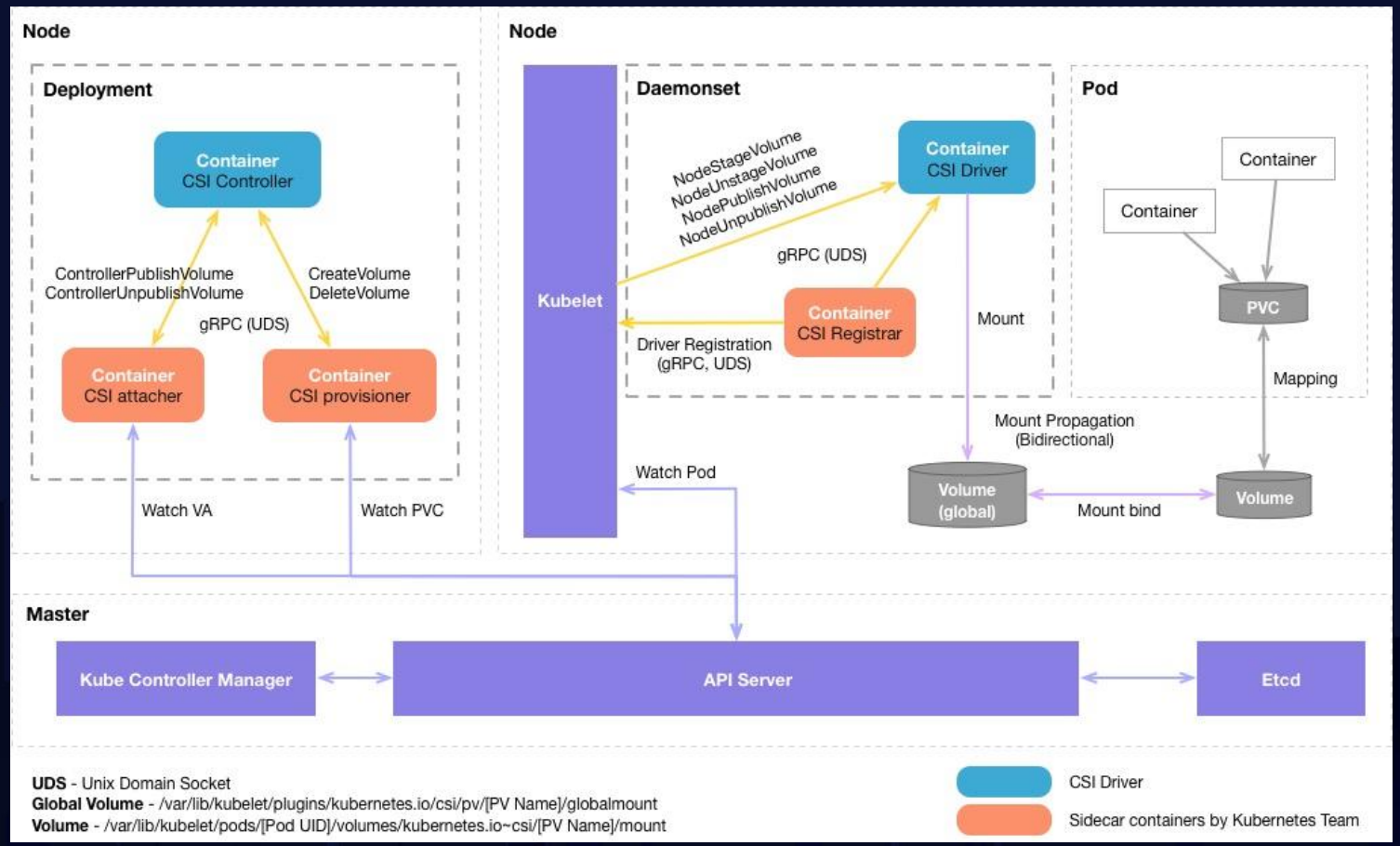
- Create logical partitions which do not consume much storage resources
- Volume is collection of such logical meta partitions and data partitions

Withstand traffic peak

- Pre-allocate logical partitions



Integration with cloud-native

CSI driver

- Support spec v0.3 and v1.0