



# sodacon 2020

## DATA CONNECTED

### CCB'S CLOUD DATABASE PLATFORM PRACTICE BASED ON KUBERNETES & SODA

Xion Lai

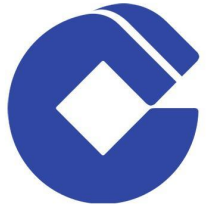
Cloud Platform R&D Department, General Manager

China Construction Bank Fintech





## COMPANY OVERVIEW



**中国建设银行**  
China Construction Bank

- Ranked 2nd in 'TOP 1000 WORLD BANKS 2020'  
--<The Banker Magazine>

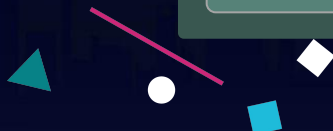
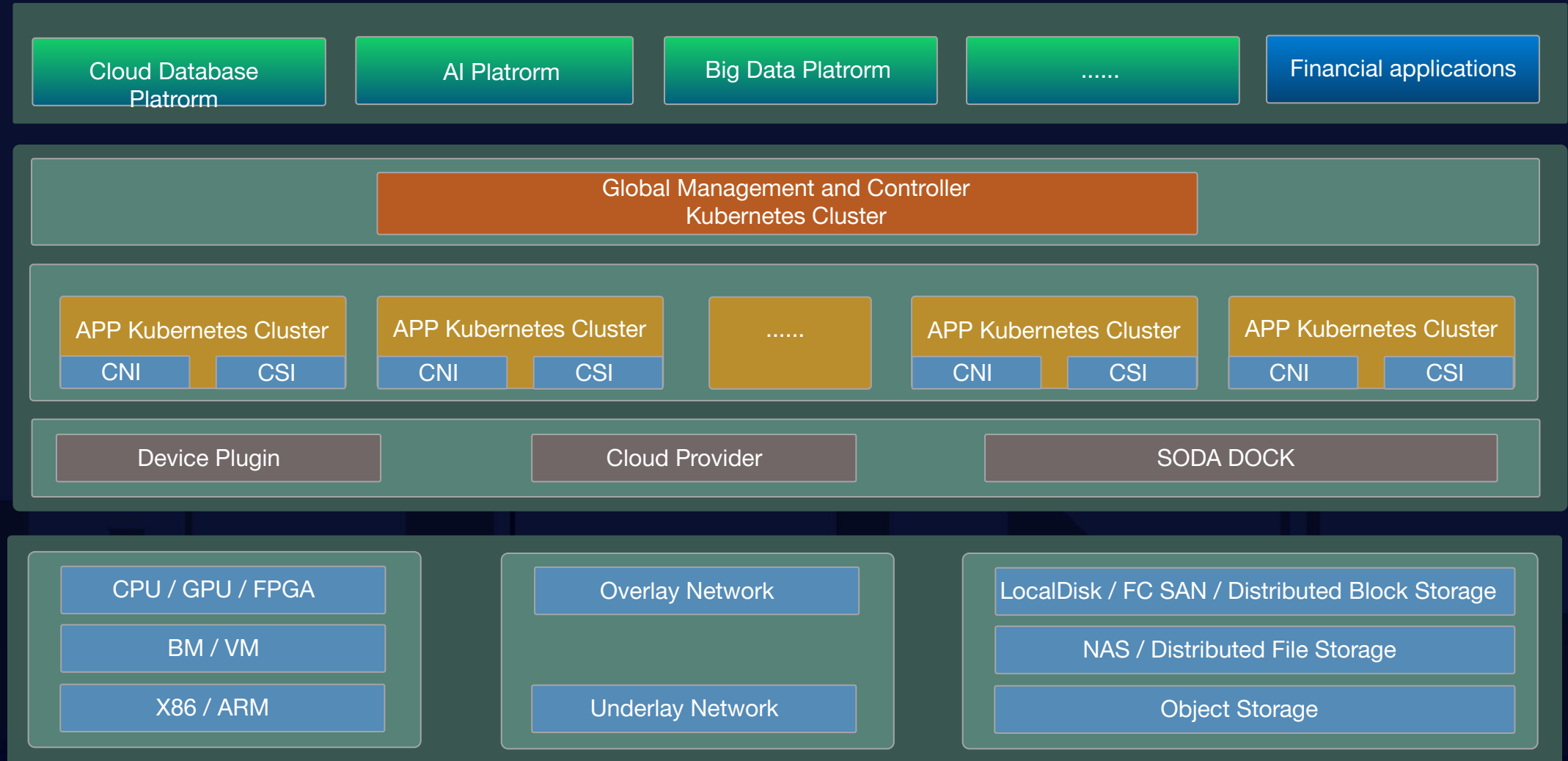
- 30th in 'GLOBAL FORTUNE 500, 2020'  
--<Fortune Magazine>



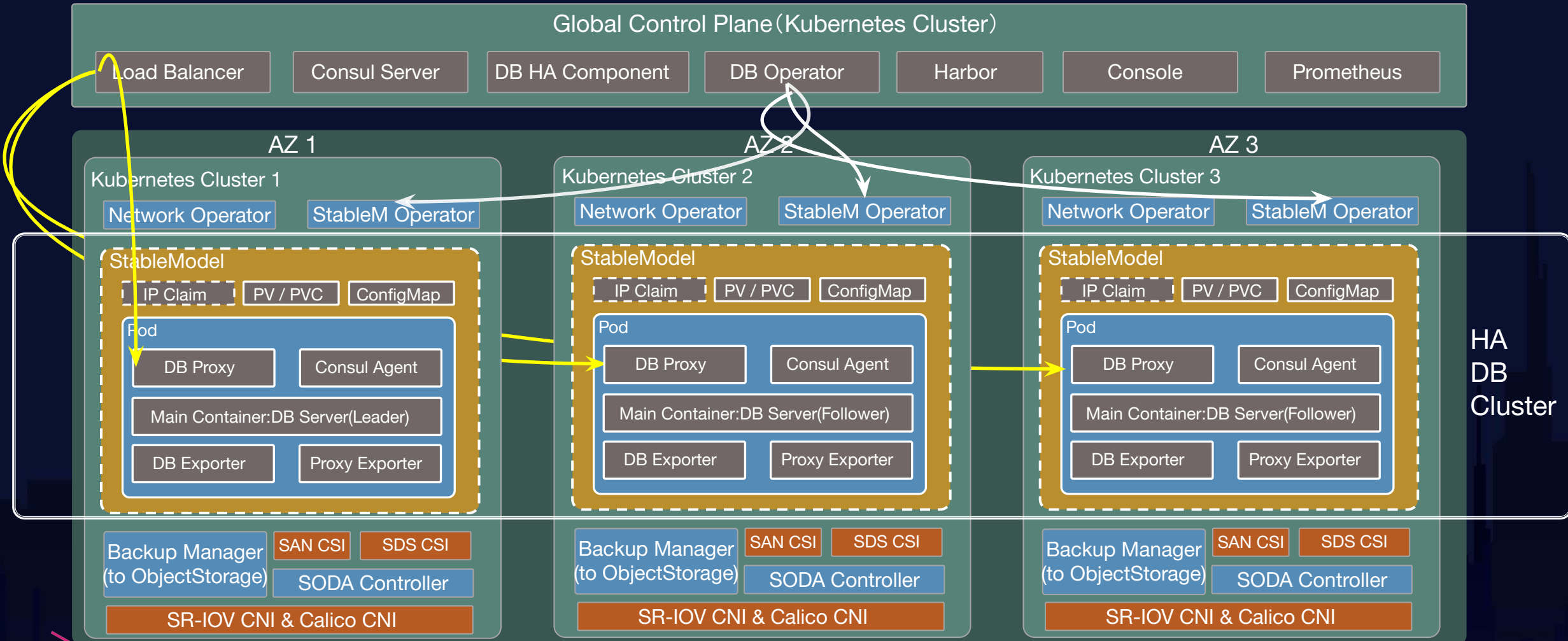
**建信金融科技**  
CCB Fintech

- First fintech company held by China nationalized major banks
- Development centers in 7 major cities of China, 6300+ employees

# CCB'S CLOUDNATIVE PLATFORM OVERVIEW



# CLOUD DATABASE PLATFORM BASED ON KUBERNETES&SODA



# ACHIEVEMENTS OF THE PLATFORM



建行云 总览 云产品

MySQL(k8s版)

概览 MySQL服务 Redis服务 告警管理 操作日志 项目信息

返回 详情页面

详细信息 监控 数据库管理 参数设置 用户管理 任务日志 备份管理 慢日志

**基本属性**

实例名称 mysql-tqwiuryr  
GTID 信息 已开启  
访问地址 : 3306  
APPID  
VPCID  
SubnetID  
所属用户ID  
标签 -  
创建时间 2019-09-30 17:40:52

**配置信息**

架构 高可用版  
实例规格 4核 8G 200GB  
数据库版本 5.7.28  
部署方式 多可用区  
主库所在可用区 az1  
从库所在可用区 az2, az3  
可维护时间段 23:00-05:00

**拓扑图**

主库: mysql-tqwiuryr-1  
状态: 正常(Passing)  
数据中心: az1

半同步/延迟0M

从库: mysql-tqwiuryr-2  
状态: 正常(Passing)  
数据中心: az2

冷备中心

从库: mysql-tqwiuryr-3  
状态: 正常(Passing)  
数据中心: az3

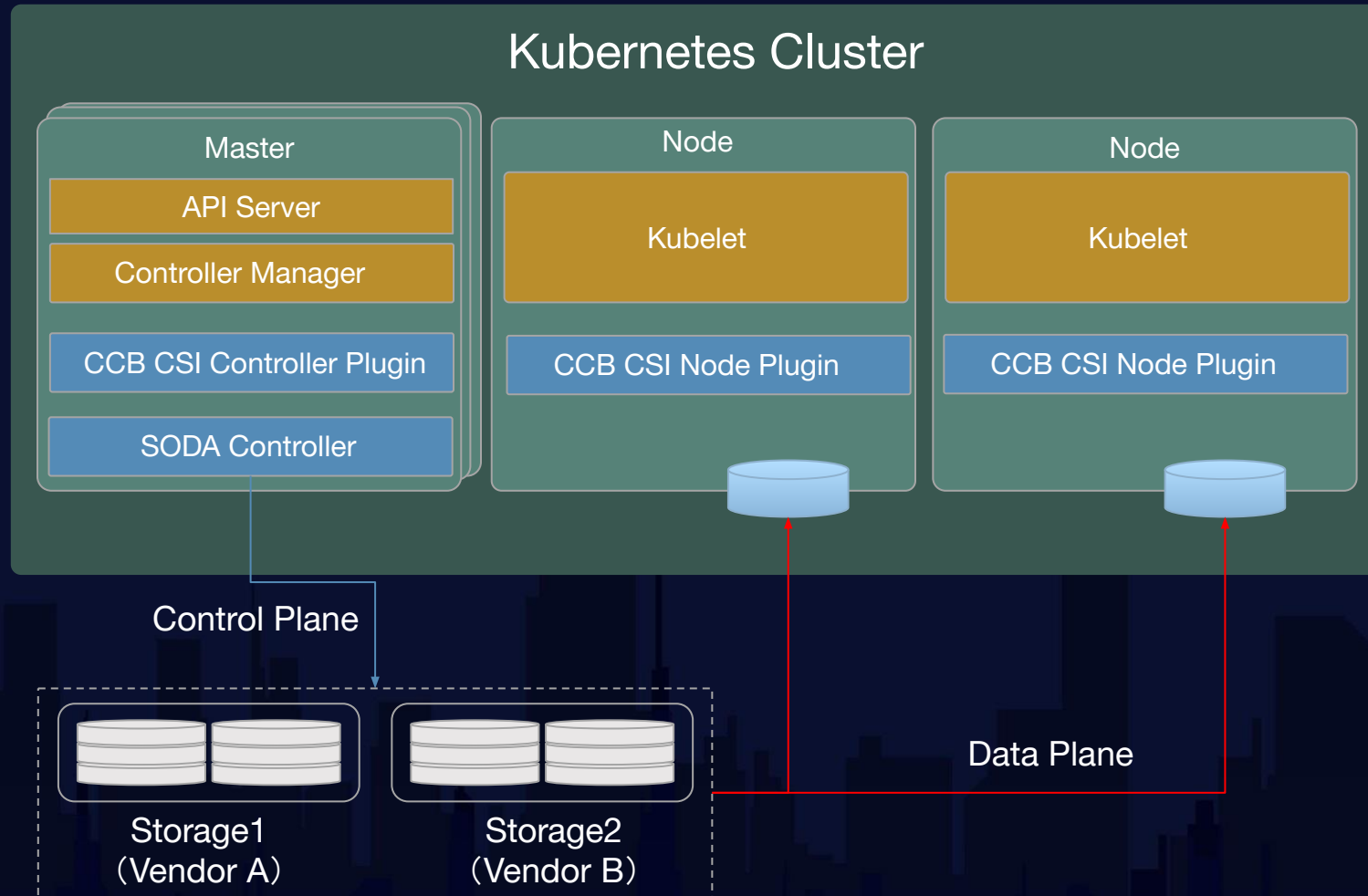
半同步/延迟0M

**运行信息**

复制信息 半同步  
复制状态 运行中  
任务  
任务状态 无运行中的任务

- **Scale:** 600+ database clusters delivered in one year
- **Efficiency:** HA database cluster deployed within 1 minute
- **Security:** Multiple data protection mechanisms, ensuring data security
- **Automation:** Automated maintenance, seconds level event perception, error self-healing, minimizing db maintenance cost

# HOW CAN SODA HELP

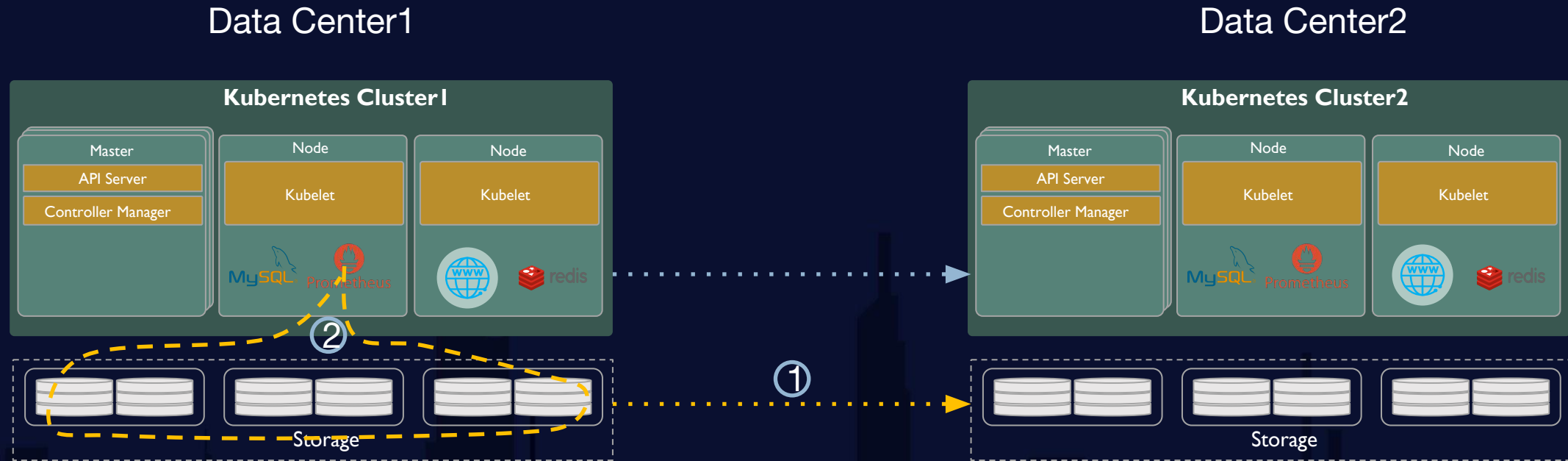


- Single plugin, minimizing problems of deployment and maintenance caused by multiple CSI plugins(CCB SAN CSI, CCB NAS CSI, CCB SDS CSI..etc)

- SODA Dock as interface for different storage backends to shield protocol differences

- Provide a scalable monitoring framework where backends and client exporters can be managed dynamically

# CHALLENGES IN THE FUTURE



- Data migration between different Kubernetes clusters and storage;
- Unified monitoring of storage infrastructure through Prometheus.





THANK YOU

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