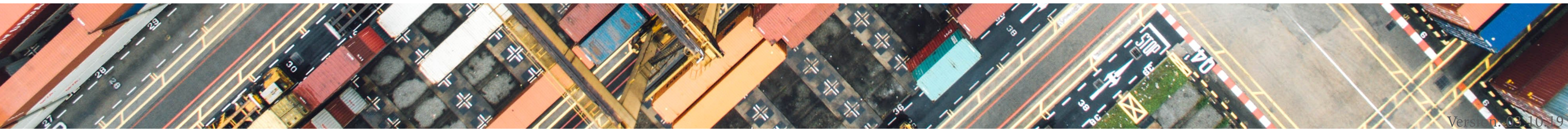




RUNNING MYSQL IN K8S

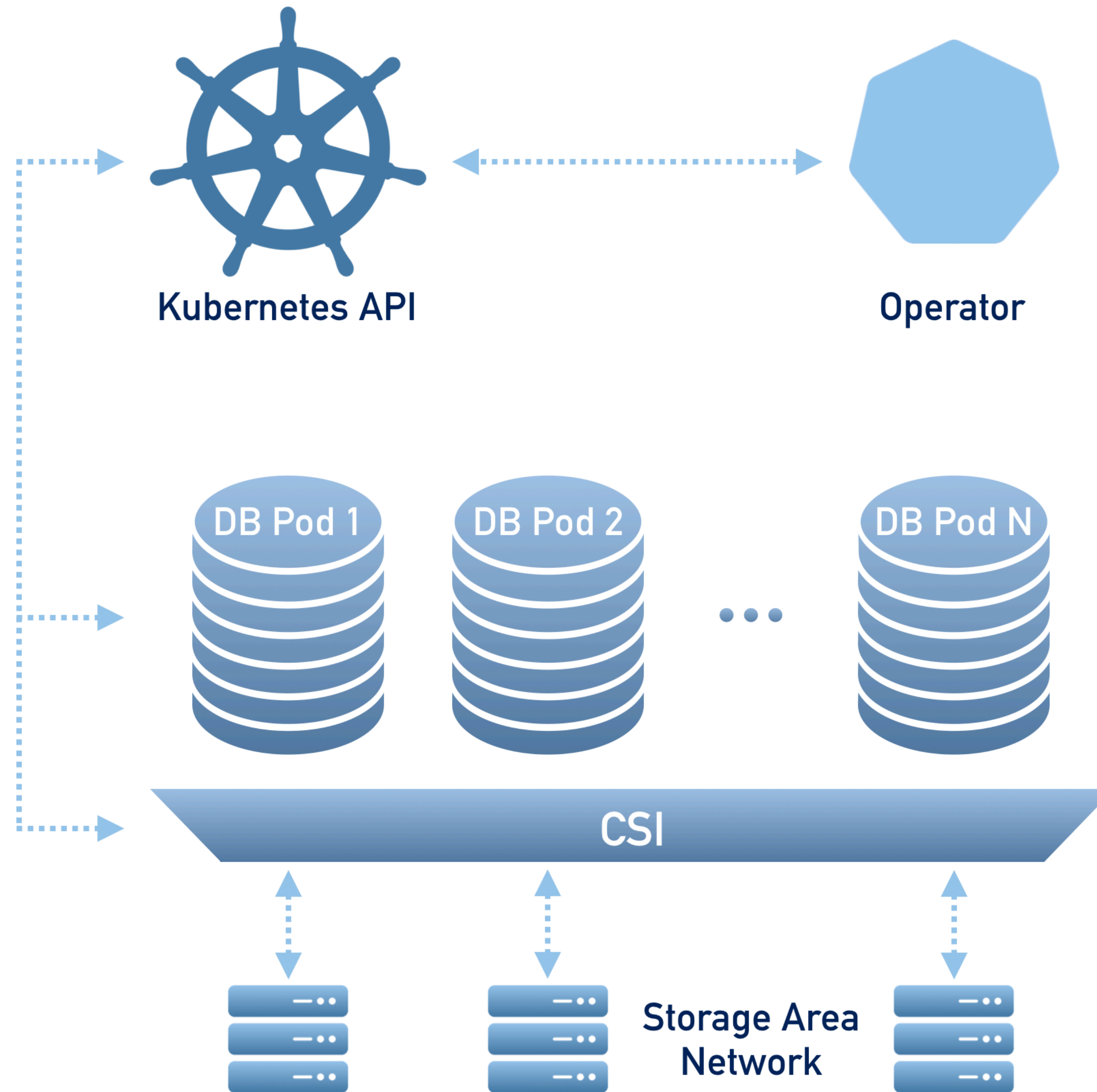




Mykola Marzhan

.....
*Has been developing deployment,
update and monitoring systems
since 2004.*

WHAT IS AN OPERATOR?

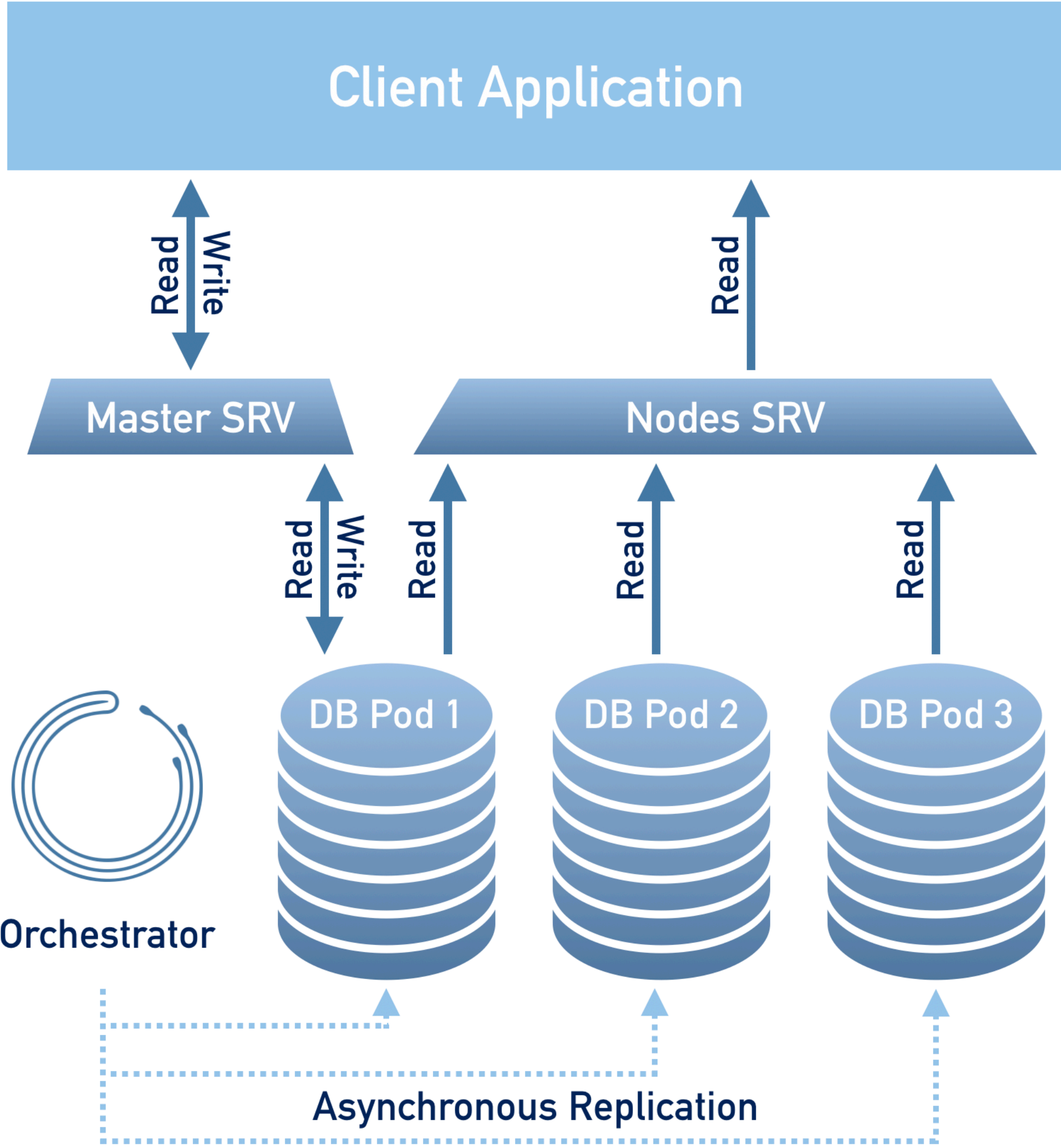


OPERATORS

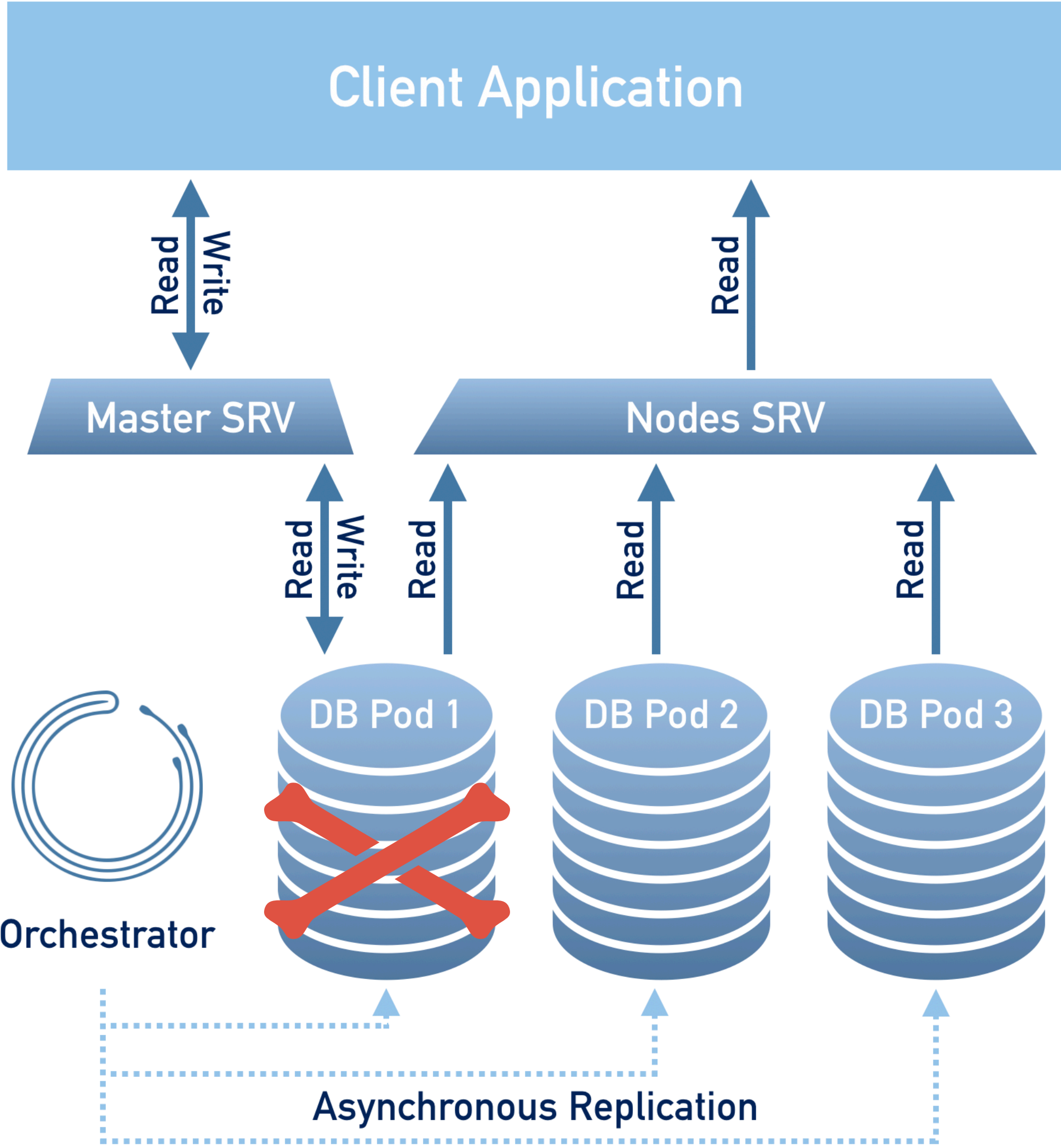


WHAT IF IT FAILS?

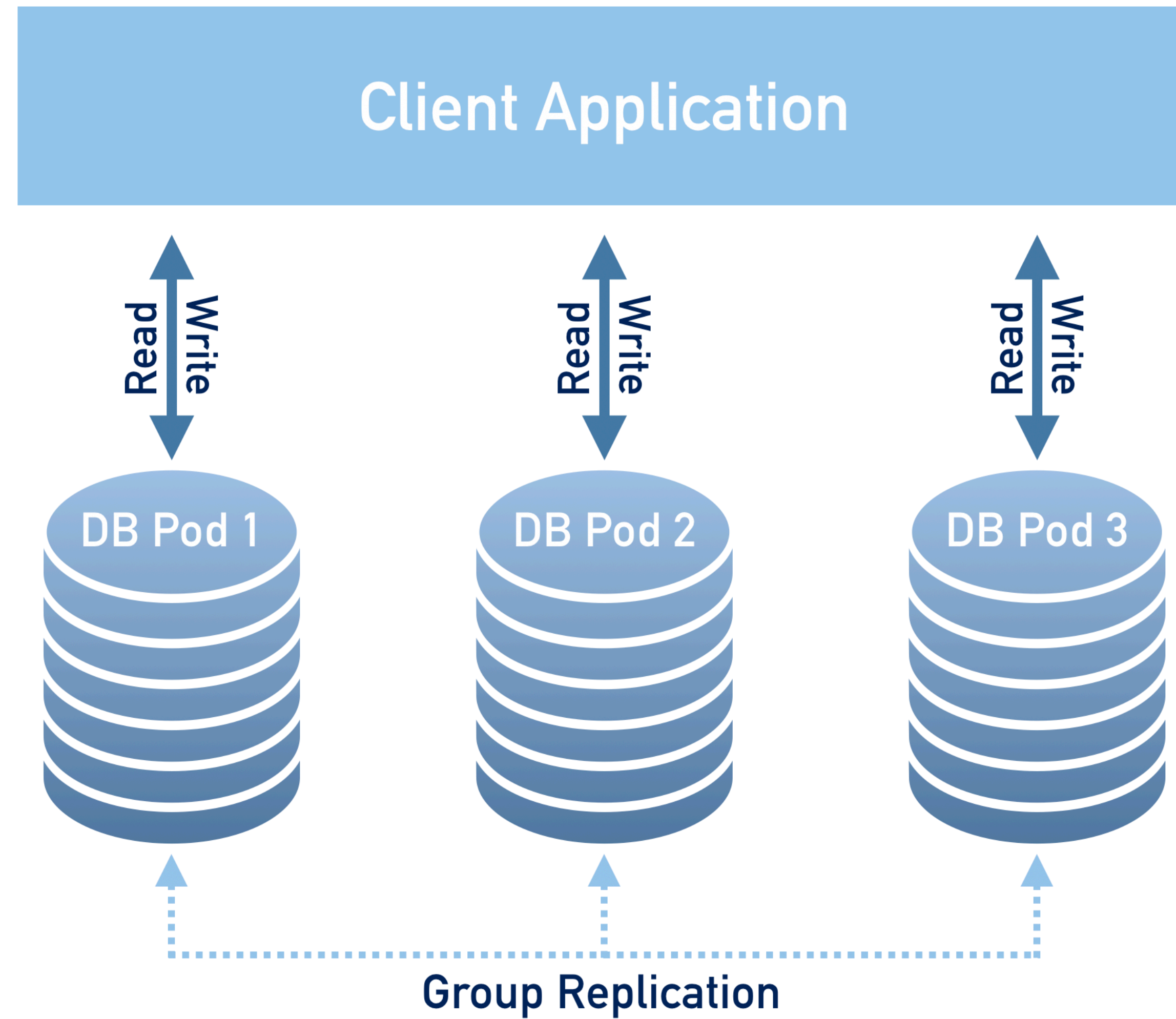
PRESSLABS OPERATOR



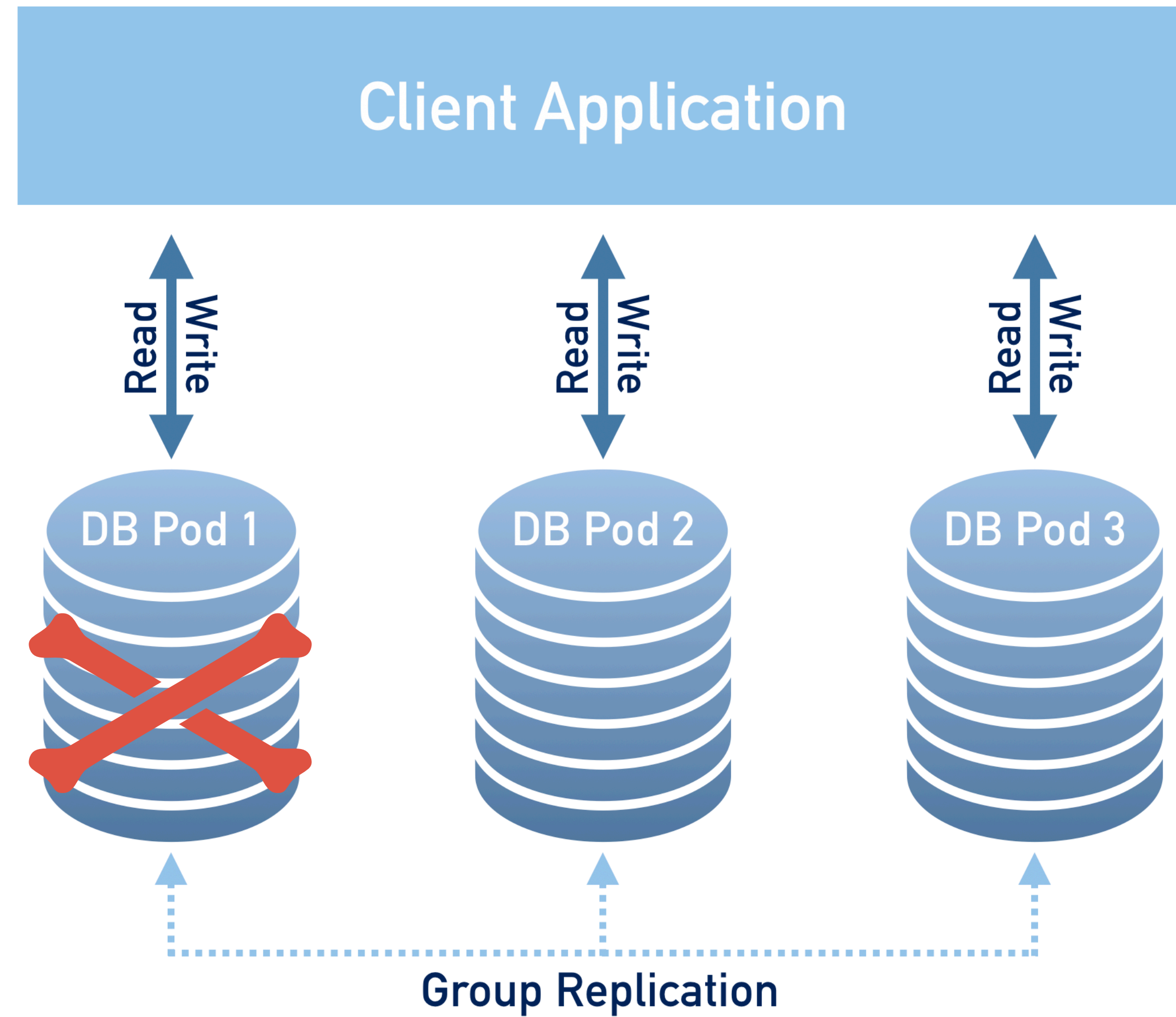
PRESSLABS OPERATOR



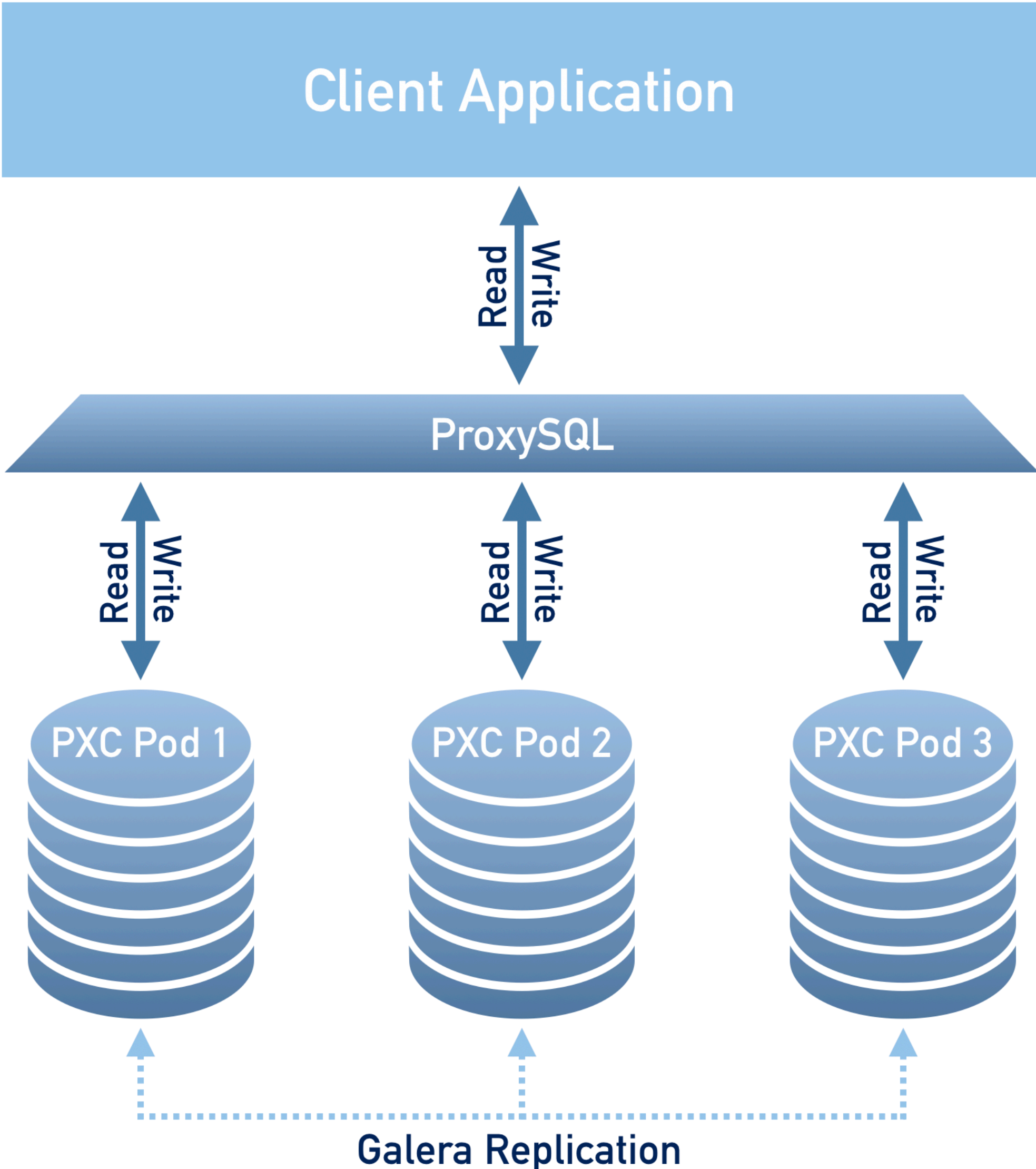
MYSQL OPERATOR



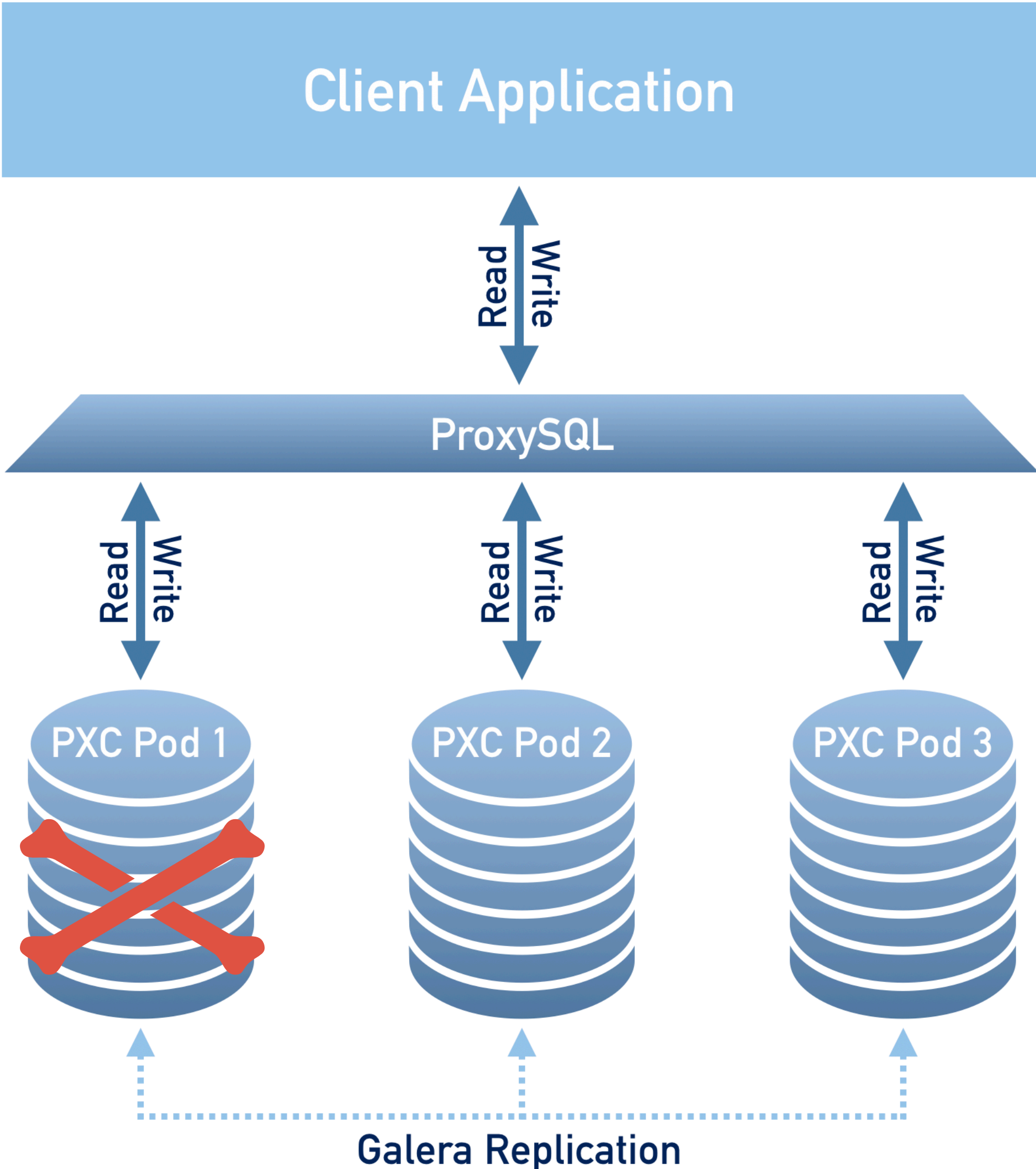
MYSQL OPERATOR



PERCONA XTRADB CLUSTER



PERCONA XTRADB CLUSTER



WHAT ABOUT PERSISTENCY?

PERSISTENT VOLUME CLAIM PROVISIONER

AWS EBS, AWS EFS

Google Cloud PD

Azure Disk, Azure File

Digital Ocean

Ceph

Glusterfs

NFS

iSCSI

OpenEBS

OpenStack Cinder

StorageOS

Flex

Flocker

Quobyte

Portworx Volume

Dell EMC ScaleIO

VMware vSphere Volume

PERSISTENCY



PersistentVolumeClaim

Automatic emptyDir

Automatic hostPath

PERSISTENCY



PersistentVolumeClaim

Automatic emptyDir

Automatic hostPath



PersistentVolumeClaim

Manual ReadWriteMany

PERSISTENCY



PersistentVolumeClaim

Automatic emptyDir

Automatic hostPath



PersistentVolumeClaim

Manual ReadWriteMany



PersistentVolumeClaim

Automatic emptyDir

Automatic hostPath

CAN I SCALE UP/DOWN?

**HOW CAN I RUN
MULTI-REGION CLUSTER?**

WHEN IS TRANSACTION FINISH?



All nodes certified



Majority of nodes certified Finished on master



PFFF, SO, IN SHORT
HOW CAN I RUN A **MULTI-REGION**
CLUSTER?

WHAT ABOUT BACKUPS?

BACKUP DESTINATION



S3 compatible storage
PersistentVolumeClaim

BACKUP DESTINATION



S3 compatible storage
PersistentVolumeClaim



S3 compatible storage

BACKUP DESTINATION



S3 compatible storage
PersistentVolumeClaim



S3 compatible storage



S3 compatible storage
Google Cloud Storage
Azure Blob Storage

BACKUP TOOL



Percona XtraBackup
direct streaming



mysqldump
direct streaming



Percona XtraBackup
save and stream

WHAT ABOUT RESTORE?

RESTORE SOURCE



S3 compatible storage
Persistent Volume



S3 compatible storage



S3 compatible storage
Google Cloud Storage
Azure Blob Storage
HTTP URL

WHAT ABOUT MONITORING?

MONITORING



Percona Monitoring
and Management



Prometheus
MySQL Enterprise
Monitor



Prometheus
Orchestrator

WHAT ABOUT ENCRYPTION?

ENCRYPTION



TLS for client-server
TLS for replication
keyring is disabled



TLS for client-server
TLS for replication
keyring is disabled



No TLS for client-server
No TLS for replication
keyring is disabled

WHAT ABOUT EASY BUTTON?





Mykola Marzhan
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