

ORACLE

MySQL Operator For Kubernetes

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MySQL Container Experience and Orchestration

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InnoDB Cluster

Making Replication Easy

MySQL Group Replication:

- Automatic membership changes, network partition handling, consistency...

MySQL Shell:

- Provides a powerful interface that helps in automating and integrating all components

InnoDB CLONE:

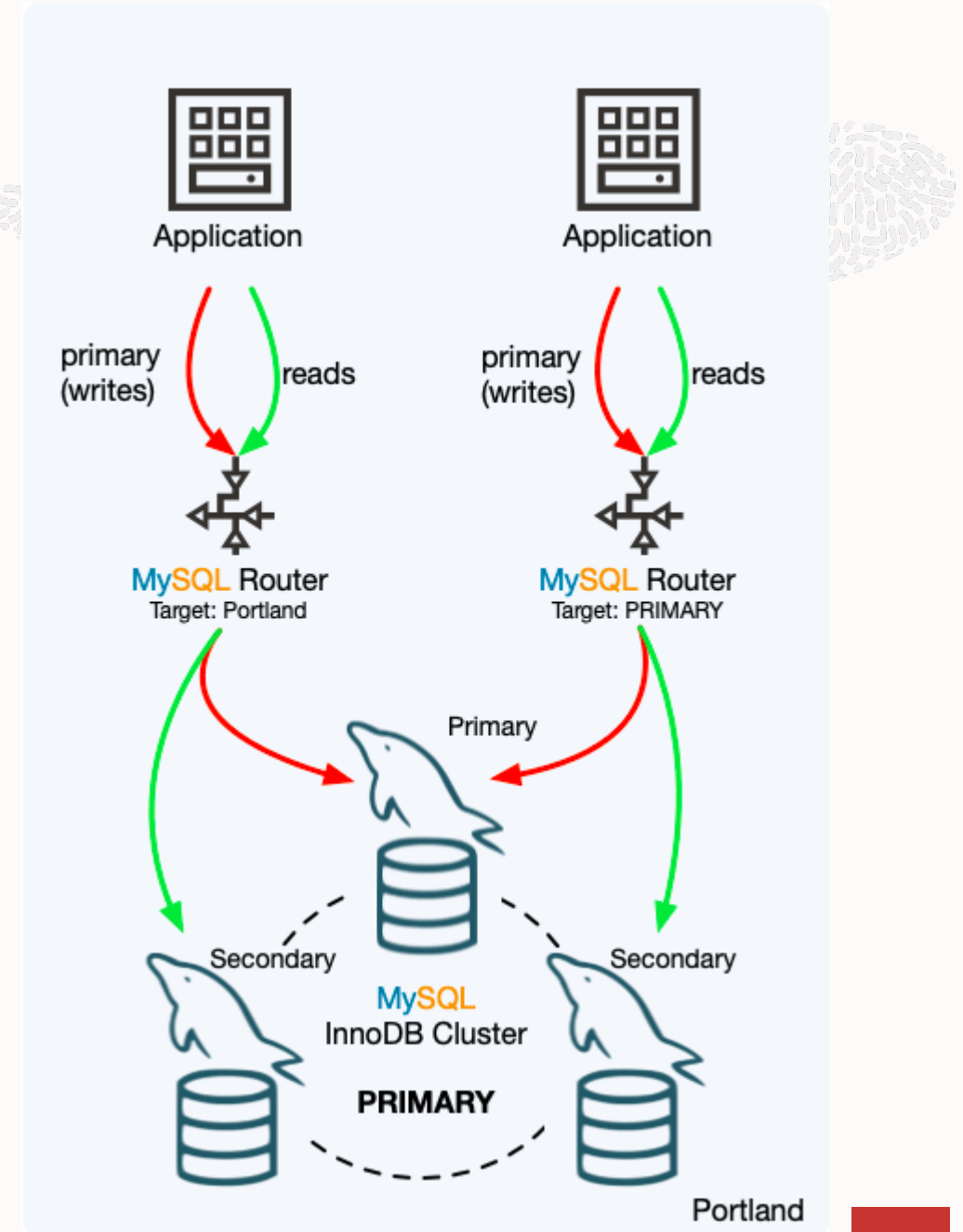
- To automatically provision members, fully integrated in InnoDB Cluster

MySQL Router:

- To send applications to the right MySQL Server

MySQL Server:

- Won't work without



MySQL Container Images

Docker and other Runtimes

Container Images for our Products

- MySQL Server
- MySQL Router
- **New:** MySQL Operator

Available via

- Docker Hub
- Oracle Container Registry
container-registry.oracle.com
- Docker, Inc. maintains a version with slightly different features as **mysql** on DockerHub

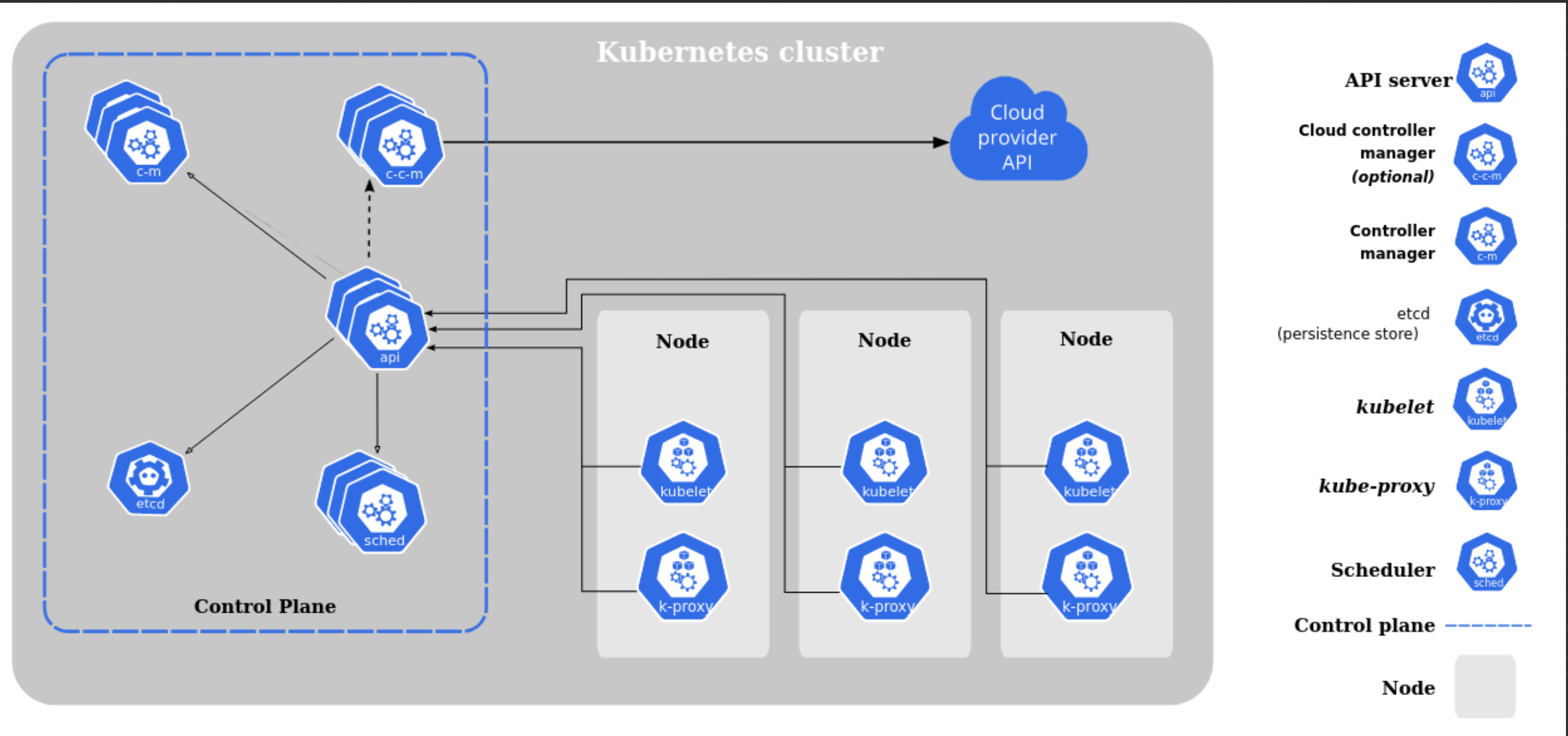


```
docker run -p 3306:3306 \
  --env MYSQL_ROOT_PASSWORD=root \
  --env MYSQL_ROOT_HOST=% \
  -v $(pwd)/datadir:/var/lib/mysql \
  mysql/mysql-server:8.0
```



“Kubernetes, also known as K8s, is an open-source system for automating deployment, scaling, and management of containerized applications.”

<https://kubernetes.io/>



MySQL Operator

At Glance

Built and maintained by the MySQL Development Team

Currently in Development, not General Available

Available as Open Source under UPL

- <http://github.com/mysql/mysql-operator/>

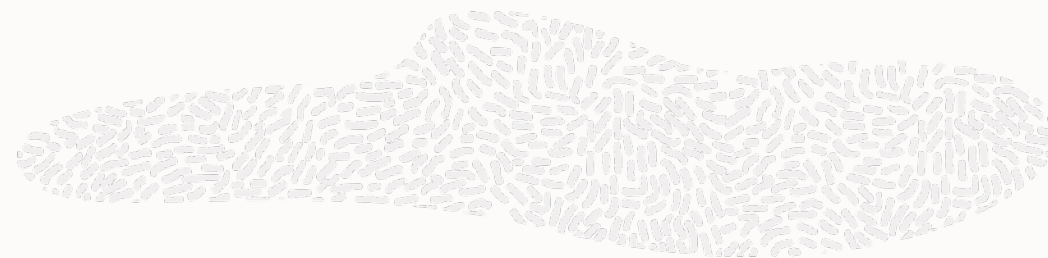
Built on top of MySQL Shell and InnoDB Cluster

Can be used using yaml files and kubectl

- `kubectl apply -f deploy/deploy-crds.yaml`
`kubectl apply -f deploy/deploy-operator.yaml`

Also offering Helm Charts

- `helm install mysql-operator helm/mysql-operator \`
`--namespace mysql-operator --create-namespace`

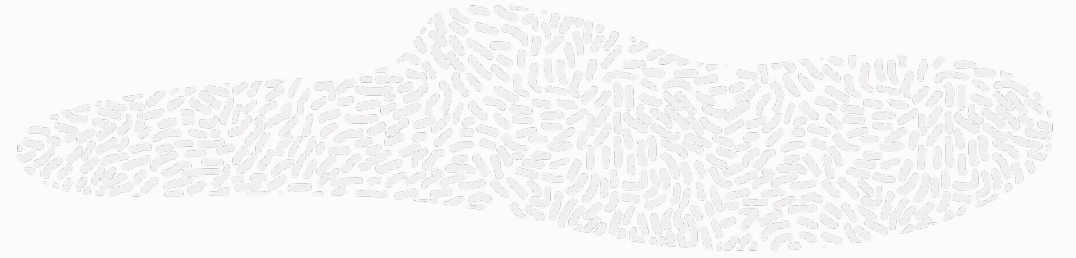


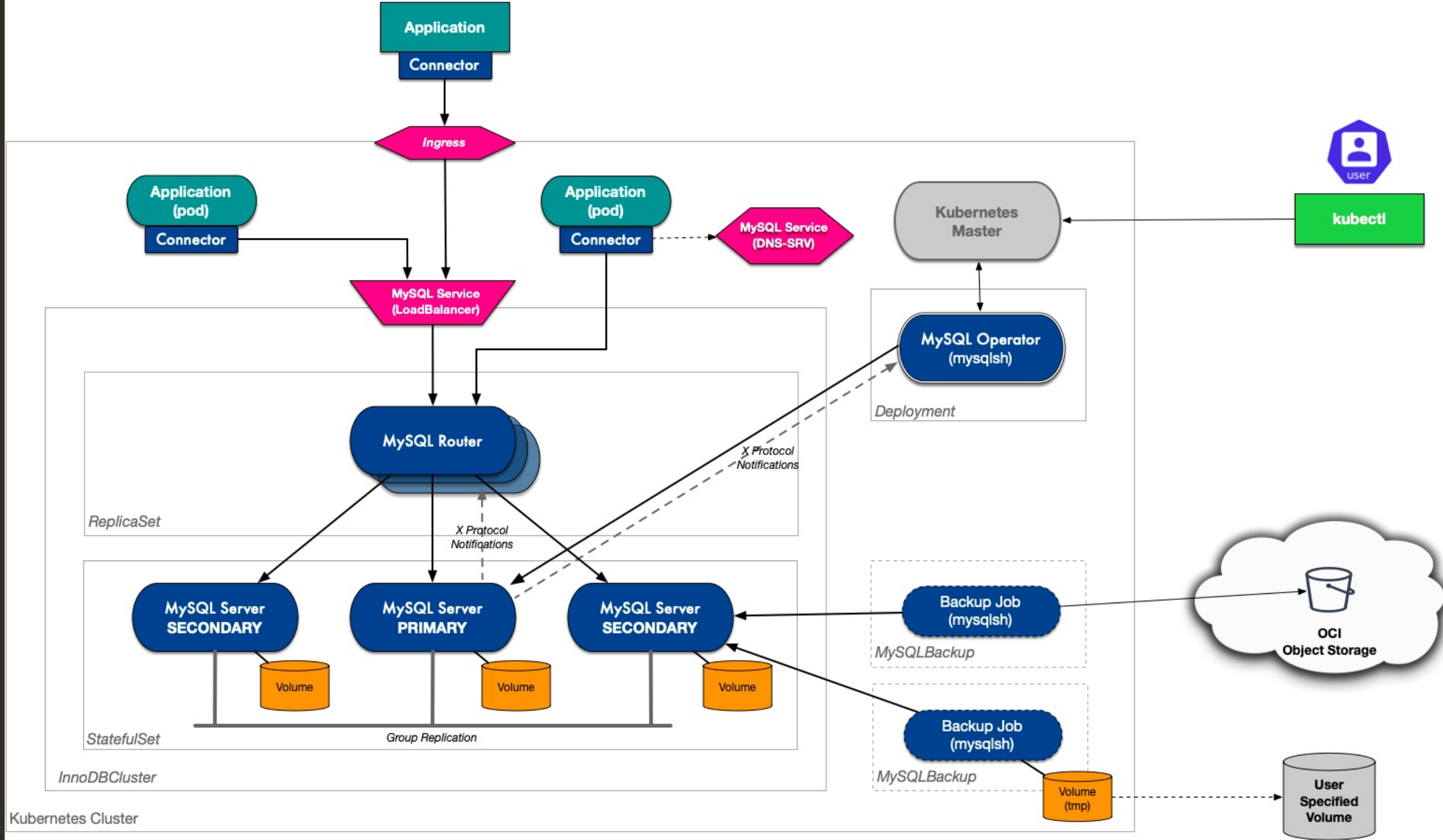
MySQL Operator

At Glance

The Operator manages the Lifecycle of InnoDB Clusters

- Installation and setup
- Handling different Error Situations
- Upgrading
- Backup
- Termination





Demo



What does it look like in practice?

Thank You

Please Reach out to Us!

GitHub Repo is on

- <https://github.com/mysql/mysql-operator>

Community Forum

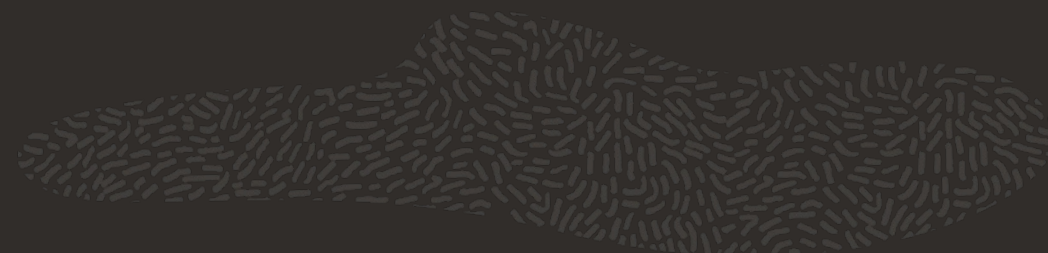
- MySQL & Docker, Kubernetes
- <https://forums.mysql.com/list.php?149>

MySQL Community Slack

- <https://slack.lefred.be/>
- #kubernetes

Issue Found? - File a bug

- Category “MySQL Operator”



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