



Troubleshooting EzPresto MySQL pod crashloopback issue in EZUA 1.3



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Issue

In EZUA, there can be scenarios where the MySQL pod in the EzPresto namespace disconnects from the web pod due to transport issues or other problems. While reinstalling EzPresto might seem like a quick fix, it's not ideal because it leads to data loss from your added data sources.

This blog post explores an alternative solution to reconnect the pods and avoid any data sources getting lost.

Environment

EZUA 1.3

Cause

The MySQL pod logs the following error in EZUA although the pod appears to be running or sometimes stays in CrashLoopback status:

[Warning] InnoDB: Cannot open table ezsql/jobs from the internal data dictionary of InnoDB though the .frm file for the table exists. Please refer to <http://dev.mysql.com/doc/refman/5.7/en/innodb-troubleshooting.html> for how to resolve the issue.

Resolution

Identify Resources:

- We began by gathering information on relevant Kubernetes resources in the `ezpresto` namespace using `kubectl get all -n ezpresto`.

Scale Down Deployments and Replicasets:

- To safely modify the environment, we scaled down all deployments and replicasets to zero replicas using the following commands:

```
kubectl scale deployments --namespace=ezpresto --all --replicas=0
kubectl scale replicasets --namespace=ezpresto --all --replicas=0
```

Verify StatefulSets:

- We confirmed the state of statefulsets using `kubectl get all -n ezpresto`.

Inspect Persistent Volume Claims (PVCs):

- We retrieved details of mysql PVC in the `ezpresto` namespace with `kubectl get pvc -n ezpresto`.

Extract PVC Configuration:

- The specific PVC for MySQL, `ezpresto-pvc-mysql`, was inspected with `kubectl get pvc -n ezpresto ezpresto-pvc-mysql -o yaml`.
- This output was saved to a file named `pvc.yaml` for further manipulation.

Delete the mysql PVC:

- Delete the existing mysql pvc using below command

```
kubectl delete -f pvc.yaml
```

Obtain Persistent Volume (PV) Details:

- Once we delete the PVC the PV should automatically get deleted as the claim policy is set to delete and once we create new pvc using below steps it will create a new PV since it uses dynamic provisioning for PV creation.

Clean Up PVC:

- Edit the `pvc.yaml` file to remove unnecessary data, such as annotations, status, and resource ID creation timestamps similar to below.

```
apiVersion: v1
kind: PersistentVolumeClaim
metadata:
  annotations:
  labels:
  name: ezpresto-pvc-mysql
  namespace: ezpresto
spec:
  accessModes:
  - ReadWriteMany
  resources:
    requests:
      storage: 5Gi
```

Recreate Clean PVC:

- The modified `pvc.yaml` was applied using `kubectl create -f pvc.yaml`, providing a fresh PVC definition.

Scale Up Services:

- The previously scaled-down resources were brought back online in a specific order:

```
kubectl scale statefulsets --namespace=ezpresto --all --replicas=1 (waits for MySQL to start)
```

```
kubectl scale replicaset --namespace=ezpresto --all --replicas=1
```

```
kubectl scale deployments --namespace=ezpresto --all --replicas=1
```

Monitor Recovery:

- The overall health of the `ezpresto` namespace was monitored using `kubectl get all -n ezpresto`.

Scale Up Ezpresto StatefulSet:

- Finally, the Ezpresso statefulset (`ezpresto-sts-wrk`) was scaled to its desired replica count of three using:

```
kubectl scale statefulsets --namespace=ezpresto statefulset.apps/ezpresto-  
sts-wrk --replicas=3
```

Verify Functionality:

- We recommend verifying Ezpresso functionality through the UI to ensure it's running without any issues.

Recreate policy server pods

kubectl delete po --all -n ezuser-system if we get any localhost refused error in web pod once everything is up and running

Ezpresto should run back to normal with the data sources which are already added without any change in them and get rid of any errors in ezpresto.

In rare scenarios we also might get indices missing error in web pod with localhost refused then follow below article for fixing it.

https://support.hpe.com/hpesc/public/docDisplay?docId=sf000102453en_us&docLocale=en_US

