After creating a Jupyter notebook in EZUA the notebook is inaccessible

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Issue

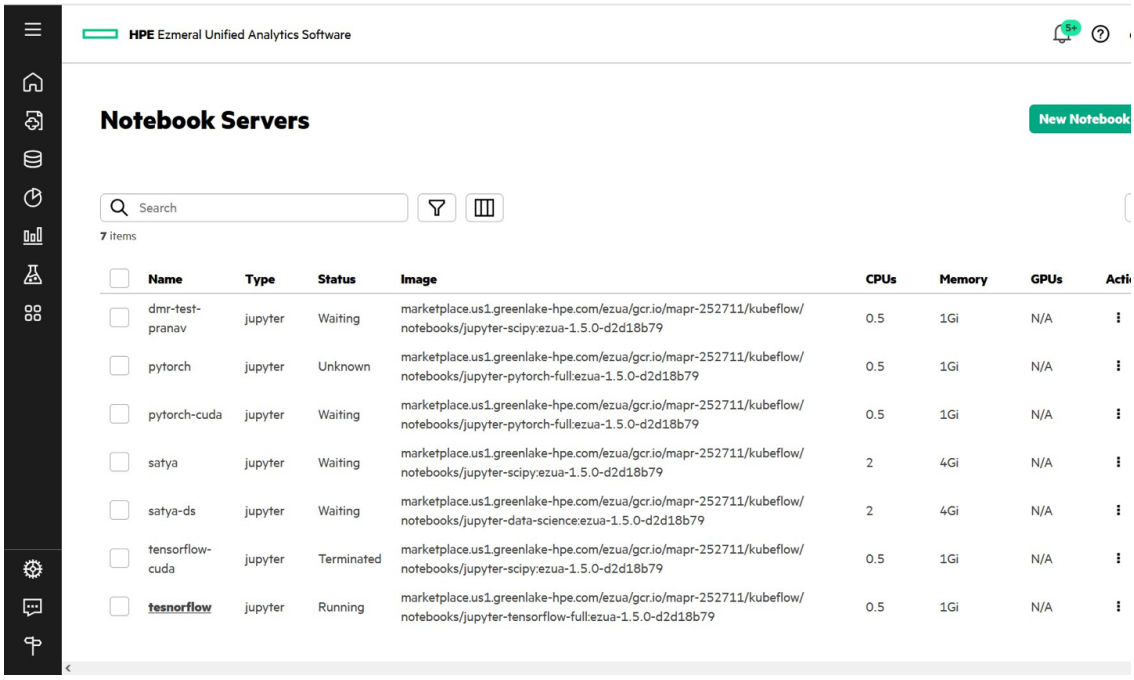
After creating a new Jupyter notebook, a customer reported getting the below error when accessing the notebook:

```
no healthy upstream
```

```
upstream connect error or disconnect/reset before headers. reset reason: remote connection
failure, transport failure reason: delayed connect error: 111
```

Pods are in a continuous loop of creation and deletion:

```
~ » kgpon euadev1-4441a814
NAME                                                READY   STATUS        RESTARTS   AGE
cherry-chart-57f4674c9-hpbdq                        2/2     Running       0          49d
dmr-test-pranav-0                                   0/2     Terminating   0          21s
fs-6766454dd5-659c8                                 2/2     Running       0          49d
list-files-and-sleep-list-files-n8l3m0yg            0/1     Completed     0          10h
list-files-and-sleep-sleep-for-1-hour-bb41e1ml      0/1     Completed     0          9h
ml-pipeline-ui-artifact-8464898bc8-r29p7            2/2     Running       0          49d
ml-pipeline-visualizationserver-7ccbdccf8f-zpvvk    2/2     Running       0          49d
pytorch-0                                           1/2     Running       0          16s
pytorch-cuda-0                                      1/2     Running       0          16s
satya-0                                             0/2     Init:0/1      0          13s
satya-ds-0                                          0/2     Init:0/1      0          6s
tensorflow-cuda-0                                   0/2     Terminating   0          8m21s
tesnorflow-0                                        2/2     Terminating   0          12s
```



Environment

EZUA 1.5

EDF 7.8

RHEL 8.8

Cause

The notebook controller keeps updating the stateful sets. and that is why the pod is getting deleted and recreated.

```
$ kubectl logs -n kubeflow notebook-controller-deployment-69849ffcb5-67qb8 | grep awez-notebook
| grep Updating.StatefulSe | tail -n5
1.7319334984617977e+09  INFO  controllers.Notebook  Updating StatefulSet  {"notebook": "euadev1-
4441a814/awez-notebook", "namespace": "euadev1-4441a814", "name": "awez-notebook"}
1.73193350084064e+09  INFO  controllers.Notebook  Updating StatefulSet  {"notebook": "euadev1-
4441a814/awez-notebook", "namespace": "euadev1-4441a814", "name": "awez-notebook"}
1.7319335031596932e+09  INFO  controllers.Notebook  Updating StatefulSet  {"notebook": "euadev1-
4441a814/awez-notebook", "namespace": "euadev1-4441a814", "name": "awez-notebook"}
1.7319335057427795e+09  INFO  controllers.Notebook  Updating StatefulSet  {"notebook": "euadev1-
4441a814/awez-notebook", "namespace": "euadev1-4441a814", "name": "awez-notebook"}
1.7319335075301127e+09  INFO  controllers.Notebook  Updating StatefulSet  {"notebook": "euadev1-
4441a814/awez-notebook", "namespace": "euadev1-4441a814", "name": "awez-notebook"}
....
1.7320106843326902e+09  INFO    controllers.Notebook    Reconciliation loop started
{"notebook": "euadev1-4441a814/awez-notebook"}
1.7320106843327568e+09  INFO    controllers.Notebook    Notebook labels CM Not found
 {"configmap": "euadev1-4441a814/notebook-labels-cm"}
1.73201068433277e+09    INFO    controllers.Notebook    Get Labels From CM      {"configmap":
"kubeflow/notebook-labels-cm"}
1.7320106843328106e+09  INFO    controllers.Notebook    Updating StatefulSet    {"notebook":
"euadev1-4441a814/awez-notebook", "namespace": "euadev1-4441a814", "name": "awez-notebook"}
1.7320106846233249e+09  INFO    controllers.Notebook    Initializing Notebook CR Status
{"notebook": "euadev1-4441a814/awez-notebook"}
1.7320106846233547e+09  INFO    controllers.Notebook    Calculating Notebook's  containerState
 {"notebook": "euadev1-4441a814/awez-notebook"}
1.7320106846233359e+09  INFO    controllers.Notebook    Updating Notebook CR state:
{"notebook": "euadev1-4441a814/awez-notebook", "state": {"running":{"startedAt":"2024-11-
18T15:57:14Z"}}}
1.7320106846233766e+09  INFO    controllers.Notebook    Calculating Notebook's Conditions
{"notebook": "euadev1-4441a814/awez-notebook"}
1.7320106846233816e+09  INFO    controllers.Notebook    Updating Notebook CR Status
{"notebook": "euadev1-4441a814/awez-notebook", "status": {"conditions":
[{"type":"Initialized","status":"True","lastProbeTime":"2024-11-
19T10:04:44Z","lastTransitionTime":"2024-11-18T15:57:12Z"},
{"type":"Ready","status":"True","lastProbeTime":"2024-11-
19T10:04:44Z","lastTransitionTime":"2024-11-18T15:57:15Z"},
{"type":"ContainersReady","status":"True","lastProbeTime":"2024-11-
19T10:04:44Z","lastTransitionTime":"2024-11-18T15:57:15Z"},
{"type":"PodScheduled","status":"True","lastProbeTime":"2024-11-
19T10:04:44Z","lastTransitionTime":"2024-11-18T15:56:58Z"}],"readyReplicas":1,"containerState":
{"running":{"startedAt":"2024-11-18T15:57:14Z"}}}}
```

Upon further checking it was found that there were two clusterpolicies in kyverno:

```
add-vendor-app-labels-cherry-chart

      mutate:
        patchStrategicMerge:
          spec:
            template:
              metadata:
                labels:
                  hpe-ezua/type: vendor-service

hpe-ezua-add-labels-kubeflow-user-pods

      mutate:
        patchStrategicMerge:
          spec:
            template:
              metadata:
                labels:
                  hpe-ezua/app: kubeflow
                  hpe-ezua/type: app-service-user
```

And these were "conflicting" for the hpe-ezua/type label.

Resolution

Changed kyverno policy label from,

hpe-ezua/type: vendor-service

to

hpe-ezua/type2: vendor-service

resolved the issue.