

Ezmeral Unified Analytics: UI not responding. Stuck in 'loading'

Table of contents

Issue

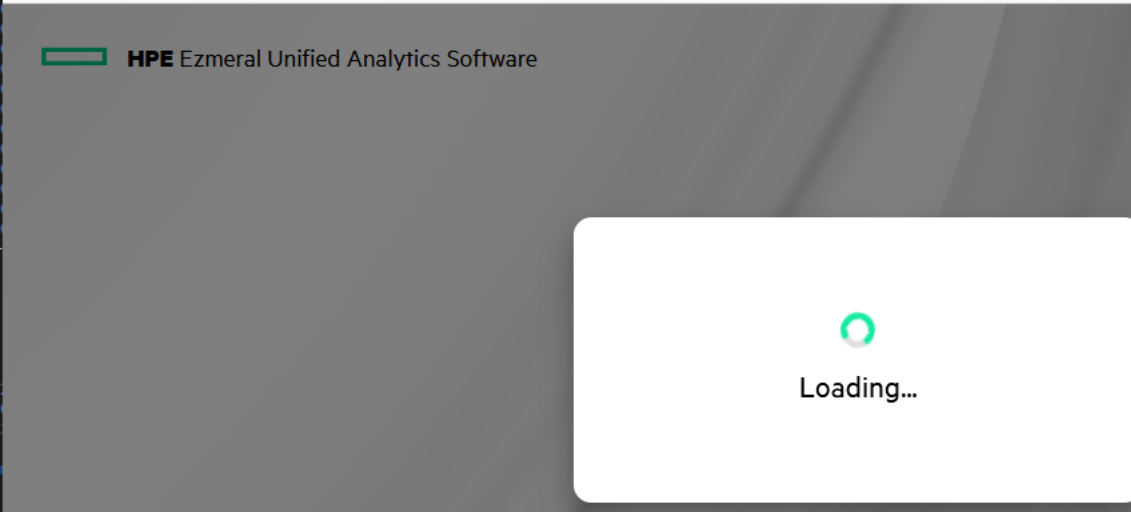
Environment

Cause

Resolution

Issue

Ezmeral Unified Analytics Version 1.2 stopped working and stuck in 'loading'



```
EZUA k8s master node showing huge load (~10 for 8 vcpu ), all node memory used by kube-apiserver service and ~100% cpu used by kswapd0 process
3 days, 15:38, 2 users, load average: 79.26, 78.20, 81.42
Tasks: 224 total, 5 running, 219 sleeping, 0 stopped, 0 zombie
%Cpu(s): 1.3 us, 24.0 sy, 0.0 ni, 0.9 id, 68.6 wa, 1.8 hi, 3.2 si, 0.2 st
GiB Mem : 31.1 total, 0.2 free, 29.1 used, 1.8 buff/cache
GiB Swap: 0.0 total, 0.0 free, 0.0 used. 0.1 avail Mem

  PID USER      PR  NI   VIRT   RES   SHR  S  %CPU  %MEM    TIME+  COMMAND
  104 root        20   0    0.0m    0.0m    0.0m  R   66.6    0.0   1772:13 [kswapd0]
 10235 root        20   0 2077.9m  33.6m    0.0m  S   18.2    0.1   1089:33 calico-node -felix
2845811 root        20   0   28.2g   27.2g    0.0m  S   13.4   87.4 353:02.16 /usr/bin/kube-apiserver --
2874996 root        20   0   743.4m  28.9m    0.0m  D   12.2    0.1 266:37.33 /usr/bin/kube-scheduler --
  8868 etcd        20   0   16.7g  926.4m    0.0m  S    9.4    2.9 2273:38 /usr/bin/etcd --advertise-
```

Environment

Ezmeral Unified Analytics Version 1.2 (apparently version 1.3 not affected)

Cause

Kyverno component's bug <https://github.com/kyverno/kyverno/issues/6462> caused k8s ETCD DB to log huge number of objects under /registry/kyverno.io key and grow it's size to 26GB (from ~40MB under normal conditions), that caused kube-apiserver to use all node's memory (32GB) and kswapd to use all CPU resources, causing node to be unresponsive.

```
[root@k8s master ~]# ETCDCCTL_API=3 etcdctl --cacert="/etc/kubernetes/pki/etcd/ca.crt" --cert="/etc/kubernetes/pki/aj
{
  {
    "Endpoint": "https://10.163.172.60:2379",
    "Status": {
      "header": {
        "cluster_id": 5427669618447811070,
        "member_id": 10400918124204391470,
        "revision": 31400702,
        "raft_term": 2
      },
      "version": "3.5.9-hpe1",
      "dbSize": 2612277248,
      "leader": 10400918124204391470,
      "raftIndex": 31853795,
      "raftTerm": 2,
      "raftAppliedIndex": 31853795,
      "dbSizeInUse": 2562428928
    }
  }
}
```

ETCD entries recap

```
[root@k8s master ~]# ETCDCCTL_API=3 etcdctl --cacert="/etc/kubernetes/pki/etcd/ca.crt" --cert="/etc/kubernetes/pki/aj
1075728 kyverno.io >>>>> https://github.com/kyverno/kyverno/issues/6462
416 configmaps
330 services
```

```
275 clusterroles
271 secrets
265 serviceaccounts
--omitted ----
```

Resolution

Please refer to <https://etcd.io/docs/v3.5/op-guide/maintenance/#space-quota> for ETCD specific command syntax

- stop kube-apiserver
- **!! take etcd db snapshot !!**
- manually delete etcd `--prefix /registry/kyverno.io/` entries
- verify no more etcd `/registry/kyverno.io/` entries exists
- compact ETCD
- run ETCD defrag
- verify post defrag DB size decreased
- started kube-apiserver > UI working back
- implement <https://github.com/kyverno/kyverno/issues/6462> workaround
 - **set `--admissionReports=false` under**

```
# kubectl describe deployments kyverno-admission-controller -n kyverno
--- omitted ---
```

Args:

```
--servicePort=443
--loggingFormat=text
--disableMetrics=false
--otelConfig=prometheus
--metricsPort=8000
--imagePullSecrets=map[name:ezafimagepullsecret]
--admissionReports=false
```

- monitor ETCD db size for next 24hrs

