CONFIGURATION GUIDES › KUBERNETES

Remote Kubernetes Monitoring

Applicare 10.0 · Updated June 20, 2026 · kubernetes · **Pending technical review**

1. Create an **applicare-setup.yml** file with the below content:

YAML

```yaml
apiVersion: v1
kind: Namespace
metadata:
  name: applicare
---
apiVersion: v1
kind: ServiceAccount
metadata:
  name: applicare
  namespace: applicare
---
apiVersion: rbac.authorization.k8s.io/v1
kind: ClusterRole
metadata:
  name: applicareapi-cluster-role
rules:
  # Core inventory + storage objects
  - apiGroups: [""]
    resources:
      - nodes
      - namespaces
      - pods
      - services
      - events
      - endpoints
      - configmaps
      - persistentvolumeclaims
      - persistentvolumes
      - replicationcontrollers
    verbs: ["get", "list", "watch"]
  # Container log reads (fixes "Failed to get log details ... 403")
  - apiGroups: [""]
    resources:
      - pods/log
    verbs: ["get"]
  # Kubelet Summary API + cAdvisor via the API-server proxy:
  #   GET /api/v1/nodes/<node>/proxy/stats/summary     -> pod disk (ephemeral + PVC) and
network
  #   GET /api/v1/nodes/<node>/proxy/metrics/cadvisor  -> CPU throttling
  # nodes/proxy is a distinct RBAC subresource; granting "nodes" above does NOT cover it.
  - apiGroups: [""]
    resources:
      - nodes/proxy
      - nodes/stats
```

```
      - nodes/metrics
    verbs: ["get"]
  # Resource quotas per namespace (near-limit alerting)
  - apiGroups: [""]
    resources:
      - resourcequotas
      - limitranges
    verbs: ["get", "list", "watch"]
  # Events via the newer events.k8s.io API group
  - apiGroups: ["events.k8s.io"]
    resources:
      - events
    verbs: ["get", "list", "watch"]
  # CPU / memory metrics (KubernetesNodesMetrics / ContainerMetrics jobs)
  - apiGroups: ["metrics.k8s.io"]
    resources:
      - nodes
      - pods
    verbs: ["get", "list"]
  # Workload objects (desired-vs-ready replica health)
  - apiGroups: ["apps"]
    resources:
      - deployments
      - replicasets
      - statefulsets
      - daemonsets
    verbs: ["get", "list", "watch"]
  # Batch workloads (Job / CronJob failure monitoring)
  - apiGroups: ["batch"]
    resources:
      - jobs
      - cronjobs
    verbs: ["get", "list", "watch"]
  # Ingress resources — topology Ingress→Service→Pod chain
  - apiGroups: ["networking.k8s.io"]
    resources:
      - ingresses
      - ingressclasses
    verbs: ["get", "list", "watch"]
---
apiVersion: rbac.authorization.k8s.io/v1
kind: ClusterRoleBinding
metadata:
  name: applicareapi-cluster-role-binding
subjects:
  - kind: ServiceAccount
```

```
    name: applicare
    namespace: applicare
roleRef:
  apiGroup: rbac.authorization.k8s.io
  kind: ClusterRole
  name: applicareapi-cluster-role
---
apiVersion: v1
kind: Secret
metadata:
  name: applicare-token
  namespace: applicare
  annotations:
    kubernetes.io/service-account.name: applicare
type: kubernetes.io/service-account-token
```

2. Execute the below command in the same directory where the file was created:

BASH
```
kubectl apply -f applicare-setup.yml
```

3. Execute **kubectl top nodes** in the kubernetes.

```
C:\Windows\system32>kubectl top nodes
NAME       CPU(cores)   CPU%   MEMORY(bytes)   MEMORY%
minikube   181m         9%     1601Mi          41%
```

- ***If you are not able to view the below details, then:*** Install metrics pod in Kubernetes. Execute the below command to install metrics pod:
  - **kubectl apply -f https://github.com/kubernetes-sigs/metrics-server/releases/latest/download/components.yaml**
- Check if the metrics server is running by executing the below command.
  - **kubectl get pods -n kube-system**

```
E:\kubernetes>kubectl get pods -n kube-system
NAME                               READY   STATUS    RESTARTS        AGE
coredns-6d4b75cb6d-l7n9m           1/1     Running   0               6d21h
etcd-minikube                      1/1     Running   0               6d21h
kube-apiserver-minikube            1/1     Running   0               6d21h
kube-controller-manager-minikube   1/1     Running   1 (6d21h ago)   6d21h
kube-proxy-kmsnd                   1/1     Running   0               6d21h
kube-scheduler-minikube            1/1     Running   0               6d21h
metrics-server-658867cdb7-m46jm    1/1     Running   0               6d21h
storage-provisioner                1/1     Running   3 (2d4h ago)    6d21h

E:\kubernetes>
```

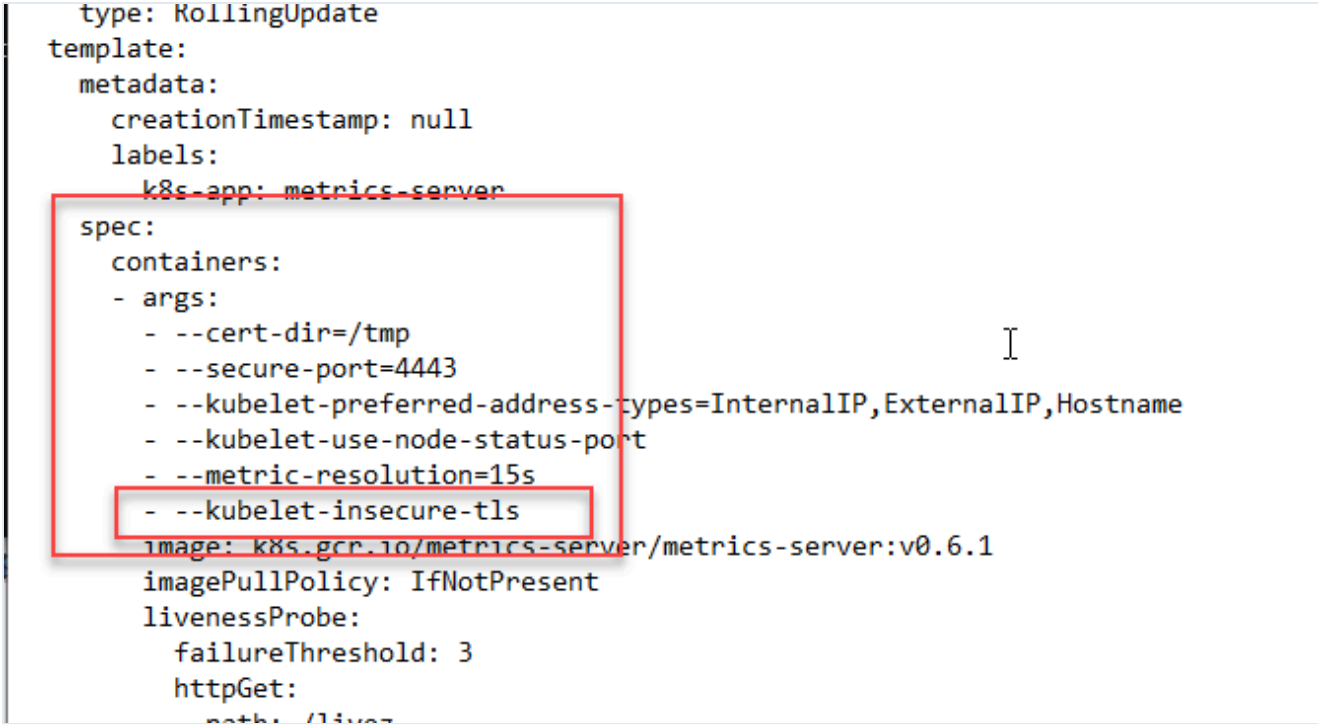
If it is still not running, then follow the below steps:

- **Step 1:** Edit the configuration file by executing the below command.

```bash
kubectl edit deployments.apps -n kube-system metrics-server
```

- **Step 2:** Add the below lines in the **spec: container: args:** and save the file.

```text
- --kubelet-insecure-tls
```



- **Step 3:** After a few minutes, execute the command **kubectl get pods -n kube-system** and check if the metrics server is running.
  - ***If it is not running, then***: Edit the configuration file by executing the command **kubectl edit deployments.apps -n kube-system metrics-server** modify the below lines in the **spec: container: args:** and save it.

```text
- --kubelet-preferred-address-types=InternalIP
```

```
    type: RollingUpdate
  template:
    metadata:
      creationTimestamp: null
      labels:
        k8s-app: metrics-server
    spec:
      containers:
      - args:
        - --cert-dir=/tmp
        - --secure-port=4443
        - --kubelet-preferred-address-types=InternalIP
        - --kubelet-use-node-status-port
        - --metric-resolution=15s
        - --kubelet-insecure-tls
        image: k8s.gcr.io/metrics-server/metrics-server:v0.6.1
        imagePullPolicy: IfNotPresent
        livenessProbe:
          failureThreshold: 3
          httpGet:
```

- **Step 4:** To verify the metrics API server is running, execute the below command and check **kubectl top nodes**.

```
C:\Windows\system32>kubectl top nodes
NAME       CPU(cores)   CPU%   MEMORY(bytes)   MEMORY%
minikube   181m         9%     1601Mi          41%
```

4. Refer here to **install SingleAgent and start.**

- Once we start the agent it will be added to Applicare Console.

5. Execute the below command one by one to get the **Cluster IP** and **Token**. Copy the **$APISERVER** and **$TOKEN** value for configuration.

To get APISERVER and TOKEN in PowerShell:

```
TEXT
$APISERVER = kubectl config view --minify -o jsonpath='{.clusters[0].cluster.server}'
Write-Host "APISERVER: $APISERVER"
$TOKEN = kubectl get secret applicare-token -n applicare -o jsonpath='{.data.token}' |
ForEach-Object {
[System.Text.Encoding]::UTF8.GetString([System.Convert]::FromBase64String($_)) }
Write-Host "TOKEN: $TOKEN"
```

To get APISERVER and TOKEN in Bash

```bash
APISERVER=$(kubectl config view --minify -o jsonpath='{.clusters[0].cluster.server}')
echo "APISERVER: $APISERVER"
TOKEN=$(kubectl get secret applicare-token -n applicare -o jsonpath='{.data.token}' | base64 --decode)
echo "TOKEN: $TOKEN"
```

6. Login into the Applicare console and go to the **Overview screen**. Select the newly added server and click the **Edit** button.

7. **Enable** the **Kubernetes Integration checkbox** and add the configuration details.

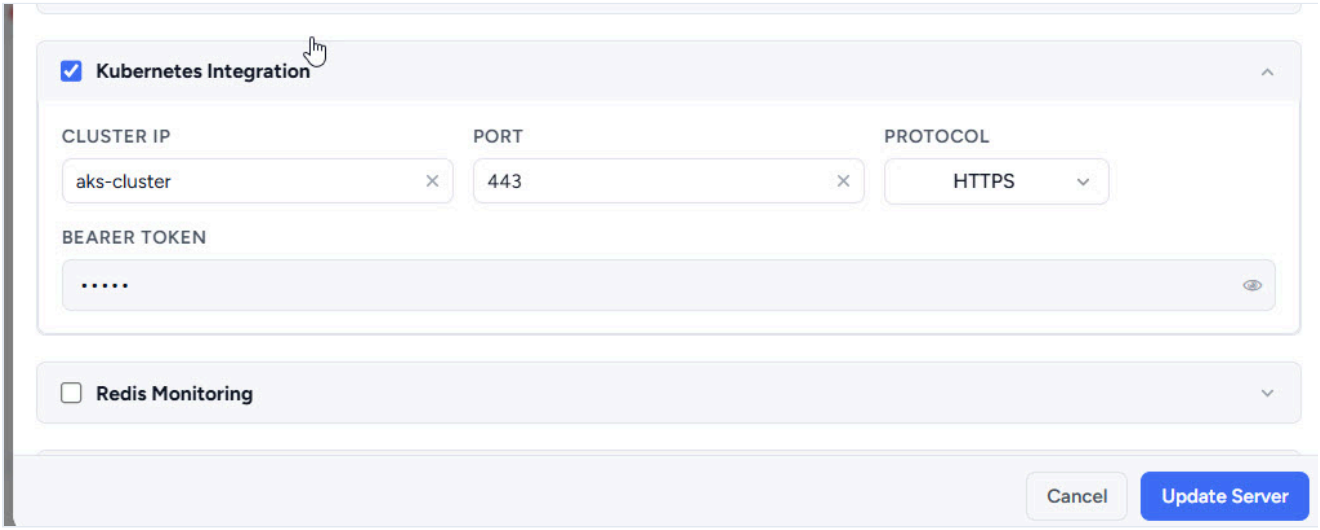
8. Remove the "**https://** (or) **http://"** and **port** in **APISERVER** value and Paste the remaining value in the **CLUSTER IP** field.

9. Copy the **TOKEN** value and paste it in the **BEARER TOKEN** field.

10. Enter the Kubernetes running port in the **PORT** field.

11. Select the Kubernetes protocol from the **PROTOCOL dropdown**. Protocol details will be available in the **APISERVER. "https:// (or) http://"**

12. Click the **Update Server** button.

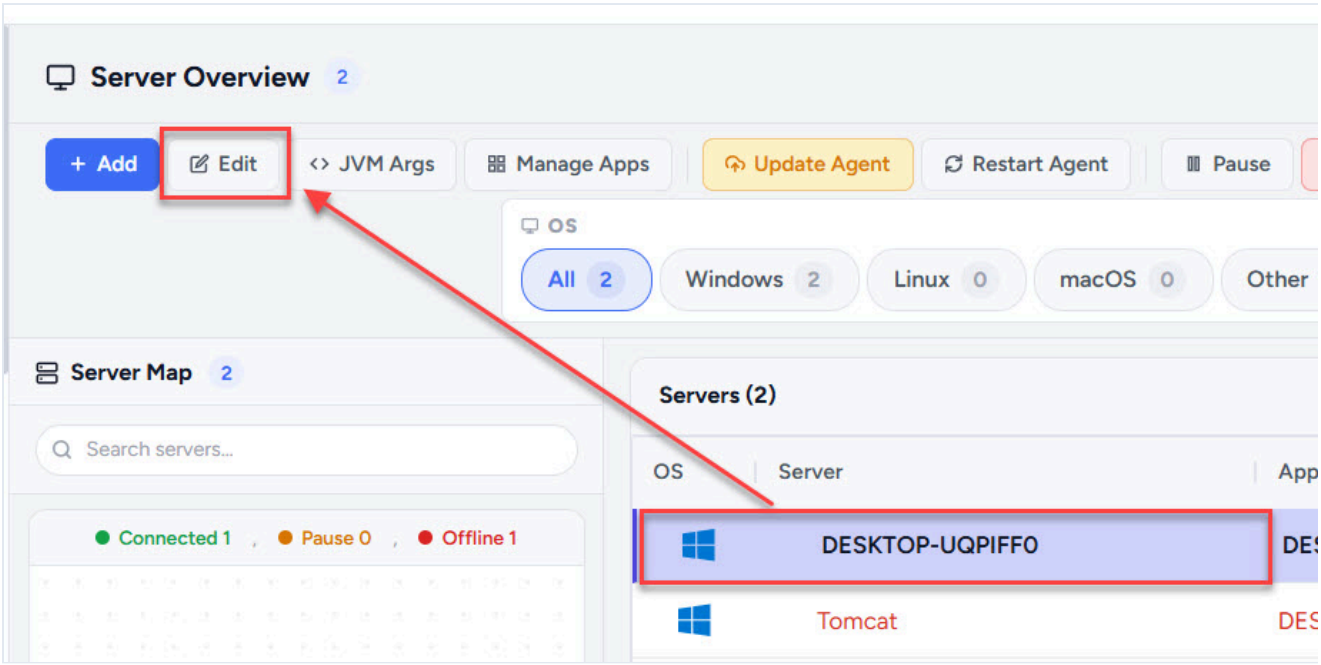


- **Note:** We can edit or delete the Kubernetes configuration from both the **Overview** or **Kubernetes** menu.

Overview Menu

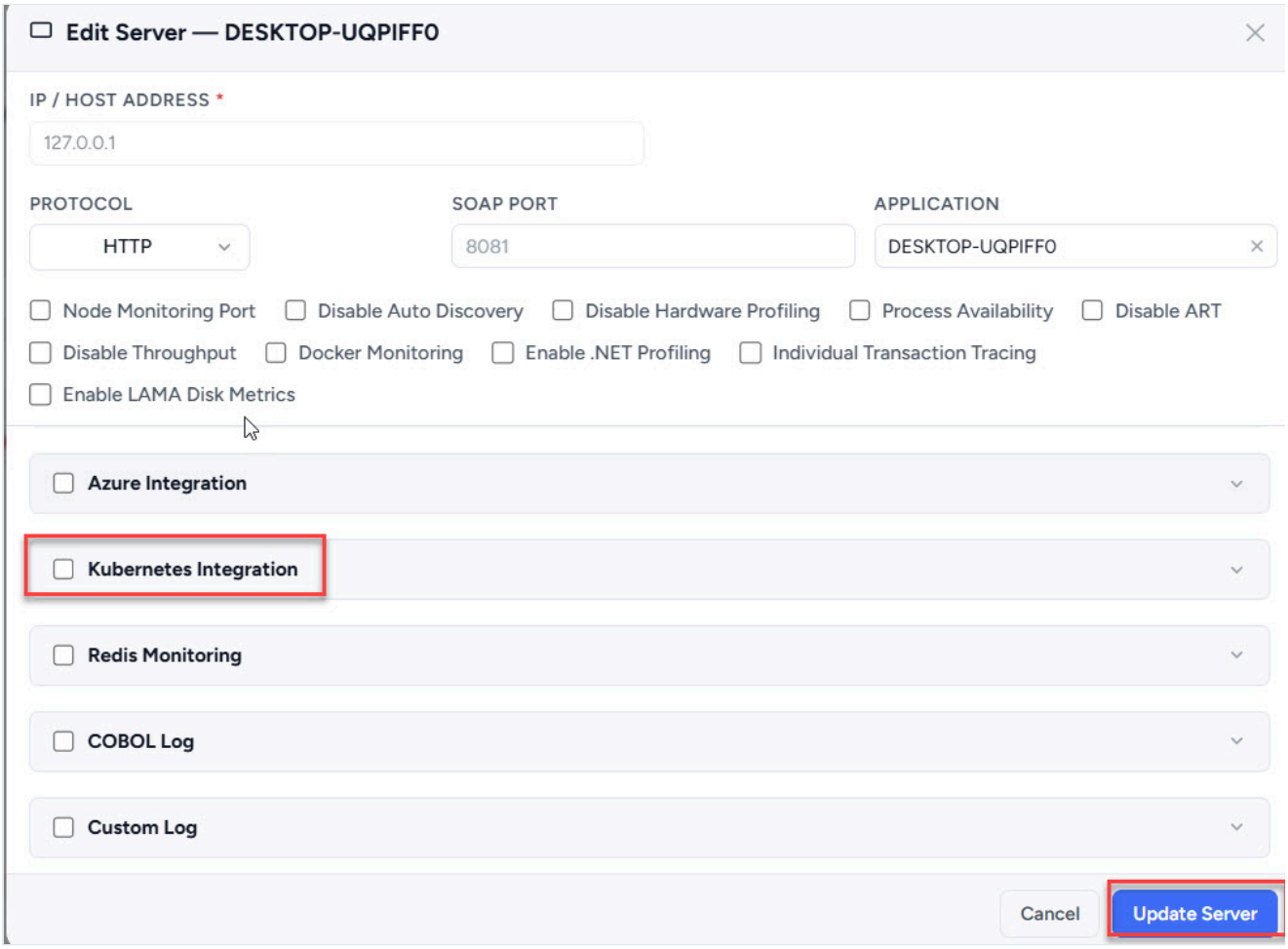
Update

- Select the **row** and click the **Edit** button to update details and then click the **Update** button.



Delete

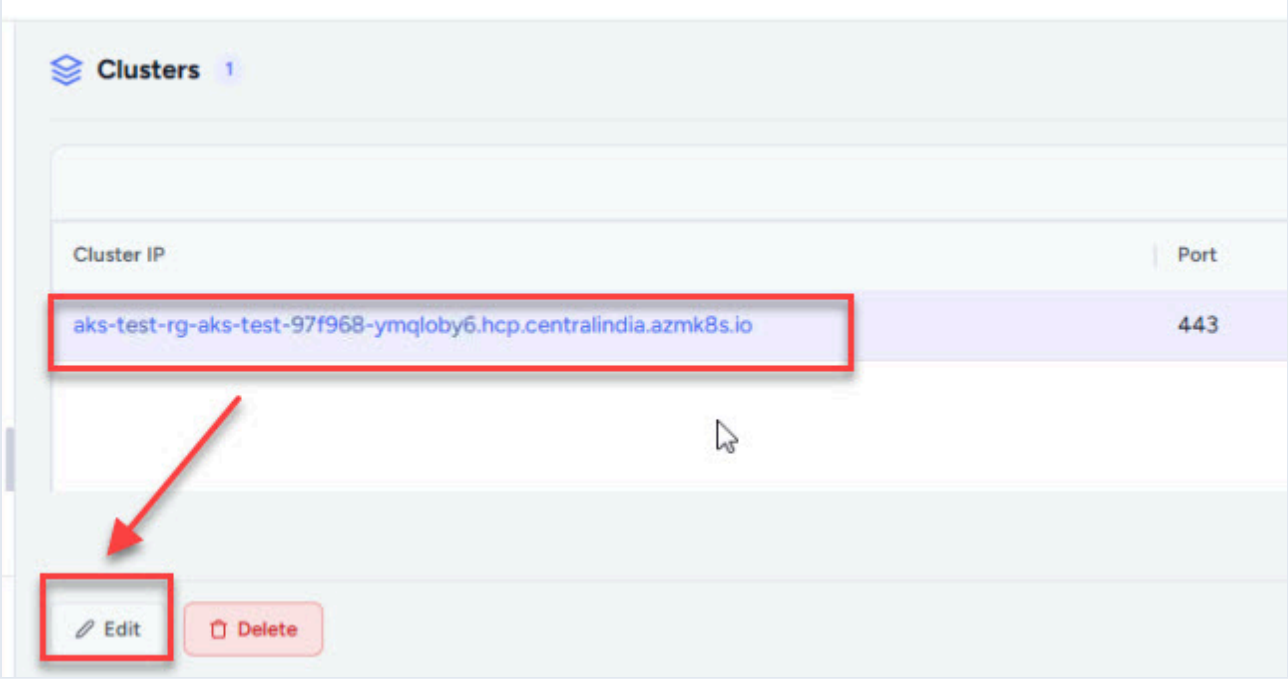
- Select the **row** and click the **Edit** button and **Uncheck** the **Add the Kubernetes Monitoring** checkbox. Then, click the **Update** button.



Kubernetes Menu

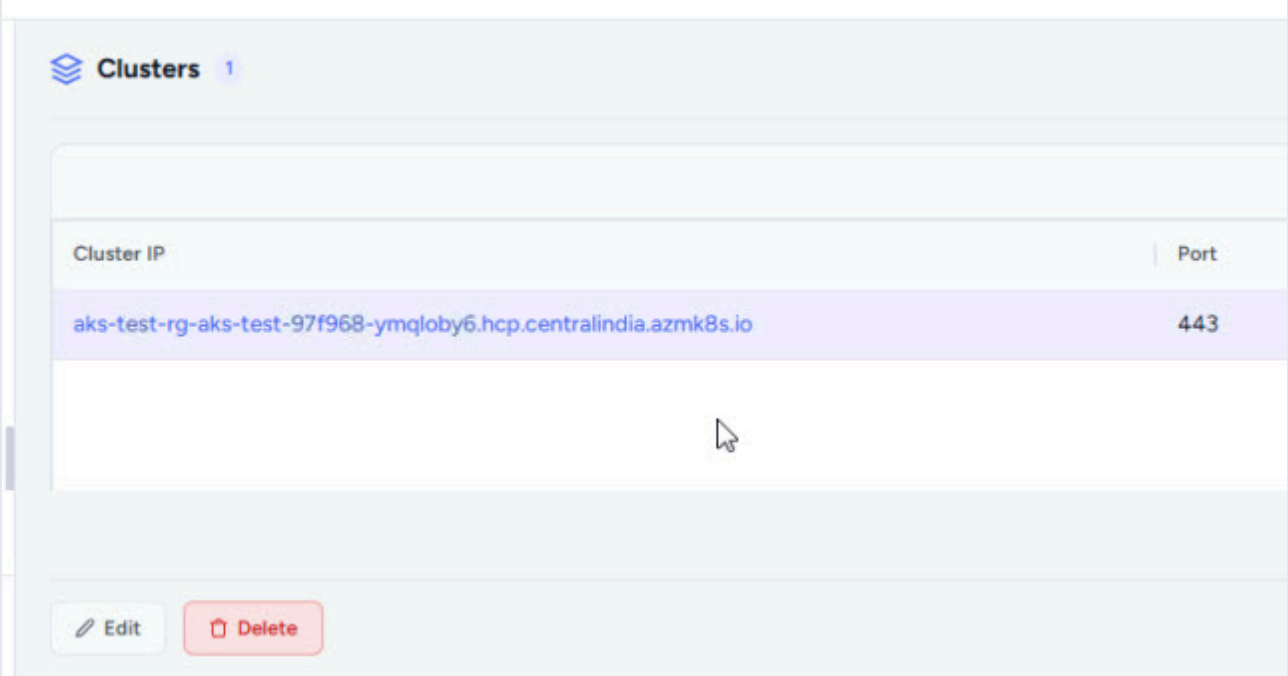
Update

- Select the **row** and click the **Edit** button to update details. Then, click the **Save** button.



Delete

- Select the **row** and click the **Delete** button.



Note: We can edit or delete the Kubernetes configuration from both the **Overview** or **Kubernetes** menu.

Uninstall the Applicare Kubernetes monitor service account and secrets.

```bash
kubectl delete namespace applicare
kubectl delete clusterrole applicareapi-cluster-role
kubectl delete clusterrolebinding applicareapi-cluster-role-binding
```