To collect metrics of k8s, the telegraf should run as pod(containter) in the k8s cluster Also, the pod (which runs telegraf container) need the permission to access the k8s api, or it cannot retrieve metric from cluster.

To give the telegraf permission, use kubectl to create following things.

Ref: <https://github.com/influxdata/telegraf/blob/release-1.10/plugins/inputs/kube_inventory/README.md>

<https://godleon.github.io/blog/Kubernetes/k8s-How-to-access-resource-legally/>

---

kind: ClusterRole

apiVersion: rbac.authorization.k8s.io/v1

metadata:

name: influx:cluster:viewer

labels:

rbac.authorization.k8s.io/aggregate-view-telegraf: "true"

rules:

- apiGroups: [""]

resources: ["persistentvolumes", "nodes", "deployments" , "daemonsets", "statefulsets"]

verbs: ["get", "list"]

---

kind: ClusterRole

apiVersion: rbac.authorization.k8s.io/v1

metadata:

name: influx:telegraf

aggregationRule:

clusterRoleSelectors:

- matchLabels:

rbac.authorization.k8s.io/aggregate-view-telegraf: "true"

- matchLabels:

rbac.authorization.k8s.io/aggregate-to-view: "true"

rules: [] # Rules are automatically filled in by the controller manager.

---

apiVersion: v1

kind: ServiceAccount

metadata:

name: telegraf

---

apiVersion: rbac.authorization.k8s.io/v1

kind: ClusterRoleBinding

metadata:

name: influx:telegraf:viewer

roleRef:

apiGroup: rbac.authorization.k8s.io

kind: ClusterRole

name: influx:telegraf

subjects:

- kind: ServiceAccount

name: telegraf

namespace: default

After creating authorization and service account, we need to specify the service account that the telegraf pod belongs to.

apiVersion: apps/v1

kind: Deployment

metadata:

name: telegraf-deployment

spec:

selector:

matchLabels:

app: telegraf

minReadySeconds: 5

template:

metadata:

labels:

app: telegraf

spec:

**serviceAccountName: "telegraf"**

containers:

- image: telegraf:1.10.0

name: telegraf

volumeMounts:

- mountPath: /etc/telegraf/telegraf.conf

name: telegraf-config

subPath: telegraf.conf

readOnly: true

envFrom:

- secretRef:

name: telegraf-secrets

volumes:

- name: telegraf-config

configMap:

name: telegraf-config