

## 命令

```
# 1、查看pod 状态的命令
kubectl get pod -n kube-system -o wide
# 2、删除pod
kubectl delete pod/kub-flannel-ds-xxxx -n kube-system --grace-period=0 --force
# 3、生成 新的token
[root@master ~]# kubeadm token create --print-join-command
```

```
apiVersion: policy/v1beta1
kind: PodSecurityPolicy
metadata:
  name: psp.flannel.unprivileged
  annotations:
    seccomp.security.alpha.kubernetes.io/allowedProfileNames: docker/default
    seccomp.security.alpha.kubernetes.io/defaultProfileName: docker/default
    apparmor.security.beta.kubernetes.io/allowedProfileNames: runtime/default
    apparmor.security.beta.kubernetes.io/defaultProfileName: runtime/default
spec:
  privileged: false
  volumes:
    - configMap
    - secret
    - emptyDir
    - hostPath
  allowedHostPaths:
    - pathPrefix: "/etc/cni/net.d"
    - pathPrefix: "/etc/kube-flannel"
    - pathPrefix: "/run/flannel"
  readOnlyRootFilesystem: false
  # Users and groups
  runAsUser:
    rule: RunAsAny
  supplementalGroups:
    rule: RunAsAny
  fsGroup:
    rule: RunAsAny
  # Privilege Escalation
  allowPrivilegeEscalation: false
  defaultAllowPrivilegeEscalation: false
  # Capabilities
  allowedCapabilities: ['NET_ADMIN']
  defaultAddCapabilities: []
  requiredDropCapabilities: []
  # Host namespaces
  hostPID: false
  hostIPC: false
  hostNetwork: true
  hostPorts:
    - min: 0
      max: 65535
  # SELinux
  seLinux:
    # SELinux is unused in CaaSP
    rule: 'RunAsAny'
---
kind: ClusterRole
apiVersion: rbac.authorization.k8s.io/v1beta1
metadata:
  name: flannel
rules:
  - apiGroups: ['extensions']
    resources: ['podsecuritypolicies']
    verbs: ['use']
    resourceNames: ['psp.flannel.unprivileged']
  - apiGroups:
      - ""
    resources:
      - pods
```

```

    verbs:
      - get
  - apiGroups:
    - ""
    resources:
      - nodes
    verbs:
      - list
      - watch
  - apiGroups:
    - ""
    resources:
      - nodes/status
    verbs:
      - patch
---
kind: ClusterRoleBinding
apiVersion: rbac.authorization.k8s.io/v1beta1
metadata:
  name: flannel
roleRef:
  apiGroup: rbac.authorization.k8s.io
  kind: ClusterRole
  name: flannel
subjects:
- kind: ServiceAccount
  name: flannel
  namespace: kube-system
---
apiVersion: v1
kind: ServiceAccount
metadata:
  name: flannel
  namespace: kube-system
---
kind: ConfigMap
apiVersion: v1
metadata:
  name: kube-flannel-cfg
  namespace: kube-system
  labels:
    tier: node
    app: flannel
data:
  cni-conf.json: |
    {
      "name": "cbr0",
      "cniVersion": "0.3.1",
      "plugins": [
        {
          "type": "flannel",
          "delegate": {
            "hairpinMode": true,
            "isDefaultGateway": true
          }
        },
        {
          "type": "portmap",
          "capabilities": {
            "portMappings": true
          }
        }
      ]
    }
  net-conf.json: |
    {
      "Network": "10.244.0.0/16",
      "Backend": {
        "Type": "vxlan"
      }
    }
---
apiVersion: apps/v1
kind: DaemonSet

```

```
metadata:
  name: kube-flannel-ds-amd64
  namespace: kube-system
  labels:
    tier: node
    app: flannel
spec:
  selector:
    matchLabels:
      app: flannel
  template:
    metadata:
      labels:
        tier: node
        app: flannel
    spec:
      affinity:
        nodeAffinity:
          requiredDuringSchedulingIgnoredDuringExecution:
            nodeSelectorTerms:
              - matchExpressions:
                  - key: beta.kubernetes.io/os
                    operator: In
                    values:
                      - linux
                  - key: beta.kubernetes.io/arch
                    operator: In
                    values:
                      - amd64
      hostNetwork: true
      tolerations:
        - operator: Exists
          effect: NoSchedule
      serviceAccountName: flannel
      initContainers:
        - name: install-cni
          image: quay-mirror.qiniu.com/coreos/flannel:v0.12.0-amd64
          command:
            - cp
          args:
            - -f
            - /etc/kube-flannel/cni-conf.json
            - /etc/cni/net.d/10-flannel.conflist
          volumeMounts:
            - name: cni
              mountPath: /etc/cni/net.d
            - name: flannel-cfg
              mountPath: /etc/kube-flannel/
      containers:
        - name: kube-flannel
          image: quay-mirror.qiniu.com/coreos/flannel:v0.12.0-amd64
          command:
            - /opt/bin/flanneld
          args:
            - --ip-masq
            - --kube-subnet-mgr
          resources:
            requests:
              cpu: "100m"
              memory: "50Mi"
            limits:
              cpu: "100m"
              memory: "50Mi"
          securityContext:
            privileged: false
            capabilities:
              add: ["NET_ADMIN"]
          env:
            - name: POD_NAME
              valueFrom:
                fieldRef:
                  fieldPath: metadata.name
            - name: POD_NAMESPACE
              valueFrom:
```

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        fieldRef:
          fieldPath: metadata.namespace
      volumeMounts:
      - name: run
        mountPath: /run/flannel
      - name: flannel-cfg
        mountPath: /etc/kube-flannel/
    volumes:
    - name: run
      hostPath:
        path: /run/flannel
    - name: cni
      hostPath:
        path: /etc/cni/net.d
    - name: flannel-cfg
      configMap:
        name: kube-flannel-cfg
---
apiVersion: apps/v1
kind: DaemonSet
metadata:
  name: kube-flannel-ds-arm64
  namespace: kube-system
  labels:
    tier: node
    app: flannel
spec:
  selector:
    matchLabels:
      app: flannel
  template:
    metadata:
      labels:
        tier: node
        app: flannel
    spec:
      affinity:
        nodeAffinity:
          requiredDuringSchedulingIgnoredDuringExecution:
            nodeSelectorTerms:
              - matchExpressions:
                  - key: beta.kubernetes.io/os
                    operator: In
                    values:
                      - linux
                  - key: beta.kubernetes.io/arch
                    operator: In
                    values:
                      - arm64
      hostNetwork: true
      tolerations:
      - operator: Exists
        effect: NoSchedule
      serviceAccountName: flannel
      initContainers:
      - name: install-cni
        image: quay-mirror.qiniu.com/coreos/flannel:v0.12.0-arm64
        command:
        - cp
        args:
        - -f
        - /etc/kube-flannel/cni-conf.json
        - /etc/cni/net.d/10-flannel.conflist
        volumeMounts:
        - name: cni
          mountPath: /etc/cni/net.d
        - name: flannel-cfg
          mountPath: /etc/kube-flannel/
      containers:
      - name: kube-flannel
        image: quay-mirror.qiniu.com/coreos/flannel:v0.12.0-arm64
        command:
        - /opt/bin/flanneld
        args:

```

```

- --ip-masq
- --kube-subnet-mgr
resources:
  requests:
    cpu: "100m"
    memory: "50Mi"
  limits:
    cpu: "100m"
    memory: "50Mi"
securityContext:
  privileged: false
  capabilities:
    add: ["NET_ADMIN"]
env:
- name: POD_NAME
  valueFrom:
    fieldRef:
      fieldPath: metadata.name
- name: POD_NAMESPACE
  valueFrom:
    fieldRef:
      fieldPath: metadata.namespace
volumeMounts:
- name: run
  mountPath: /run/flannel
- name: flannel-cfg
  mountPath: /etc/kube-flannel/
volumes:
- name: run
  hostPath:
    path: /run/flannel
- name: cni
  hostPath:
    path: /etc/cni/net.d
- name: flannel-cfg
  configMap:
    name: kube-flannel-cfg
---
apiVersion: apps/v1
kind: DaemonSet
metadata:
  name: kube-flannel-ds-arm
  namespace: kube-system
  labels:
    tier: node
    app: flannel
spec:
  selector:
    matchLabels:
      app: flannel
  template:
    metadata:
      labels:
        tier: node
        app: flannel
    spec:
      affinity:
        nodeAffinity:
          requiredDuringSchedulingIgnoredDuringExecution:
            nodeSelectorTerms:
              - matchExpressions:
                  - key: beta.kubernetes.io/os
                    operator: In
                    values:
                      - linux
              - key: beta.kubernetes.io/arch
                    operator: In
                    values:
                      - arm
      hostNetwork: true
      tolerations:
        - operator: Exists
          effect: NoSchedule
      serviceAccountName: flannel

```

```

initContainers:
- name: install-cni
  image: quay-mirror.qiniu.com/coreos/flannel:v0.12.0-arm
  command:
  - cp
  args:
  - -f
  - /etc/kube-flannel/cni-conf.json
  - /etc/cni/net.d/10-flannel.conflist
  volumeMounts:
  - name: cni
    mountPath: /etc/cni/net.d
  - name: flannel-cfg
    mountPath: /etc/kube-flannel/
containers:
- name: kube-flannel
  image: quay-mirror.qiniu.com/coreos/flannel:v0.12.0-arm
  command:
  - /opt/bin/flanneld
  args:
  - --ip-masq
  - --kube-subnet-mgr
  resources:
    requests:
      cpu: "100m"
      memory: "50Mi"
    limits:
      cpu: "100m"
      memory: "50Mi"
  securityContext:
    privileged: false
    capabilities:
      add: ["NET_ADMIN"]
  env:
  - name: POD_NAME
    valueFrom:
      fieldRef:
        fieldPath: metadata.name
  - name: POD_NAMESPACE
    valueFrom:
      fieldRef:
        fieldPath: metadata.namespace
  volumeMounts:
  - name: run
    mountPath: /run/flannel
  - name: flannel-cfg
    mountPath: /etc/kube-flannel/
volumes:
- name: run
  hostPath:
    path: /run/flannel
- name: cni
  hostPath:
    path: /etc/cni/net.d
- name: flannel-cfg
  configMap:
    name: kube-flannel-cfg
---
apiVersion: apps/v1
kind: DaemonSet
metadata:
  name: kube-flannel-ds-ppc64le
  namespace: kube-system
  labels:
    tier: node
    app: flannel
spec:
  selector:
    matchLabels:
      app: flannel
  template:
    metadata:
      labels:
        tier: node

```

```

    app: flannel
spec:
  affinity:
    nodeAffinity:
      requiredDuringSchedulingIgnoredDuringExecution:
        nodeSelectorTerms:
          - matchExpressions:
              - key: beta.kubernetes.io/os
                operator: In
                values:
                  - linux
              - key: beta.kubernetes.io/arch
                operator: In
                values:
                  - ppc64le
  hostNetwork: true
  tolerations:
    - operator: Exists
      effect: NoSchedule
  serviceAccountName: flannel
  initContainers:
    - name: install-cni
      image: quay-mirror.qiniu.com/coreos/flannel:v0.12.0-ppc64le
      command:
        - cp
      args:
        - -f
        - /etc/kube-flannel/cni-conf.json
        - /etc/cni/net.d/10-flannel.conflist
      volumeMounts:
        - name: cni
          mountPath: /etc/cni/net.d
        - name: flannel-cfg
          mountPath: /etc/kube-flannel/
  containers:
    - name: kube-flannel
      image: quay-mirror.qiniu.com/coreos/flannel:v0.12.0-ppc64le
      command:
        - /opt/bin/flanneld
      args:
        - --ip-masq
        - --kube-subnet-mgr
      resources:
        requests:
          cpu: "100m"
          memory: "50Mi"
        limits:
          cpu: "100m"
          memory: "50Mi"
      securityContext:
        privileged: false
        capabilities:
          add: ["NET_ADMIN"]
      env:
        - name: POD_NAME
          valueFrom:
            fieldRef:
              fieldPath: metadata.name
        - name: POD_NAMESPACE
          valueFrom:
            fieldRef:
              fieldPath: metadata.namespace
      volumeMounts:
        - name: run
          mountPath: /run/flannel
        - name: flannel-cfg
          mountPath: /etc/kube-flannel/
  volumes:
    - name: run
      hostPath:
        path: /run/flannel
    - name: cni
      hostPath:
        path: /etc/cni/net.d

```

```

    - name: flannel-cfg
      configMap:
        name: kube-flannel-cfg
---
apiVersion: apps/v1
kind: DaemonSet
metadata:
  name: kube-flannel-ds-s390x
  namespace: kube-system
  labels:
    tier: node
    app: flannel
spec:
  selector:
    matchLabels:
      app: flannel
  template:
    metadata:
      labels:
        tier: node
        app: flannel
    spec:
      affinity:
        nodeAffinity:
          requiredDuringSchedulingIgnoredDuringExecution:
            nodeSelectorTerms:
              - matchExpressions:
                  - key: beta.kubernetes.io/os
                    operator: In
                    values:
                      - linux
                  - key: beta.kubernetes.io/arch
                    operator: In
                    values:
                      - s390x
      hostNetwork: true
      tolerations:
        - operator: Exists
          effect: NoSchedule
      serviceAccountName: flannel
      initContainers:
        - name: install-cni
          image: quay-mirror.qiniu.com/coreos/flannel:v0.12.0-s390x
          command:
            - cp
          args:
            - -f
            - /etc/kube-flannel/cni-conf.json
            - /etc/cni/net.d/10-flannel.conflist
          volumeMounts:
            - name: cni
              mountPath: /etc/cni/net.d
            - name: flannel-cfg
              mountPath: /etc/kube-flannel/
      containers:
        - name: kube-flannel
          image: quay-mirror.qiniu.com/coreos/flannel:v0.12.0-s390x
          command:
            - /opt/bin/flanneld
          args:
            - --ip-masq
            - --kube-subnet-mgr
          resources:
            requests:
              cpu: "100m"
              memory: "50Mi"
            limits:
              cpu: "100m"
              memory: "50Mi"
          securityContext:
            privileged: false
            capabilities:
              add: ["NET_ADMIN"]
      env:

```



```

- name: POD_NAME
  valueFrom:
    fieldRef:
      fieldPath: metadata.name
- name: POD_NAMESPACE
  valueFrom:
    fieldRef:
      fieldPath: metadata.namespace
volumeMounts:
- name: run
  mountPath: /run/flannel
- name: flannel-cfg
  mountPath: /etc/kube-flannel/
volumes:
- name: run
  hostPath:
    path: /run/flannel
- name: cni
  hostPath:
    path: /etc/cni/net.d
- name: flannel-cfg
  configMap:
    name: kube-flannel-cfg

```

```

docker pull registry.cn-shanghai.aliyuncs.com/leozhanggg/flannel:v0.12.0-amd64
docker pull registry.cn-shanghai.aliyuncs.com/leozhanggg/flannel:v0.12.0-arm64

docker pull registry.cn-shanghai.aliyuncs.com/leozhanggg/flannel:v0.12.0-arm
docker pull registry.cn-shanghai.aliyuncs.com/leozhanggg/flannel:v0.12.0-ppc64le

docker pull registry.cn-shanghai.aliyuncs.com/leozhanggg/flannel:v0.12.0-s390x

```

然后再改名

```
kubecttl taint nodes --all node-role.kubernetes.io/master-
```

```

docker tag registry.cn-shanghai.aliyuncs.com/leozhanggg/flannel:v0.12.0-amd64 quay.io/coreos/flannel:v0.12.0-amd64
docker tag registry.cn-shanghai.aliyuncs.com/leozhanggg/flannel:v0.12.0-arm64 quay.io/coreos/flannel:v0.12.0-arm64
docker tag registry.cn-shanghai.aliyuncs.com/leozhanggg/flannel:v0.12.0-arm quay.io/coreos/flannel:v0.12.0-arm
docker tag registry.cn-shanghai.aliyuncs.com/leozhanggg/flannel:v0.12.0-ppc64le quay.io/coreos/flannel:v0.12.0-ppc64le

```

执行如下命令清除目录、删除网络设备（注：与 master 有类似但又不同）：

```

ifconfig cni0 down
ip link delete cni0
ifconfig flannel.1 down
ip link delete flannel.1
rm /var/lib/cni/ -rf
rm /etc/kubernetes/ -rf
rm /var/lib/kubelet/ -rf

```