

```
controlplane:~$ vi namespace.yaml
controlplane:~$ kubectl apply -f namespace.yaml
namespace/haproxy-controller-devops created
controlplane:~$ kubectl get namespaces
NAME                STATUS    AGE
default             Active    34d
haproxy-controller-devops  Active    13s
kube-node-lease     Active    34d
kube-public         Active    34d
kube-system         Active    34d
local-path-storage  Active    34d
controlplane:~$ vi service-account.yaml
controlplane:~$ kubectl ap
api-resources (Print the supported API resources on the server)
api-versions  (Print the supported API versions on the server, in the form of "group/version")
apply         (Apply a configuration to a resource by file name or stdin)
controlplane:~$ kubectl apply -f service-account.yaml
serviceaccount/haproxy-service-account-devops created
```

```
apiVersion: v1
kind: Namespace
metadata:
  name: haproxy-controller-devops
~
~
```

```
apiVersion: v1
kind: ServiceAccount
metadata:
  name: haproxy-service-account-devops
  namespace: haproxy-controller-devops
```

```
controlplane:~$ vi cluster-role.yaml
controlplane:~$ kubectl apply -f cluster-role.yaml
clusterrole.rbac.authorization.k8s.io/haproxy-cluster-role-devops created
controlplane:~$ vi cluster-role-pinding.yml
controlplane:~$ kubectl apply -f cluster-role-pinding.yml
clusterrolebinding.rbac.authorization.k8s.io/haproxy-cluster-role-binding-devops created
controlplane:~$
```

```
apiVersion: rbac.authorization.k8s.io/v1
kind: ClusterRole
metadata:
  name: haproxy-cluster-role-devops
rules:
- apiGroups: [""]
  resources: ["configmaps", "secrets", "endpoints", "nodes", "pods", "services", "namespaces", "events", "serviceaccounts"]
  verbs: ["get", "list", "watch", "create", "patch", "update"]
~
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```

```
apiVersion: rbac.authorization.k8s.io/v1
kind: ClusterRoleBinding
metadata:
  name: haproxy-cluster-role-binding-devops
  namespace: haproxy-controller-devops
roleRef:
  apiGroup: rbac.authorization.k8s.io
  kind: ClusterRole
  name: haproxy-cluster-role-devops
subjects:
- kind: ServiceAccount
  name: haproxy-service-account-devops
  namespace: haproxy-controller-devops
~
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```

```
controlplane:~$ vi backend-deployment.yaml
controlplane:~$ kubectl apply -f backend-deployment.yaml
deployment.apps/backend-deployment-devops created
controlplane:~$ vi backend-service.yaml
controlplane:~$ vi backend-service.yaml
controlplane:~$ kubectl apply -f backend-service.yaml
service/service-backend-devops created
controlplane:~$ vi frontend-deployment.yaml
controlplane:~$ kubectl apply -f frontend-deployment.yaml
deployment.apps/haproxy-ingress-devops created
controlplane:~$ vi HA-proxy-service.yaml
controlplane:~$ kubectl apply -f HA-proxy-service.yaml
service/ingress-service-devops created
controlplane:~$
```

```
controlplane:~$ vi backend-deployment.yaml
controlplane:~$ kubectl apply -f backend-deployment.yaml
deployment.apps/backend-deployment-devops created
controlplane:~$ vi backend-service.yaml
controlplane:~$ vi backend-service.yaml
controlplane:~$ kubectl apply -f backend-service.yaml
service/service-backend-devops created
controlplane:~$ vi frontend-deployment.yaml
controlplane:~$ kubectl apply -f frontend-deployment.yaml
deployment.apps/haproxy-ingress-devops created
controlplane:~$ vi HA-proxy-service.yaml
controlplane:~$ kubectl apply -f HA-proxy-service.yaml
service/ingress-service-devops created
controlplane:~$ █
```

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: backend-deployment-devops
  namespace: haproxy-controller-devops
  labels:
    run: ingress-default-backend
spec:
  replicas: 1
  selector:
    matchLabels:
      run: ingress-default-backend
  template:
    metadata:
      labels:
        run: ingress-default-backend
    spec:
      containers:
        - name: backend-container-devops
          image: gcr.io/google_containers/defaultbackend:1.0
          ports:
            - containerPort: 8080
```

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```
apiVersion: v1
kind: Service
metadata:
  name: service-backend-devops
  namespace: haproxy-controller-devops
  labels:
    run: ingress-default-backend
spec:
  selector:
    run: ingress-default-backend
  ports:
    - name: port-backend
      protocol: TCP
      port: 8080
      targetPort: 8080
~
```

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: haproxy-ingress-devops
  namespace: haproxy-controller-devops
  labels:
    run: haproxy-ingress
spec:
  replicas: 1
  selector:
    matchLabels:
      run: haproxy-ingress
  template:
    metadata:
      labels:
        run: haproxy-ingress
    spec:
      serviceAccountName: haproxy-service-account-devops
      containers:
        - name: ingress-container-devops
          image: haproxytech/kubernetes-ingress
          args:
            - --default-backend-service=haproxy-controller-devops/service-backend-devops
          ports:
            - name: http
              containerPort: 80
            - name: https
              containerPort: 443
            - name: stat
              containerPort: 1024
          livenessProbe:
            httpGet:
              path: /healthz
              port: 1024
```

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: haproxy-ingress-devops
  namespace: haproxy-controller-devops
  labels:
    run: haproxy-ingress
spec:
  replicas: 1
  selector:
    matchLabels:
      run: haproxy-ingress
  template:
    metadata:
      labels:
        run: haproxy-ingress
    spec:
      serviceAccountName: haproxy-service-account-devops
      containers:
        - name: ingress-container-devops
          image: haproxytech/kubernetes-ingress
          args:
            - --default-backend-service=haproxy-controller-devops/service-backend-devops
          ports:
            - name: http
              containerPort: 80
            - name: https
              containerPort: 443
            - name: stat
              containerPort: 1024
          livenessProbe:
            httpGet:
              path: /healthz
              port: 1024
```

```
ports:
- name: http
  containerPort: 80
- name: https
  containerPort: 443
- name: stat
  containerPort: 1024
livenessProbe:
  httpGet:
    path: /healthz
    port: 1024
resources:
  requests:
    cpu: 500m
    memory: 50Mi
env:
- name: TZ
  value: Etc/UTC
- name: POD_NAME
  valueFrom:
    fieldRef:
      fieldPath: metadata.name
- name: POD_NAMESPACE
  valueFrom:
    fieldRef:
      fieldPath: metadata.namespace
```

```
apiVersion: v1
kind: Service
metadata:
  name: ingress-service-devops
  namespace: haproxy-controller-devops
  labels:
    run: haproxy-ingress
spec:
  selector:
    run: haproxy-ingress
  type: NodePort
  ports:
    - name: http
      protocol: TCP
      port: 80
      targetPort: 80
      nodePort: 32456
    - name: https
      protocol: TCP
      port: 443
      targetPort: 443
      nodePort: 32567
    - name: stat
      protocol: TCP
      port: 1024
      targetPort: 1024
      nodePort: 32678
```

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```
controlplane:~$ kubectl get namespaces
NAME                STATUS    AGE
default             Active   34d
haproxy-controller-devops  Active   18m
kube-node-lease     Active   34d
kube-public         Active   34d
kube-system         Active   34d
local-path-storage  Active   34d
controlplane:~$ kubectl get serviceaccount -n haproxy-controller-devops
NAME                SECRETS    AGE
default             0          18m
haproxy-service-account-devops  0          16m
controlplane:~$ kubectl get clusterrole
NAME                CREATED AT
admin               2025-03-22T19:51:47Z
calico-kube-controllers  2025-03-22T19:51:51Z
calico-node         2025-03-22T19:51:51Z
cluster-admin       2025-03-22T19:51:47Z
edit                2025-03-22T19:51:47Z
flannel             2025-03-22T19:51:51Z
haproxy-cluster-role-devops  2025-04-26T19:17:53Z
kubeadm:get-nodes   2025-03-22T19:51:49Z
local-path-provisioner-role  2025-03-22T19:53:52Z
system:aggregate-to-admin  2025-03-22T19:51:47Z
system:aggregate-to-edit  2025-03-22T19:51:47Z
system:aggregate-to-view  2025-03-22T19:51:47Z
system:auth-delegator  2025-03-22T19:51:47Z
system:basic-user     2025-03-22T19:51:47Z
system:certificates.k8s.io:certificatesigningrequests:nodeclient  2025-03-22T19:51:47Z
system:certificates.k8s.io:certificatesigningrequests:selfnodeclient  2025-03-22T19:51:47Z
system:certificates.k8s.io:kube-apiserver-client-approver  2025-03-22T19:51:47Z
system:certificates.k8s.io:kube-apiserver-client-kubelet-approver  2025-03-22T19:51:47Z
system:certificates.k8s.io:kubelet-serving-approver  2025-03-22T19:51:47Z
system:certificates.k8s.io:legacy-unknown-approver  2025-03-22T19:51:47Z
system:controller:attachdetach-controller  2025-03-22T19:51:47Z
```

```
controlplane:~$ kubectl get clusterrolebinding
NAME                AGE                ROLE
calico-kube-controllers  34d                ClusterRole/calico-kube-controllers
canal-calico            34d                ClusterRole/calico-node
canal-flannel           34d                ClusterRole/flannel
cluster-admin           34d                ClusterRole/cluster-admin
haproxy-cluster-role-binding-devops  11m                ClusterRole/haproxy-cluster-role-devops
kubeadm:cluster-admins  34d                ClusterRole/cluster-admin
kubeadm:get-nodes       34d                ClusterRole/kubeadm:get-nodes
kubeadm:kubelet-bootstrap  34d                ClusterRole/system:node-bootstrapper
```