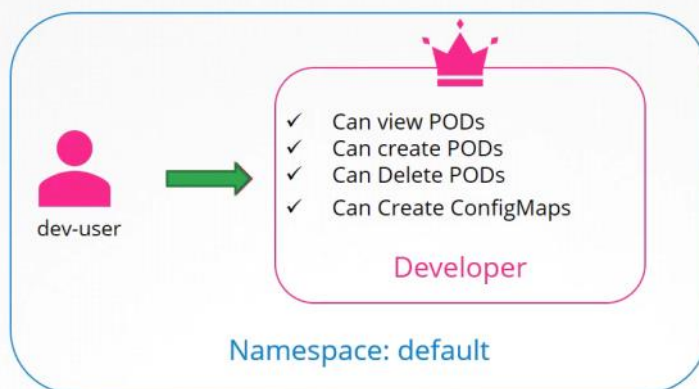


# Cluster Roles

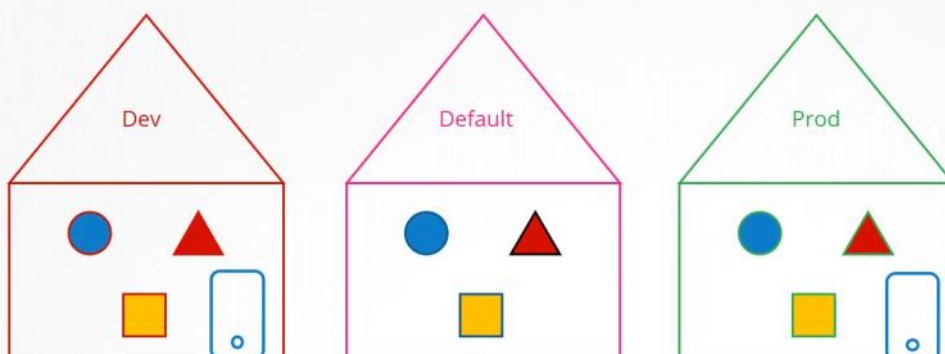
## Roles



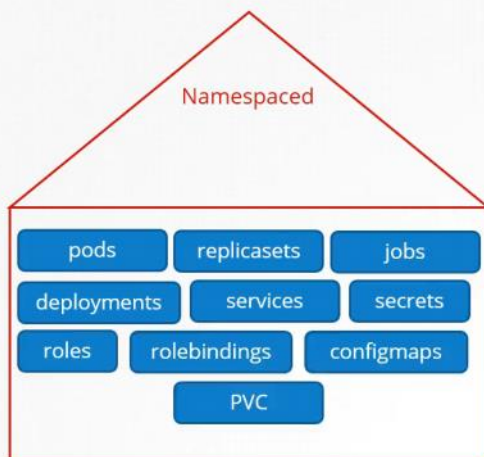
## Roles



## Namespace

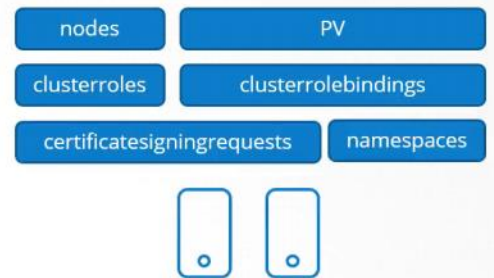


# Namespace



```
kubectl api-resources --namespaced=true
```

## Cluster Scoped




```
kubectl api-resources --namespaced=false
```

 roles  rolebindings

 clusterroles  clusterrolebindings

## clusterroles



- ✓ Can view Nodes
- ✓ Can create Nodes
- ✓ Can delete Nodes

Cluster Admin



- ✓ Can view PVs
- ✓ Can create PVs
- ✓ Can delete PVCs

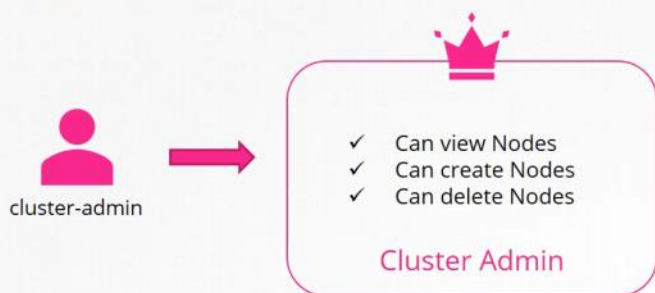
Storage Admin

cluster-admin-role.yaml

```
apiVersion: rbac.authorization.k8s.io/v1
kind: ClusterRole
metadata:
  name: cluster-administrator
rules:
- apiGroups: [""]
  resources: ["nodes"]
  verbs: ["list", "get", "create", "delete"]
```

```
kubectl create -f cluster-admin-role.yaml
```

# clusterrolebinding



## cluster-admin-role.yaml

```
apiVersion: rbac.authorization.k8s.io/v1
kind: ClusterRole
metadata:
  name: cluster-administrator
rules:
- apiGroups: [""]
  resources: ["nodes"]
  verbs: ["list", "get", "create", "delete"]
```

## cluster-admin-role-binding.yaml

```
apiVersion: rbac.authorization.k8s.io/v1
kind: ClusterRoleBinding
metadata:
  name: cluster-admin-role-binding
subjects:
- kind: User
  name: cluster-admin
  apiGroup: rbac.authorization.k8s.io
roleRef:
  kind: ClusterRole
  name: cluster-administrator
  apiGroup: rbac.authorization.k8s.io
```

Udemy

A new user **michelle** joined the team. She will be focusing on the **nodes** in the cluster. Create the required **ClusterRoles** and **ClusterRoleBindings** so she gets access to the **nodes**.

Complete  Next

✔ Grant permission to access nodes

```
---
kind: ClusterRole
apiVersion: rbac.authorization.k8s.io/v1
metadata:
  name: node-admin
rules:
- apiGroups: [""]
  resources: ["nodes"]
  verbs: ["get", "watch", "list", "create", "delete"]
---
kind: ClusterRoleBinding
apiVersion: rbac.authorization.k8s.io/v1
metadata:
  name: michelle-binding
subjects:
- kind: User
  name: michelle
  apiGroup: rbac.authorization.k8s.io
roleRef:
  kind: ClusterRole
  name: node-admin
  apiGroup: rbac.authorization.k8s.io
```

```

controlplane ~ → k describe clusterrole michelle-role
Name:          michelle-role
Labels:        <none>
Annotations:   <none>
PolicyRule:
  Resources      Non-Resource URLs  Resource Names  Verbs
  -----
nodes           []                     []              [get list watch]

controlplane ~ →

controlplane ~ → k describe clusterrolebinding michelle-role-binding
Name:          michelle-role-binding
Labels:        <none>
Annotations:   <none>
Role:
  Kind: ClusterRole
  Name: michelle-role
Subjects:
  Kind  Name      Namespace
  ----  ---
User   michelle

controlplane ~ →

controlplane ~ →

controlplane ~ → k get nodes --as michelle
NAME      STATUS    ROLES                  AGE    VERSION
controlplane Ready     control-plane,master   16m    v1.23.3+k3s1

```