Create a file with user details locally at /tmp/users/user-details.csv

***# User File Contents***

***password123,user1,u0001***

***password123,user2,u0002***

***password123,user3,u0003***

***password123,user4,u0004***

***password123,user5,u0005***

Edit the kube-apiserver static pod configured by kubeadm to pass in the user details. The file is located at /etc/kubernetes/manifests/kube-apiserver.yaml

***apiVersion: v1***

***kind: Pod***

***metadata:***

***name: kube-apiserver***

***namespace: kube-system***

***spec:***

***containers:***

***- command:***

***- kube-apiserver***

***<content-hidden>***

***image: k8s.gcr.io/kube-apiserver-amd64:v1.11.3***

***name: kube-apiserver***

***volumeMounts:***

***- mountPath: /tmp/users***

***name: usr-details***

***readOnly: true***

***volumes:***

***- hostPath:***

***path: /tmp/users***

***type: DirectoryOrCreate***

***name: usr-details***

Modify the kube-apiserver startup options to include the basic-auth file

***apiVersion: v1***

***kind: Pod***

***metadata:***

***creationTimestamp: null***

***name: kube-apiserver***

***namespace: kube-system***

***spec:***

***containers:***

***- command:***

***- kube-apiserver***

***- --authorization-mode=Node,RBAC***

***<content-hidden>***

***- --basic-auth-file=/tmp/users/user-details.csv***

Create the necessary roles and role bindings for these users:

***---***

***kind: Role***

***apiVersion: rbac.authorization.k8s.io/v1***

***metadata:***

***namespace: default***

***name: pod-reader***

***rules:***

***- apiGroups: [""] # "" indicates the core API group***

***resources: ["pods"]***

***verbs: ["get", "watch", "list"]***

***---***

***# This role binding allows "jane" to read pods in the "default" namespace.***

***kind: RoleBinding***

***apiVersion: rbac.authorization.k8s.io/v1***

***metadata:***

***name: read-pods***

***namespace: default***

***subjects:***

***- kind: User***

***name: user1 # Name is case sensitive***

***apiGroup: rbac.authorization.k8s.io***

***roleRef:***

***kind: Role #this must be Role or ClusterRole***

***name: pod-reader # this must match the name of the Role or ClusterRole you wish to bind to***

***apiGroup: rbac.authorization.k8s.io***

Once created, you may authenticate into the kube-api server using the users credentials

curl -v -k https://localhost:6443/api/v1/pods -u "user1:password123"