**Deploying a Voting Application**

**Objective:** To deploy a voting application in Kubernetes.

**Tools required:** kubeadm, kubectl, kubelet, and etcd

**Prerequisites:** A Kubernetes cluster must be set up

Steps to be followed:

1. Creating a namespace
2. Creating the application
3. Verifying the Deployment of application

**Step 1: Creating a namespace**

1. Create a namespace **vote**, using the following command:

**kubectl create namespace vote**

Text

Description automatically generated

**Step 2: Creating the application**

1. Clone the following repository for a voting app.

**git clone https://github.com/dockersamples/example-voting-app.git**

Text

Description automatically generated

1. Locate to the cloned directory.

**cd example-voting-app/**

1. Create the application by running the following command:

**kubectl create -f k8s-specifications/**

**Text

Description automatically generated**

**Step 3: Verifying the Deployment of application**

1. Verify the created Pod state using the following command:

**kubectl get pod -n vote -o wide**

**A screenshot of a computer

Description automatically generated with medium confidence**

1. Verify the Deployment.

**kubectl get deployment -n vote**

Text

Description automatically generated

1. To get detailed information on the Pods with namespace **role**, use the following commands:

**kubectl get pod --namespace vote -o wide**

**kubectl get svc --namespace vote -o wide**

**Graphical user interface

Description automatically generated**

Verify on which node the pod is running.

1. Copy the worker node 1 **Internal-IP** and Service **NodePort** of the **result** Pod.

**kubectl get nodes -o wide**

Graphical user interface, text

Description automatically generated

1. Paste the **IP** and **NodePort** into the browser.

**172.31.5.214:31001**

Graphical user interface, website

Description automatically generated

|  |
| --- |
|  |

The **voting** application has been successfully deployed, as shown in the screenshot above.