Configuration of VPA(Vertical Pod Autoscaler) :-

The Kubernetes Vertical Pod Autoscaler automatically adjusts the CPU and memory reservations for your pods to help "right size" your applications. This adjustment can improve cluster resource utilization and free up CPU and memory for other pods. This topic helps you to deploy the sVertical Pod Autoscaler to your cluster and verify that it is working.

Prerequisites

- You have an existing Amazon EKS cluster. If you don't, see Getting started with Amazon EKS.
- You have the Kubernetes Metrics Server installed. For more information, see Installing the Kubernetes Metrics Server.
- You are using a `kubectl` client that is configured to communicate with your Amazon EKS cluster.
- OpenSSL `1.1.1` or later installed on your device.

To deploy the Vertical Pod Autoscaler

1. Open a terminal window and navigate to a directory where you would like to download the Vertical Pod Autoscaler source code.
2. Clone the kubernetes/autoscaler GitHub repository.
3. `git clone https://github.com/kubernetes/autoscaler.git`
4. Change to the `vertical-pod-autoscaler` directory.
5. `cd autoscaler/vertical-pod-autoscaler/`
6. Deploy the Vertical Pod Autoscaler to your cluster with the following command.
7. `./hack/vpa-up.sh`

Verify that the Vertical Pod Autoscaler pods have been created successfully.

```
kubectl get pods -n kube-system
```

The example output is as follows.

```
NAME                                        READY   STATUS    RESTARTS   AGE

...

metrics-server-8459fc497-kfj8w              1/1     Running   0          83m

vpa-admission-controller-68c748777d-ppspd   1/1     Running   0          7s

vpa-recommender-6fc8c67d85-gljpl            1/1     Running   0          8s

vpa-updater-786b96955c-bgp9d                1/1     Running   0          8s
```