BitBucket in Kubernetes Cluster

1. Create a RDS instance of Engine type PostgreSQL.
2. Choose Dev/Test as use case in Step2 show in diagram below.
3. Checkbox in “Only enable options eligible for RDS Free Usage Tier” in Step 3
4. Provided “DB instance identifier”, “Master username”, “Master password”.

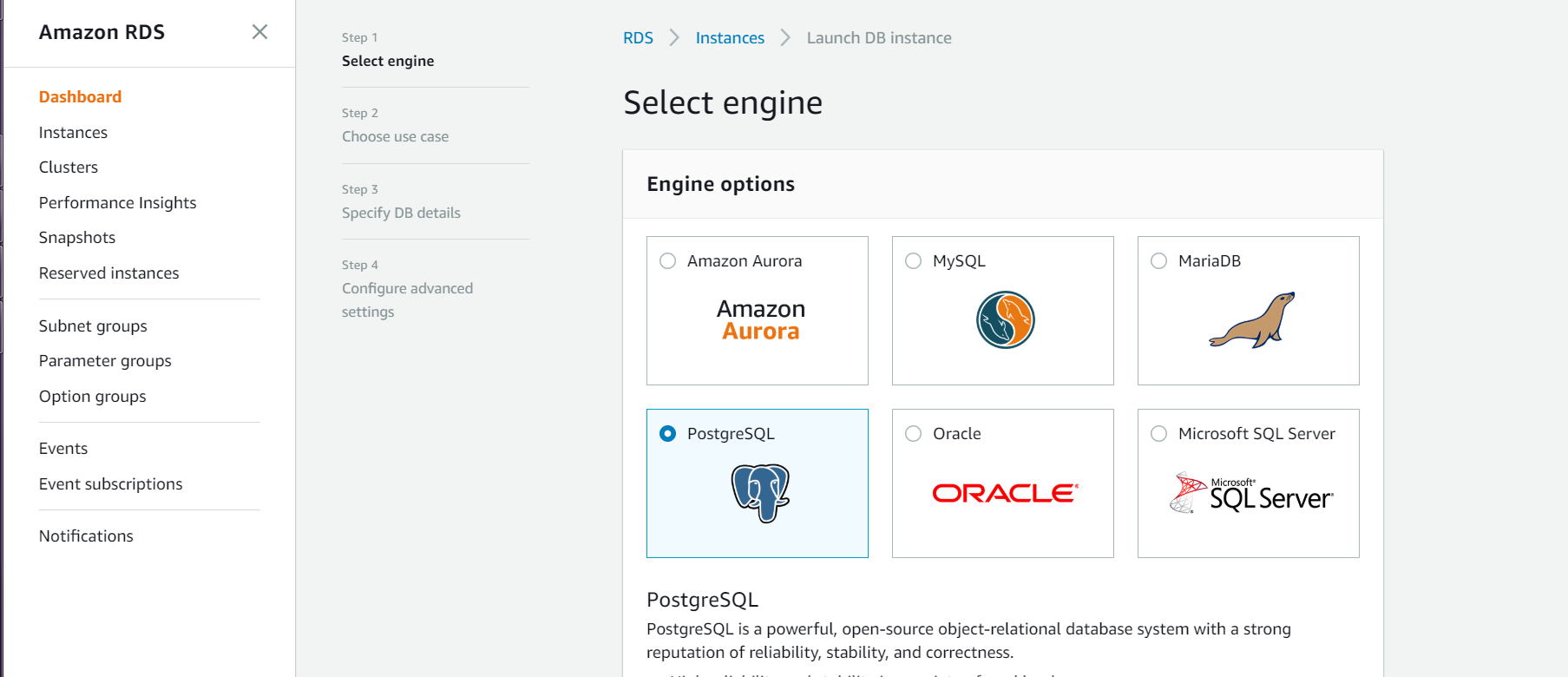
Ex: DB instance identifier : Bitbucketdemo

Master username : bitbucketuser

Master password : bitbucketpass

1. Step 4: Provide Database name. Selection Backup dropdown menu as “0”.
2. Launch the DB instance. And note down the Endpoint after successful creation.

Ex: bitbucketdemo.c9hpesfbnyl5.us-west-2.rds.amazonaws.com



1. Replace the “ENDPOINT”, Bitbucket “Username”,”Password”,”Database\_Name” in the **bitbucket.properties** file.

Ex: jdbc.driver=org.postgresql.Driver

jdbc.url=jdbc:postgresql://bitbucketdemo.c9hpesfbnyl5.us-west-2.rds.amazonaws.com:5432/bitbucket

jdbc.user=bitbucketuser

jdbc.password=bitbucketpass

1. Build the Bitbucket docker image from the Dockerfile

Ex docker build -t cicdpipeline/bitbucket:demo .

1. Docker login

docker login -username=<> --password=<> docker.io

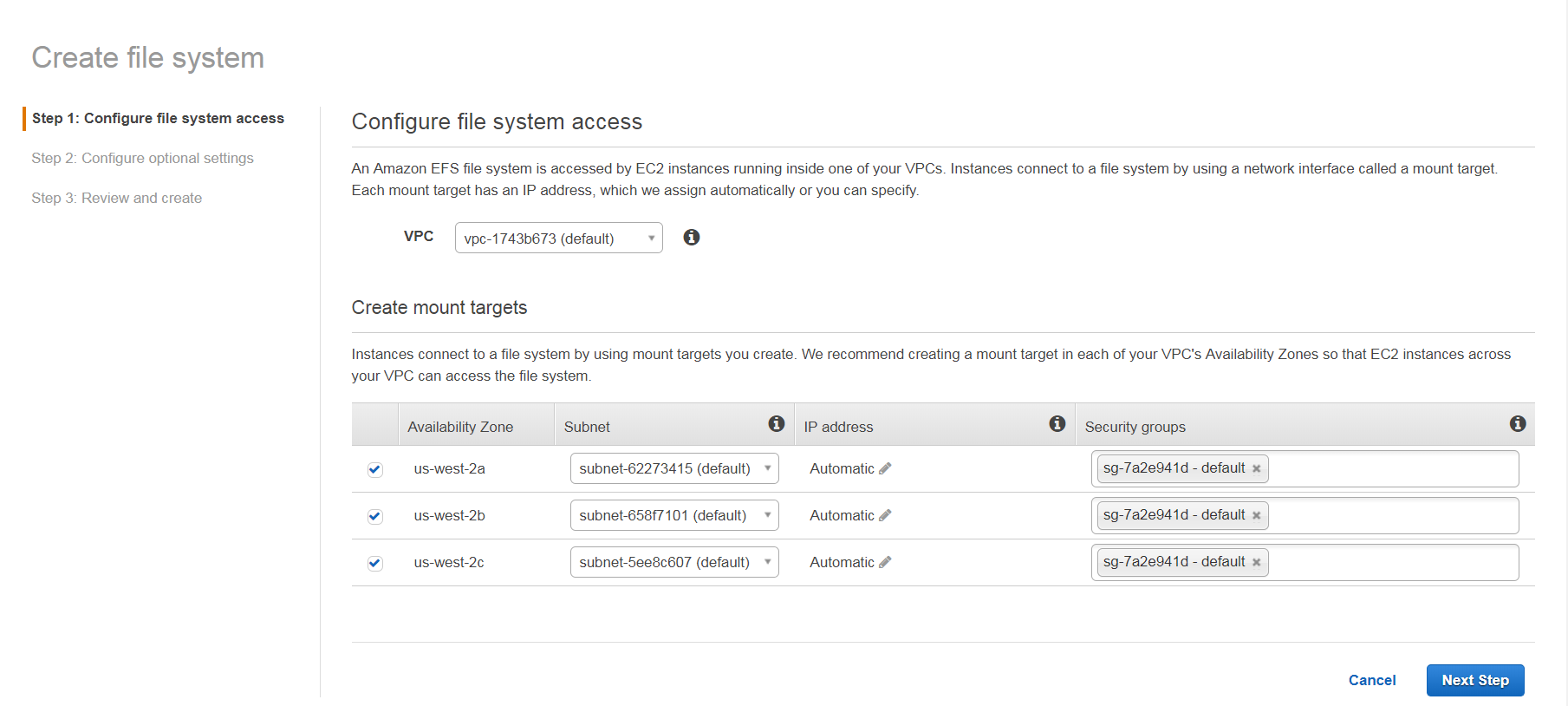
1. Push the image to docker repo

Docker push cicdpipeline/bitbucket:demo

1. Create the Kubernetes Cluster

--- Same as you explained us but with little change

1. Use worker node t2.medium instead of t2.small
2. Number of worker nodes to 2 instead of 1.
3. Creating EFS
4. Step1:
5. Select the VPC on to which KubernetesCluster is launched
6. Select on Subnet instead of 3 which is shown as default
7. Step2: Accept as it is
8. Step3: Accept and click on Create File System
9. Edit the EFS security group and add Port number “2049” as anywhere.
10. Note down the EFS IP address.



1. Replace the EFS ip address in the Kubernetes yaml file

Ex: volumes:

- name: bitbucket-data

nfs:

server: 172.20.46.50

path: "/"

1. Create a Pod using the Kubernetes file.
2. Create a Service
3. Describe the Service to get Endpoint/LoadBalancer URL
4. Access Bitbucket on <Endpoint>:7990
5. Test the pod and instance level test cases