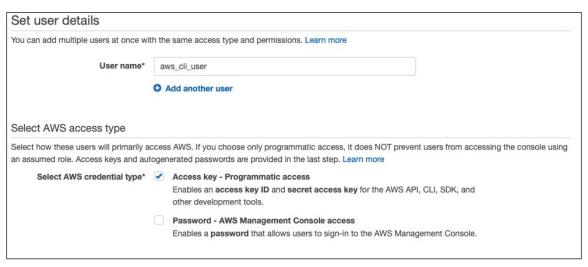
Docker Deployment on AWS Cloud

Add new user

Go to AWS \rightarrow IAM \rightarrow Users

Add new user

Select Access key — Programmatic access checkbox



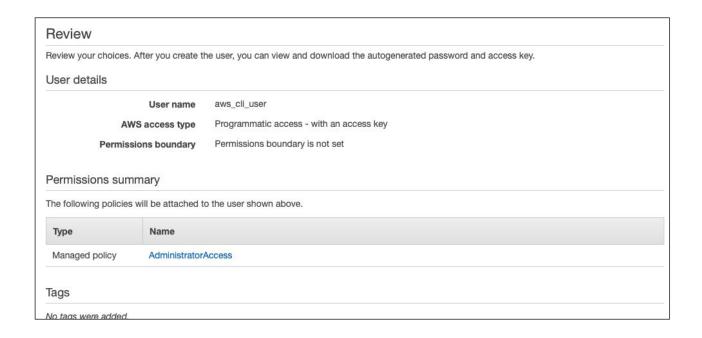
Attach policy

Give this user, administrator permissions for AWS Elastic Beanstalk resources. Attach the policy 'AdministratorAccess-AWSElasticBeanstalk' to the list of permissions.



Access credentials

Skip the tags for this user. Note down access key and access secret.



AWS Elastic Beanstalk CLI

What is AWS Elastic Bean?

Introduction, refer the slides

Installation of CLI

https://docs.aws.amazon.com/elasticbeanstalk/latest/dg/eb-cli3-install.html

https://github.com/aws/aws-elastic-beanstalk-cli-setup

Elastic Bean Initiate

Go to the project directory containing the ML code with Dockerfile.

Run this command

eb init

Follow the prompts and input your **access key id** and **secret access key** if prompted. These are the settings I used for my specific project. The region will differ depending on your location and latency.

- Default region: 16
- Select an application to use: 3 [Create new Application]
- Application name: flask-api
- Docker: Y
- Select platform branch: 1 (Docker running on 64bit Amazon Linux 2)
- CodeCommit: n
- SSH: n

You will notice that the AWS Flastic Reanstalk CLI will have created an elasticheanstalk

eb init should do the following.

You will notice that the AWS Elastic Beanstalk CLI will have created an .elasticbeanstalk folder containing a config.yml detailing deployment configurations.

Elastic Bean Application Create

Now in the same project folder, run the following command

eb create

Elastic Beanstalk will automatically handle all the infrastructure deployment required to help you deploy your project so you can concentrate on developing the codebase. It will go through the process of automatically creating all the necessary resources such as launching an EC2 instance, setting load balancer, auto scaling groups and routes to serve your application.

Upon successful deployment, Elastic Beanstalk will return an address where the application will be available.