ECONSULTANT – DEPLOYMENT GUIDE

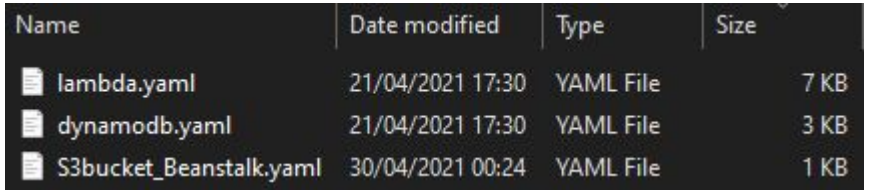
STEP 1 - LOCATE .YAML FILES

Find CloudFormation .yaml files located in the “eConsultant – code” folder.

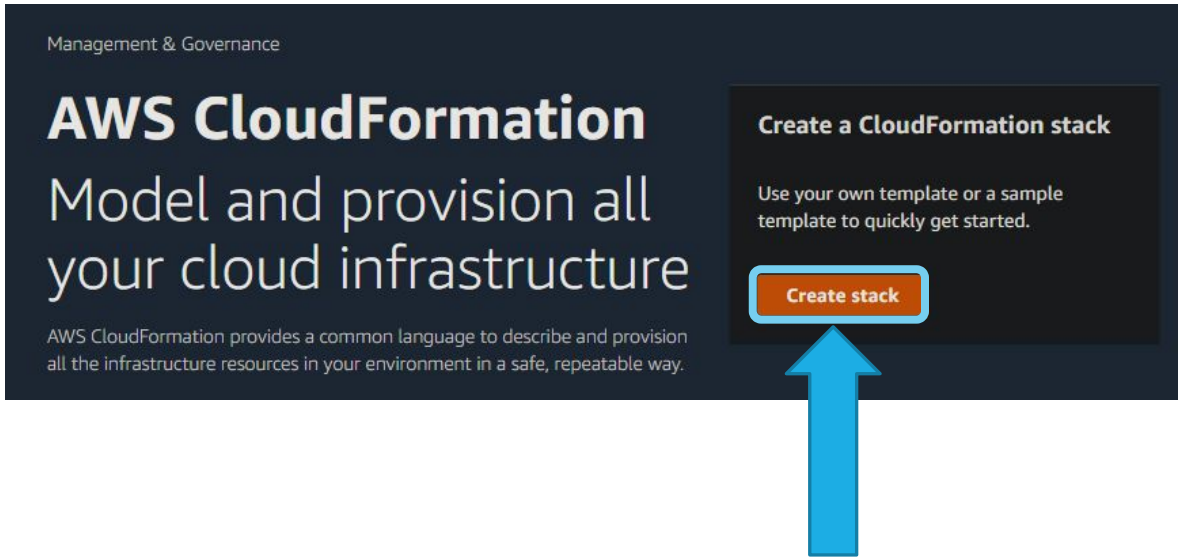
There are three files:

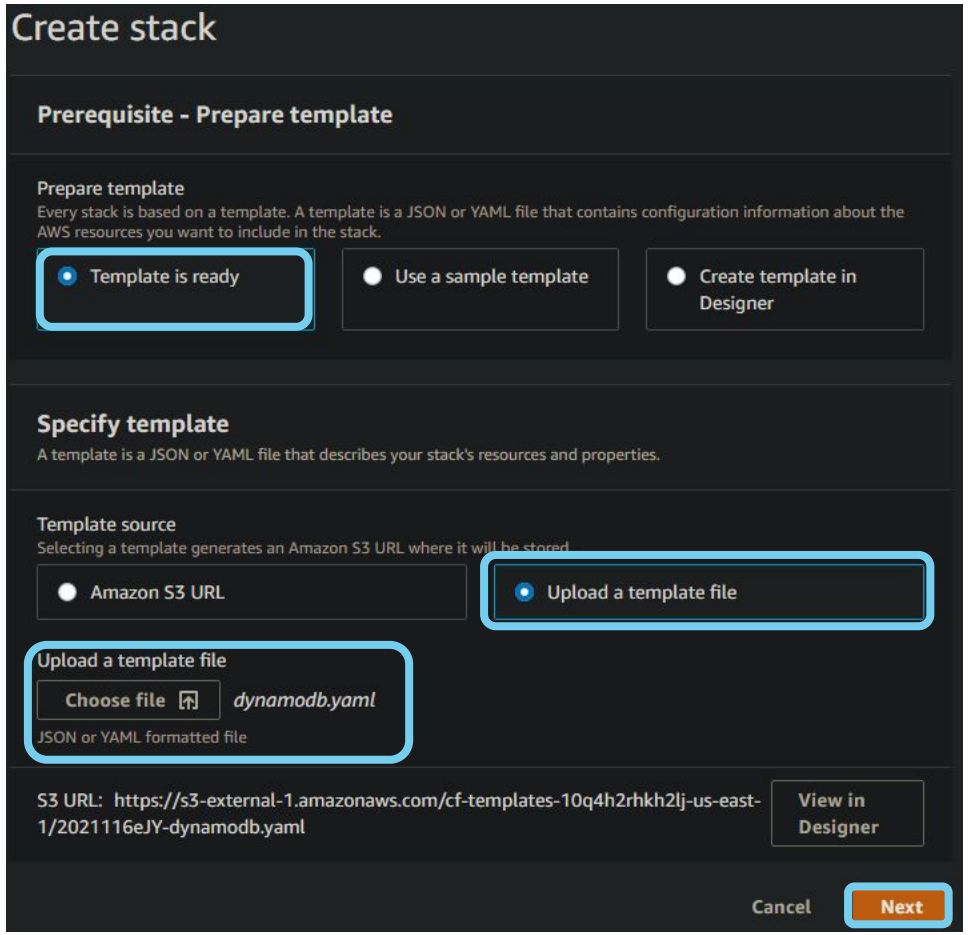
1. dynamodb.yaml - creates three empty tables in DynamoDB
2. S3bucket_Beanstalk.yaml - creates Beanstalk application and empty S3 bucket
3. lambda.yaml - creates three Lambda functions and HTTP APIs to control EC2

Directory: Consultancy App › AWS › CloudFormation



STEP 2 - CREATE AWS CLOUD FORMATION STACKS

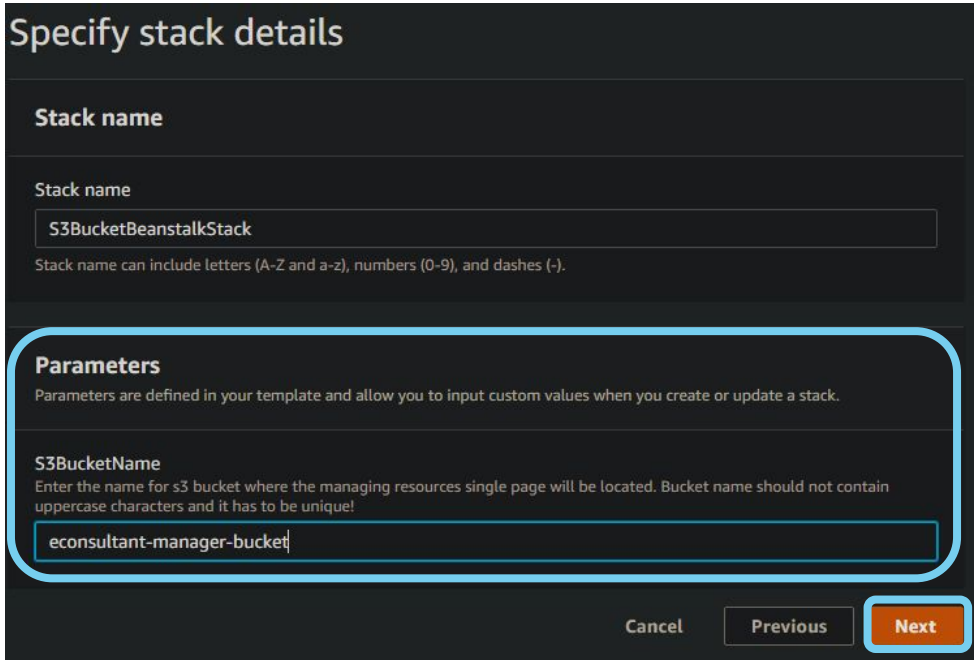




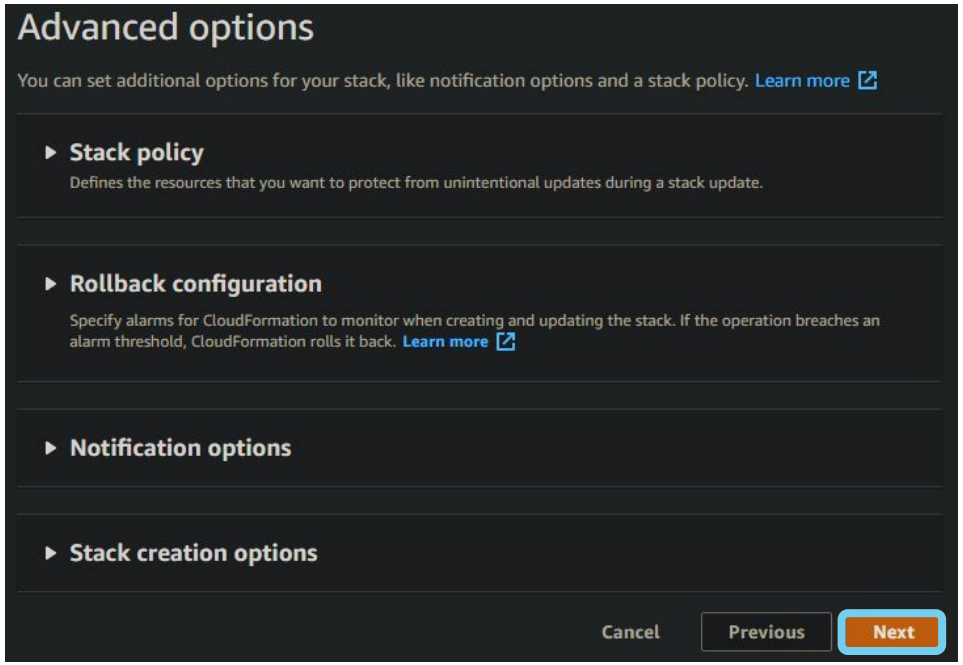
Choose .yaml template file you want to use for the stack and click “next” button.

STEP 2 - CREATE AWS CLOUD FORMATION STACKS

Give the name to the stack, fill out the parameters (bucket name) and click “next”.

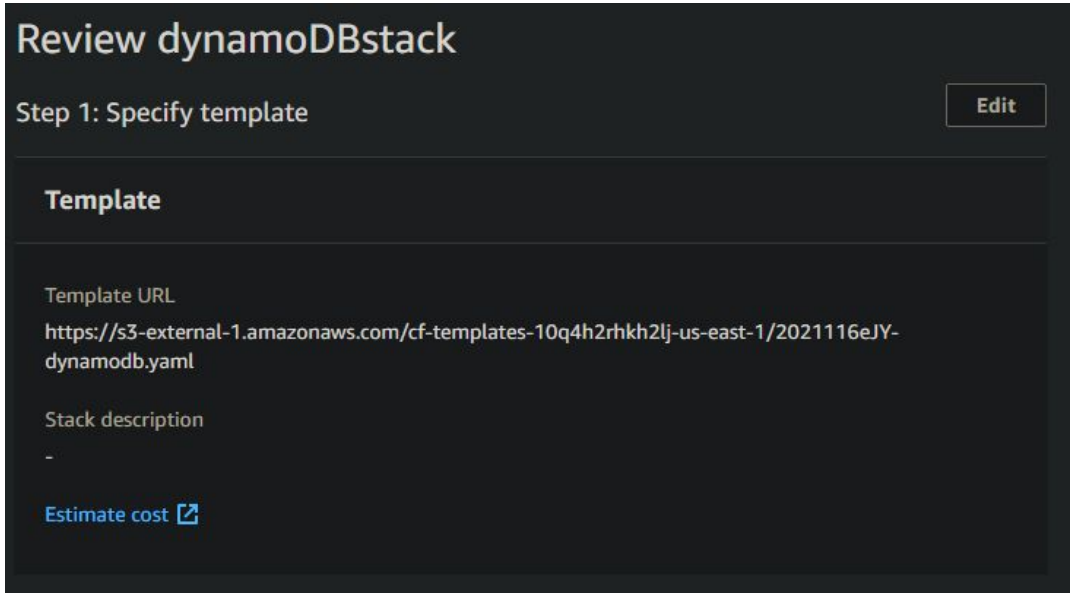


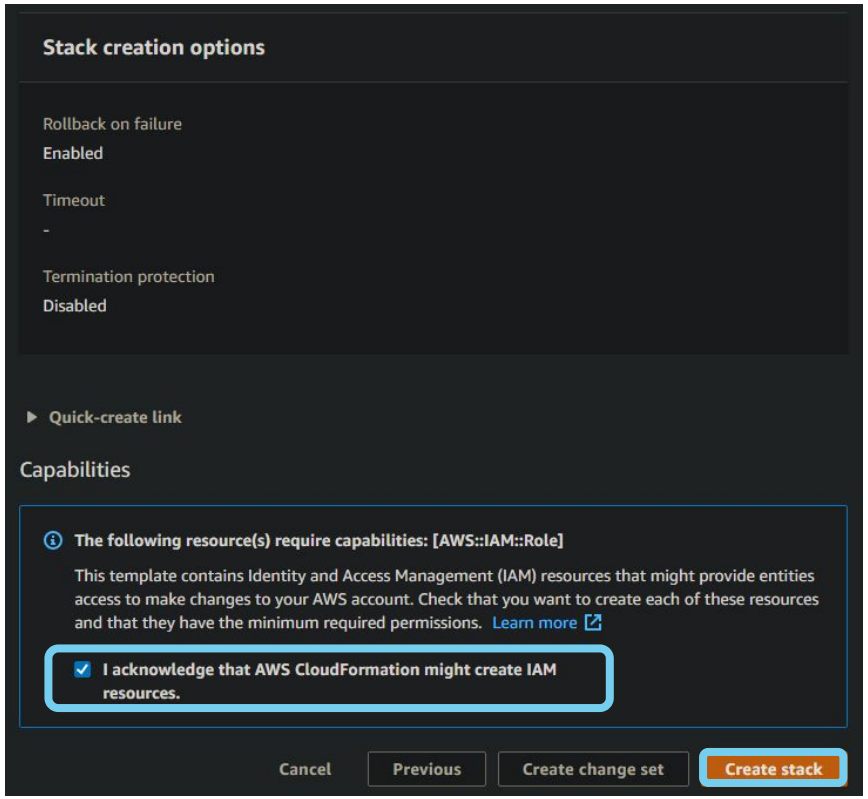
On the next page leave all the fields blank and click “next” again.



STEP 2 - CREATE AWS CLOUD FORMATION STACKS

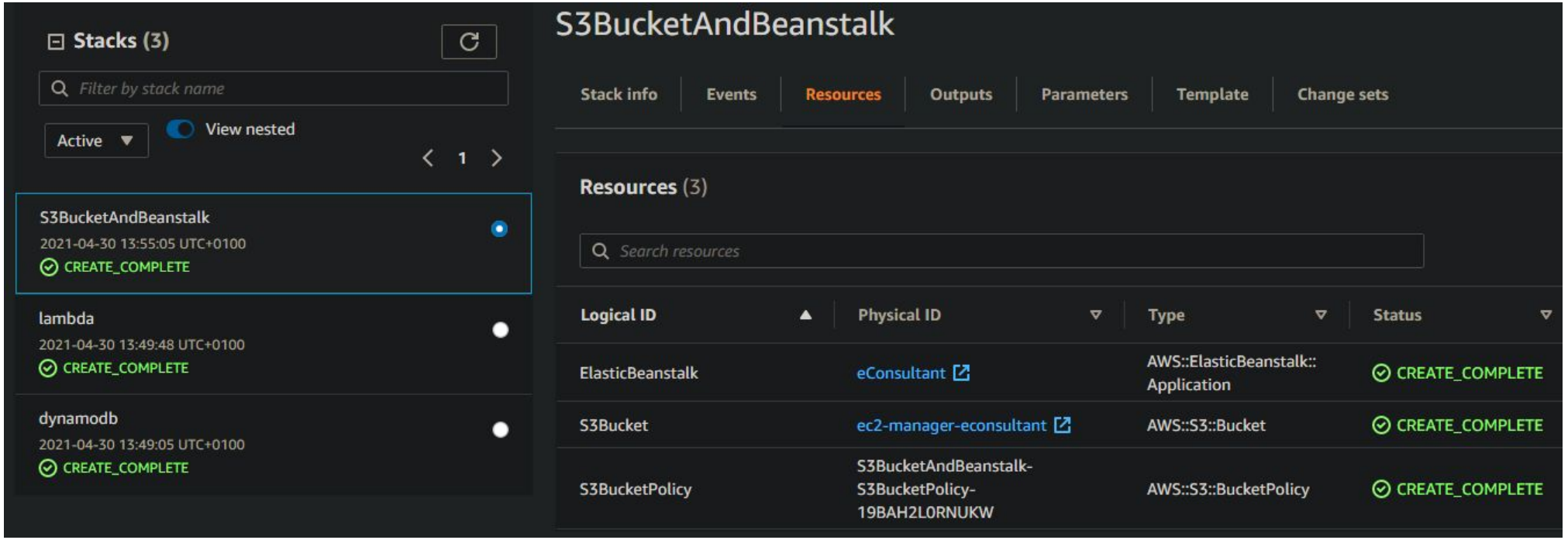
Finalise creating the stack by simply reviewing the stack and ticking off the requirements before clicking “create stack” button.





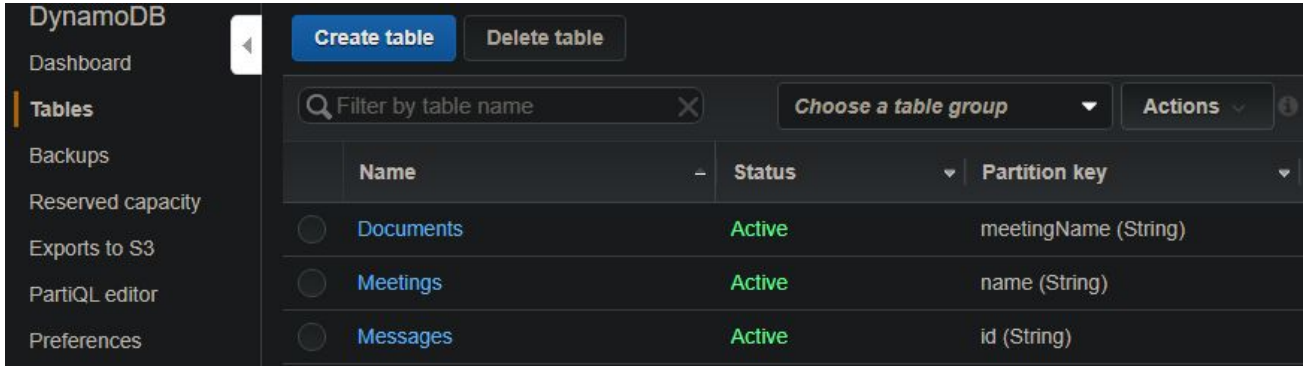
STEP 2 - CREATE AWS CLOUD FORMATION STACKS

After following the previous steps for each template you should see all three stacks in your CloudFormation.

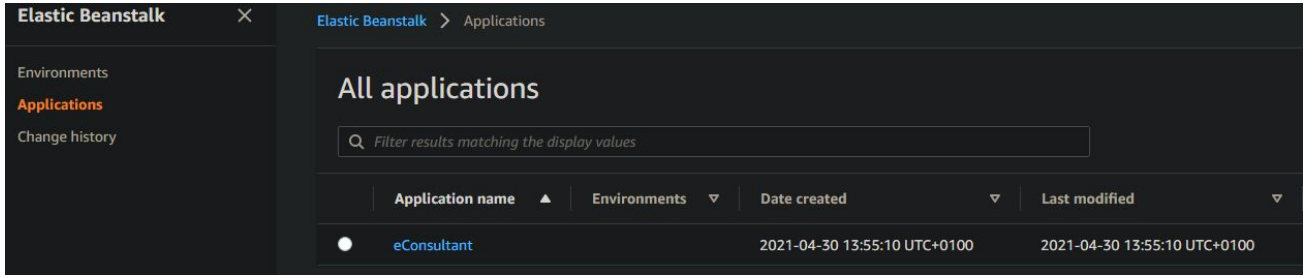


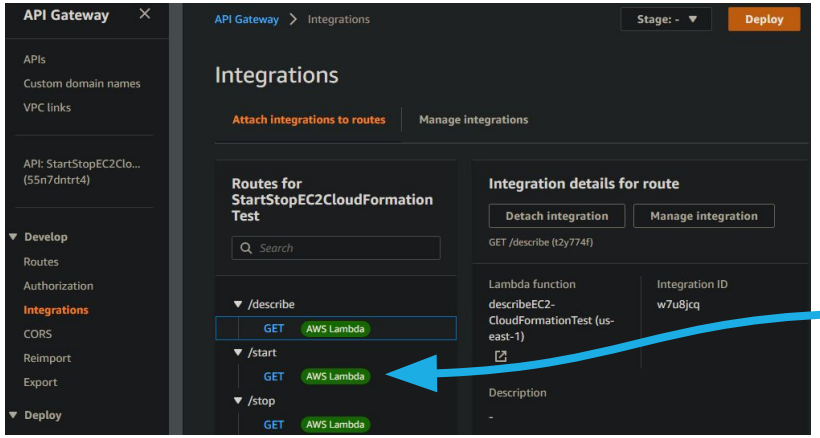
STEP 3 - REVIEW WHAT HAS BEEN CREATED

Go to DynamoDB and check if tables have been created.



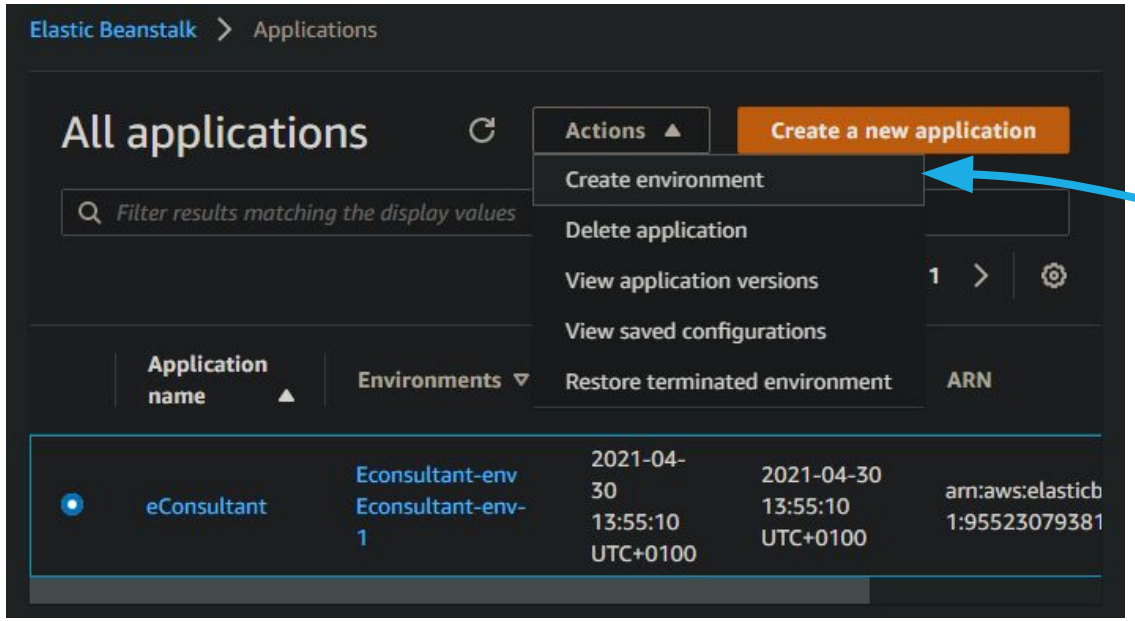
Go to Elastic Beanstalk to see if application has been created.





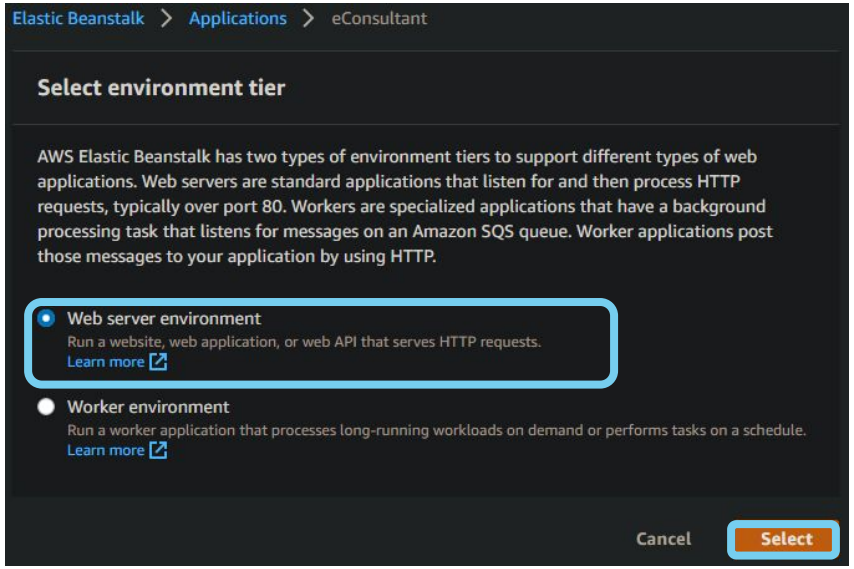
Go to API Gateway to see if HTTP API routes has been created with integration to AWS Lambda.

STEP 4 - CREATE A NEW ENVIRONMENT IN BEANSTALK



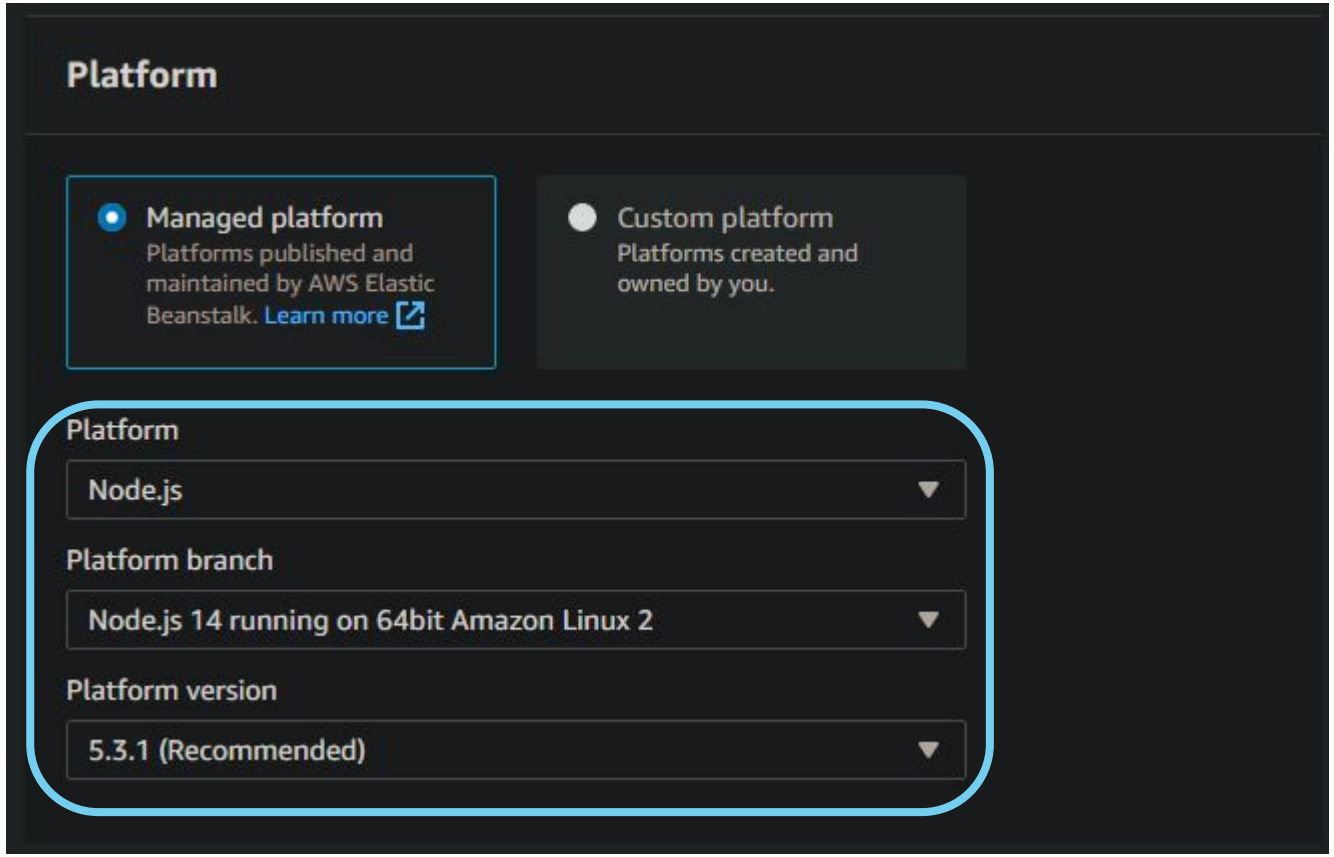
Select your application, click “Actions” and choose “Create environment” for your application.

Choose Web server environment tier and click “Select” button.



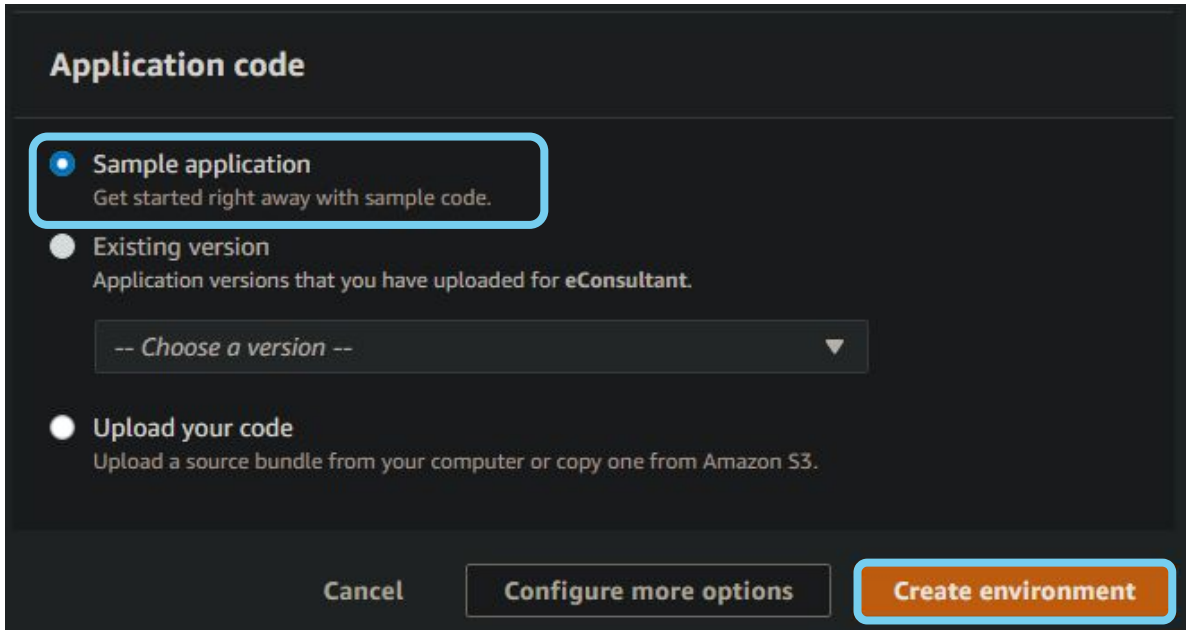
STEP 4 - CREATE A NEW ENVIRONMENT IN BEANSTALK

Choose Node.js as your managing platform.

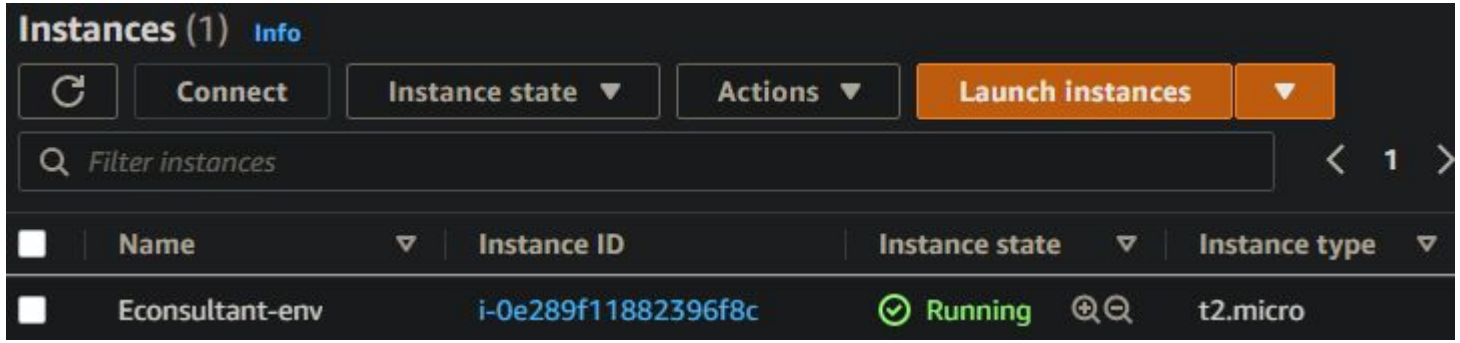


STEP 4 - CREATE A NEW ENVIRONMENT IN BEANSTALK

Choose “Sample application” code and click “Create environment”.



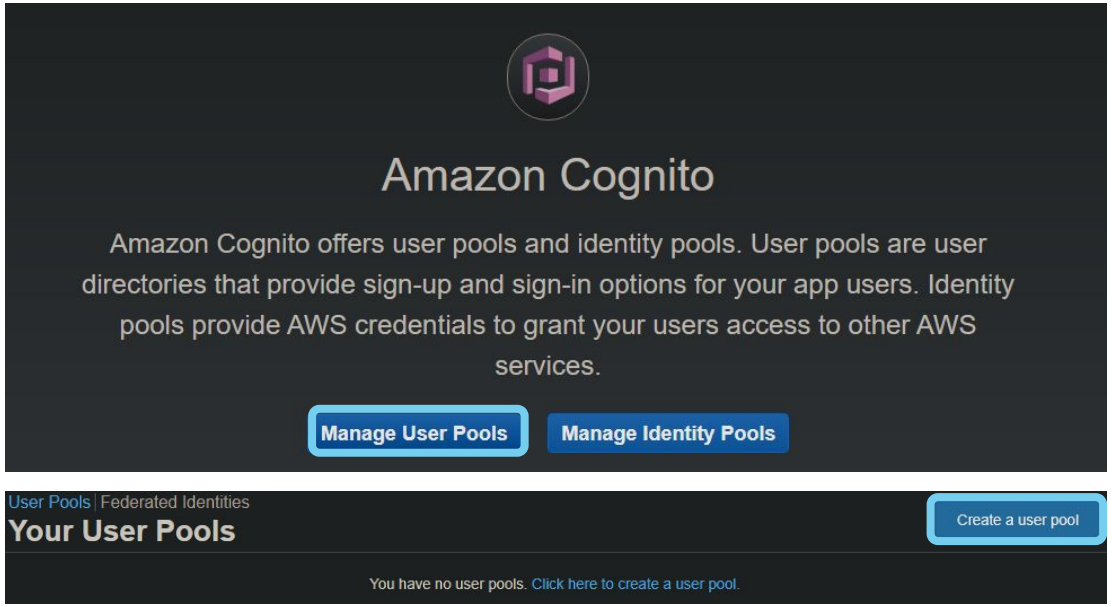
After successful creation of the environment, it can be found in EC2 instances

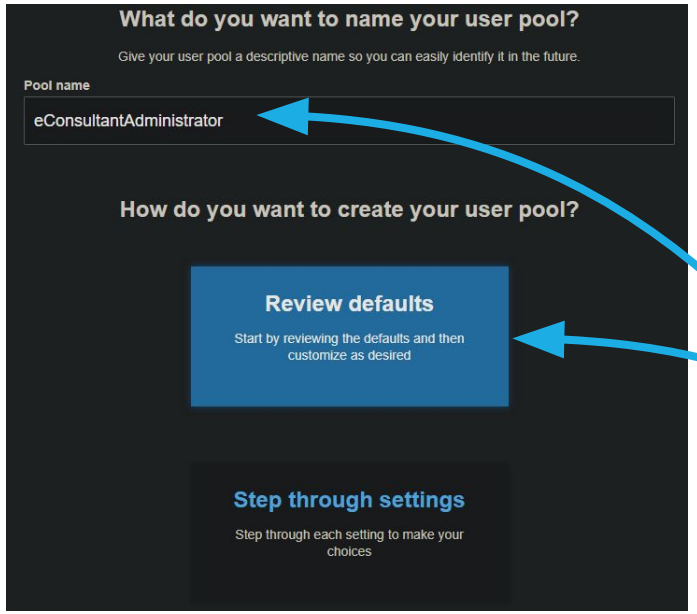


STEP 5 - CONFIGURE AMAZON COGNITO

Go to Amazon Cognito service and click “Manage User Pools”.

Click “Create a user pool”.

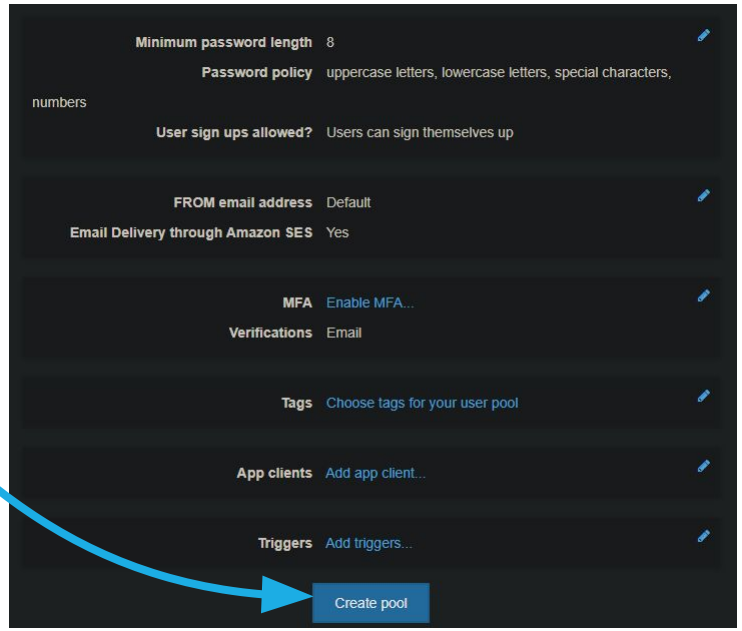


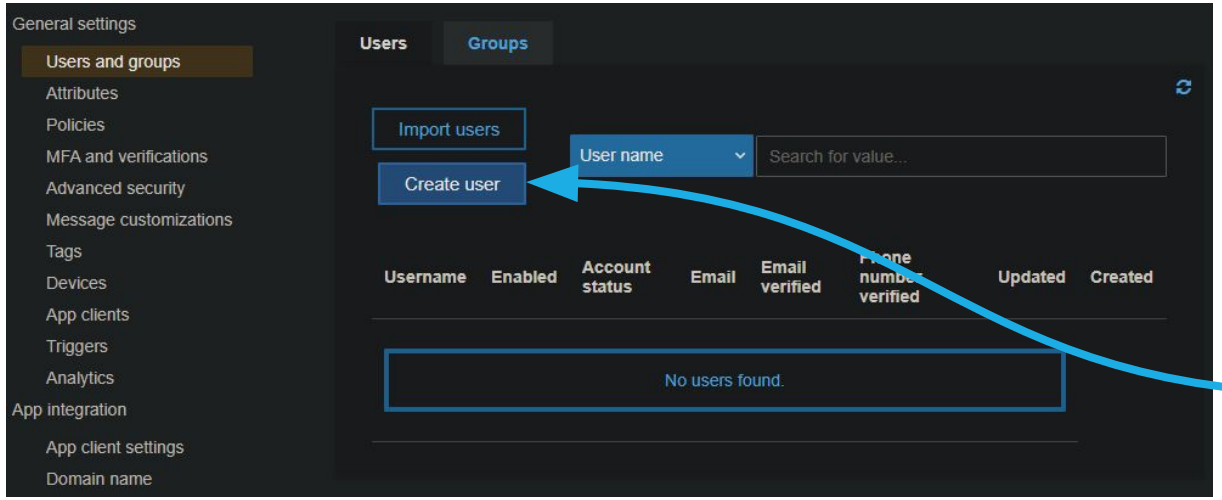


Give a name to the user pool and choose “Review defaults” option.

STEP 5 - CONFIGURE AMAZON COGNITO

After reviewing settings click "Create pool".





Go to "Users and groups" and create user for yourself.

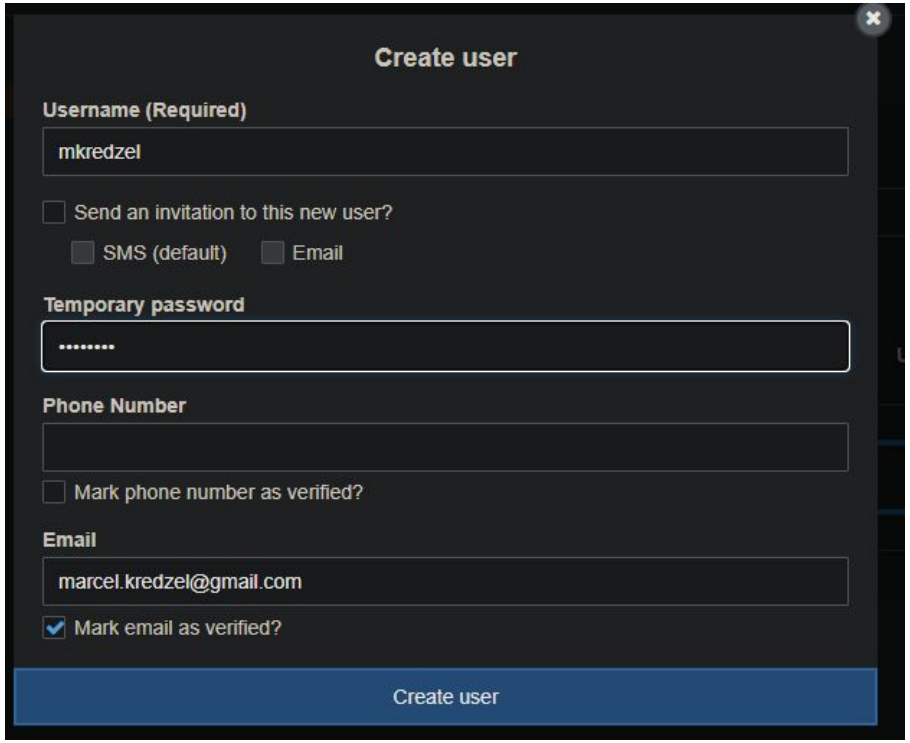
STEP 5 - CONFIGURE AMAZON COGNITO

Enter your:

- Username
- Temporary password which you will be able to change during the first login to the website
- Email address

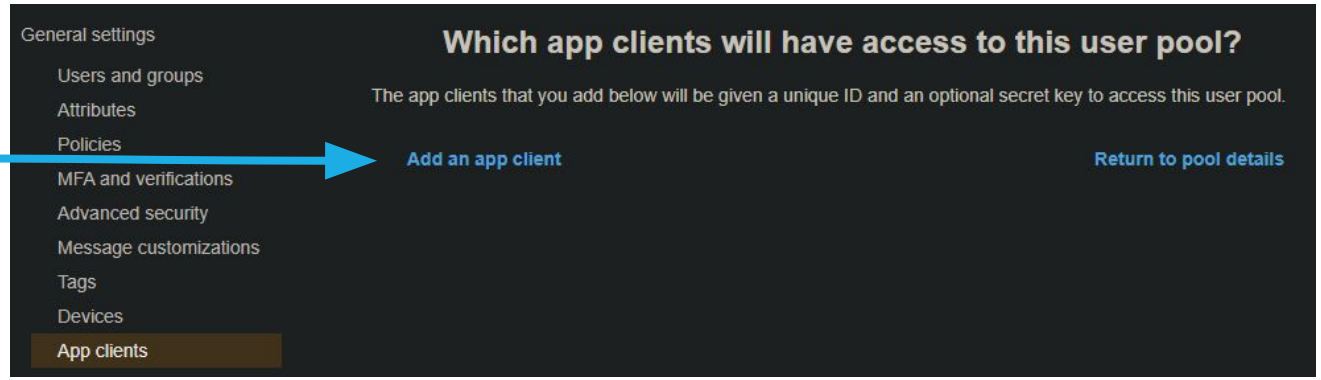
Uncheck:

- “Send an invitation to this new user?”
- “Mark phone number as verified?”



STEP 5 - CONFIGURE AMAZON COGNITO

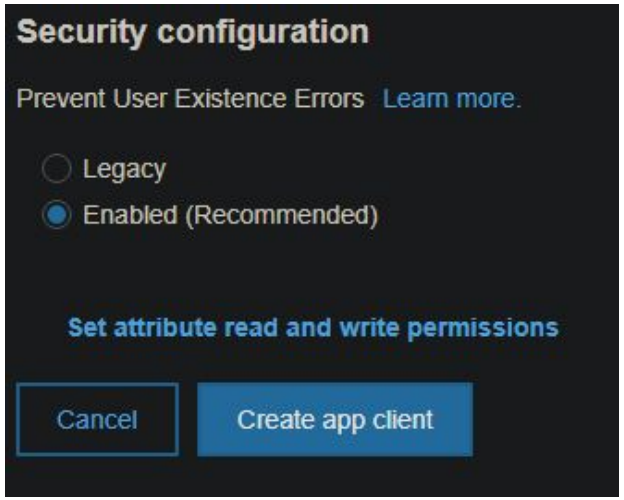
Go to “App clients” and add an app client.

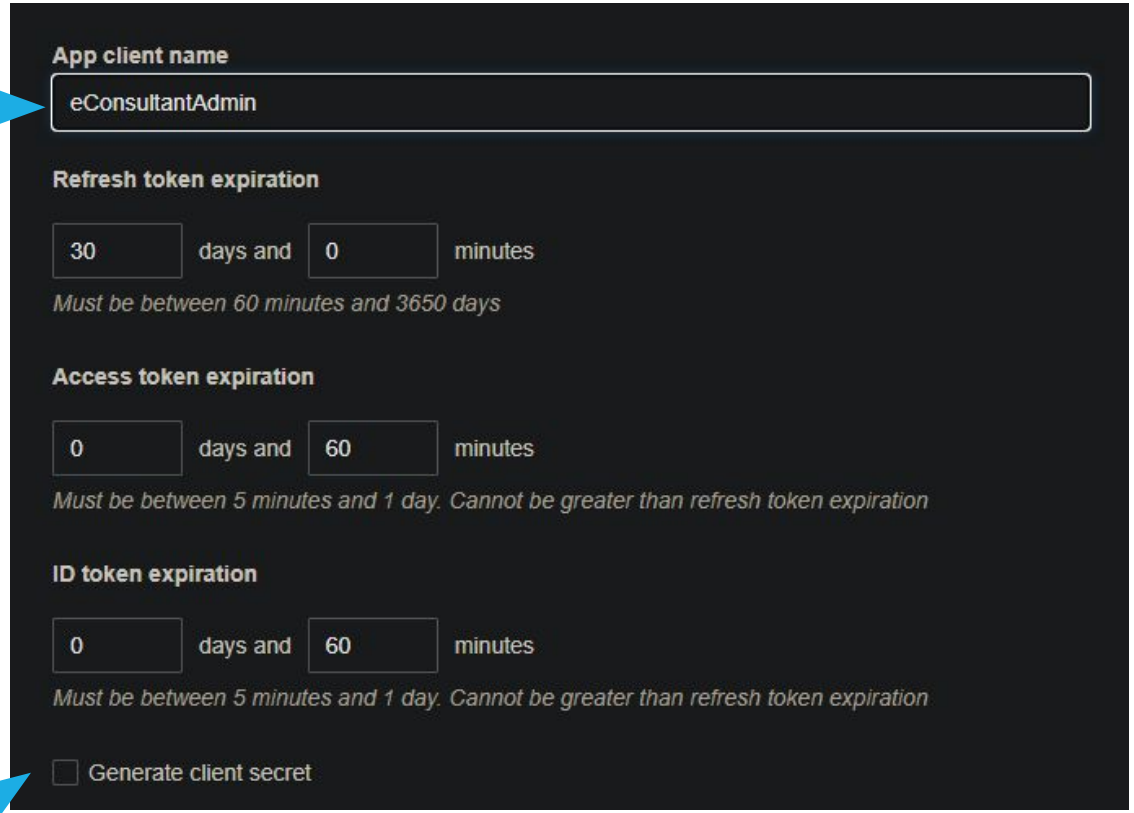


STEP 5 - CONFIGURE AMAZON COGNITO

Enter App client name and uncheck "Generate client secret".

Click "Create app client"

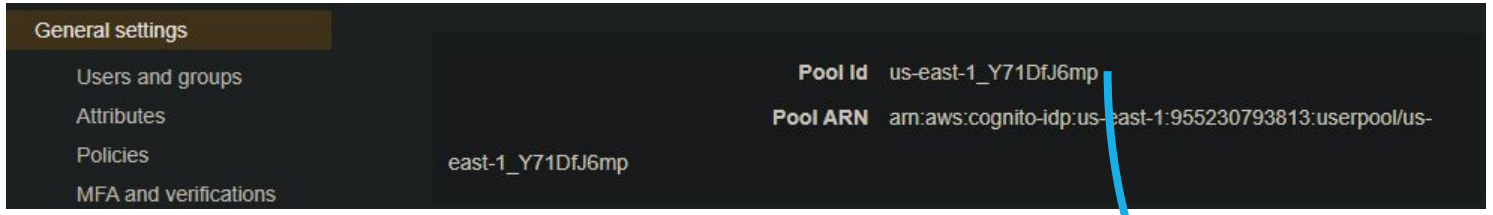


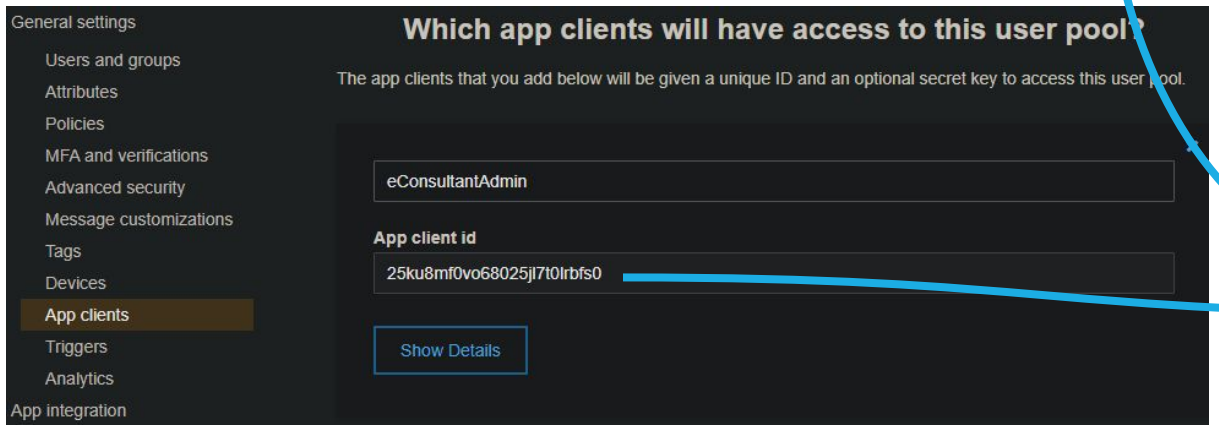


STEP 6 - ADD COGNITO CREDENTIALS TO THE CODE

Locate and open two config.js files located in: Consultancy App › Beanstalk › public › assets › scripts

and: Consultancy App › AWS › S3 Bucket



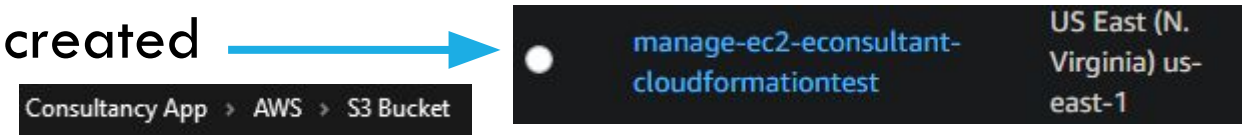


Use Pool Id and App client Id from Amazon Cognito to replace credentials in config.js

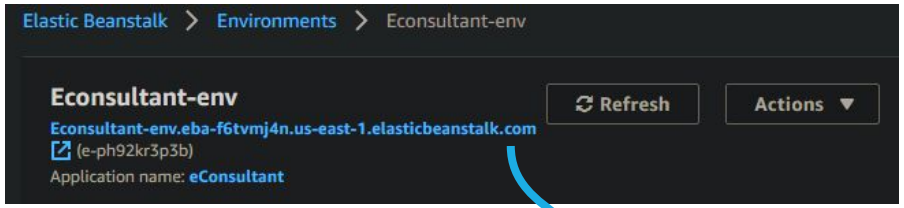
```
window._config = {
    cognito: {
        userPoolId: 'us-east-1_Y71DfJ6mp',
        region: 'us-east-1',
        clientId: '25ku8mf0vo68025jl7t0lrbfs0'
    },
};
```

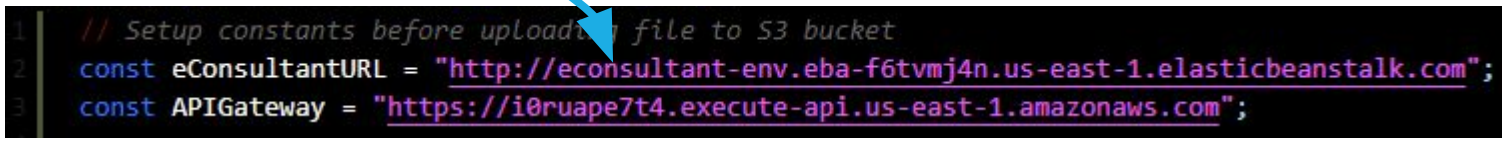
STEP 7 - UPLOAD FILES TO S3 BUCKET

Lastly check if S3 bucket has been created and find files in “S3 Bucket” folder



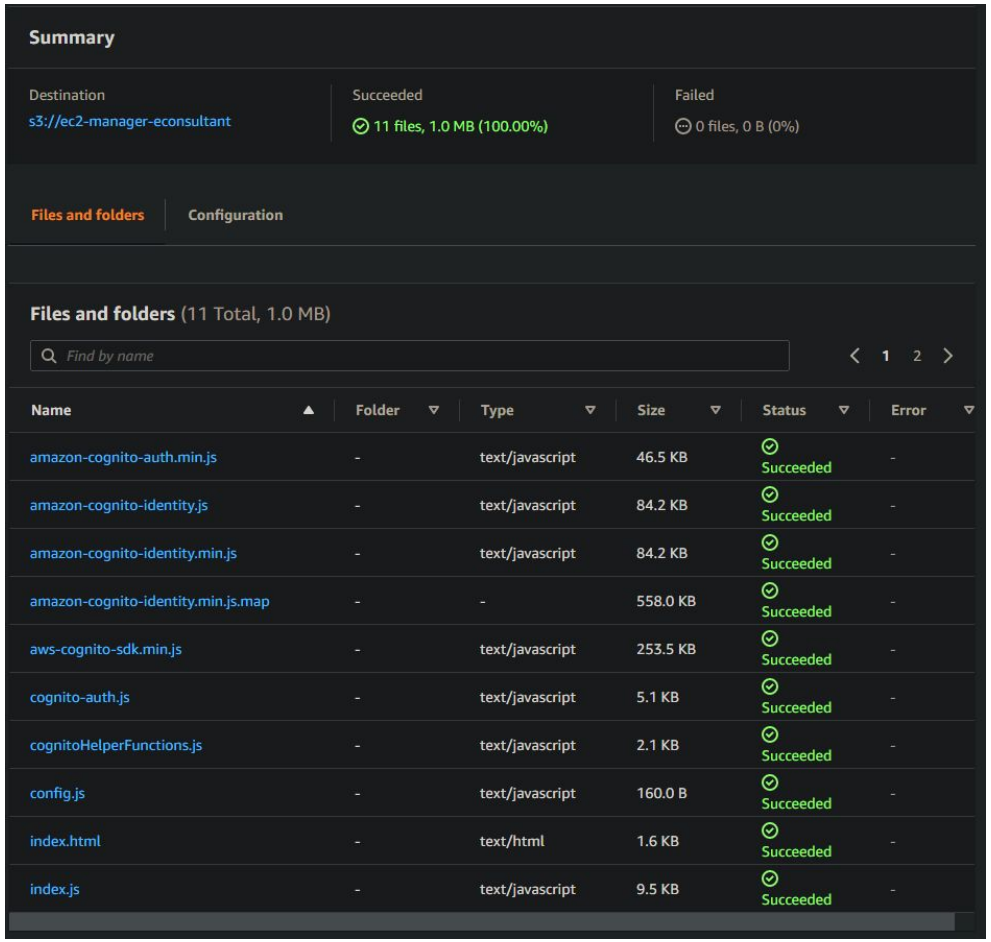
Open index.js file and edit API Gateway HTTP links and eConsultant Elastic Beanstalk link.





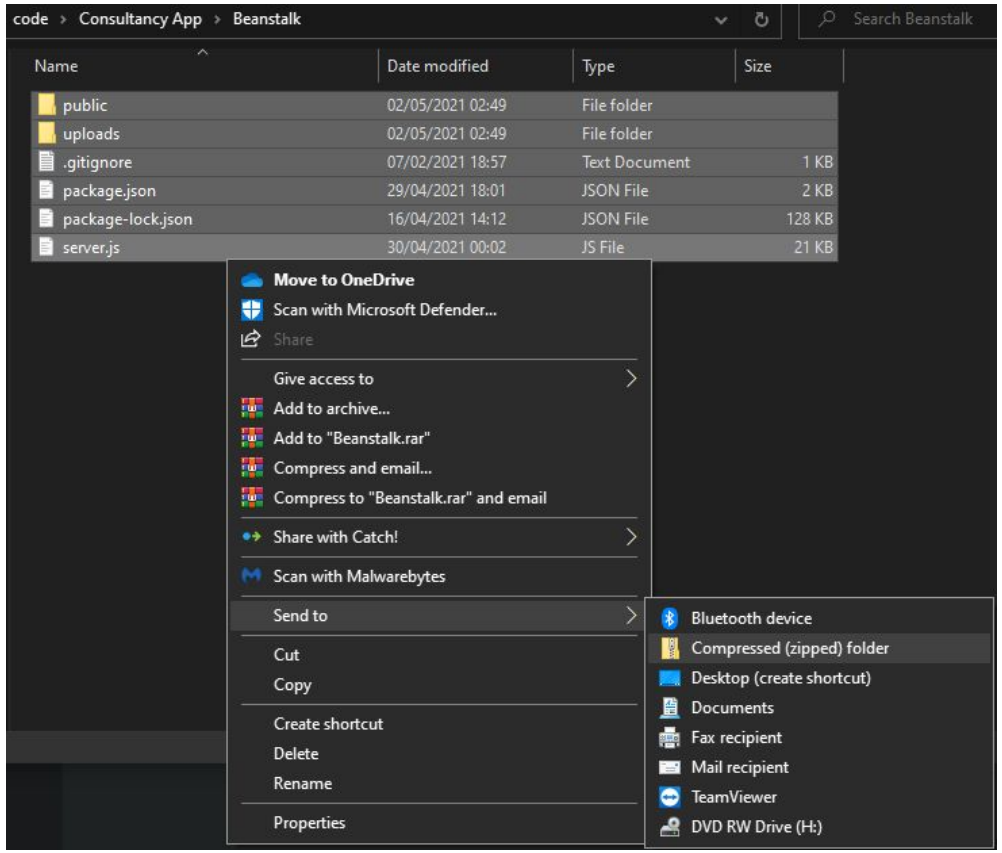
STEP 7 - UPLOAD FILES TO S3 BUCKET

Once changes to the files are made you can upload all files to S3 bucket created earlier.

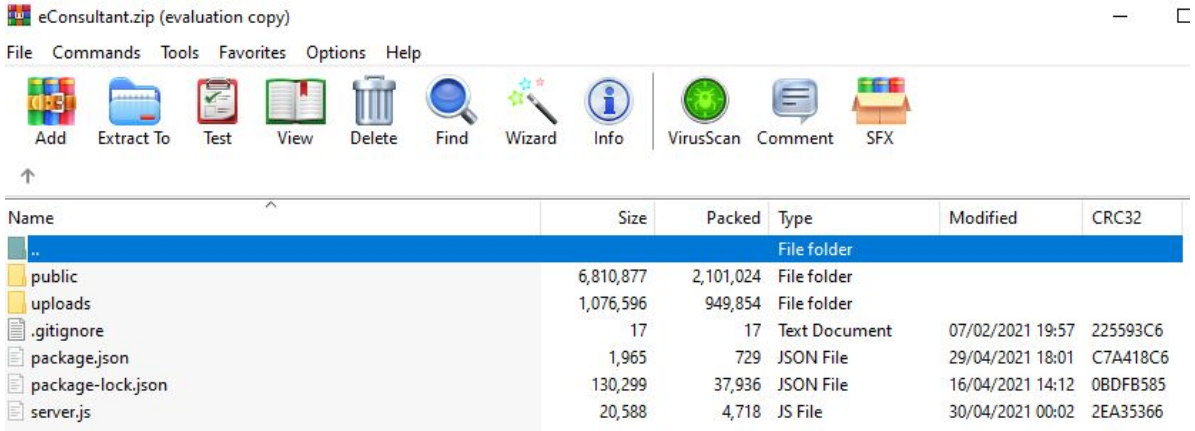


STEP 8 - UPLOAD ECONSULTANT CODE AND DEPLOY IT

Zip the files inside “Beanstalk” folder.

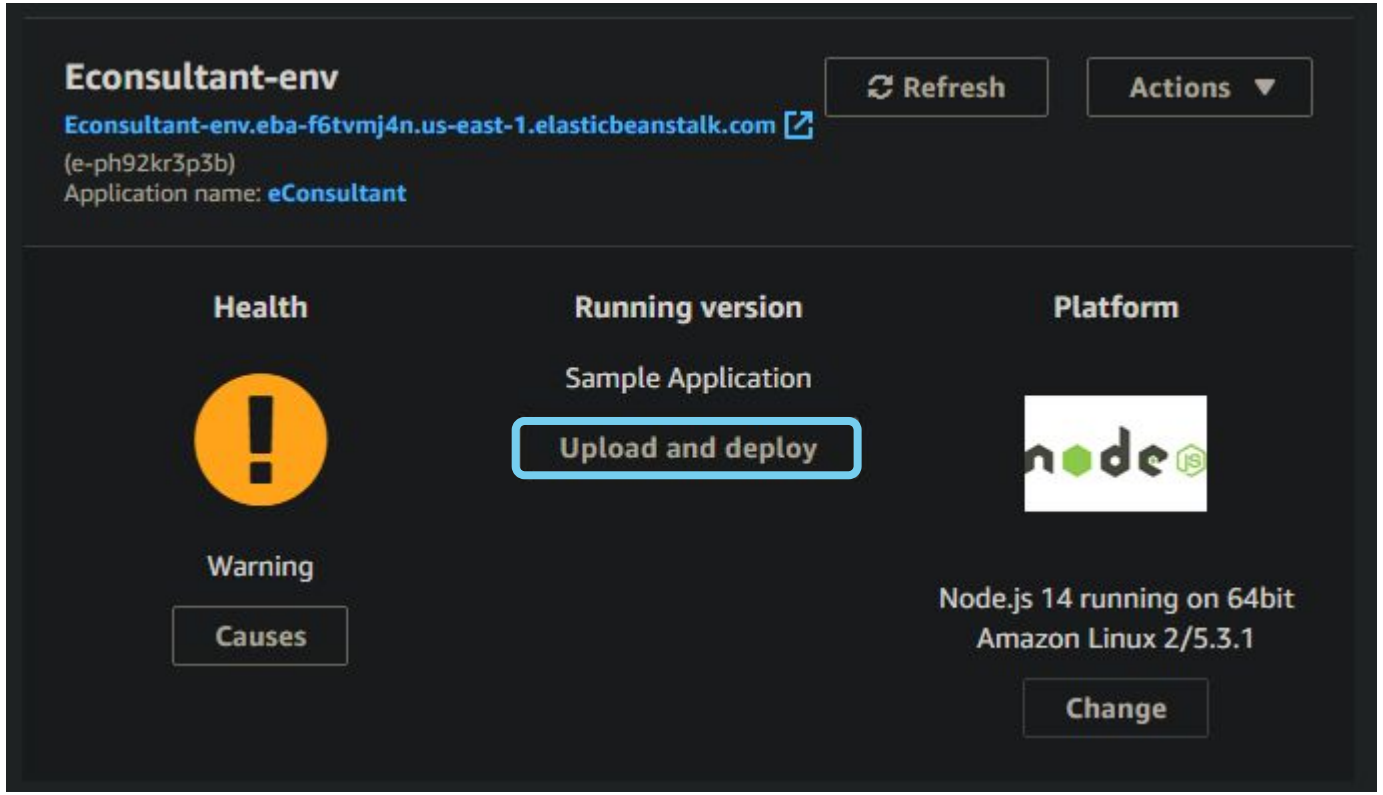


After opening the .zip file you should see following folders and files.



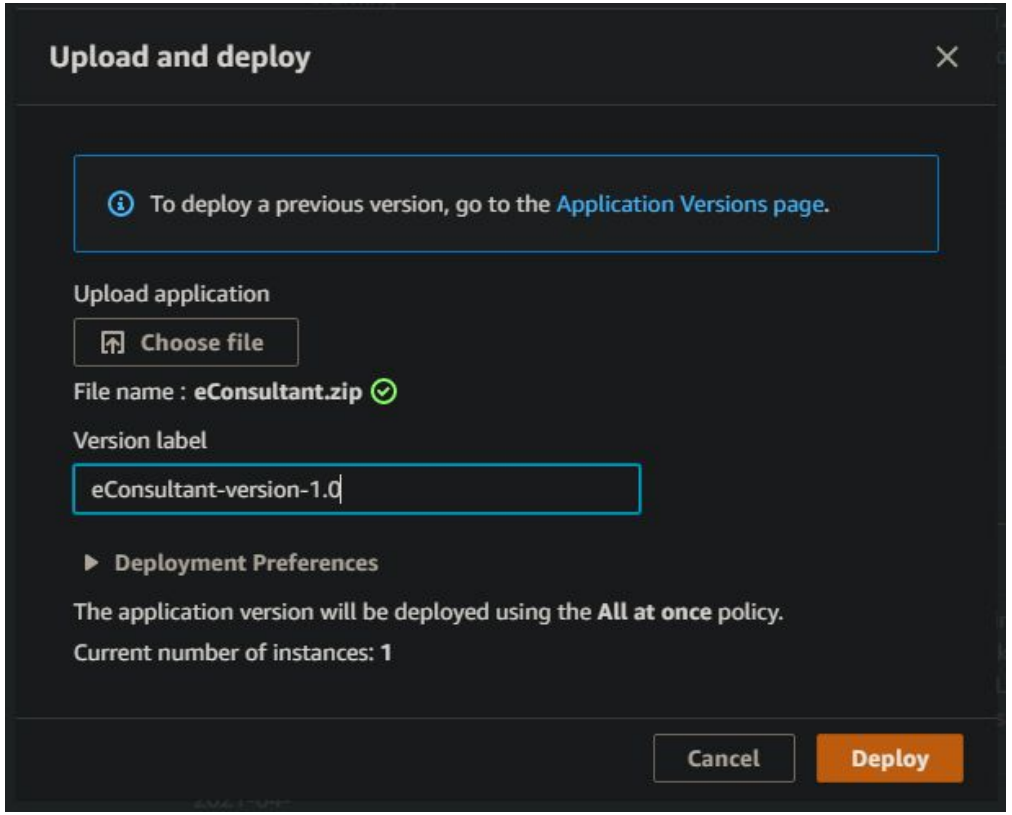
STEP 8 - UPLOAD ECONSULTANT CODE AND DEPLOY IT

Go back to Elastic Beanstalk and click “Upload and deploy”. Please do not mind the warning. It comes from probable limitations to AWS Educate account.



STEP 8 - UPLOAD ECONSULTANT CODE AND DEPLOY IT

Choose the zipped files, label the version of the deployment and click “Deploy”.

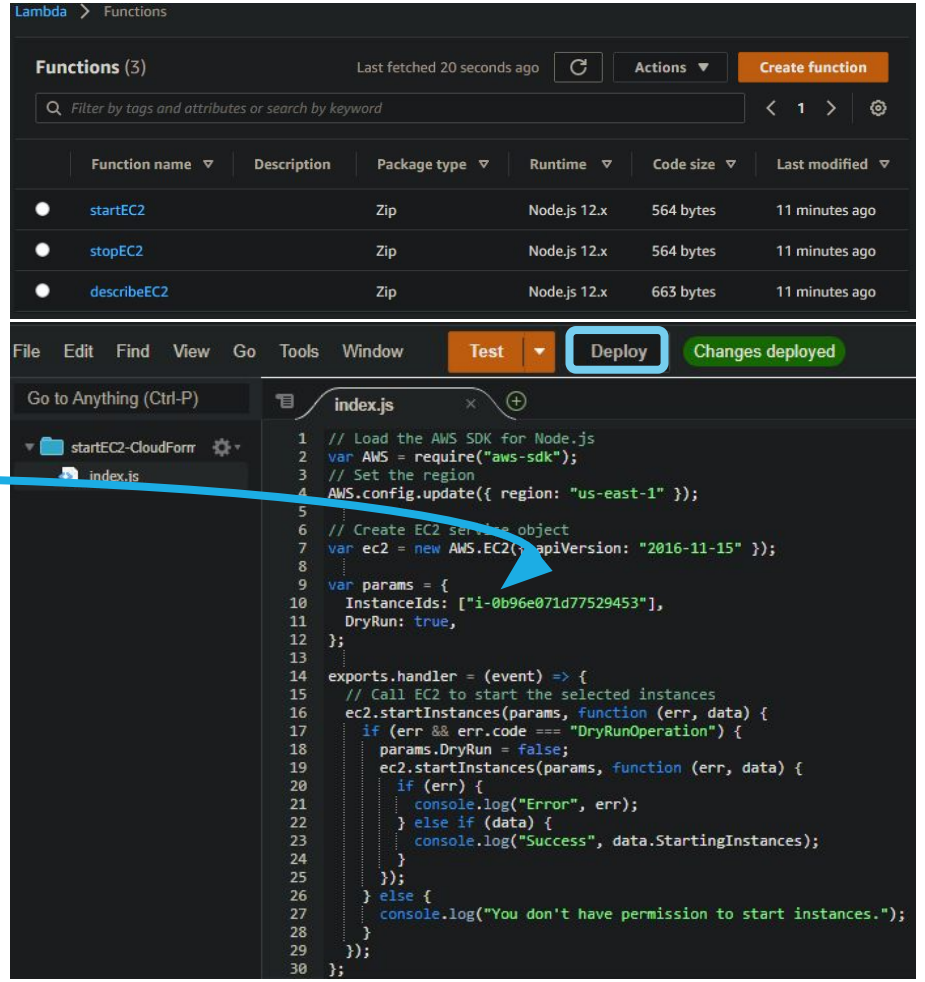


STEP 9 - REPLACE EC2 INSTANCE ID IN LAMBDA

If lambda stack was built successfully, you should be able to see three new functions in AWS Lambda.

You have to go to all three functions and change the id of the EC2 instance that you want to control.

Do not forget to save and click “Deploy” after making changes to these two functions.



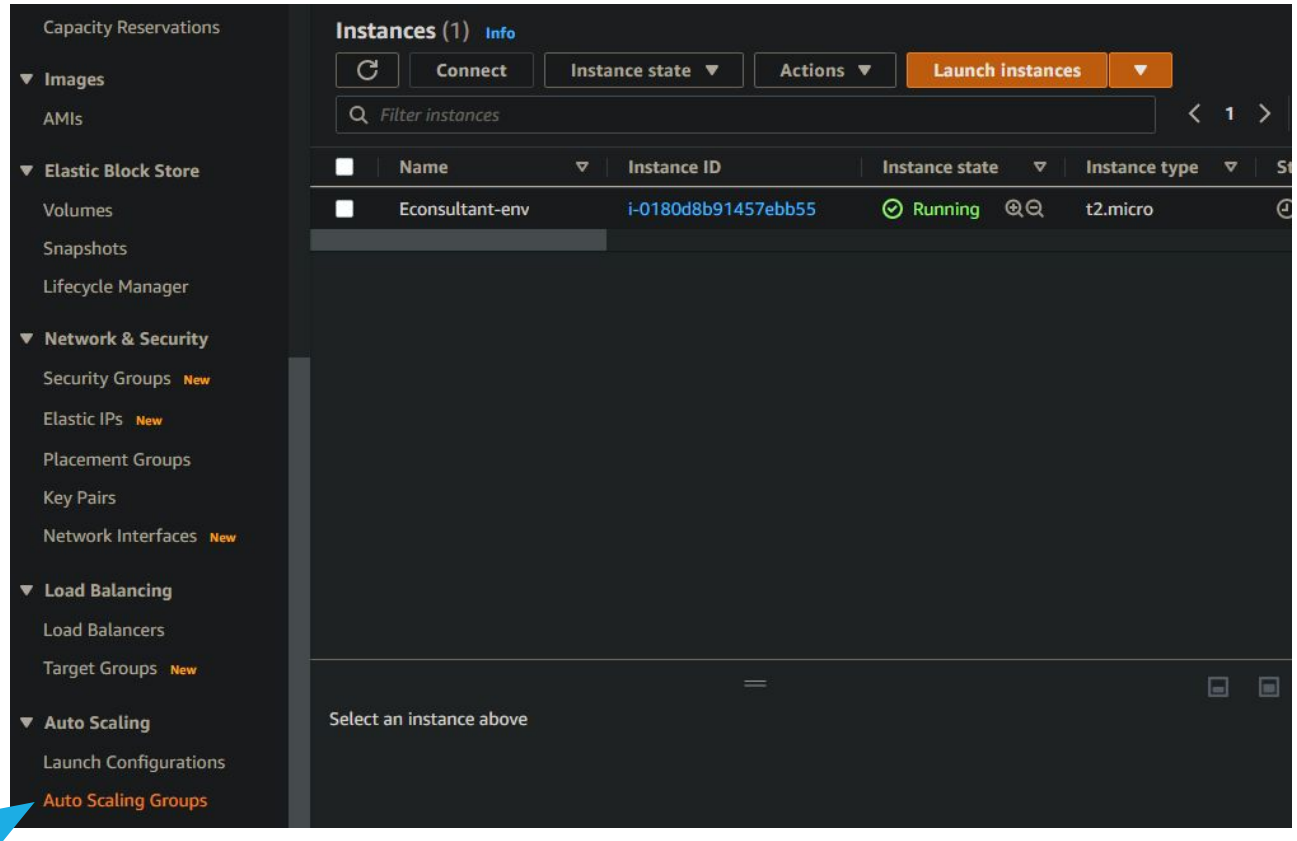
STEP 10 - REMOVE HEALTH CHECK FROM EC2 INSTANCE

Auto Scaling Groups are restarted after every code deployment of the application.

Please keep in mind that this step has to be completed after every update of code to the Elastic Beanstalk!

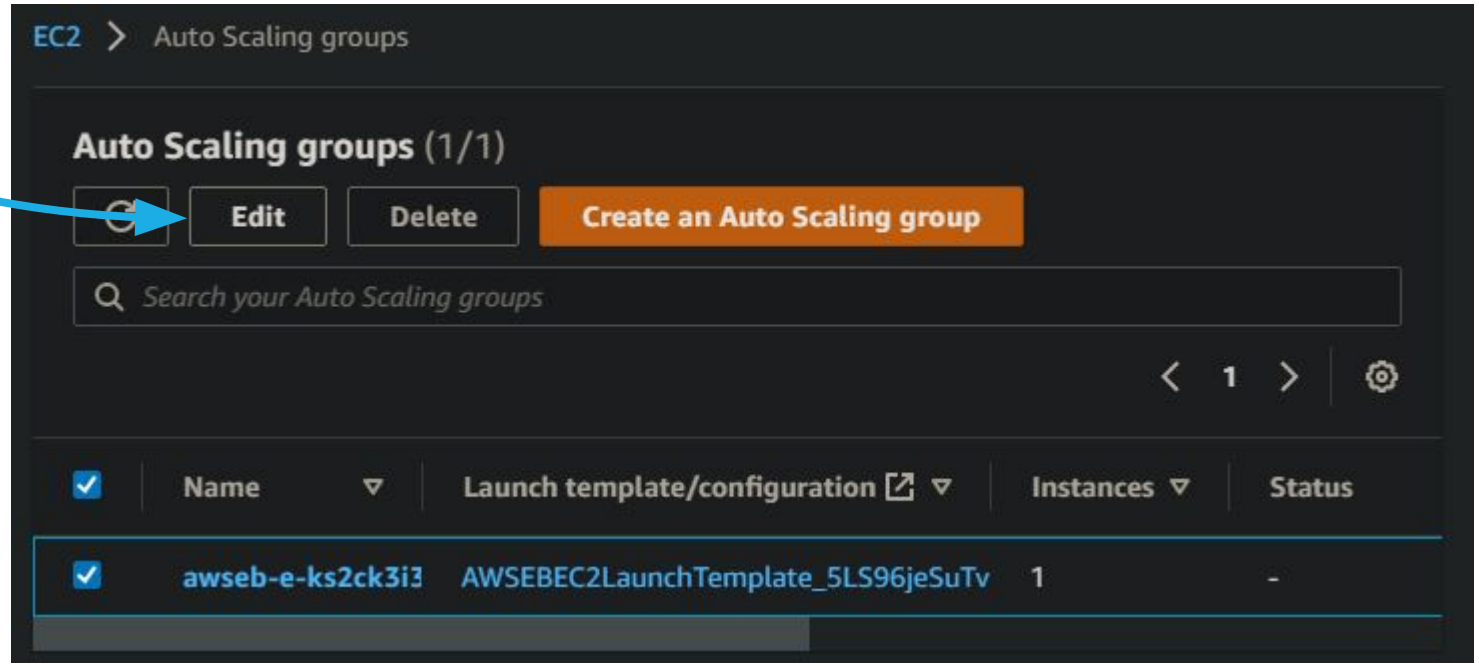
STEP 10 - REMOVE HEALTH CHECK FROM EC2 INSTANCE

Go to “Auto Scaling Groups” in EC2 navigation menu.



STEP 10 - REMOVE HEALTH CHECK FROM EC2 INSTANCE

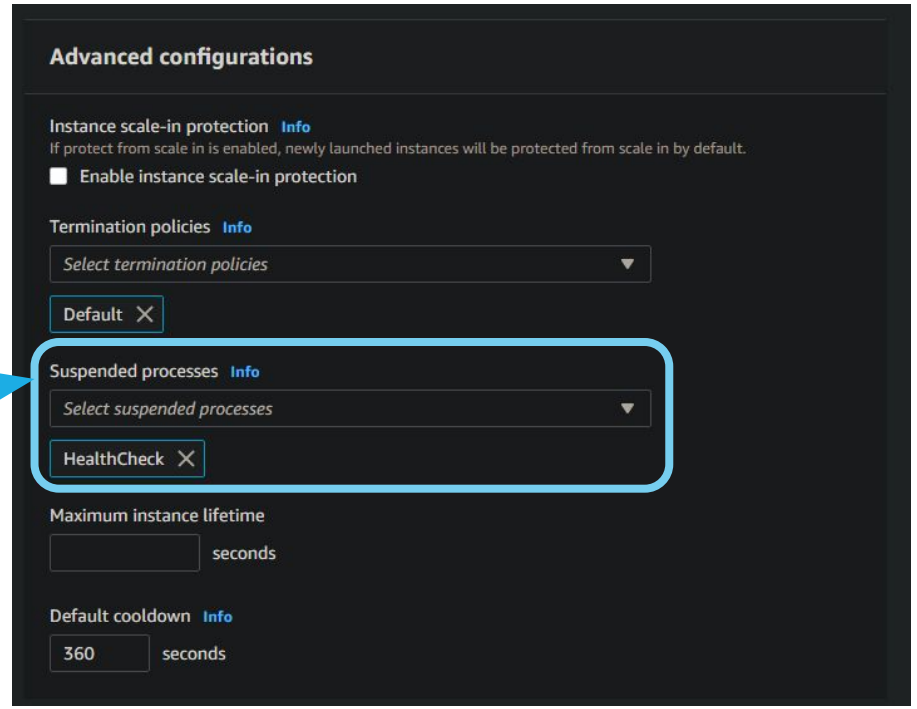
Select the group of the instance that Elastic Beanstalk has created and click “edit”.



STEP 10 - REMOVE HEALTH CHECK FROM EC2 INSTANCE

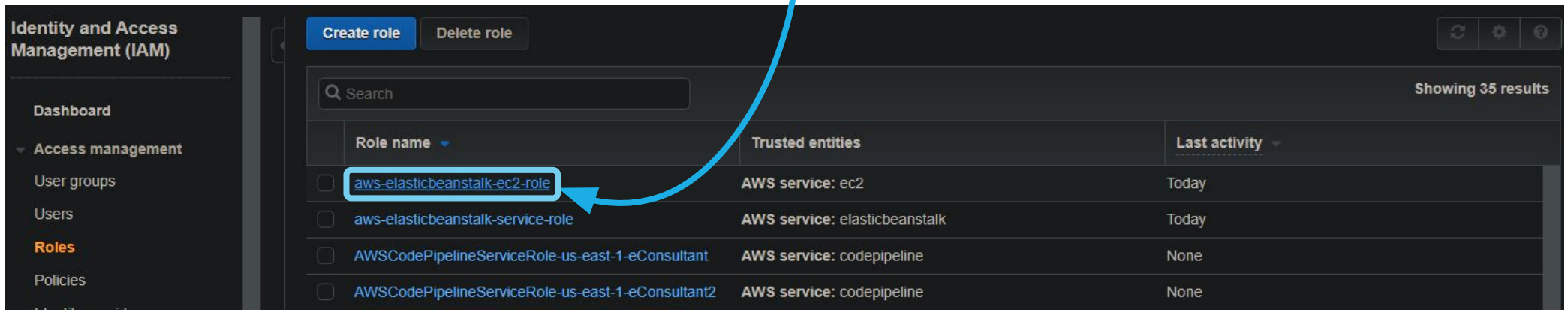
Scroll down to “Advanced configurations” and add “HealthCheck” to “Suspended processes”.

Apply changes by clicking “Update” in the bottom of the page.



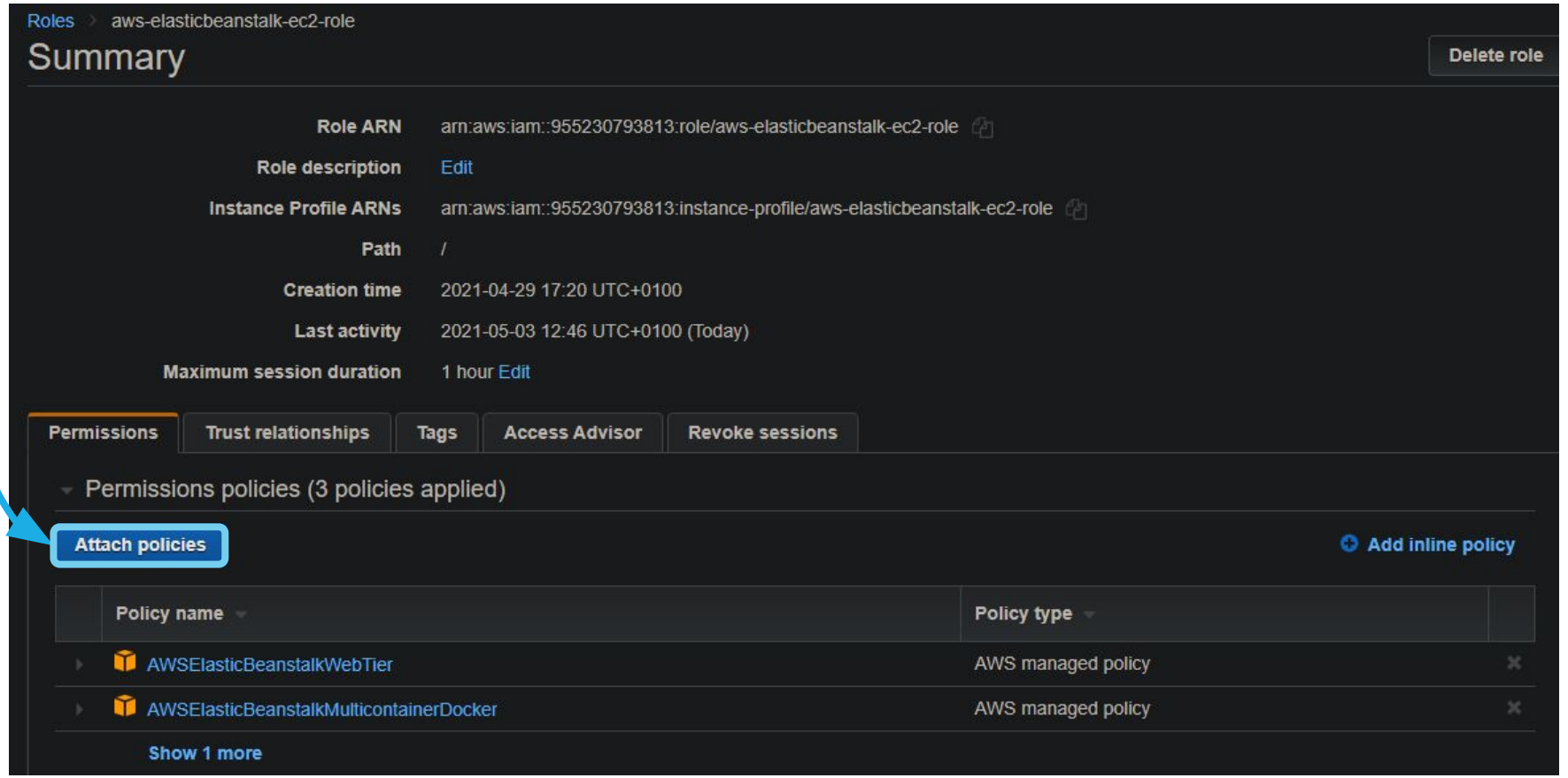
STEP 11 - MODIFY BEANSTALK ROLE FOR ACCESS TO DB

Go to IAM. Navigate to “Roles” and click on the aws-elasticbeanstalk-ec2-role



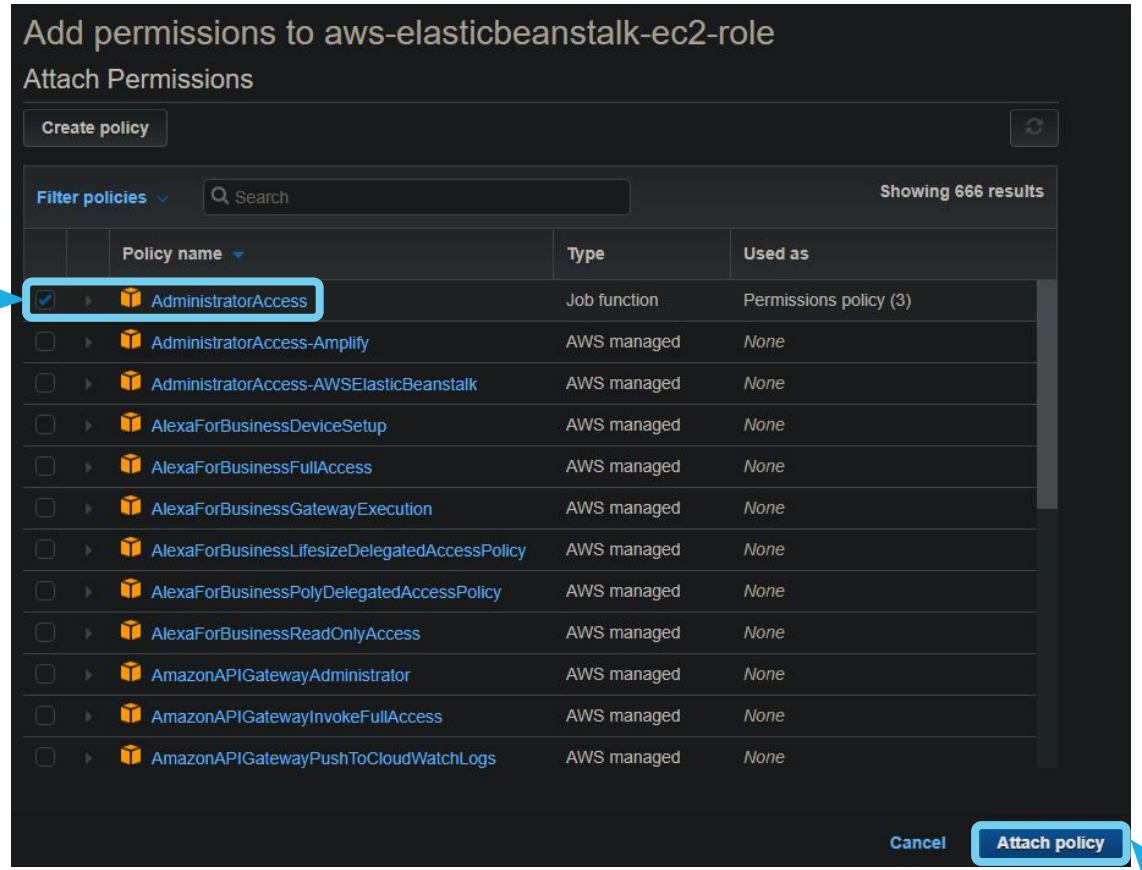
STEP 11 - MODIFY BEANSTALK ROLE FOR ACCESS TO DB

Click “Attach policies”



STEP 11 - MODIFY BEANSTALK ROLE FOR ACCESS TO DB

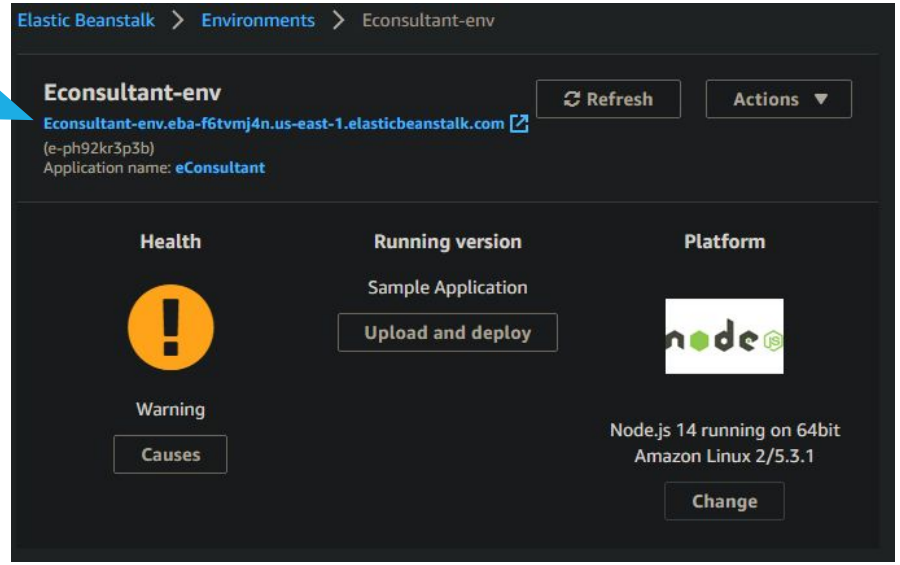
Select “AdministratorAccess” policy and click “Attach policy” button.

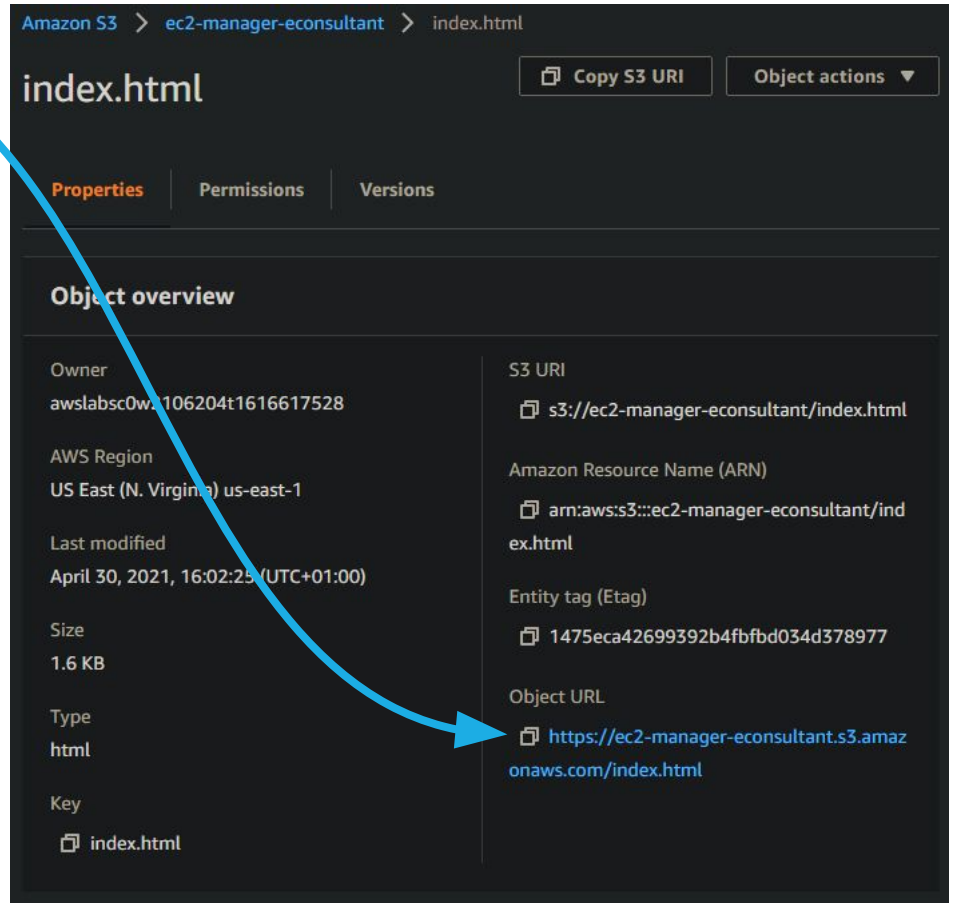


STEP 12 - ACCESS DEPLOYED APPLICATION

Access EC2 management static page through S3 bucket index.html Object URL link.

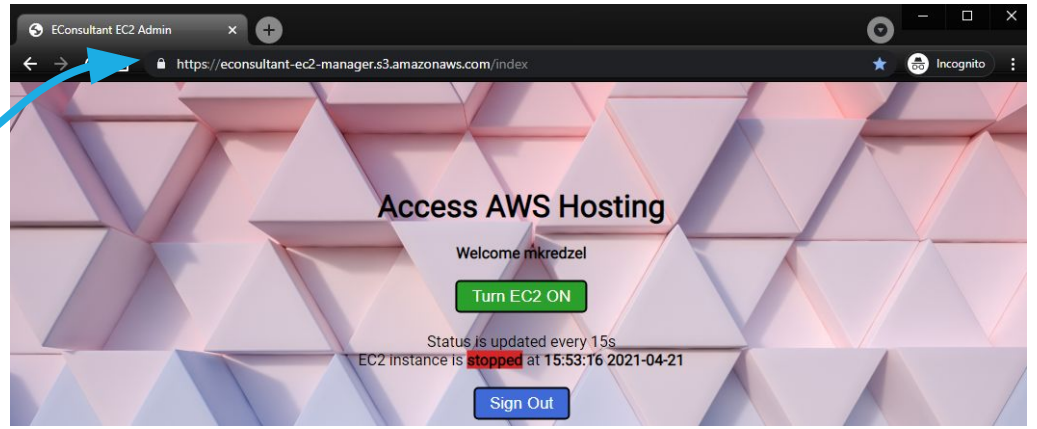
Access the deployed eConsultant application through EC2 instance public IPv4 address.

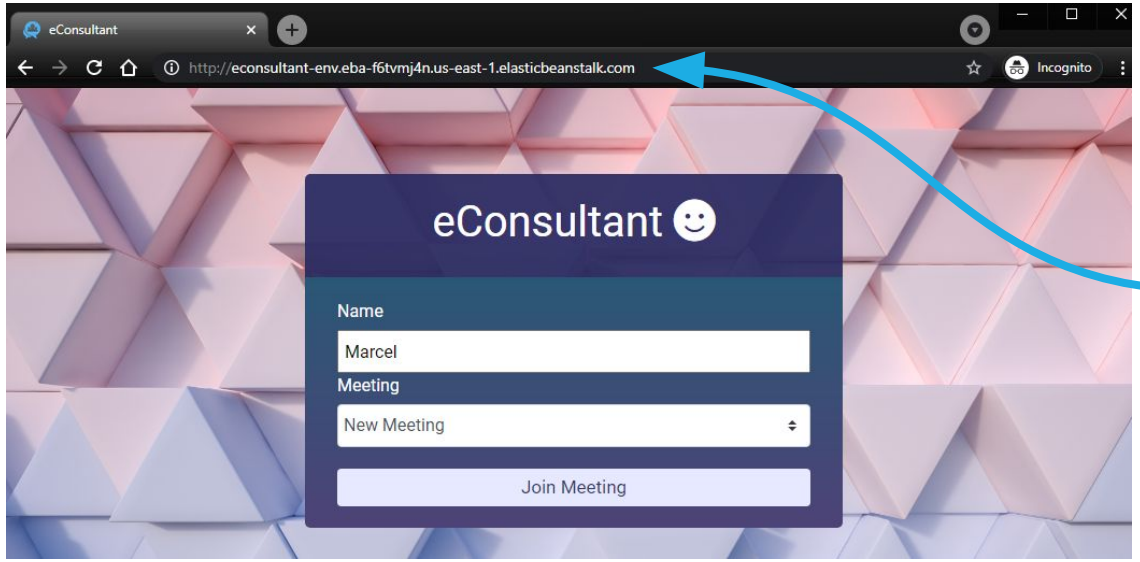




STEP 12 - ACCESS DEPLOYED APPLICATION

Access EC2 management static page through S3 bucket index.html Object URL link.

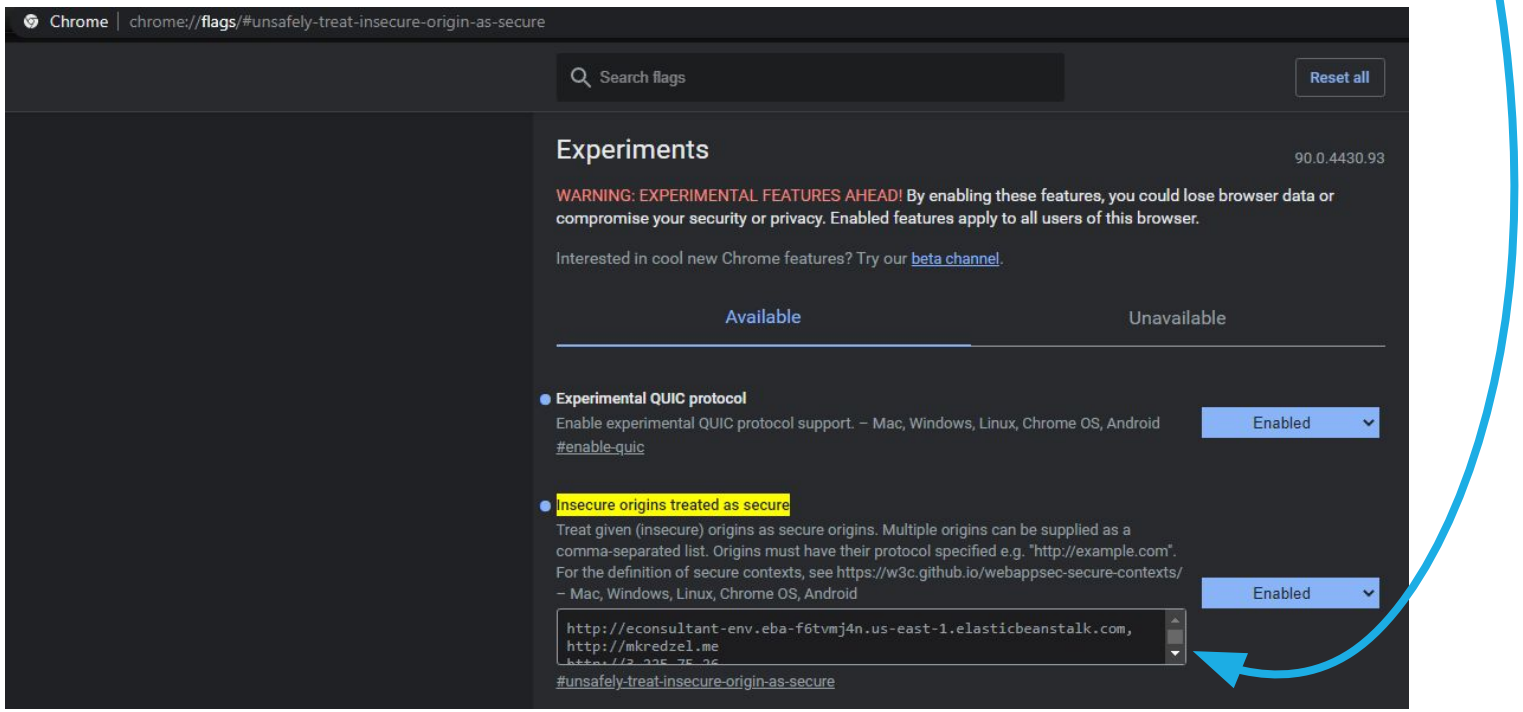


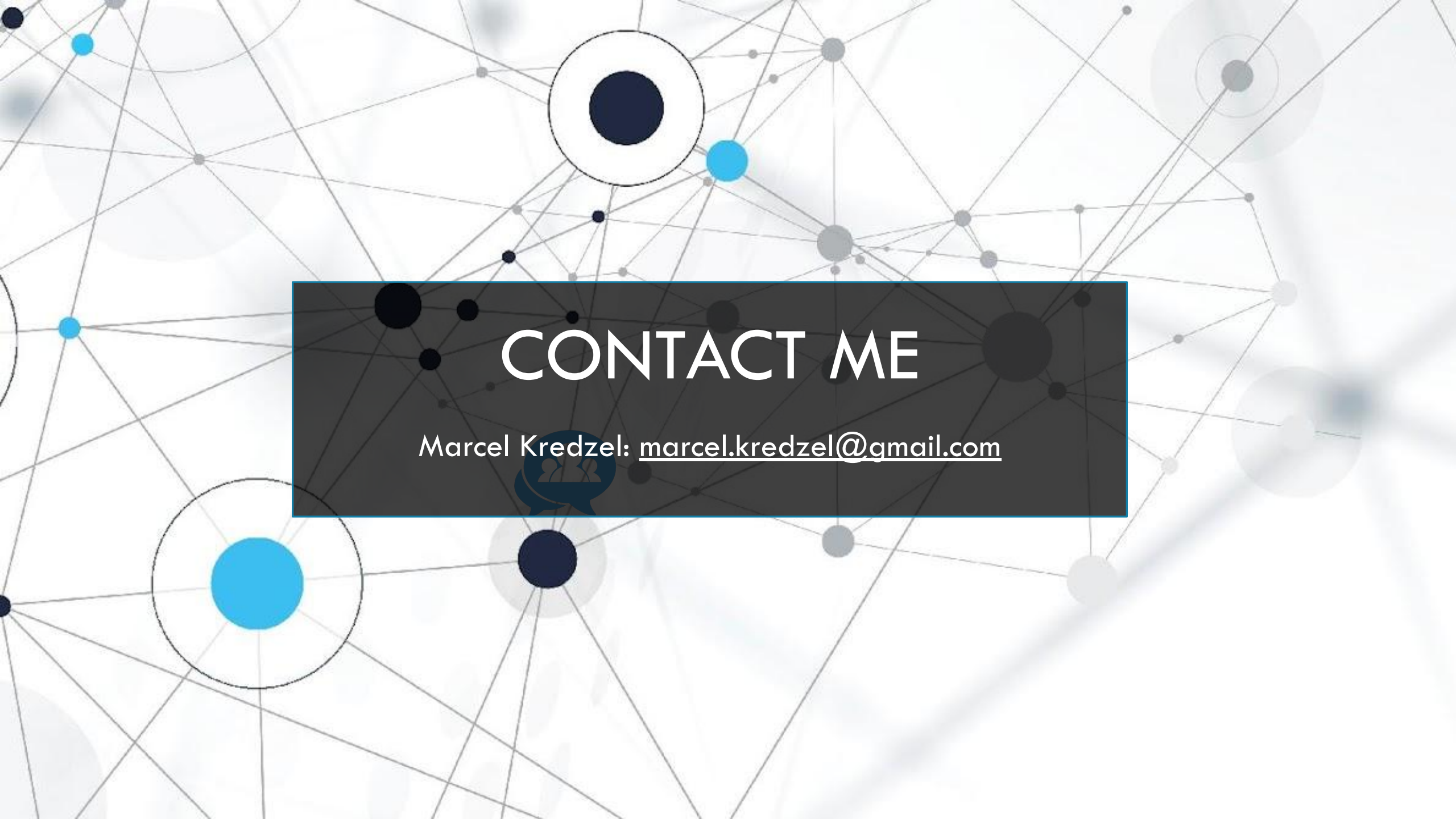


Access the deployed eConsultant application through Elastic Beanstalk environment address.

STEP 13 - ALLOW USAGE OF YOUR MICROPHONE

Go to chrome://flags/#unsafely-treat-insecure-origin-as-secure in your Google Chrome browser and add the eConsultant URL: `http://econsultant-env.eba-f6tvmj4n.us-east-1.elasticbeanstalk.com` to "Insecure origins treated as secure". Make sure that it is not URL to dashboard but to the main chat application. Relaunch the browser and feel free to record your speech in eConsultant web app.





CONTACT ME

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