AWS Solution Architect

Course-end Project

--Set Up and Monitor a WordPress Instance for Your Organization

Problem Statement: In this project, you should be able to launch a WordPress instance using AWS CloudFormation and monitor the instance using Amazon Route 53.

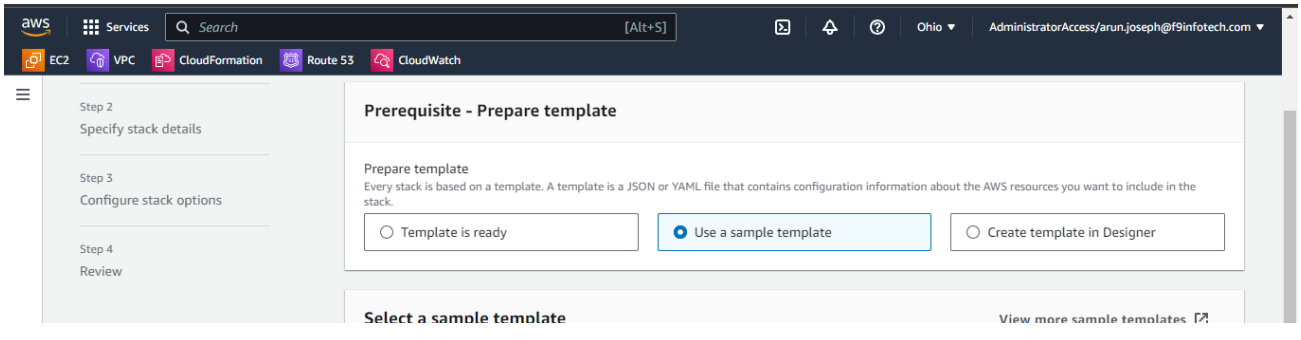
Real-World Scenario:

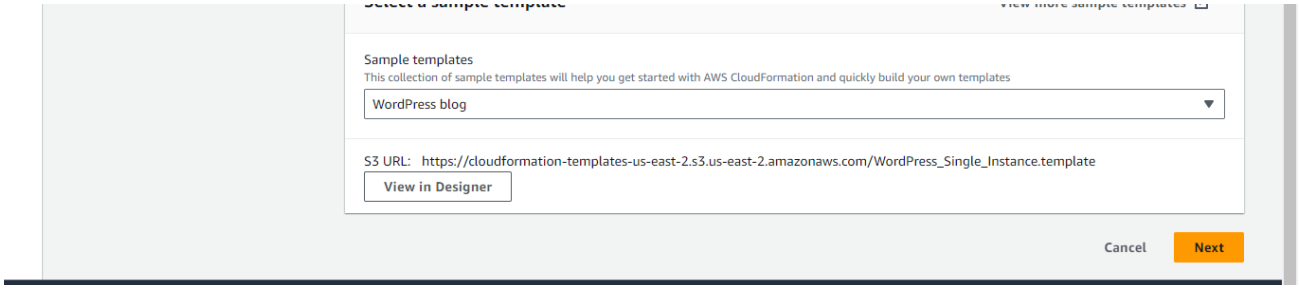
Your organization publishes blogs and provides documentation services for other businesses and technologies. You have been asked to:

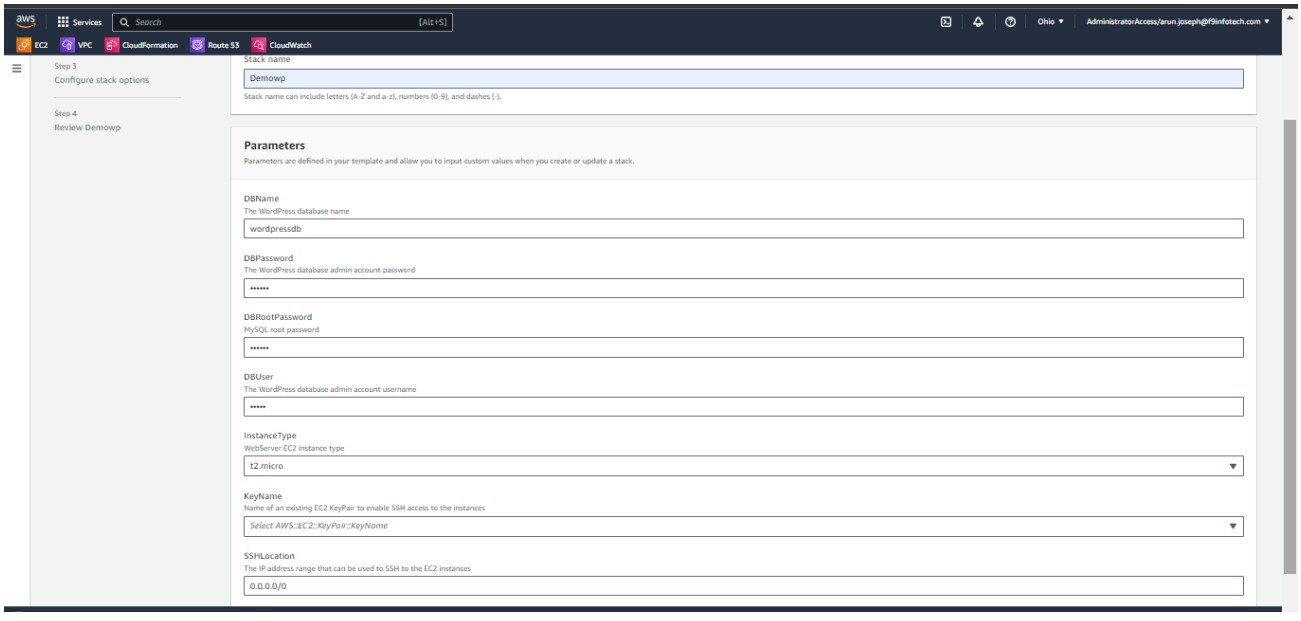
- Set up a live WordPress instance to publish blogs
- Set up a WordPress instance that can be used for development and testing purposes so that any work done on this instance will not impact the live blog
- Configure the WordPress instance for development and testing purposes, which will be available only for business hours (9 AM–6 PM)
- Monitor the health of the WordPress instance

Task (Activities)

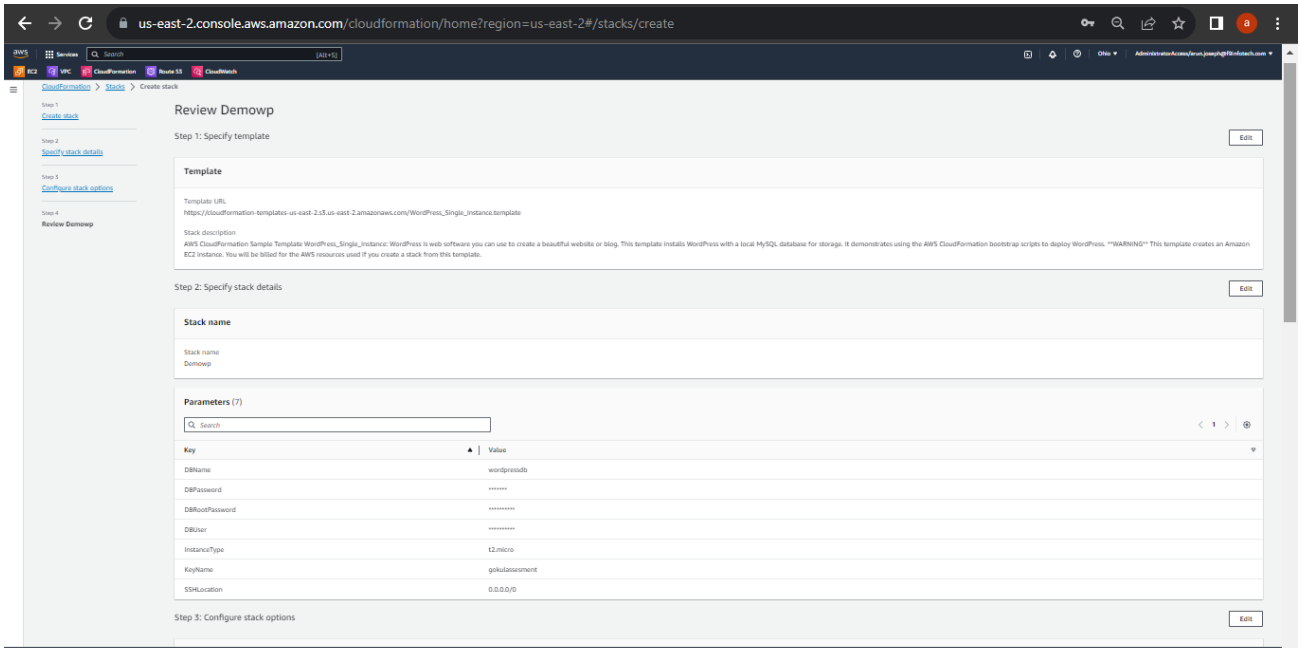
1. Create a CloudFormation stack



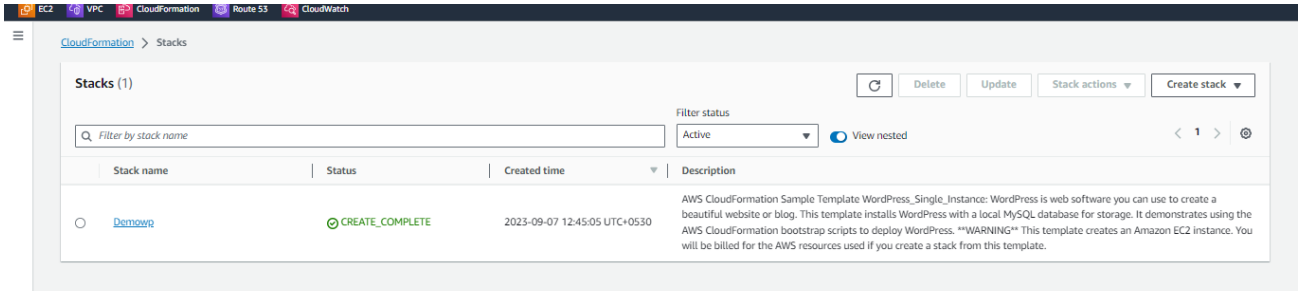

Sample templates
This collection of sample templates will help you get started with AWS CloudFormation and quickly build your own templates
WordPress blog
S3 URL: https://cloudformation-templates-us-east-2.s3.us-east-2.amazonaws.com/WordPress_Single_Instance.template
View in Designer
Cancel
Next

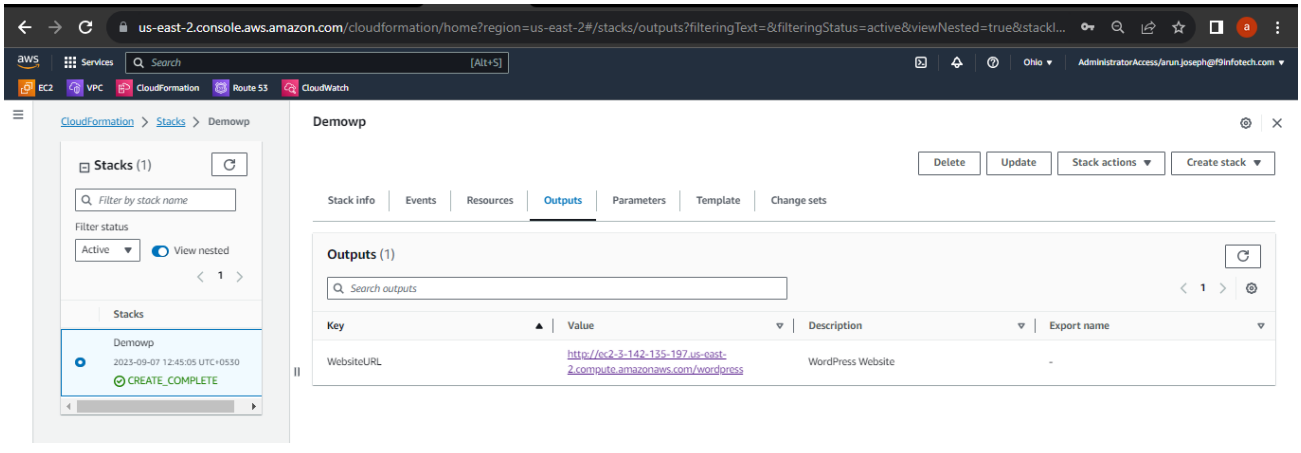

Step 3
Configure stack options
Step 4
Review Demowp
Stack name
Demowp
Stack name can include letters (A-Z and a-z), numbers (0-9), and dashes (-).
Parameters
Parameters are defined in your template and allow you to input custom values when you create or update a stack.
DBName
The WordPress database name
wordpressdb
DBPassword
The WordPress database admin account password
DBRootPassword
MySQL root password
DBUser
The WordPress database admin account username
InstanceType
WebServer EC2 instance type
t2.micro
KeyName
Name of an existing EC2 KeyPair to enable SSH access to the instances
Select AWS::EC2::KeyPair::KeyName
SSHLocation
The IP address range that can be used to SSH to the EC2 instances
0.0.0.0/0

Next


us-east-2.console.aws.amazon.com/cloudformation/home?region=us-east-2#/stacks/create
Review Demowp
Step 1: Specify template
Edit
Template
Template URL
https://cloudformation-templates-us-east-2.s3.us-east-2.amazonaws.com/WordPress_Single_Instance.template
Stack description
Step 2: Specify stack details
Edit
Stack name
Stack name
Demowp
Parameters (7)
Key
Value
DBName
wordpressdb
DBPassword
DBRootPassword
DBUser
InstanceType
t2.micro
KeyName
gokulassesment
SSHLocation
0.0.0.0/0
Step 3: Configure stack options
Edit

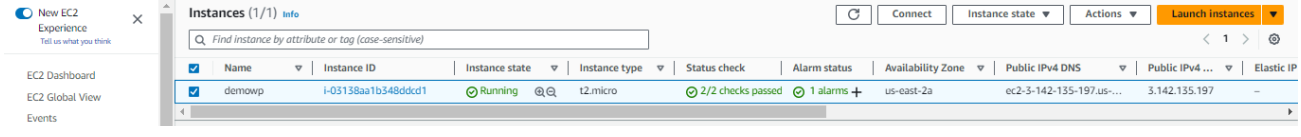
Submit



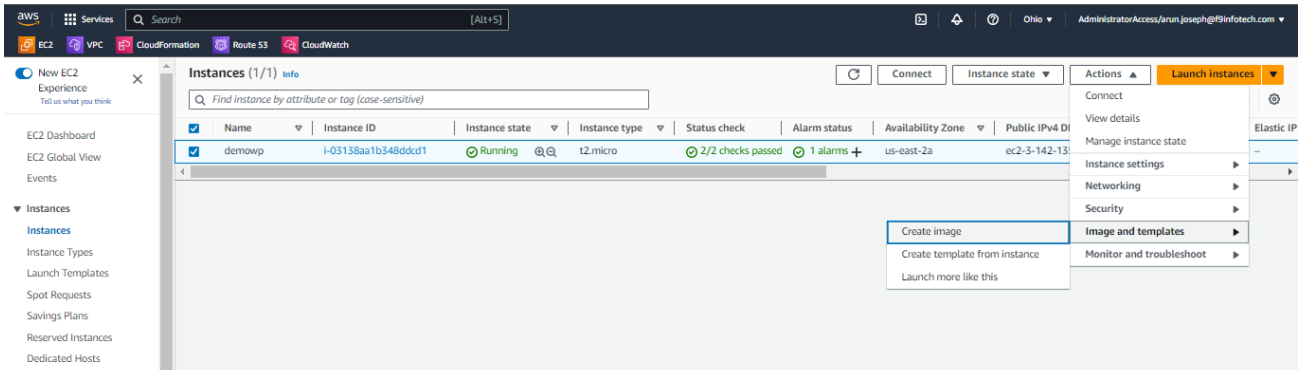


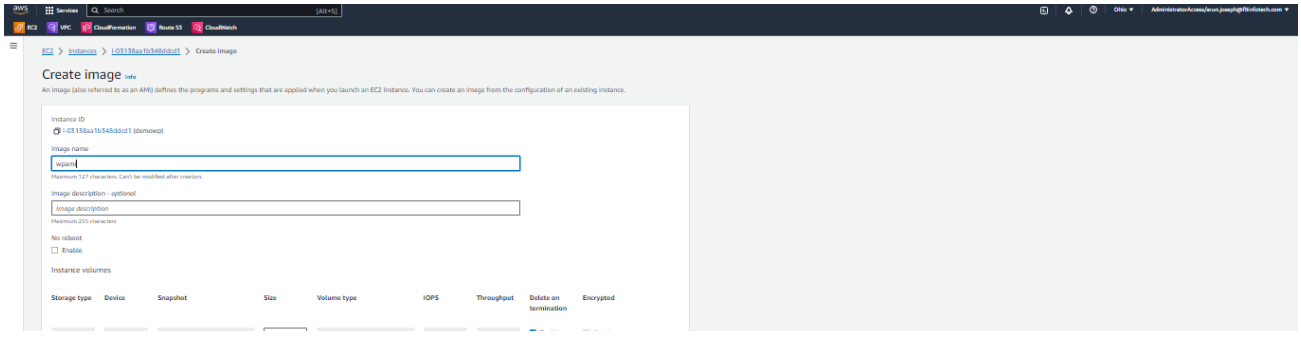
Stack Created

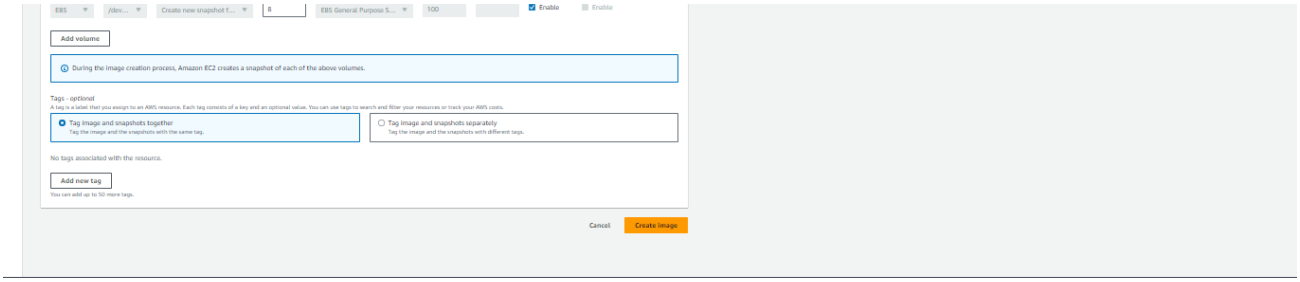
– Now just check your ec2 console

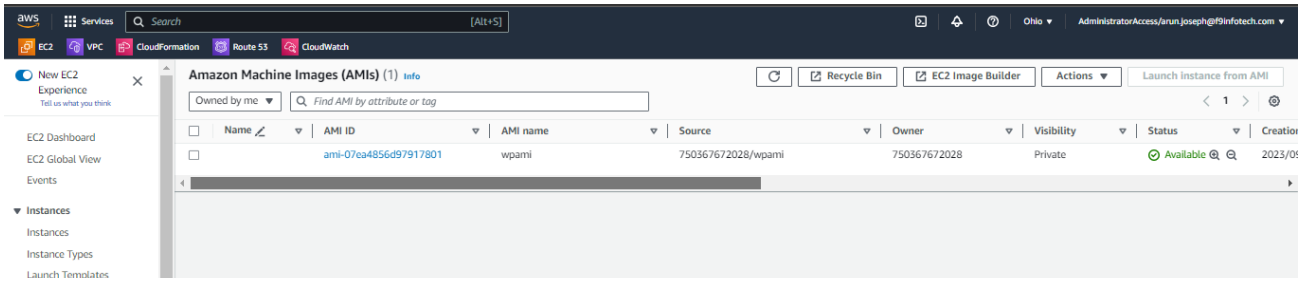


2. Create an AMI of the WordPress instance





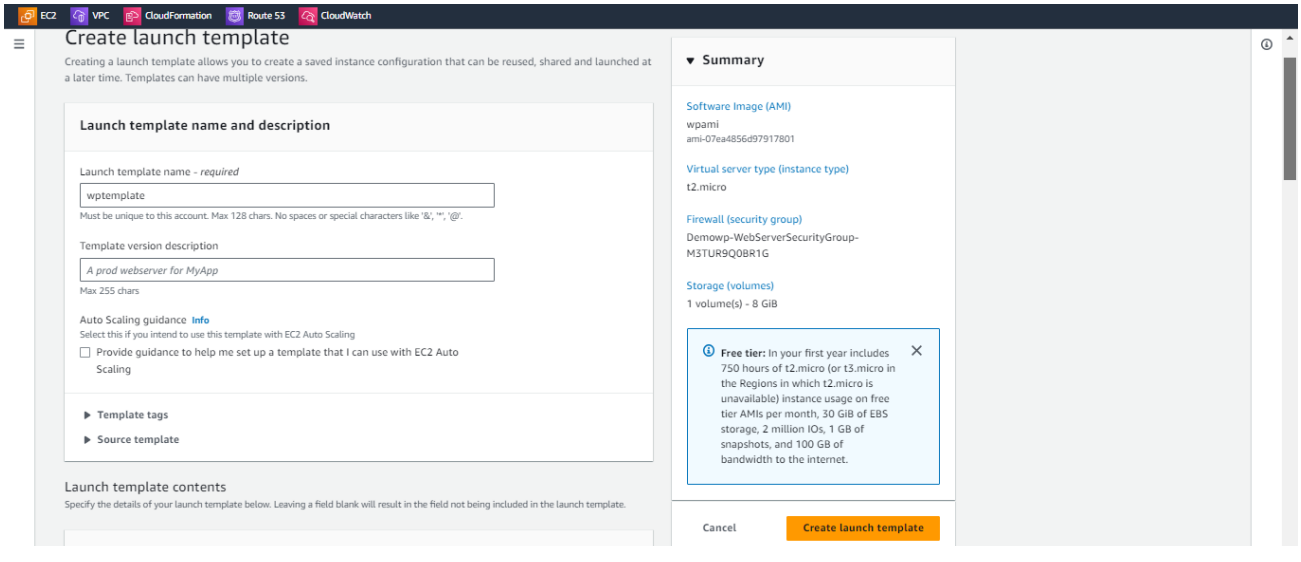


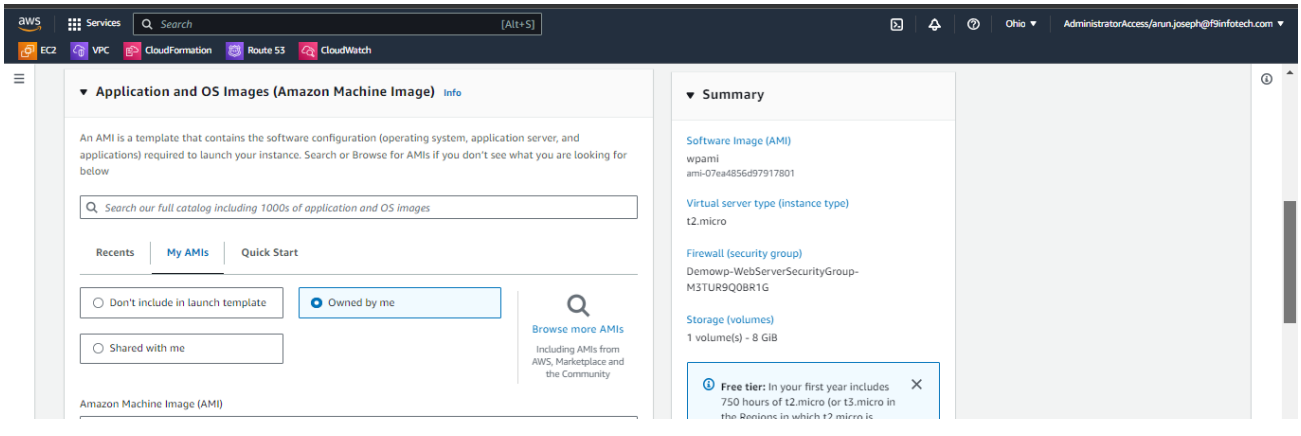


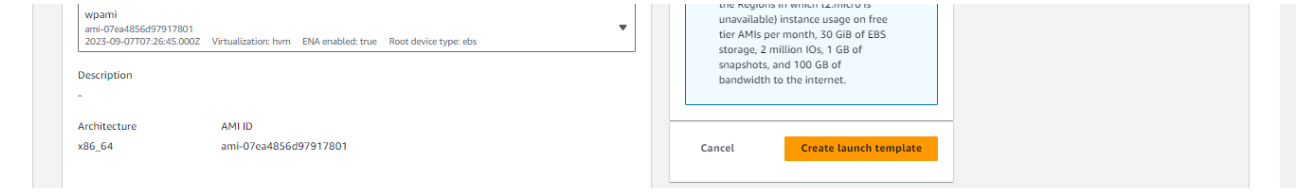
AMI is Created

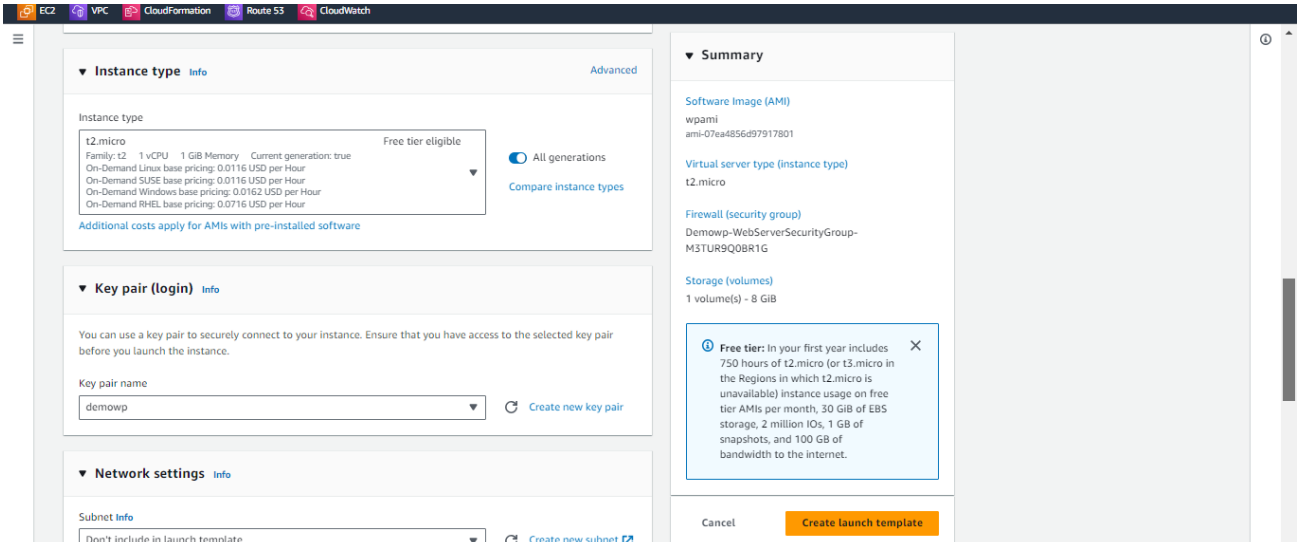
3. Configure Auto Scaling to launch a new WordPress instance

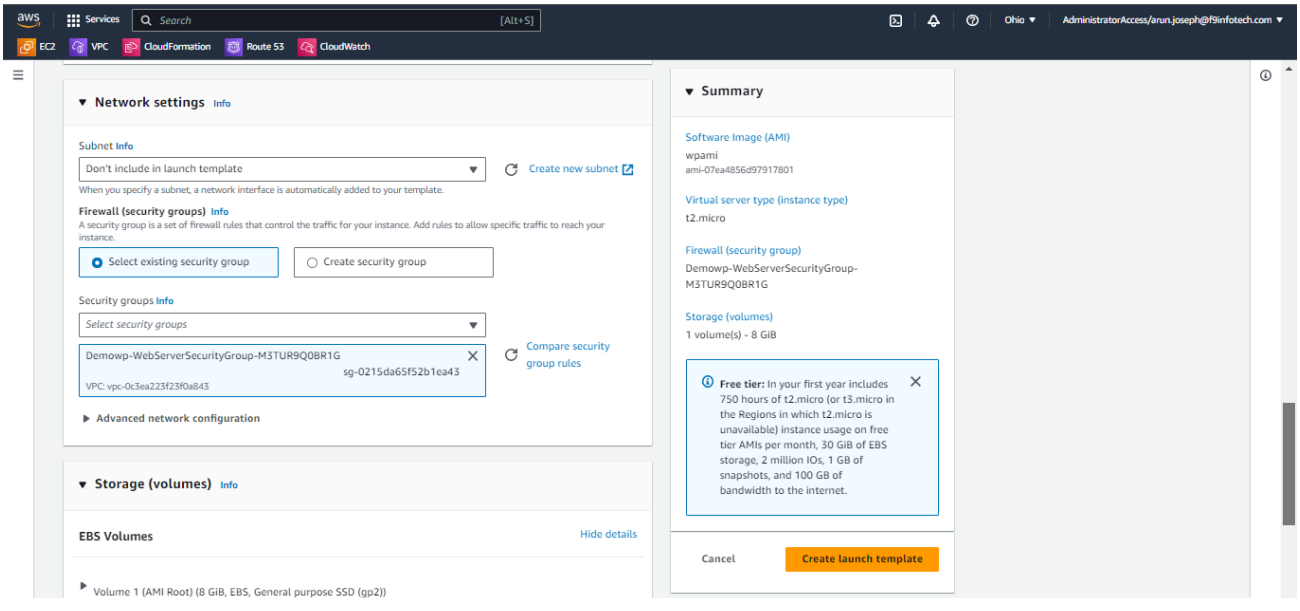
Create Template



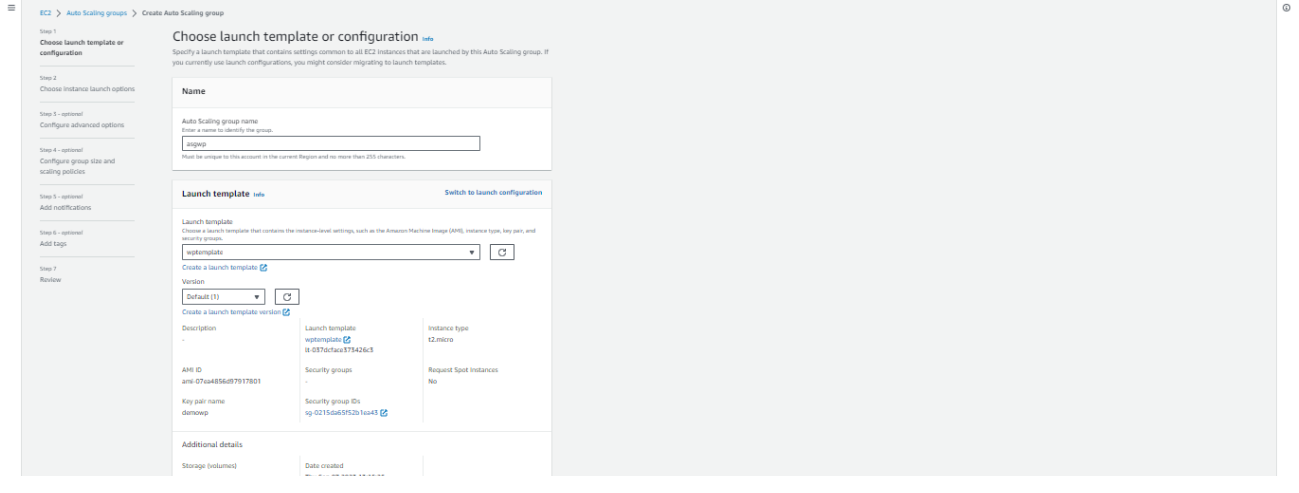


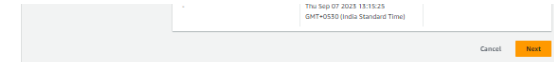


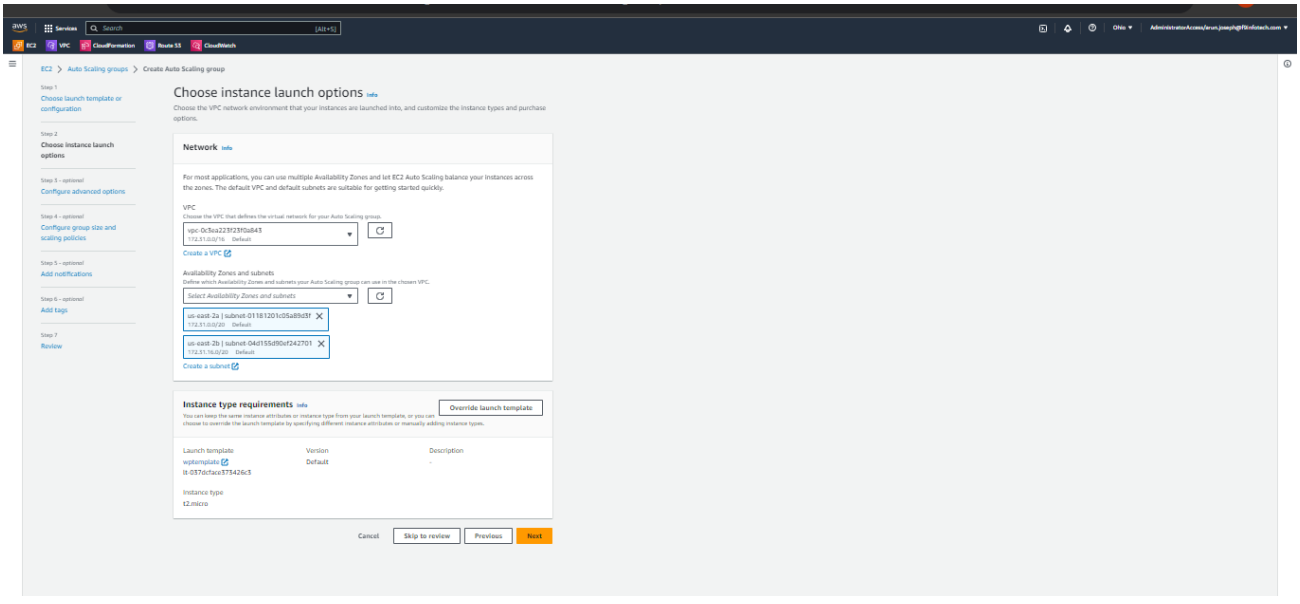


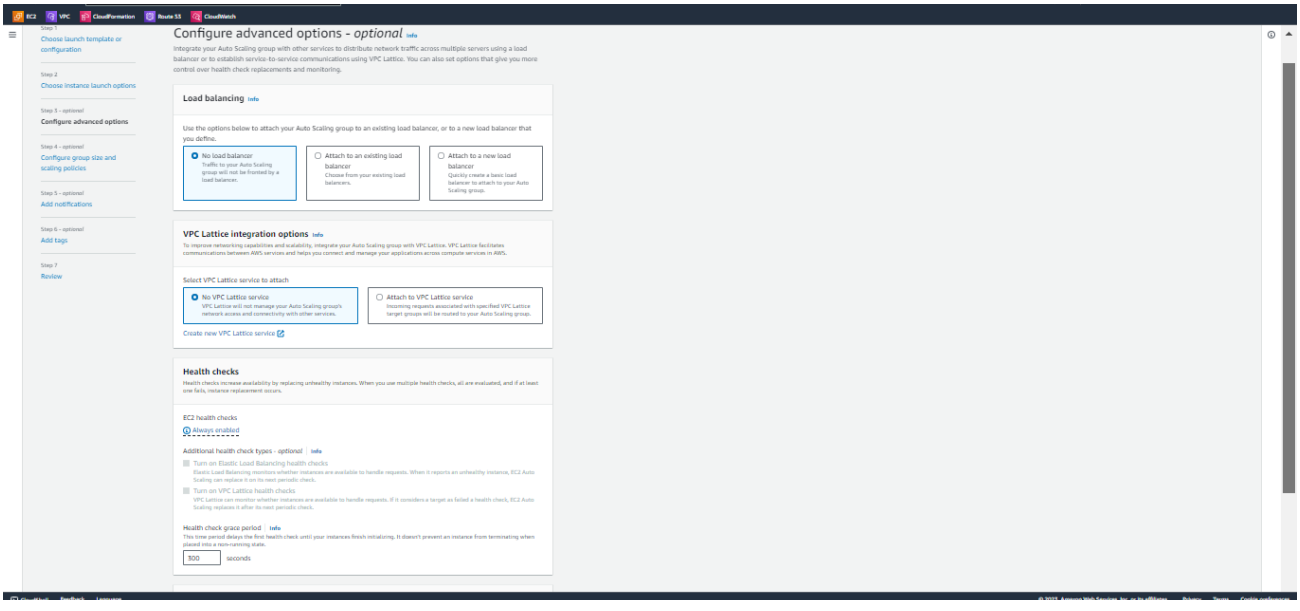


Template create and create ASG.

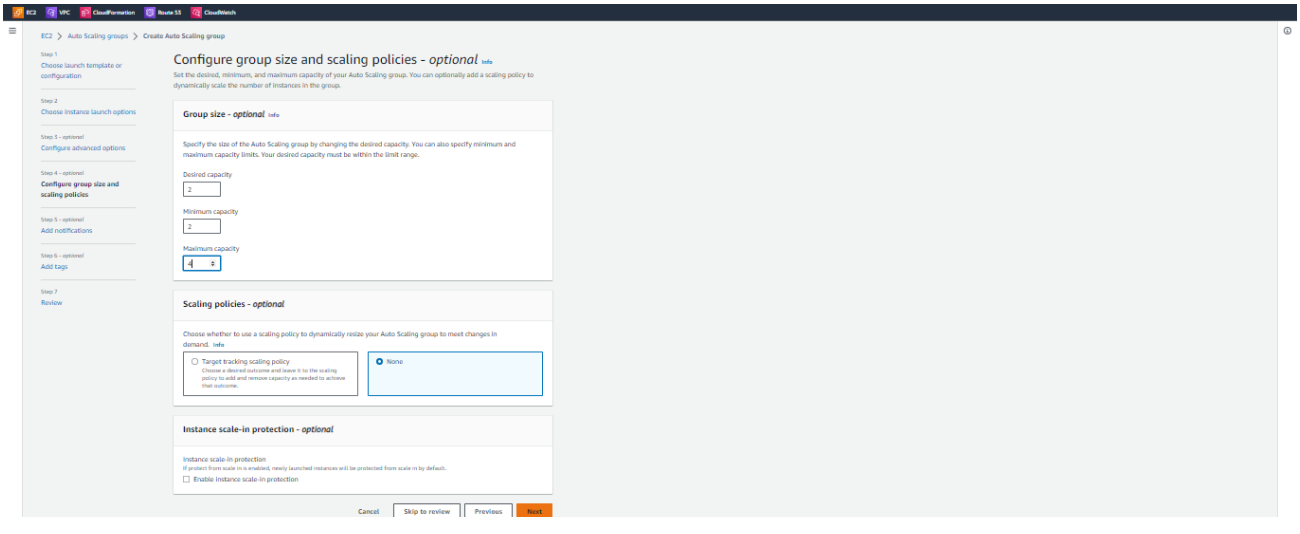



Thu Sep 07 2023 13:15:25
GMT+0530 (India Standard Time)
Cancel
Next

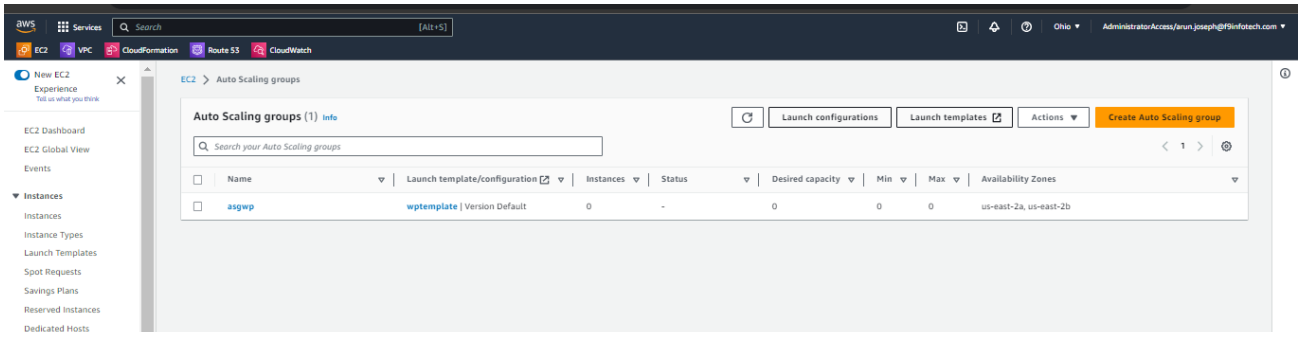

Choose instance launch options
Network
Instance type requirements
Override launch template
Cancel
Skip to review
Previous
Next


Configure advanced options - optional
Load balancing
VPC Lattice integration options
Health checks
Cancel
Skip to review
Previous
Next

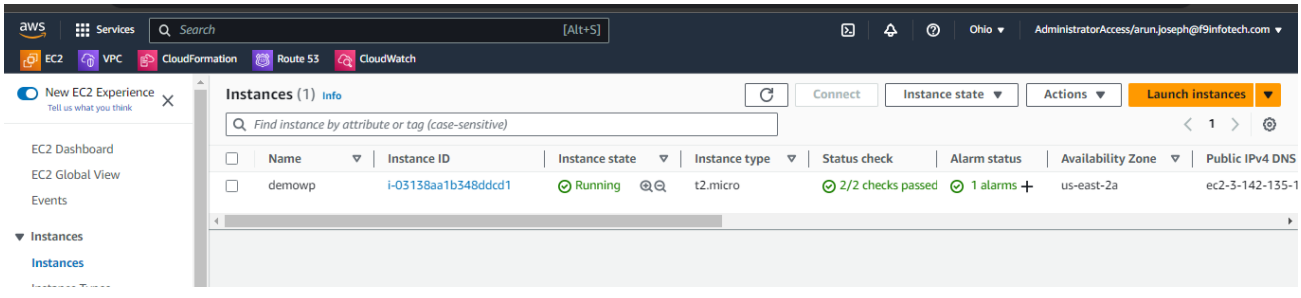
Next


Configure group size and scaling policies - optional
Group size - optional
Scaling policies - optional
Instance scale-in protection - optional
Cancel
Skip to review
Previous
Next

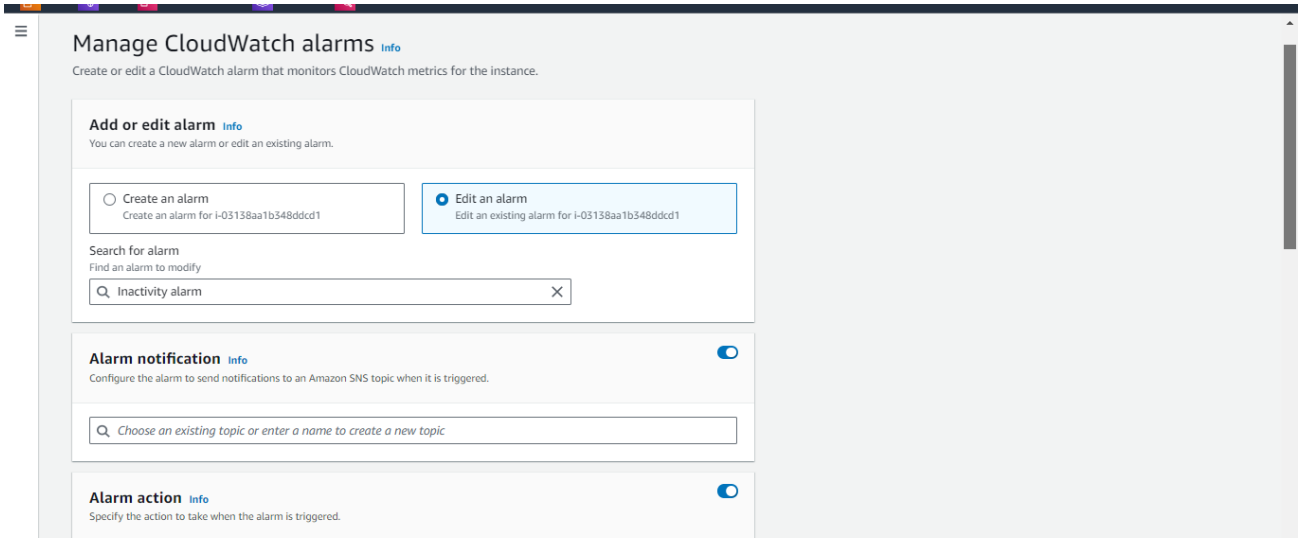
Then review it and create ASG.



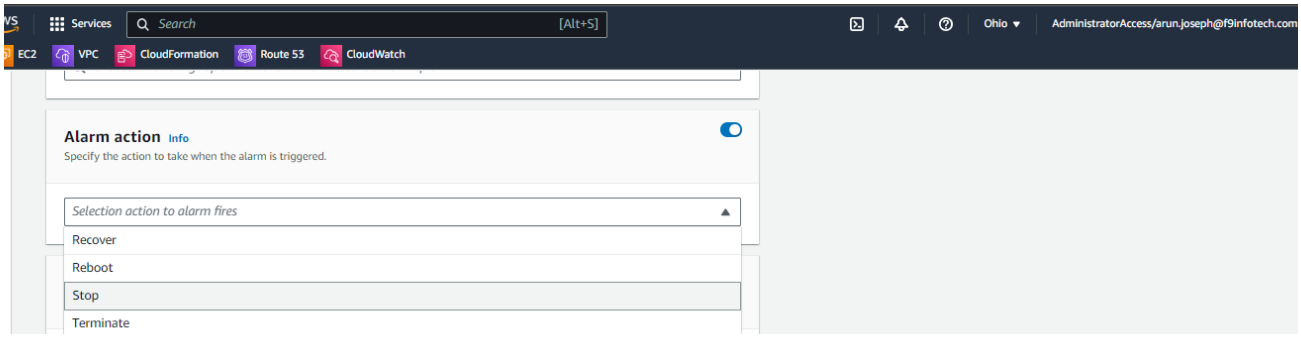
4. Configure the new WordPress instance to shut down automatically



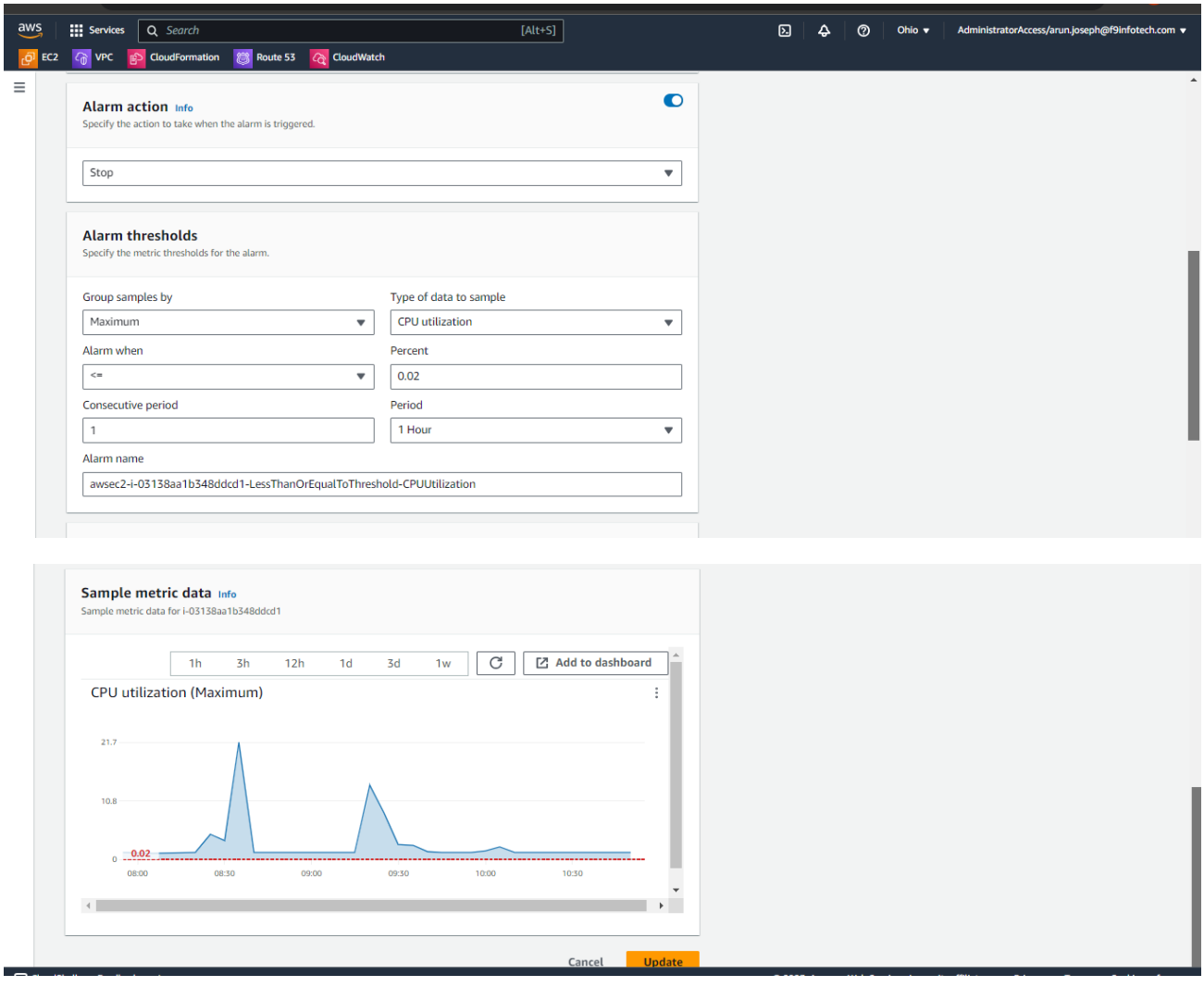
Click The + Icon under the Alarm status



Click the **edit an alarm** and on **Toggle** of **Alarm action**



Select the **Stop**

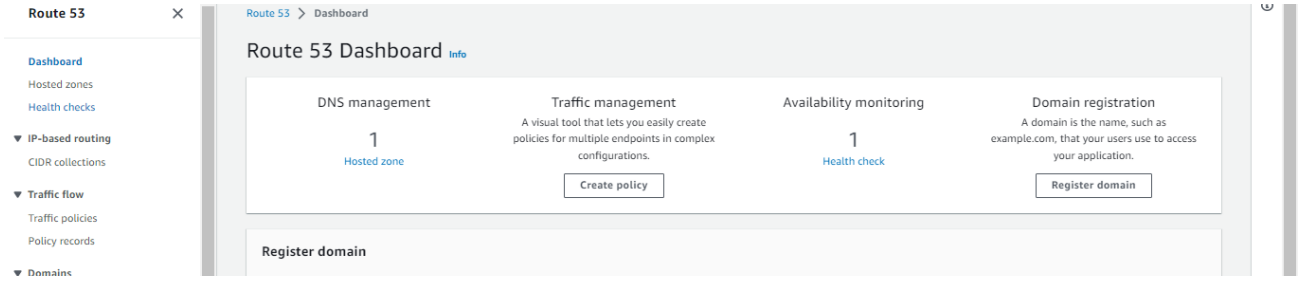


Update

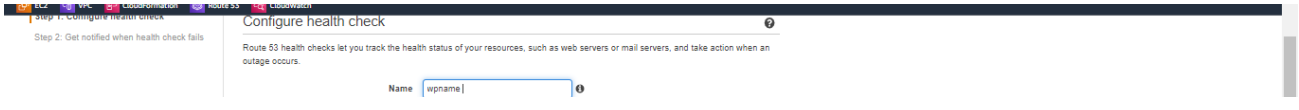
It's Created

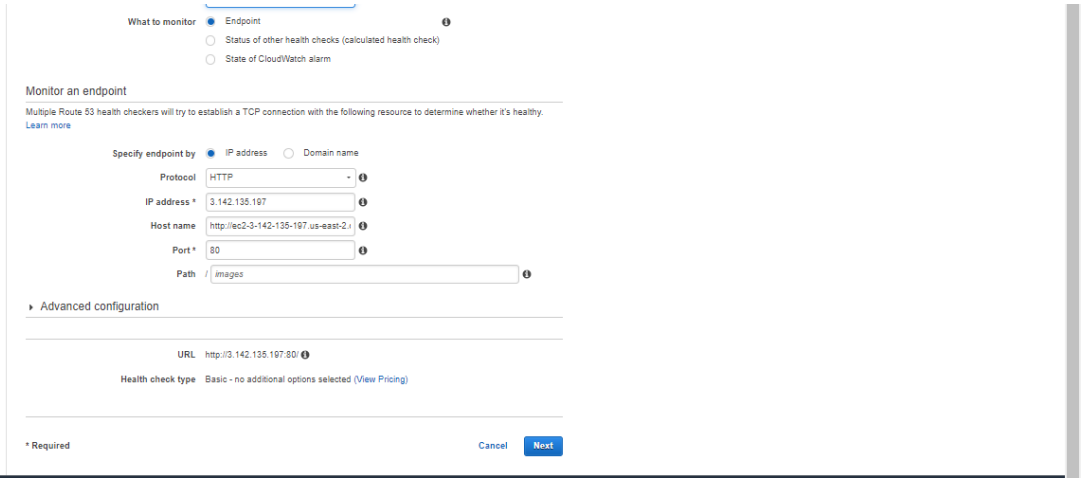
5. Monitor the instance using Availability Monitoring feature of the R53

Go to the Route53

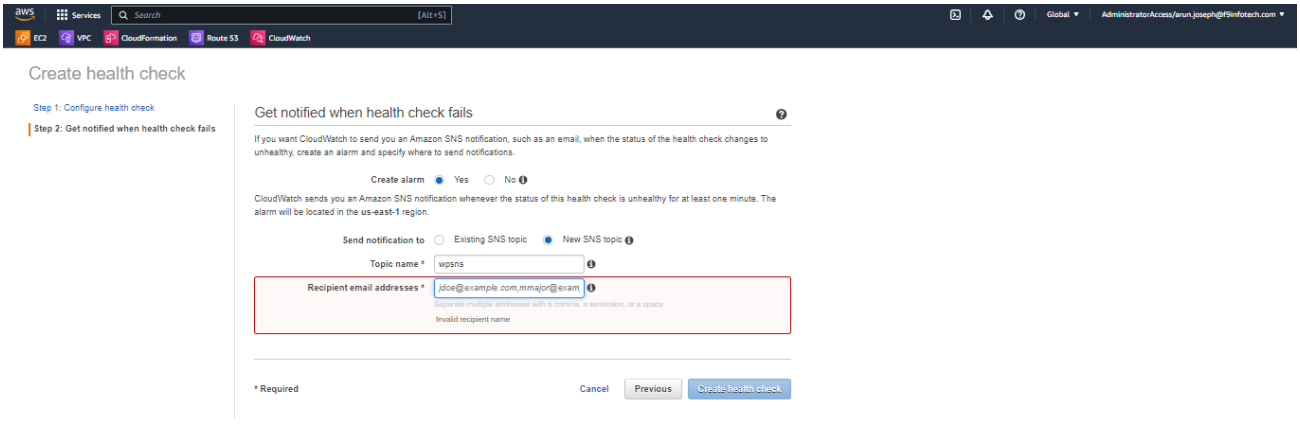


Go to the **Health Checks** on the left side bar





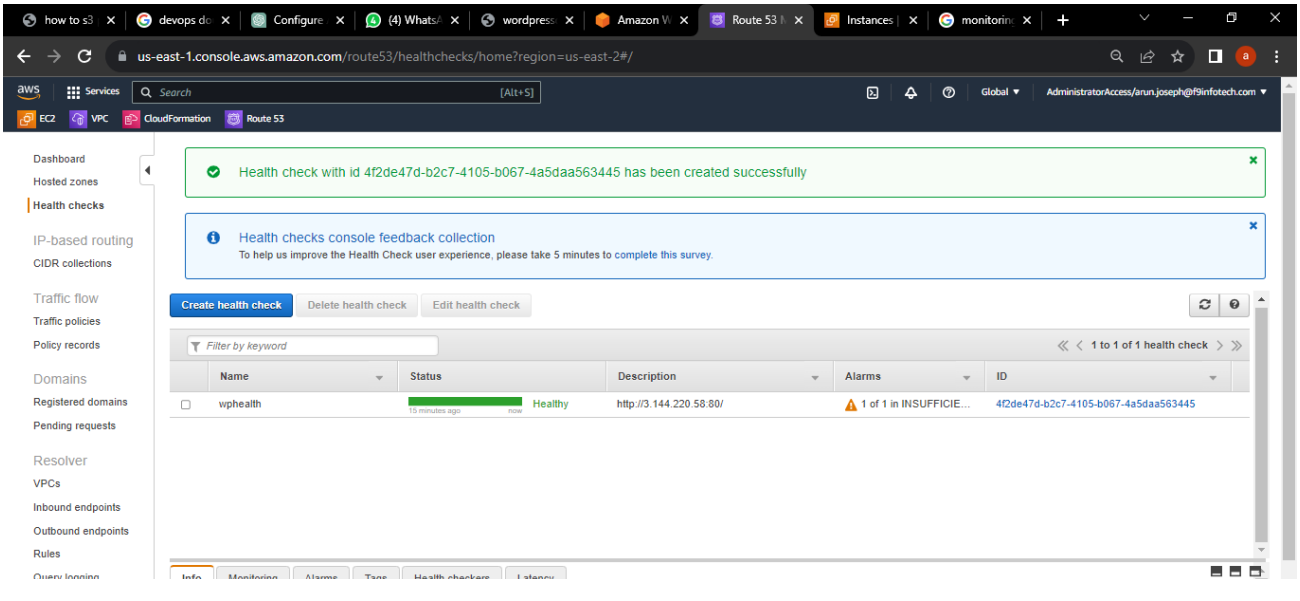
Next

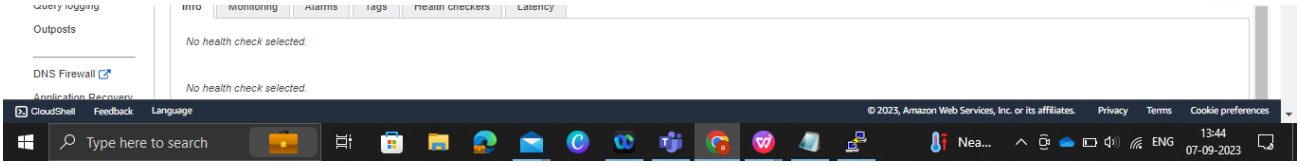


Create alarm **Yes**

Select **New SNS Topic and give email address**

Create





Task is Completed