

AWS Solutions Architect Certification Training

support@intellipaat.com - +91-7022374614 - US: 1-800-216-8930 (Toll Free)

AWS-DevOps-Project COMPLETED by Nagesha. K.S.

Please check the following screenshots for each question.

Problem Statement:

You are assigned to create a software development life cycle for an application your company has created. The company wants you to use AWS for the infrastructure part and AWS Developer tools for the pipeline part.

Tasks to be performed:

1. Create a website in any language of your choice and push the code into **GitHub**
2. **Migrate** your **GitHub repository** into the **AWS CodeCommit repository**
3. Create **two CodeDeploy** deployments (for the **QA stage** and the **Production stage**) with an **EC2 deployment group** into which you can push the code from the CodeCommit repository
4. Using **AWS CodePipeline**, create a software development life cycle:
 - a) The source is the **CodeCommit** repository.
 - b) The code will be pushed into the deployment created in **CodeDeploy**.
 - c) There should be **two stages in deployment**, the **QA stage** and the **Production stage**
 - d) Only **when the QA stage is successful**, the **Production stage should execute**.
5. Create a **third stage** where the same website is pushed into an **Elastic Beanstalk environment**

Index.html

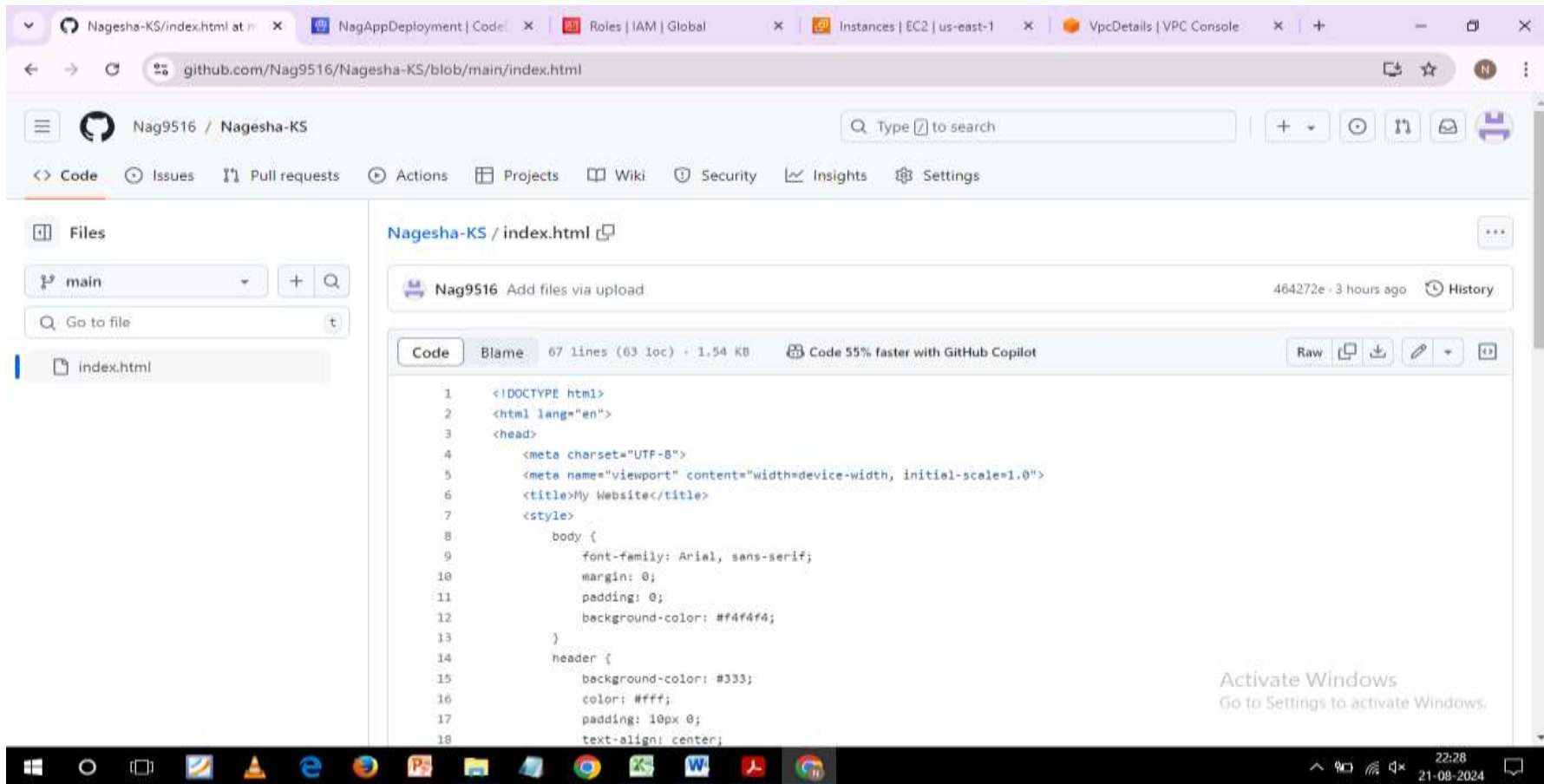
```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>My Website</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      margin: 0;
      padding: 0;
      background-color: #f4f4f4;
    }
    header {
      background-color: #333;
      color: #fff;
      padding: 10px 0;
      text-align: center;
    }
    nav {
      background-color: #444;
      padding: 10px;
      text-align: center;
    }
    nav a {
      color: #fff;
      text-decoration: none;
      margin: 0 15px;
    }
  </style>
</head>
<body>
  <div class="container">
    <div class="row">
      <div class="col">
        <div class="header">
          <h1>My Website</h1>
        </div>
        <div class="nav">
          <a href="#home">Home</a>
          <a href="#about">About</a>
          <a href="#services">Services</a>
          <a href="#contact">Contact</a>
        </div>
      </div>
    </div>
  </div>
</body>
</html>
```

```
        section {
            padding: 20px;
            background-color: #fff;
        }
        footer {
            background-color: #333;
            color: #fff;
            text-align: center;
            padding: 10px 0;
            position: fixed;
            width: 100%;
            bottom: 0;
        }
    </style>
</head>
<body>
    <header>
        <h1>Welcome to Nagesha KS Website</h1>
    </header>

    <nav>
        <a href="#home">Home</a>
        <a href="#about">About</a>
        <a href="#services">Services</a>
        <a href="#contact">Contact</a>
    </nav>

    <section>
        <h2>Home</h2>
        <p>This is the home page content.</p>
    </section>
```

```
<footer>
  <p>&copy; 2024 My Website. All rights reserved.</p>
</footer>
</body>
</html>
```



```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>My Website</title>
7   <style>
8     body {
9       font-family: Arial, sans-serif;
10      margin: 0;
11      padding: 0;
12      background-color: #f4f4f4;
13    }
14    header {
15      background-color: #333;
16      color: #fff;
17      padding: 10px 0;
18      text-align: center;
```


aws

Services

iam

EC2 Dashboard

EC2 Global View

Events

Console-to-Code

Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity

Reservations

Images

AMIs

AMI Catalog

Instances (1/2)

Info

Last updated about 3 hours ago

Connect

Instance state

Actions

Launch instances

Find Instance by attribute or tag (case-sensitive)

All states

Instance state = running

Clear filters

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Avail...
<input checked="" type="checkbox"/>	NagAppPRODInstance	i-08ab2a9e50c25e71c	Running	t2.micro	Initializing	View alarms +	us-
<input type="checkbox"/>	NagAppQAInstance	i-06d57dc401aebc20a	Running	t2.micro	Initializing	View alarms +	us-

i-08ab2a9e50c25e71c (NagAppPRODInstance)

Details

Status and alarms

Monitoring

Security

Networking

Storage

Tags

Instance summary

Instance ID

i-08ab2a9e50c25e71c (NagAppPRODInstance)

Public IPv4 address

54.162.238.177 | open address

Private IPv4 addresses

172.31.36.218

IPv6 address

-

Instance state

Running

Public IPv4 DNS

CloudShell

Feedback

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21-08-2024

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:instanceState=running;v=3:\$case=tags:true%5Cclient:false:\$regex=tags:false%5Cclient:false

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All states

Instance state = running

Clear filters

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Av
<input type="checkbox"/>	NagAppPRODInstance	i-08ab2a9e50c25e71c	Running	t2.micro	Initializing	View alarms	us-
<input checked="" type="checkbox"/>	NagAppQAInstance	i-06d57dc401aebc20a	Running	t2.micro	Initializing	View alarms	us-

i-06d57dc401aebc20a (NagAppQAInstance)

Details

Status and alarms

Monitoring

Security

Networking

Storage

Tags

Instance summary Info

Instance ID

i-06d57dc401aebc20a (NagAppQAInstance)

IPv6 address

-

Public IPv4 address

54.172.45.14 | open address

Private IPv4 addresses

172.31.36.206

Instance state

Running

Public IPv4 DNS

ec2-54-172-45-14.compute-1.amazonaws.com | open address

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Nagesha-KS/index.html at

NagAppDeployment | Code

Roles | IAM | Global

Instances | EC2 | us-east-1

VpcDetails | VPC Console

us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#VpcDetails:VpcId=vpc-081806c4daf5e020d

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Services

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VPC dashboard

EC2 Global View

Filter by VPC

Virtual private cloud

Your VPCs

Subnets

Route tables

Internet gateways

Egress-only internet gateways

Carrier gateways

DHCP option sets

Elastic IPs

Managed prefix lists

Endpoints

Endpoint services

You successfully created vpc-081806c4daf5e020d.

VPC > Your VPCs > vpc-081806c4daf5e020d

vpc-081806c4daf5e020d

Actions

Details

Info

VPC ID	State	DNS hostnames	DNS resolution
vpc-081806c4daf5e020d	Available	Enabled	Enabled
Tenancy	DHCP option set	Main route table	Main network ACL
Default	dopt-08e021c762653fd1f	rtb-030487221dc42b465	acl-04519e89e664d70b8
Default VPC	IPv4 CIDR	IPv6 pool	IPv6 CIDR (Network border group)
Yes	172.31.0.0/16	-	-
Network Address Usage metrics	Route 53 Resolver DNS Firewall rule groups	Owner ID	
Disabled	-	289436155303	

Resource map

CIDRs

Flow logs

Tags

Integrations

Resource map

Info

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NagAppDeployment | Code

Roles | IAM | Global

Instances | EC2 | us-east-1

VpcDetails | VPC Console

us-east-1.console.aws.amazon.com/codesuite/codedeploy/applications/NagAppDeployment?region=us-east-1

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Developer Tools

CodeDeploy

Source • CodeCommit

Artifacts • CodeArtifact

Build • CodeBuild

Deploy • CodeDeploy

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Deployments

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NagAppDeployment

Notify

Delete application

Application details

Name

Compute platform

NagAppDeployment

EC2/On-premises

Deployments

Deployment groups

Revisions

Deployment groups

View details

Edit

Create deployment group

<

1

>

	Name	Status	Last attempted de...	Last successful de...	Trigger co
<input type="radio"/>	NagAppProdDeploymentGroup	-	-	-	0
<input type="radio"/>	NagAppQADeploymentGroup	-	-	-	0

Activate Windows
Go to Settings to activate Windows

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us-east-1.console.aws.amazon.com/codesuite/codedeploy/applications/NagAppDeployment/deployment-groups/NagAppQADeploymentGroup?region=us-east-1&tags-me...

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Artifacts • CodeArtifact

Build • CodeBuild

▼ Deploy • CodeDeploy

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► Pipeline • CodePipeline

Settings

Developer Tools > CodeDeploy > Applications > NagAppDeployment > NagAppQADeploymentGroup

NagAppQADeploymentGroup

EditDeleteCreate deployment

Deployment group details

Deployment group name	Application name	Compute platform
NagAppQADeploymentGroup	NagAppDeployment	EC2/On-premises
Deployment type	Service role ARN	Deployment configuration
In-place	arn:aws:iam::289436155303:role/NagCodeDeploy	CodeDeployDefault.AllAtOnce
Rollback enabled	Agent update scheduler	
False	Learn to schedule update in AWS Systems Manager	

Environment configuration: Amazon EC2 instances

Key	Value
-----	-------

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us-east-1.console.aws.amazon.com/codesuite/codedeploy/applications/NagAppDeployment/deployment-groups/NagAppProdDeploymentGroup?region=us-east-1&tags-m...

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Developer Tools > CodeDeploy > Applications > NagAppDeployment > NagAppProdDeploymentGroup

NagAppProdDeploymentGroup

EditDeleteCreate deployment

Deployment group details

Deployment group name	Application name	Compute platform
NagAppProdDeploymentGroup	NagAppDeployment	EC2/On-premises
Deployment type	Service role ARN	Deployment configuration
In-place	arn:aws:iam::289436155303:role/NagCodeDeploy	CodeDeployDefault.AllAtOnce
Rollback enabled	Agent update scheduler	
False	Learn to schedule update in AWS Systems Manager	

Environment configuration: Amazon EC2 instances

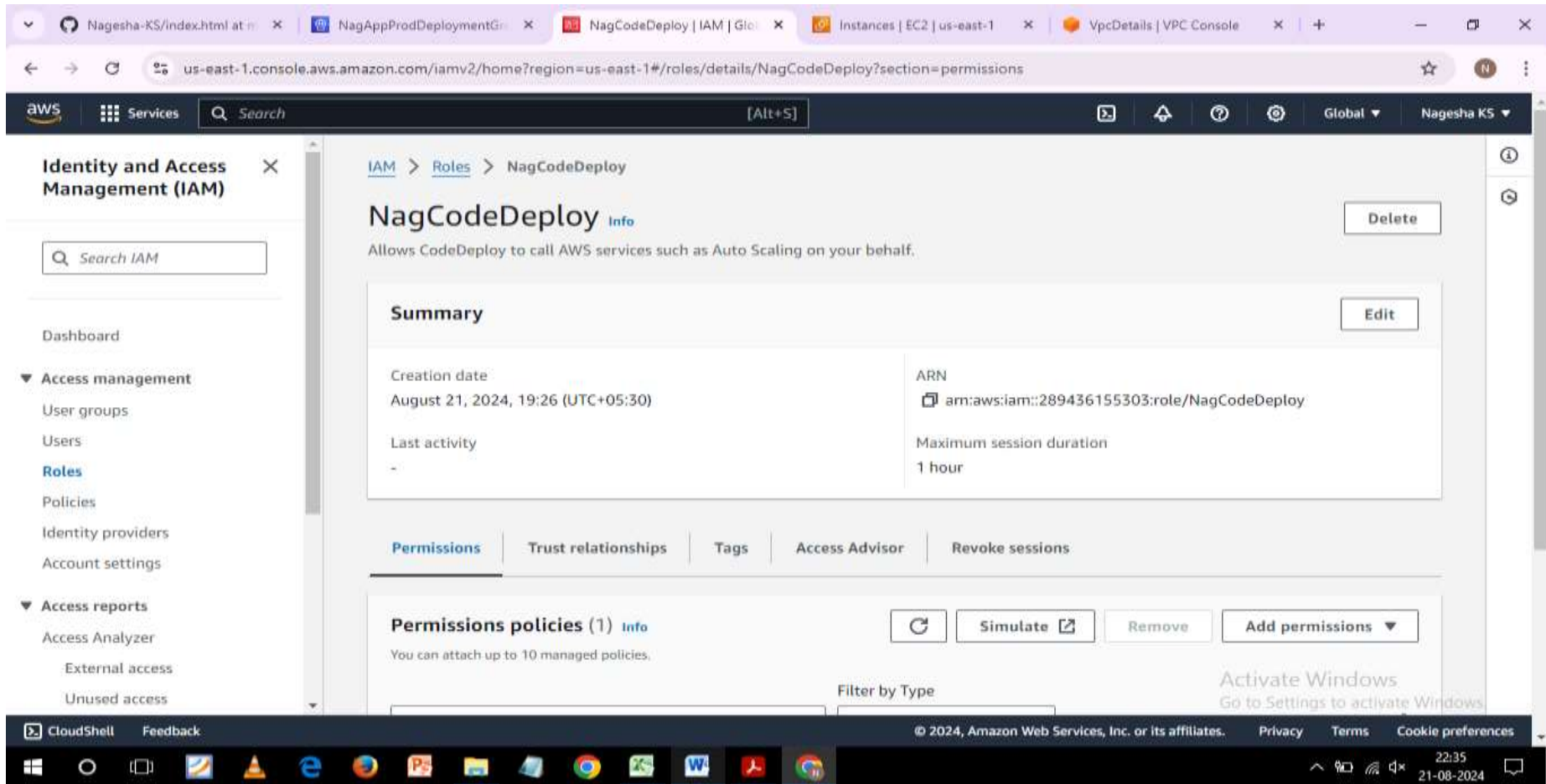
Key	Value
-----	-------

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Settings - Branches - Nag95

NagAppPipeline | CodePipeline

Roles | IAM | Global

Instances | EC2 | us-east-1

VpcDetails | VPC Console

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us-east-1.console.aws.amazon.com/codesuite/codepipeline/pipelines/NagAppPipeline/view?region=us-east-1

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Success

Congratulations! The pipeline NagAppPipeline has been created.

Create a notification rule for this pipeline

Developer Tools > CodePipeline > Pipelines > NagAppPipeline

NagAppPipeline

Notify

Edit

Stop execution

Clone pipeline

Release change

Pipeline type: V2 Execution mode: QUEUED

Source Failed

Retry stage

Retry failed actions

Pipeline execution ID: 53e13e12-7a87-4d60-a744-5ac2eac91da3

Source

AWS CodeCommit

Failed - Just now

View details

Disable transition

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Settings | Branches | Nag95 |

NagAppPipeline | CodePipel |

Roles | IAM | Global

Instances | EC2 | us-east-1

VpcDetails | VPC Console

us-east-1.console.aws.amazon.com/codesuite/codepipeline/pipelines/NagAppPipeline/view?region=us-east-1

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▼ Pipeline • CodePipeline

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💬 Feedback

⊖ Build ⚠️ Didn't Run

Start rollback

Build

[AWS CodeBuild](#)

⊖ Didn't Run

No executions yet

Disable transition

⊖ Deploy ⚠️ Didn't Run

Start rollback

Deploy

[AWS CodeDeploy](#)

⊖ Didn't Run

No executions yet

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Settings · Branches · Nag951 · NagAppPipeline | CodePipel · Environment overview - eve · Instances | EC2 | us-east-1 · VpcDetails | VPC Console

us-east-1.console.aws.amazon.com/elasticbeanstalk/home?region=us-east-1#/environment/dashboard?environmentId=e-hbku38bfn7

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Elastic Beanstalk

Applications

Environments

Change history

▼ Application: NagAppElasticBeanstalk

Application versions

Saved configurations

▼ Environment: NagAppElasticBeanstalk-env

Go to environment

Configuration

Events

Health

Logs

Elastic Beanstalk is launching your environment. This will take a few minutes.

Elastic Beanstalk > Environments > NagAppElasticBeanstalk-env

NagAppElasticBeanstalk-env

Environment overview

Health

Unknown

Environment ID

e-hbku38bfn7

Domain

-

Application name

NagAppElasticBeanstalk

Platform

Change version

Platform

PHP 8.3 running on 64bit Amazon Linux 2023/4.3.2

Running version

-

Platform state

Supported

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