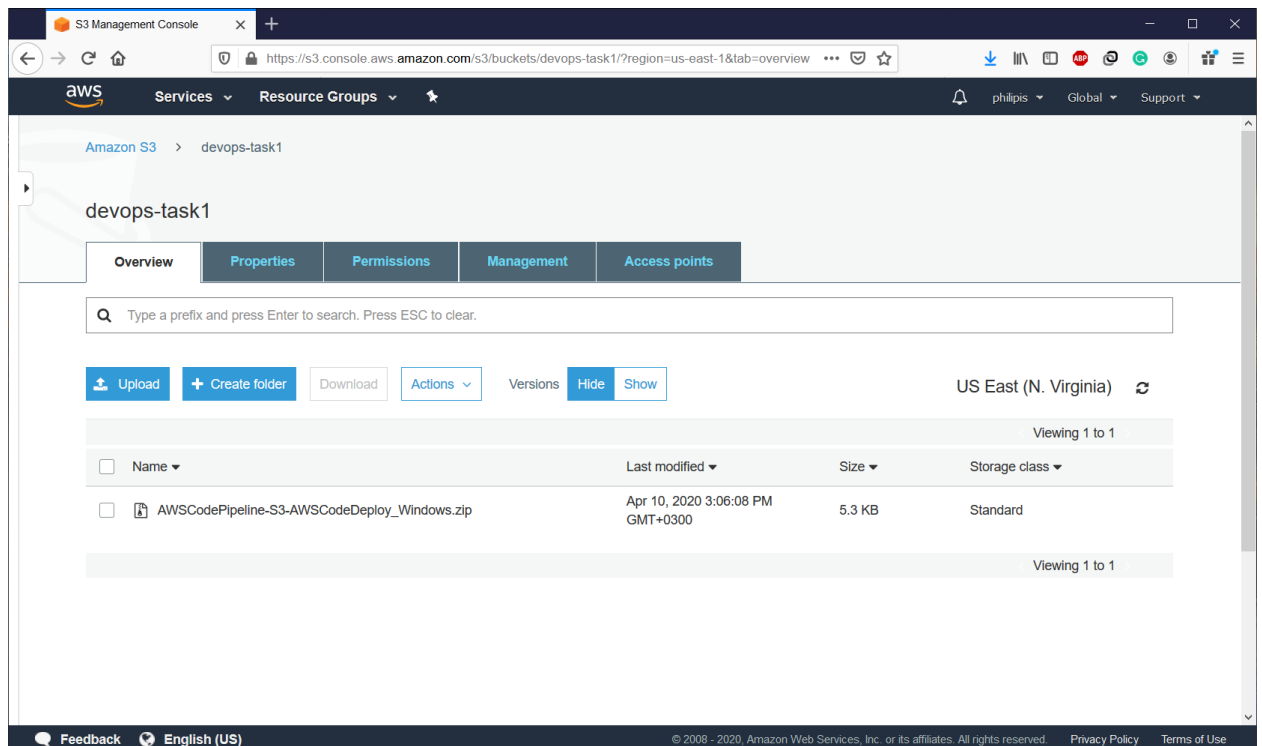
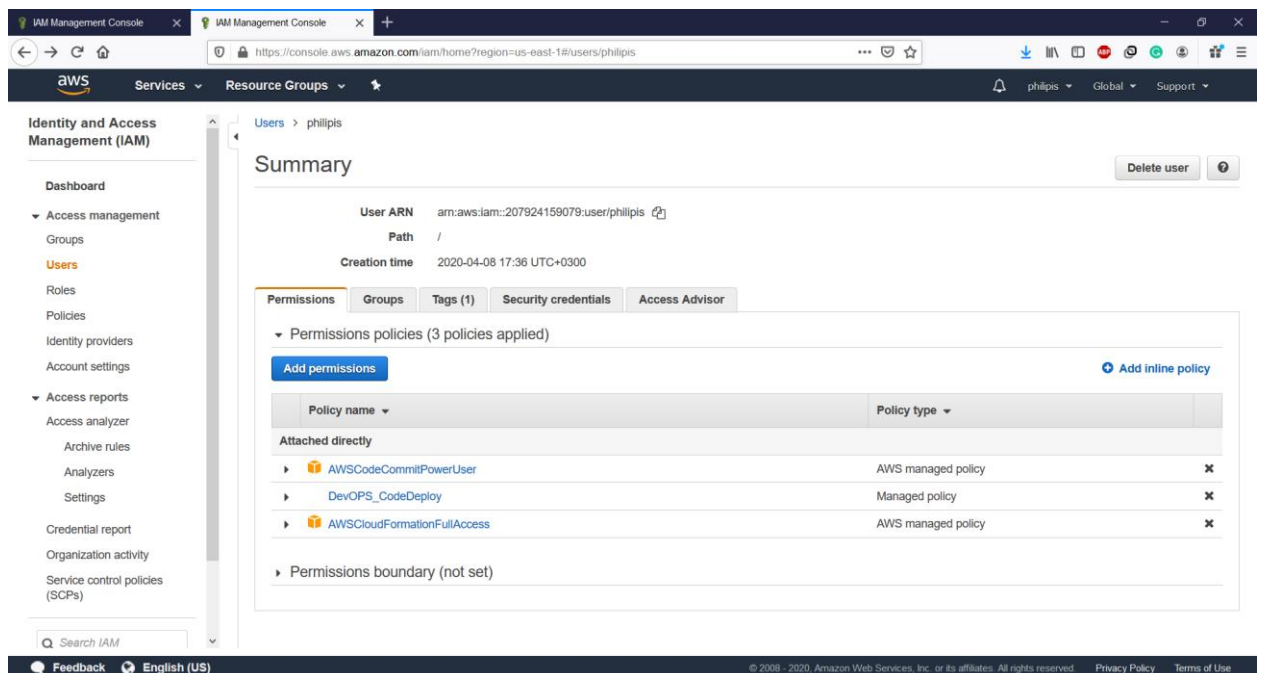


Starting to do <https://docs.aws.amazon.com/codepipeline/latest/userguide/tutorials-simple-s3.html>

1. Create an S3 Bucket devops-task1 and download the file AWSCodePipeline-S3-AWSCodeDeploy_Windows.zip



2. Create IAM User philipis and give him permission for CodeDeploy actions (<https://docs.aws.amazon.com/codedeploy/latest/userguide/getting-started-provision-user.html>)



3. Create an IAM Instance Profile for Your Amazon EC2 Instances

Install AWS CLI 2 for Win (<https://docs.aws.amazon.com/cli/latest/userguide/install-cliv2-windows.html>) and configure it

```
Администратор: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 10.0.17763.973]
(c) Корпорация Майкрософт (Microsoft Corporation), 2018. Все права защищены.

C:\Users\Fill>aws --version
aws-cli/2.0.7 Python/3.7.5 Windows/10 botocore/2.0.0dev11

C:\Users\Fill>aws configure
AWS Access Key ID [None]: 
AWS Secret Access Key [None]: 
Default region name [None]: us-east-1
Default output format [None]: json

C:\Users\Fill>aws s3 ls
2020-04-10 15:01:25 devops-task1

C:\Users\Fill>
```

Create a Service Role for CodeDeploy and update Trust Relationship to us-east-1 region only via console

The screenshot shows the AWS IAM Management Console interface. The browser address bar indicates the URL: <https://console.aws.amazon.com/iam/home?region=us-east-1#/roles/DevOps-TASK1-CodeDep>. The page title is "Edit Trust Relationship". Below the title, a message states: "You can customize trust relationships by editing the following access control policy document." The "Policy Document" section contains a JSON snippet:

```
1 {
2   "Version": "2012-10-17",
3   "Statement": [
4     {
5       "Sid": "",
6       "Effect": "Allow",
7       "Principal": {
8         "Service": "codedeploy.us-east-1.amazonaws.com"
9       },
10      "Action": "sts:AssumeRole"
11    }
12  ]
13 }
```

At the bottom right of the page, there are two buttons: "Cancel" and "Update Trust Policy".

The screenshot shows the AWS IAM Management Console interface. On the left is a navigation menu with sections like 'Identity and Access Management (IAM)', 'Access management', 'Access reports', and 'Credential report'. The main content area is titled 'Roles > DevOPS-TASK1-CodeDeploy' and shows a 'Summary' tab. The summary includes the Role ARN, Role description, Instance Profile ARNs, Path, Creation time, Last activity, and Maximum CLI/API session duration. Below the summary are tabs for 'Permissions', 'Trust relationships', 'Tags (1)', 'Access Advisor', and 'Revoke sessions'. The 'Permissions' tab is active, showing 'Permissions policies (1 policy applied)' with an 'Attach policies' button and a table listing the 'AWSCodeDeployRole' policy. There is also a 'Permissions boundary (not set)' section.

Role ARN: `arn:aws:iam::207924159079:role/DevOPS-TASK1-CodeDeploy`

```

Администратор: C:\Windows\system32\cmd.exe

C:\Users\Fill>aws --version
aws-cli/2.0.7 Python/3.7.5 windows/10 botocore/2.0.0dev11

C:\Users\Fill>aws configure
AWS Access Key ID [None]: AKIATA2J64JT7U2XM4XU
AWS Secret Access Key [None]: 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
Default region name [None]: us-east-1
Default output format [None]: json

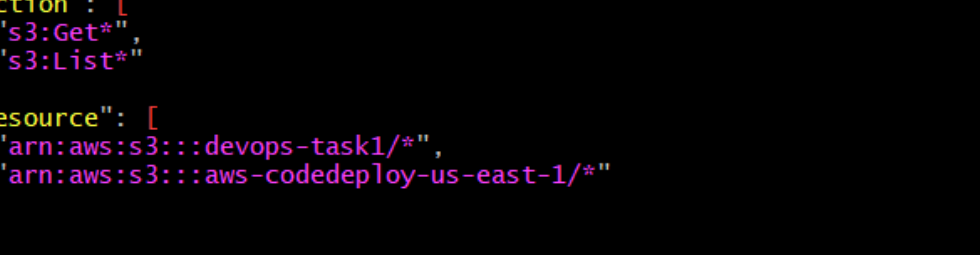
C:\Users\Fill>aws s3 ls
2020-04-10 15:01:25 devops-task1

C:\Users\Fill>aws iam get-role --role-name --query "Role.Arn" --output text
arn:aws:iam::207924159079:role/DevOPS-TASK1-CodeDeploy

C:\Users\Fill>aws iam get-role --role-name DevOPS-TASK1-CodeDeploy --query "Role.Arn" --output text
arn:aws:iam::207924159079:role/DevOPS-TASK1-CodeDeploy

C:\Users\Fill>
  
```

Create an IAM Instance Profile for Your Amazon EC2 Instances (CLI)



The screenshot shows a Windows command prompt window titled "MINGW64:/c/Users/Fill". The window displays the contents of a file named "DevOps-TASK1-EC2-Permission.json". The JSON content is as follows:

```
{
  "Action": [
    "s3:Get*",
    "s3:List*"
  ],
  "Resource": [
    "arn:aws:s3:::devops-task1/*",
    "arn:aws:s3:::aws-codedeploy-us-east-1/*"
  ]
}
```

The status bar at the bottom of the window shows the file name "DevOps-TASK1-EC2-Permission.json[+]", the file type "[unix]", the date and time "(01:59 01/01/1970)", and the page information "11,34 Внизу".

```
MINGW64:/c/Users/Fill
Fill@MI-Note MINGW64 ~
$ aws s3 ls
2020-04-10 15:01:25 devops-task1

Fill@MI-Note MINGW64 ~
$ vi DevOPS-TASK1-EC2-Trust.json

Fill@MI-Note MINGW64 ~
$ vi DevOPS-TASK1-EC2-Permission.json

Fill@MI-Note MINGW64 ~
$ aws iam create-role --role-name DevOPS-TASK1-EC2-Instance-Profile --assume-ro
e-policy-document file://DevOPS-TASK1-EC2-Trust.json
{
  "Role": {
    "Path": "/",
    "RoleName": "DevOPS-TASK1-EC2-Instance-Profile",
    "RoleId": "AROATA2J64JT2ESSGXDBT",
    "Arn": "arn:aws:iam::207924159079:role/DevOPS-TASK1-EC2-Instance-Profile"
  },
  "CreateDate": "2020-04-11T06:52:44+00:00",
  "AssumeRolePolicyDocument": {
    "Version": "2012-10-17",
    "Statement": [
      {
        "Sid": "",
        "Effect": "Allow",
        "Principal": {
          "Service": "ec2.amazonaws.com"
        },
        "Action": "sts:AssumeRole"
      }
    ]
  }
}

Fill@MI-Note MINGW64 ~
$ aws iam put-role-policy --role-name DevOPS-TASK1-EC2-Instance-Profile --policy-name DevOPS-
TASK1-EC2-Permissions --policy-document file://DevOPS-TASK1-EC2-Permissions.json

Error parsing parameter '--policy-document': Unable to load paramfile file://DevOPS-TASK1-EC2-
Permissions.json: [Errno 2] No such file or directory: 'DevOPS-TASK1-EC2-Permissions.json'

Fill@MI-Note MINGW64 ~
$ aws iam put-role-policy --role-name DevOPS-TASK1-EC2-Instance-Profile --policy-name DevOPS-
TASK1-EC2-Permissions --policy-document file://DevOPS-TASK1-EC2-Permission.json

Fill@MI-Note MINGW64 ~
$ |

MINGW64:/c/Users/Fill
TASK1-EC2-Permissions --policy-document file://DevOPS-TASK1-EC2-Permission.json

Fill@MI-Note MINGW64 ~
$ aws iam create-instance-profile --instance-profile-name DevOPS-TASK1-EC2-Instance-Profile
{
  "InstanceProfile": {
    "Path": "/",
    "InstanceProfileName": "DevOPS-TASK1-EC2-Instance-Profile",
    "InstanceProfileId": "AIPATA2J64JTQLK4SIV27",
    "Arn": "arn:aws:iam::207924159079:instance-profile/DevOPS-TASK1-EC2-Instance-Profile",
    "CreateDate": "2020-04-11T07:07:25+00:00",
    "Roles": []
  }
}

Fill@MI-Note MINGW64 ~
$ aws iam add-role-to-instance-profile --instance-profile-name ^C2-Instance-Profile --role-name
CodeDeployDemo-EC2-Instance-Profile

Fill@MI-Note MINGW64 ~
$ aws iam add-role-to-instance-profile --instance-profile-name DevOPS-TASK1-EC2-Instance-Profile
--role-name DevOPS-TASK1-EC2-Instance-Profile

Fill@MI-Note MINGW64 ~
$ |
```

4. Create 2 EC2 instance with tag Names Stage1 and Prod And waiting for running and checks status changes

The screenshot shows the AWS Management Console for EC2 instances. The left sidebar contains navigation options like EC2 Dashboard, Events, Tags, Reports, Limits, INSTANCES, IMAGES, and ELASTIC BLOCK STORE. The main content area displays a table of instances with columns: Name, Instance ID, Instance Type, Availability Zone, Instance State, Status Checks, and Alarm Status. Two instances are listed: 'Stage1' (ID: i-067a1ef29c749bc94) and 'Prod' (ID: i-05c4ce955cda688dc), both in 'running' state with '2/2 checks passed'. Below the table, the details for the 'Prod' instance are shown, including its public DNS, IP addresses, and various configuration settings.

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status
Stage1	i-067a1ef29c749bc94	t2.micro	us-east-1a	running	2/2 checks passed	None
Prod	i-05c4ce955cda688dc	t2.micro	us-east-1a	running	2/2 checks passed	None

5. Create “Deploy-Test” Application in CodeDeploy with deployment group tag Name: Stage1

The screenshot shows the AWS CodeDeploy console. A green banner at the top indicates 'Success: Deployment group created'. The main content area displays the 'Deploy-Test' application details. The 'Deployment group details' section shows the deployment group name as 'Deploy-Test', the application name as 'Deploy-Test', and the compute platform as 'EC2/On-premises'. The 'Environment configuration: Amazon EC2 instances' section shows a table with a single entry: 'Name' with value 'Stage1'.

Key	Value
Name	Stage1

6. Create Pipeline Test-Pipeline and waiting for status Source and Deploy changes

Instances | EC2 Management | CodePipeline - AWS Developer | Enor | Google Переводчик

https://console.aws.amazon.com/codesuite/codepipeline/pipelines/Test-Pipeline/view?n=80%

aws Services Resource Groups philip N. Virginia Support

Developer Tools CodePipeline

- Source • CodeCommit
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- Pipeline • CodePipeline
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 - Pipelines
 - Pipeline**
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Go to resource Feedback

Test-Pipeline

Notify Edit Stop execution Clone pipeline Release change

Source Succeeded
Pipeline execution ID: 8189eb2a-81c3-406b-a51a-d1eda7eebd4e

Source
Amazon S3
Succeeded - 1 minute ago

Source: Amazon S3 version id: TZt8f0dcmndKkFY2eZDOEROIsRKnV

Disable transition

Deploy In progress
Pipeline execution ID: 8189eb2a-81c3-406b-a51a-d1eda7eebd4e

Deploy
AWS CodeDeploy
In progress - 1 minute ago
Details

Source: Amazon S3 version id: TZt8f0dcmndKkFY2eZDOEROIsRKnV

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Check details of deploy progress

Instances | EC2 Management | CodeDeploy - AWS Developer | Enor | Google Переводчик

https://console.aws.amazon.com/codesuite/codedeploy/deployments/d-BWD2YFJN3/in=80%

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 - Deployment**
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 - Deployment configurations
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Go to resource Feedback

Deployment details

Application Deploy-Test	Deployment ID d-BWD2YFJN3	Status Succeeded
Deployment configuration CodeDeployDefault.AllAtOnce	Deployment group Deploy-Test	Initiated by User action
Deployment description -		

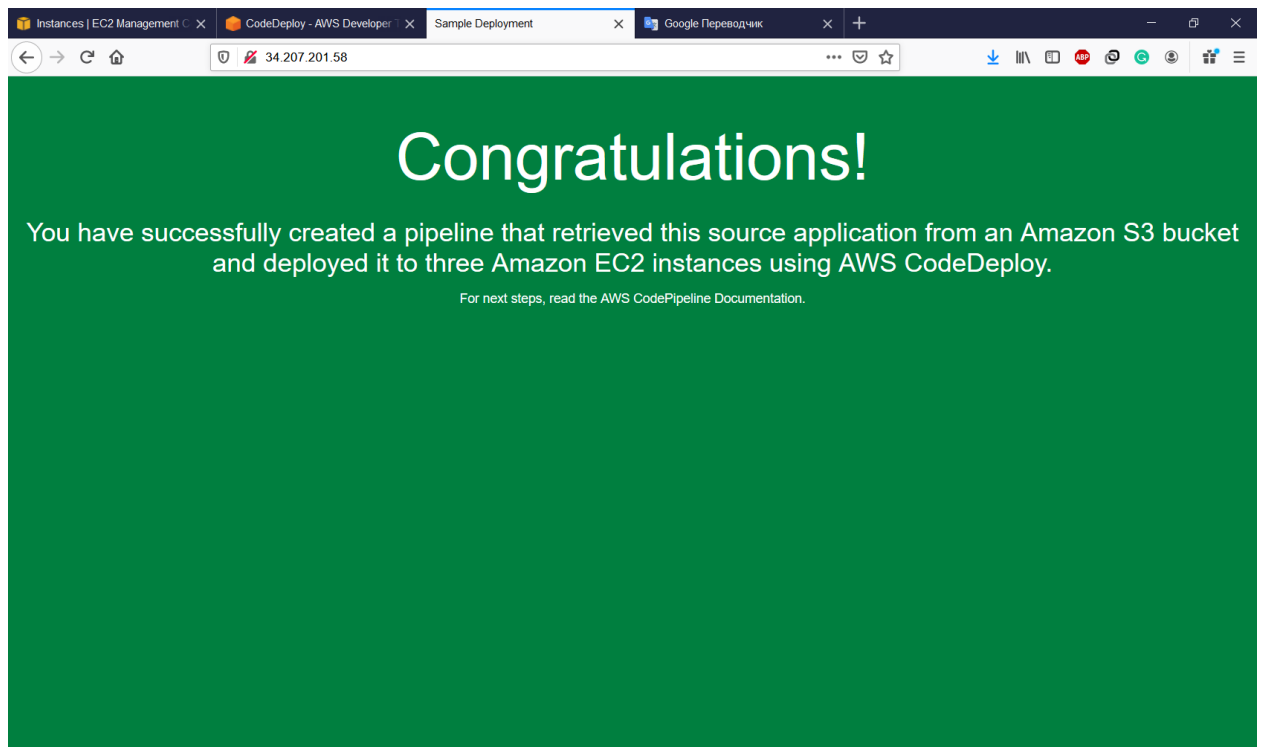
Revision details

Revision location s3://devops-task1/Test-Pipeline/SourceArti /MLpcnWe.zip?versionId=EQR6ESy17E8t2i1_N8ftUqVKdpWl w6b&eTag=d5af9ab2a6a4baa79f06a4b3050834c4	Revision created 2 minutes ago	Revision description Application revision registered by Deployment ID: d-BWD2YFJN3
---	-----------------------------------	--

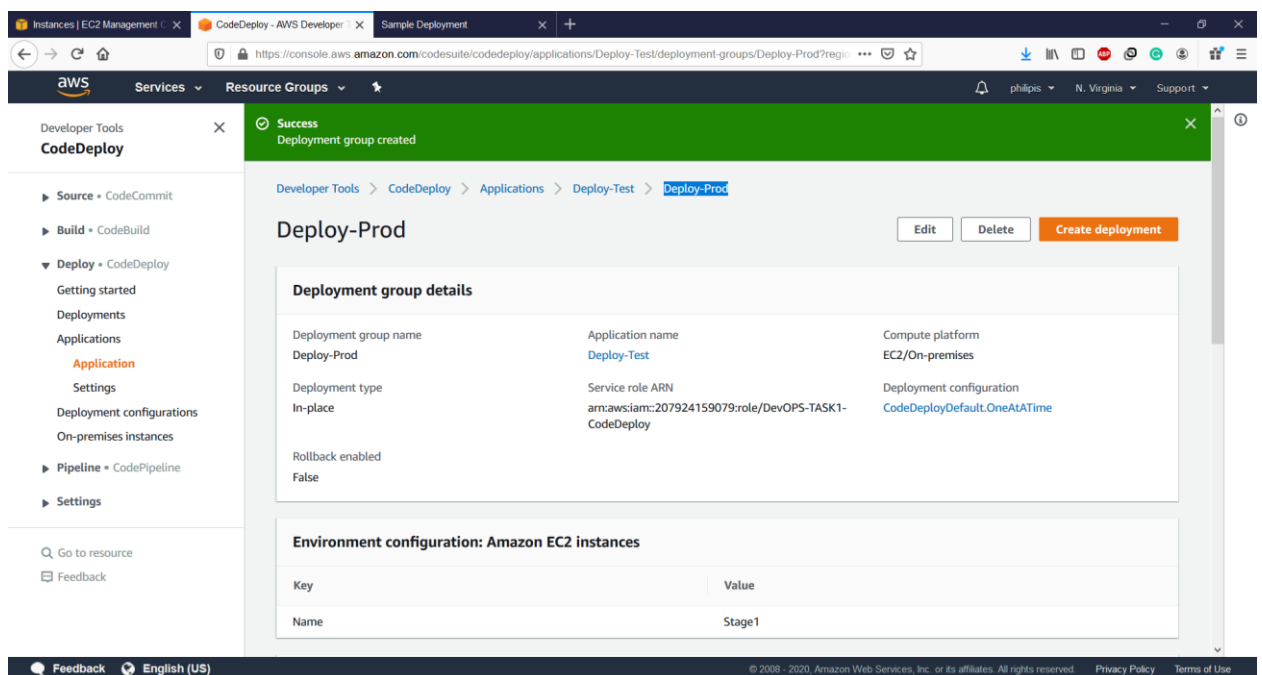
Event	Duration	Status	Error code	Start time	End time
ApplicationStop	less than one second	Succeeded	-	Apr 12, 2020 11:00 AM (UTC+3:00)	Apr 12, 2020 11:00 AM (UTC+3:00)
DownloadBundle	less than one second	Succeeded	-	Apr 12, 2020 11:00 AM (UTC+3:00)	Apr 12, 2020 11:00 AM (UTC+3:00)
BeforeInstall	2 minutes 0 seconds	Succeeded	-	Apr 12, 2020 11:00 AM (UTC+3:00)	Apr 12, 2020 11:02 AM (UTC+3:00)
Install	less than one second	Succeeded	-	Apr 12, 2020 11:02 AM (UTC+3:00)	Apr 12, 2020 11:02 AM (UTC+3:00)
AfterInstall	less than one second	Succeeded	-	Apr 12, 2020 11:02 AM (UTC+3:00)	Apr 12, 2020 11:02 AM (UTC+3:00)
ApplicationStart	less than one second	Succeeded	-	Apr 12, 2020 11:02 AM (UTC+3:00)	Apr 12, 2020 11:02 AM (UTC+3:00)
ValidateService	less than one second	Succeeded	-	Apr 12, 2020 11:02 AM (UTC+3:00)	Apr 12, 2020 11:02 AM (UTC+3:00)

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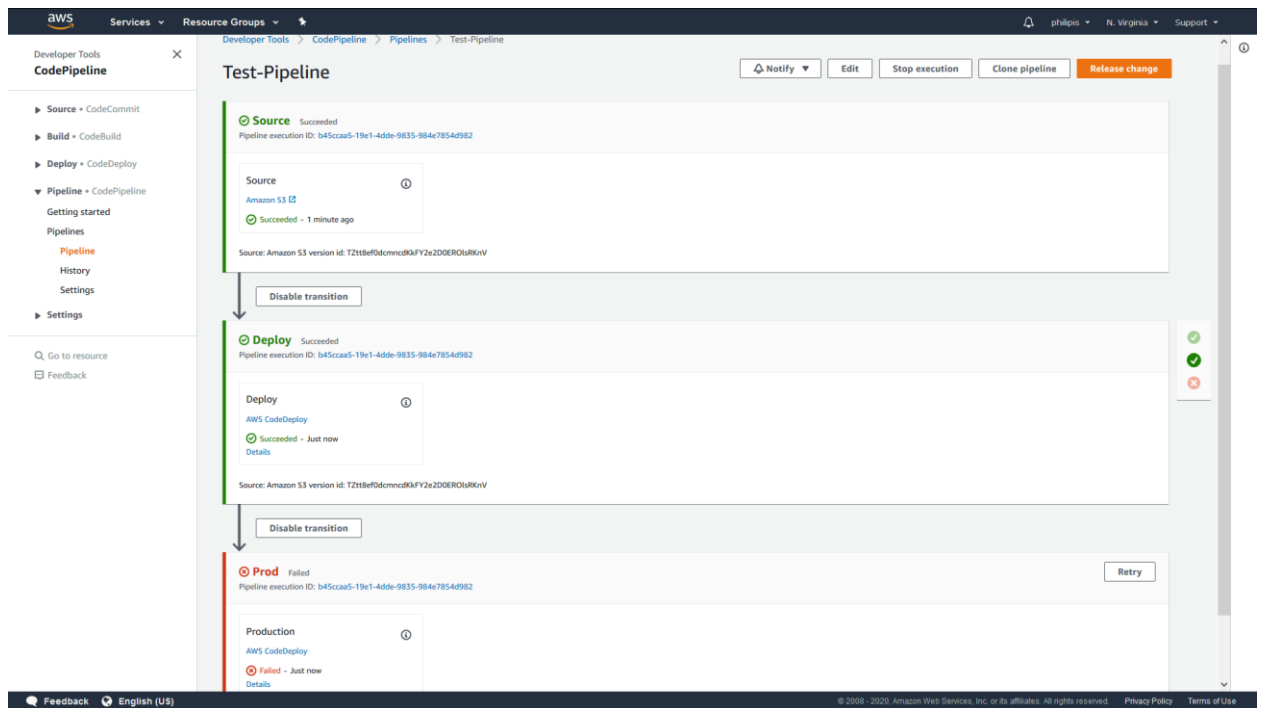
And the result



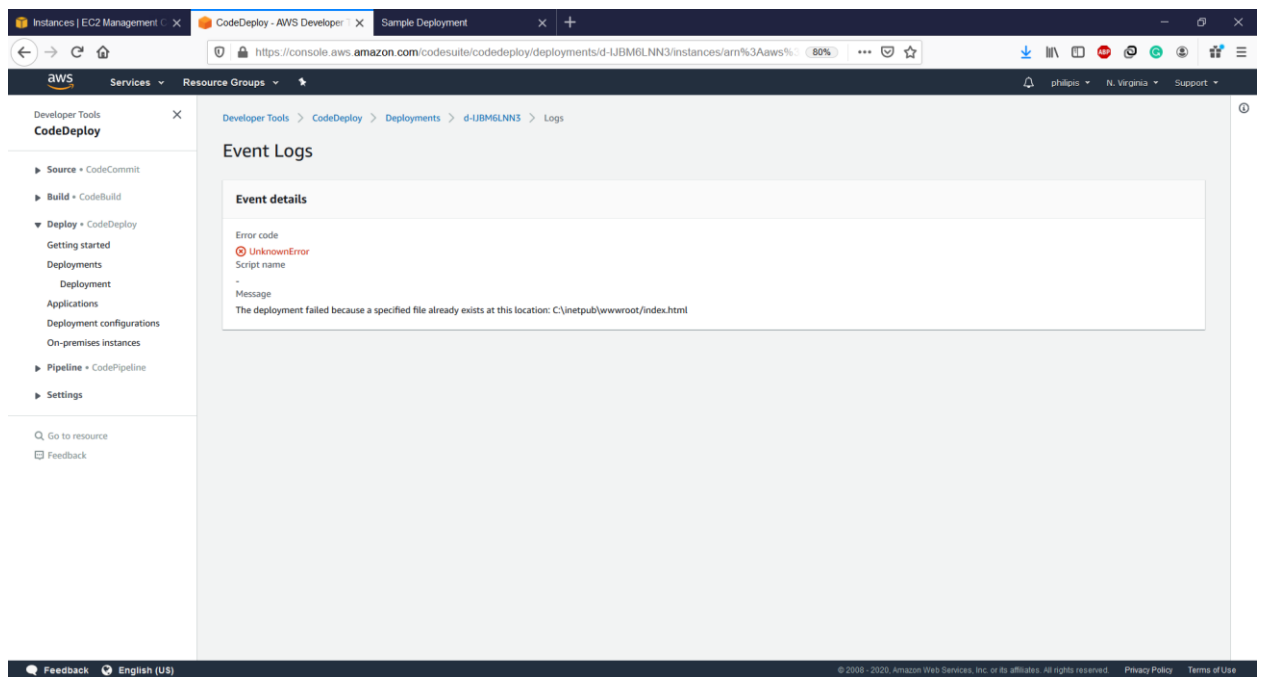
7. Add "Deploy-Prod" deployment group with same tags for EC2 Instances



8. Add "Prod" Stage to Pipeline with the Deploy-Prod Deployment group and choice Release-Change to initialize new deploy



See details of failure for Prod :



9. Disable transitions Between Stages in CodePipeline and upload the file to S3 again to start new deploy and verify that Prod Stage did not update because of disable transaction

Instances | EC2 Management | CodePipeline - AWS Developer | Sample Deployment

https://console.aws.amazon.com/codesuite/codepipeline/pipelines/Test-Pipeline/view?region=us-east-1

Developer Tools
CodePipeline

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Go to resource
Feedback

Success
Transition was disabled successfully

Source: Amazon S3 version id: TZt8f0dmcndk9FY2eZ00EROu8Kv

Disable transition

Deploy Succeeded
Pipeline execution ID: b45caa5-19e1-4dde-9835-984e7854d982

Deploy
AWS CodeDeploy
Succeeded - 4 minutes ago
Details

Source: Amazon S3 version id: TZt8f0dmcndk9FY2eZ00EROu8Kv

Enable transition

Prod Failed
Pipeline execution ID: b45caa5-19e1-4dde-9835-984e7854d982

Production
AWS CodeDeploy
Failed - 4 minutes ago
Details

Source: Amazon S3 version id: TZt8f0dmcndk9FY2eZ00EROu8Kv

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Instances | EC2 Management | CodePipeline - AWS Developer | Sample Deployment

https://console.aws.amazon.com/codesuite/codepipeline/pipelines/Test-Pipeline/view?region=us-east-1

Developer Tools
CodePipeline

- Source • CodeCommit
- Build • CodeBuild
- Deploy • CodeDeploy
- Pipeline • CodePipeline
 - Getting started
 - Pipelines
 - Pipeline**
 - History
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- Settings

Go to resource
Feedback

Developer Tools > CodePipeline > Pipelines > Test-Pipeline

Test-Pipeline

Notify Edit Stop execution Clone pipeline Release change

Source Succeeded
Pipeline execution ID: 794bc390-e744-4b99-868e-cb7930939049

Source
Amazon S3
Succeeded - Just now

Source: Amazon S3 version id: YWmKUd93LPSetnK4e9_e8tJSx0V0le

Disable transition

Deploy Succeeded
Pipeline execution ID: 794bc390-e744-4b99-868e-cb7930939049

Deploy
AWS CodeDeploy
Succeeded - Just now
Details

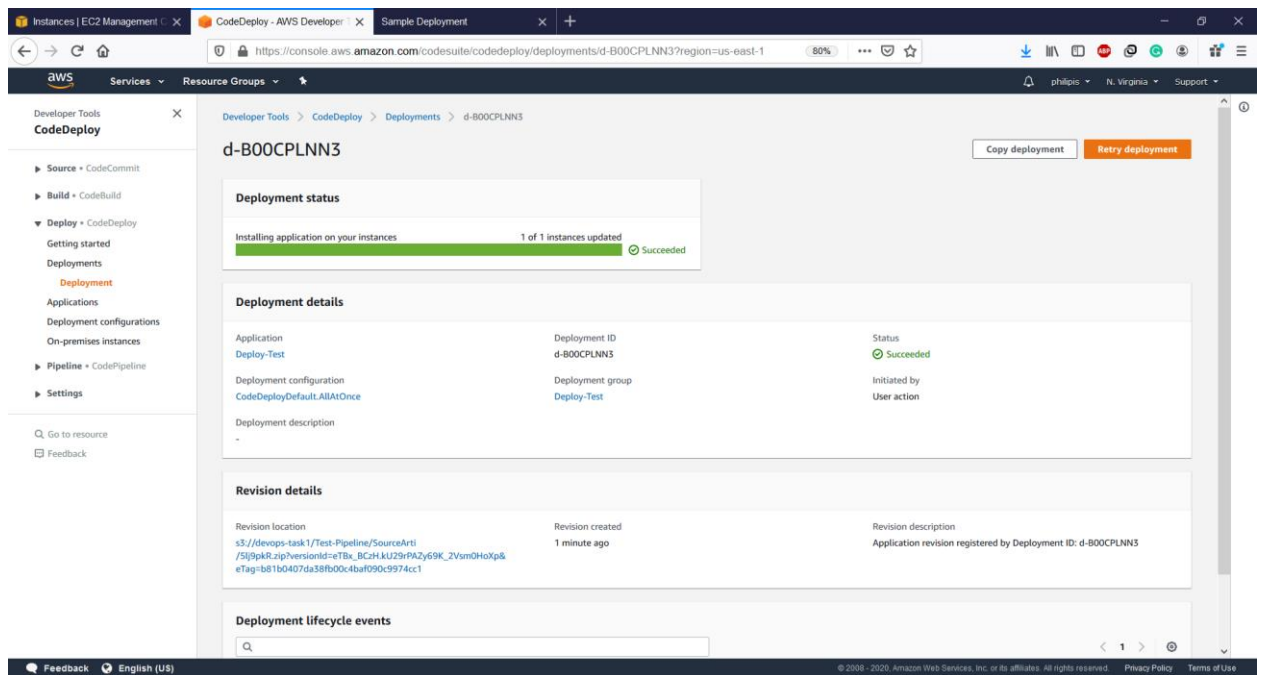
Source: Amazon S3 version id: YWmKUd93LPSetnK4e9_e8tJSx0V0le

Enable transition

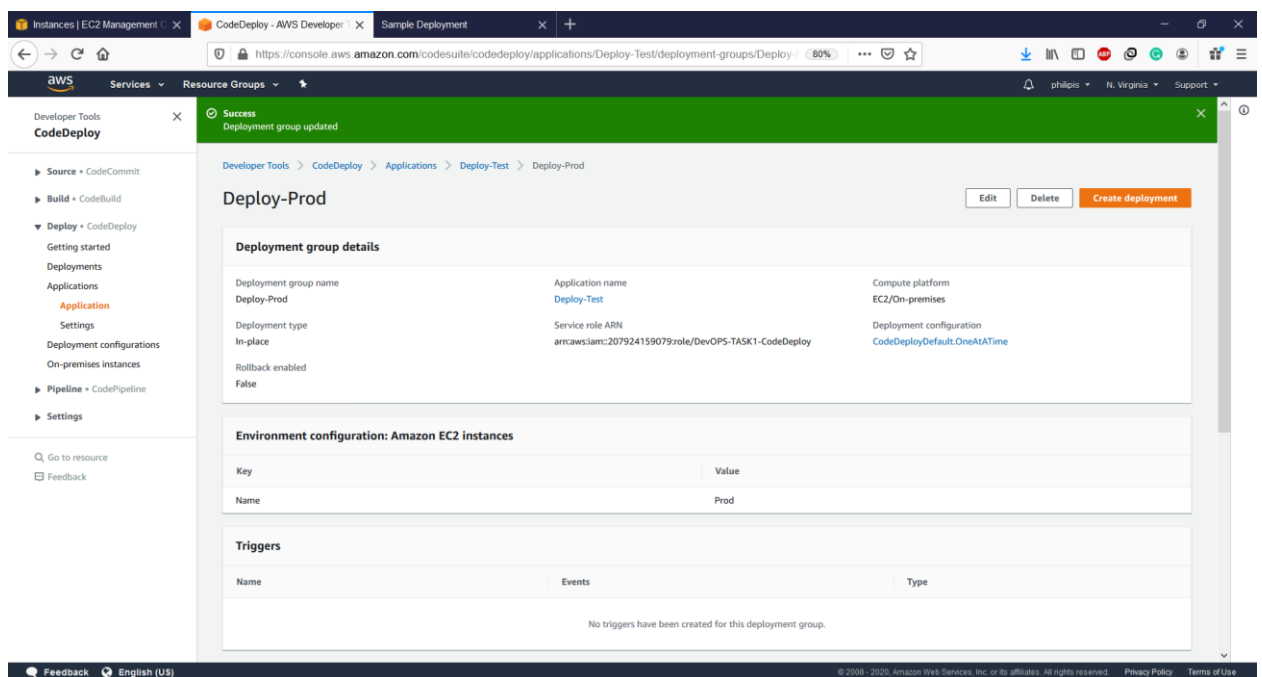
Prod Failed

Feedback English (US)

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10. Modify the Deploy-Prod Deployment group and use another instance with tag Name:Prod and enable Transaction.



The screenshot shows the AWS CodePipeline console. A green banner at the top indicates "Success Transition was enabled successfully". The pipeline view shows three stages: Source (Amazon S3, Succeeded), Deploy (AWS CodeDeploy, Succeeded), and Prod (In progress). The Deploy stage details show a successful deployment to the Prod environment.

Deployment details:

- Application: Deploy-Test
- Deployment ID: d-MVMUCKNN3
- Status: Succeeded
- Deployment configuration: CodeDeployDefault.OneAtATime
- Deployment group: Deploy-Prod
- Initiated by: User action

Revision details:

- Revision location: s3://devops-task1/Test-Pipeline/SourceArti/5j9pkR.zip?versionId=eTBx_BcH.KU29rPAZy69K_2Vsm0HoXp&eTag=b81b0407da38fb00c4ba0990c99744c1
- Revision created: 5 minutes ago
- Revision description: Application revision registered by Deployment ID: d-800CPLNN3

Event	Duration	Status	Error code	Start time	End time
ApplicationStop	less than one second	Succeeded	-	Apr 12, 2020 3:55 PM (UTC+3:00)	Apr 12, 2020 3:55 PM (UTC+3:00)
DownloadBundle	less than one second	Succeeded	-	Apr 12, 2020 3:55 PM (UTC+3:00)	Apr 12, 2020 3:55 PM (UTC+3:00)
BeforeInstall	1 minute 27 seconds	Succeeded	-	Apr 12, 2020 3:55 PM (UTC+3:00)	Apr 12, 2020 3:56 PM (UTC+3:00)
Install	less than one second	Succeeded	-	Apr 12, 2020 3:56 PM (UTC+3:00)	Apr 12, 2020 3:56 PM (UTC+3:00)
AfterInstall	less than one second	Succeeded	-	Apr 12, 2020 3:56 PM (UTC+3:00)	Apr 12, 2020 3:56 PM (UTC+3:00)
ApplicationStart	less than one second	Succeeded	-	Apr 12, 2020 3:56 PM (UTC+3:00)	Apr 12, 2020 3:56 PM (UTC+3:00)
ValidateService	less than one second	Succeeded	-	Apr 12, 2020 3:56 PM (UTC+3:00)	Apr 12, 2020 3:56 PM (UTC+3:00)

And verify that deploy finished successfully for another instance

The screenshot shows the AWS CodeDeploy console. The deployment details for the Prod instance are displayed, showing a successful deployment to the Prod environment.

Deployment details:

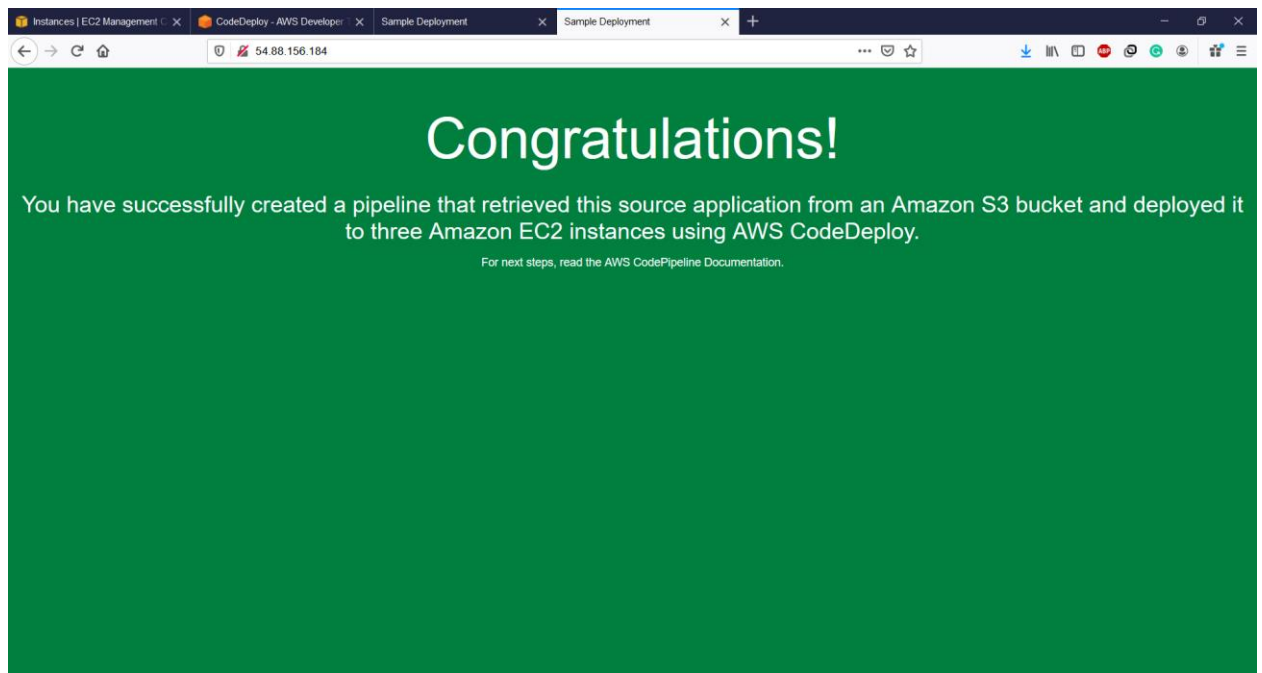
- Application: Deploy-Test
- Deployment ID: d-MVMUCKNN3
- Status: Succeeded
- Deployment configuration: CodeDeployDefault.OneAtATime
- Deployment group: Deploy-Prod
- Initiated by: User action

Revision details:

- Revision location: s3://devops-task1/Test-Pipeline/SourceArti/5j9pkR.zip?versionId=eTBx_BcH.KU29rPAZy69K_2Vsm0HoXp&eTag=b81b0407da38fb00c4ba0990c99744c1
- Revision created: 5 minutes ago
- Revision description: Application revision registered by Deployment ID: d-800CPLNN3

Event	Duration	Status	Error code	Start time	End time
ApplicationStop	less than one second	Succeeded	-	Apr 12, 2020 3:55 PM (UTC+3:00)	Apr 12, 2020 3:55 PM (UTC+3:00)
DownloadBundle	less than one second	Succeeded	-	Apr 12, 2020 3:55 PM (UTC+3:00)	Apr 12, 2020 3:55 PM (UTC+3:00)
BeforeInstall	1 minute 27 seconds	Succeeded	-	Apr 12, 2020 3:55 PM (UTC+3:00)	Apr 12, 2020 3:56 PM (UTC+3:00)
Install	less than one second	Succeeded	-	Apr 12, 2020 3:56 PM (UTC+3:00)	Apr 12, 2020 3:56 PM (UTC+3:00)
AfterInstall	less than one second	Succeeded	-	Apr 12, 2020 3:56 PM (UTC+3:00)	Apr 12, 2020 3:56 PM (UTC+3:00)
ApplicationStart	less than one second	Succeeded	-	Apr 12, 2020 3:56 PM (UTC+3:00)	Apr 12, 2020 3:56 PM (UTC+3:00)
ValidateService	less than one second	Succeeded	-	Apr 12, 2020 3:56 PM (UTC+3:00)	Apr 12, 2020 3:56 PM (UTC+3:00)

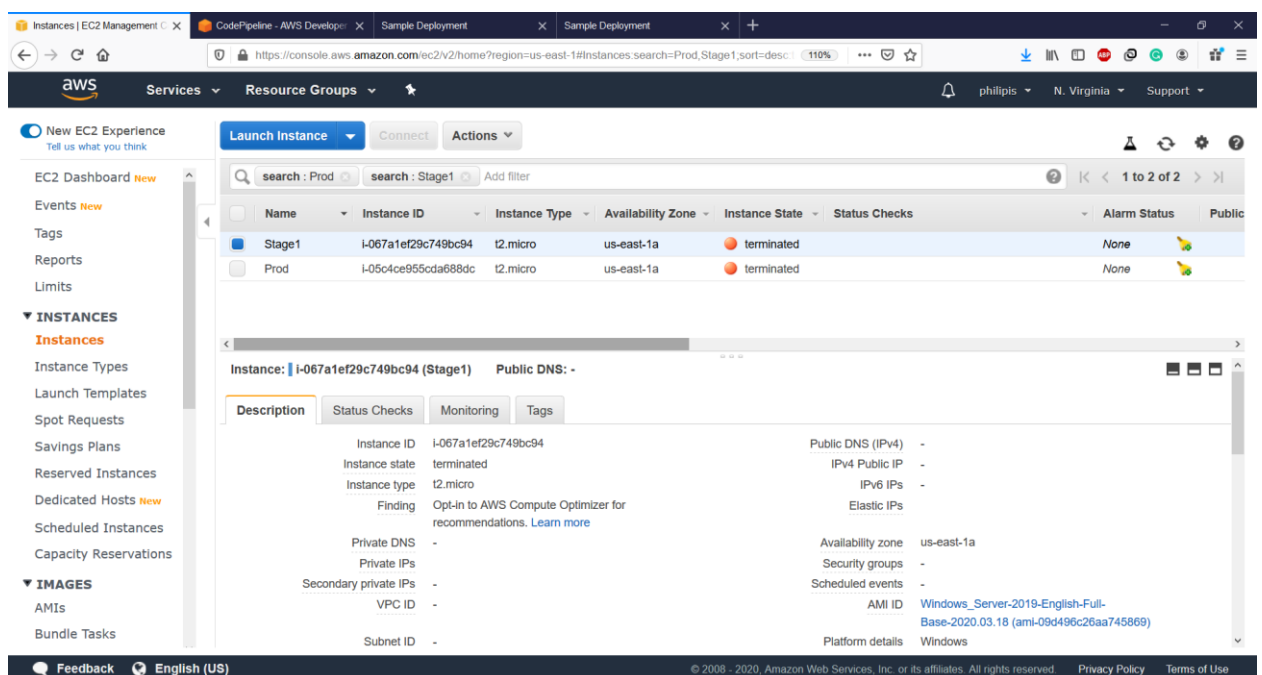
Check web on Prod Instance



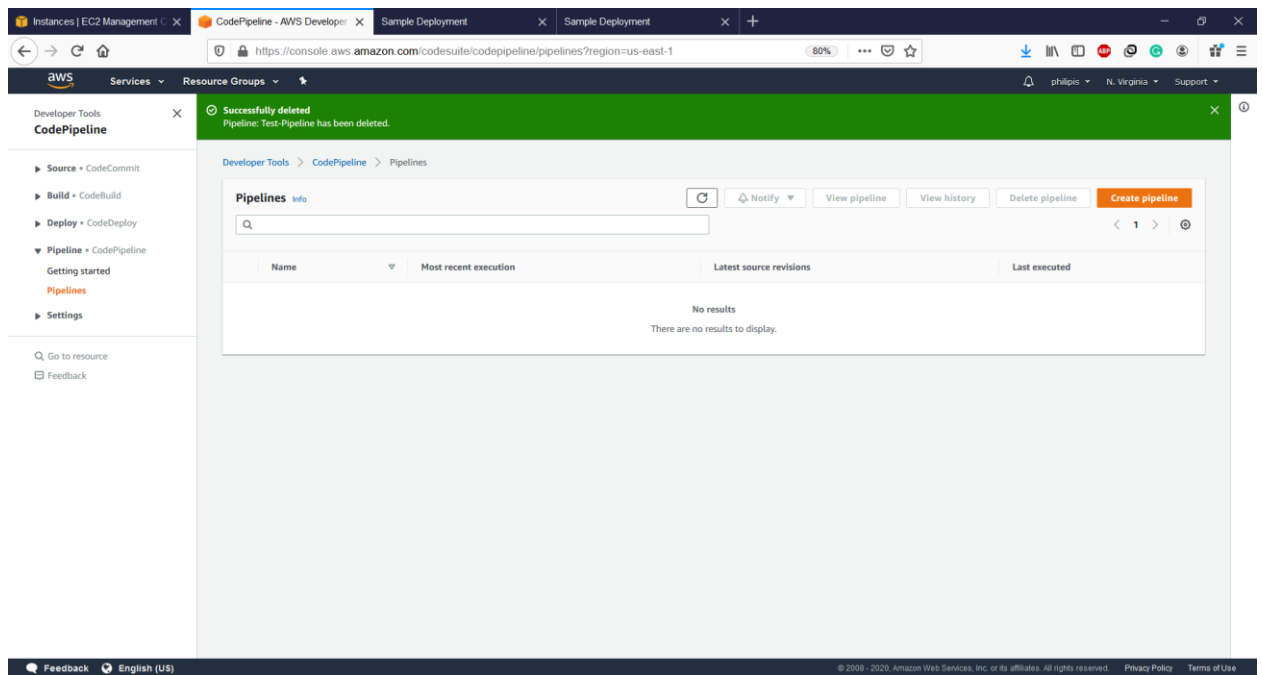
Done. It's works :)

DELETED ALL AWS Recourses (created during the task) and terminate EC2 Instances.

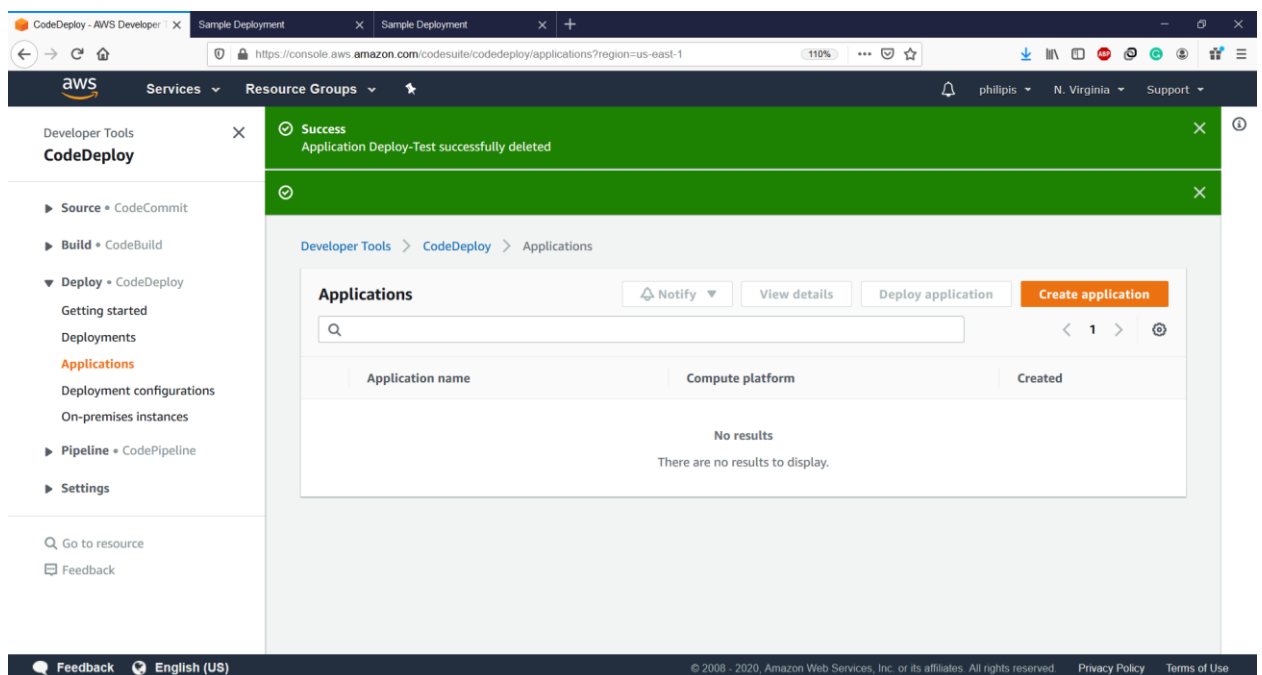
Terminate EC instance



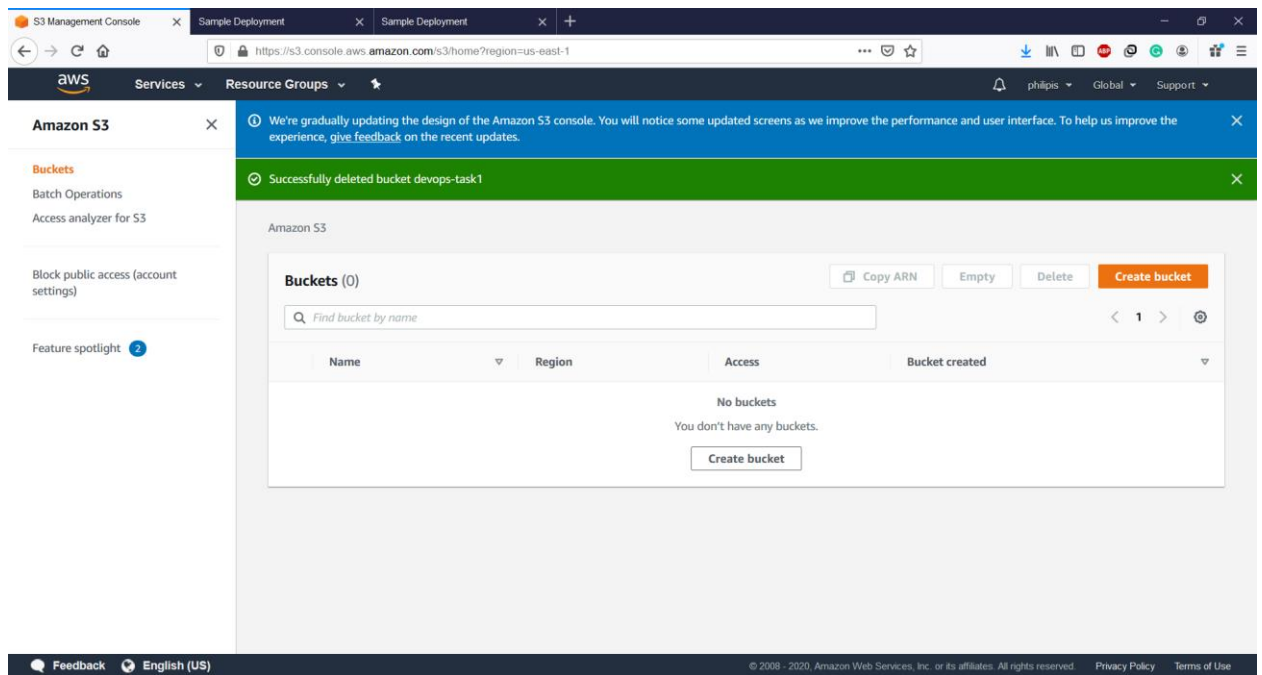
Delete Pipeline



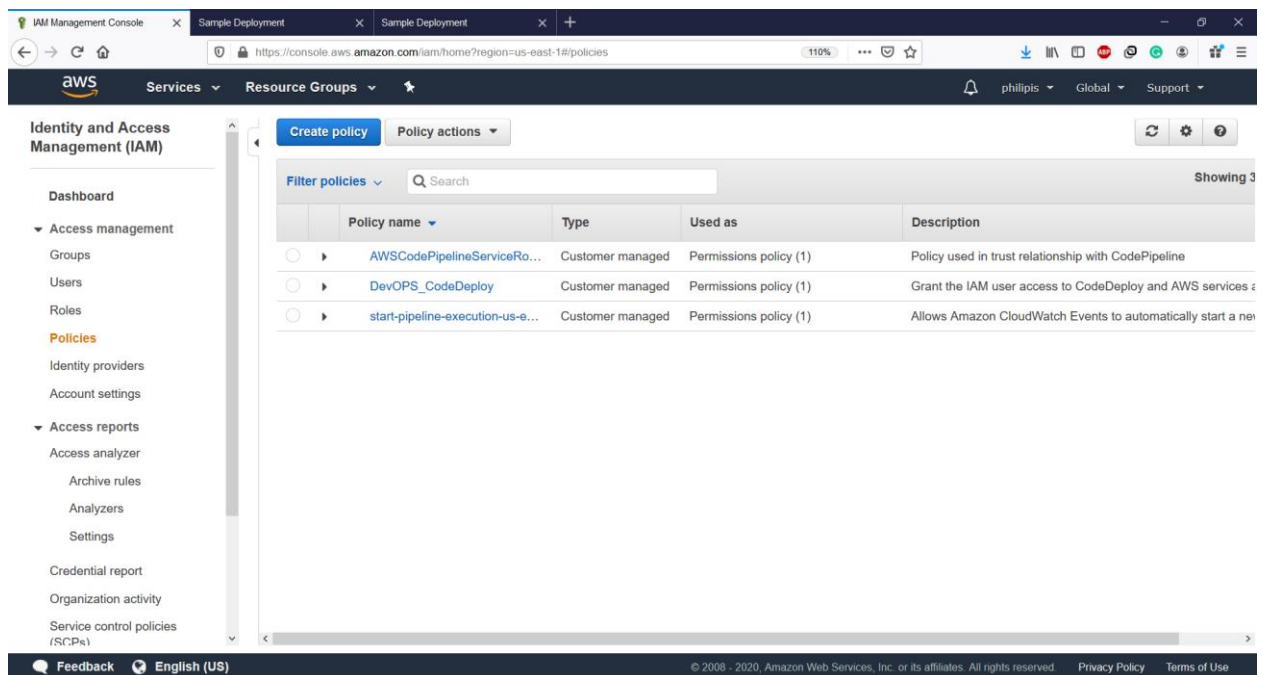
Delete Deployment groups and deploy application



Delete S3 Bucket devops-task1



Delete AIM custom Policies:



Delete AIM Roles:

Identity and Access Management (IAM)

Dashboard

- Access management
 - Groups
 - Users
 - Roles
 - Policies
 - Identity providers
 - Account settings
- Access reports
 - Access analyzer
 - Archive rules
 - Analizers
 - Settings
 - Credential report
 - Organization activity
 - Service control policies (SCPs)

Welcome to Identity and Access Management

IAM users sign-in link:
<https://207924159079.signin.aws.amazon.com/console> [Customize](#)

IAM Resources

Users: 1	Roles: 2
Groups: 0	Identity Providers: 0
Customer Managed Policies: 0	

Security Status 1 out of 5 complete.

⚠️	Delete your root access keys	▼
⚠️	Activate MFA on your root account	▼
✅	Create individual IAM users	▼
⚠️	Use groups to assign permissions	▼
⚠️	Apply an IAM password policy	▼

Feature Spotlight

Introduction to AWS IAM

0:00 / 2:18

Additional Information

- [IAM best practices](#)
- [IAM documentation](#)
- [Web Identity Federation Playground](#)
- [Policy Simulator](#)
- [Videos, IAM release history and additional resources](#)

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AIM user philipis I decided to keep for future projects.))