

Task 3.1: AWS. Creating a Simple Pipeline (S3 Bucket).

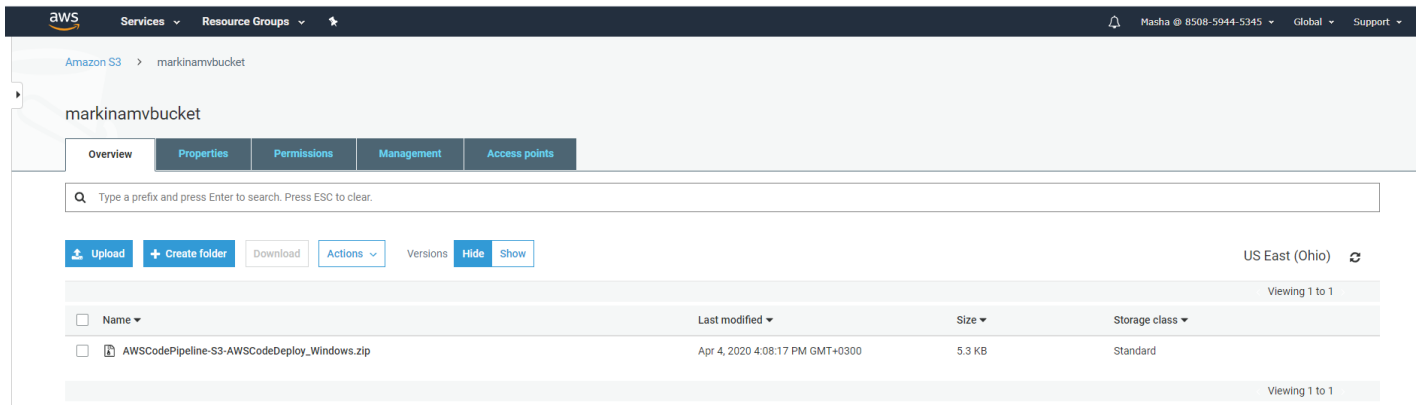
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Tutorial:

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

Fulfilment:

1) Step 1: Create an S3 Bucket for Your Application



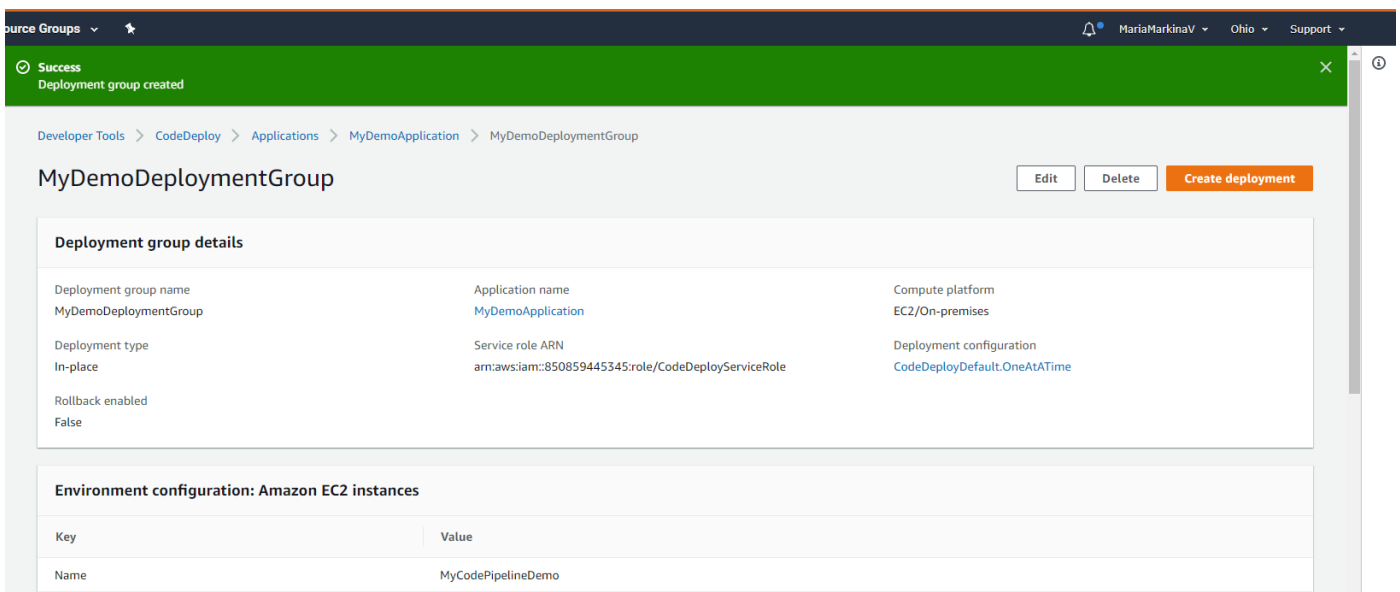
The screenshot shows the AWS S3 console interface. At the top, there's a navigation bar with 'AWS', 'Services', 'Resource Groups', and a user profile 'Masha @ 8508-5944-5345'. Below the navigation bar, the breadcrumb path is 'Amazon S3 > markinamvbucket'. The main content area shows the bucket 'markinamvbucket' with tabs for 'Overview', 'Properties', 'Permissions', 'Management', and 'Access points'. Below the tabs is a search bar with the placeholder text 'Type a prefix and press Enter to search. Press ESC to clear.' Below the search bar are buttons for 'Upload', 'Create folder', 'Download', 'Actions', 'Versions', 'Hide', and 'Show'. On the right side, there's a region selector 'US East (Ohio)' and a refresh icon. Below these elements is a table with columns: 'Name', 'Last modified', 'Size', and 'Storage class'. The table contains one object: 'AWSCodePipeline-S3-AWSCodeDeploy_Windows.zip' with a last modified date of 'Apr 4, 2020 4:08:17 PM GMT+0300', a size of '5.3 KB', and a storage class of 'Standard'. At the bottom right, it says 'Viewing 1 to 1'.

2) Step 2: Create Amazon EC2 Windows Instances and Install the CodeDeploy Agent

| | Name | Instance ID | Instance Type | Availability Zone | Instance State | Status Checks | Alarm Status | Public DNS (IPv4) | IPv4 Public IP | IPv6 IPs | Key Name | Monitoring |
|--|---------------|---------------------|---------------|-------------------|----------------|----------------|--------------|---------------------------|----------------|----------|----------|------------|
| | MyCodePipe... | i-02b44222dae900c7a | t2.micro | us-east-2c | running | 2/2 checks ... | None | ec2-3-19-53-186.us-ea... | 3.19.53.186 | - | MyKey | disabled |
| | MyCodePipe... | i-0fa78043b98ad81fc | t2.micro | us-east-2b | running | 2/2 checks ... | None | ec2-3-21-207-1.us-east... | 3.21.207.1 | - | MyKey | disabled |

| Launch Time | Security Groups | Owner |
|---------------------------------|-----------------|--------------|
| April 4, 2020 at 5:03:42 PM ... | launch-wizard-1 | 850859445345 |
| April 4, 2020 at 5:10:50 PM ... | launch-wizard-2 | 850859445345 |

3) Step 3: Create an Application in CodeDeploy



The screenshot shows the AWS CodeDeploy console interface. At the top, there's a navigation bar with 'Developer Tools', 'CodeDeploy', 'Applications', 'MyDemoApplication', and 'MyDemoDeploymentGroup'. Below the navigation bar, there's a green banner with a success message: 'Success Deployment group created'. Below the banner, there's a section for 'MyDemoDeploymentGroup' with buttons for 'Edit', 'Delete', and 'Create deployment'. Below this section is a 'Deployment group details' section with a table containing the following information:

| | | |
|-----------------------|--|------------------------------|
| Deployment group name | Application name | Compute platform |
| MyDemoDeploymentGroup | MyDemoApplication | EC2/On-premises |
| Deployment type | Service role ARN | Deployment configuration |
| In-place | arn:aws:iam::850859445345:role/CodeDeployServiceRole | CodeDeployDefault.OneAtATime |
| Rollback enabled | | |
| False | | |

Below the 'Deployment group details' section is an 'Environment configuration: Amazon EC2 instances' section with a table containing the following information:

| Key | Value |
|------|--------------------|
| Name | MyCodePipelineDemo |

4) Step 4: Create Your First Pipeline in CodePipeline

Resource Groups MariaMarkinaV Ohio Support

Success
Stage Source successfully retried

Developer tools > CodePipeline > Pipelines > MyFirstPipeline

MyFirstPipeline

Notify Edit Stop execution Clone pipeline Release change

Source Succeeded
Pipeline execution ID: 29a9c9db-cc3-4518-8f23-018fe84545b8

Source
Amazon S3

Succeeded - 3 minutes ago

Source: Amazon S3 version id: 7EmPEY82sEIFhySWIzJkv7g06qrqvQ

Disable transition

Deploy Succeeded
Pipeline execution ID: 29a9c9db-cc3-4518-8f23-018fe84545b8

Deploy
AWS CodeDeploy

Succeeded - Just now
[Details](#)

Source: Amazon S3 version id: 7EmPEY82sEIFhySWIzJkv7g06qrqvQ

Installing application on your instances 2 of 2 instances updated Succeeded

Deployment details

| | | |
|--|---|-----------------------------|
| Application MyDemoApplication | Deployment ID d-RLPF4BG82 | Status Succeeded |
| Deployment configuration CodeDeployDefault.OneAtATime | Deployment group MyDemoDeploymentGroup | Initiated by User action |
| Deployment description - | | |

Revision details

| | | |
|--|-----------------------------------|---|
| Revision location s3://codepipeline-us-east-2-949898064635/MyFirstPipeline/SourceArti/25hhEhg.zip? eTag=41d364270c65ab4c8e4c5e4015cf585d | Revision created 4 minutes ago | Revision description Application revision registered by Deployment ID: d-RLPF4BG82 |
|--|-----------------------------------|---|

Deployment lifecycle events

| Instance ID | Duration | Status | Most recent event | Events | Start time | End time |
|-------------------------------------|---------------------|-----------|-------------------|-----------------------------|--------------------------------|--------------------------------|
| i-02b44222dae900c7a | 1 minute 30 seconds | Succeeded | ValidateService | View events | Apr 4, 2020 6:02 PM (UTC+3:00) | Apr 4, 2020 6:04 PM (UTC+3:00) |
| i-0fa78043b98ad81fc | 1 minute 54 seconds | Succeeded | ValidateService | View events | Apr 4, 2020 6:00 PM (UTC+3:00) | Apr 4, 2020 6:02 PM (UTC+3:00) |

Tutorial: Create a Simpi... CodeDeploy Resource... S3 Management Cons... Identity and Access M... Instances | EC2 Mana... CodeDeploy - AWS Di... CodeDeploy - AWS Di... Instances | EC2 Mana... Sample Deployment

← → ↻ Не защищено | ec2-3-19-53-186.us-east-2.compute.amazonaws.com

Приложения Вхідні (29) - tomas... Maria Markina romashenka1997 (... Maria Markina | Lin... Моя учетная запись Microsoft's Commit... Каталог курсов и c... Port 62872 (tcp/ud... (2) CompTIA Secur... MariaMarkina/Dev... >> Другие вкладки

Congratulations!

You have successfully created a pipeline that retrieved this source application from an Amazon S3 bucket and deployed it to three Amazon EC2 instances using AWS CodeDeploy.

For next steps, read the [AWS CodePipeline Documentation](#).

5) Step 5: Add Another Stage to Your Pipeline

This screenshot shows a successful pipeline execution in AWS CodePipeline. The pipeline is named "MyFirstPipeline" and is in the "Success" state. The execution ID is "29a9c9db-ccc3-4518-8f23-018fe84545b8". The pipeline consists of three stages: "Source", "Deploy", and "Production".

- Source Stage:** Succeeded. Pipeline execution ID: 29a9c9db-ccc3-4518-8f23-018fe84545b8. The stage contains one action named "Source" using the "Amazon S3" provider, which succeeded 15 minutes ago.
- Deploy Stage:** Succeeded. Pipeline execution ID: 29a9c9db-ccc3-4518-8f23-018fe84545b8. The stage contains one action named "Deploy" using the "AWS CodeDeploy" provider, which succeeded 12 minutes ago.
- Production Stage:** Didn't Run. The stage contains one action named "Deploy-Second-Deployment" using the "AWS CodeDeploy" provider, which didn't run because no executions yet.

Each stage has a "Disable transition" button. The pipeline is shown as a vertical flow with arrows indicating the sequence of stages.

This failure is by design, to demonstrate what happens when there is a failure in a pipeline stage:

This screenshot shows a failed pipeline execution in AWS CodePipeline. The pipeline is named "MyFirstPipeline" and is in the "Failed" state. The execution ID is "88151fa2-2636-447e-80c4-9377b074c475". The pipeline consists of three stages: "Source", "Deploy", and "Production".

- Source Stage:** Succeeded. Pipeline execution ID: 88151fa2-2636-447e-80c4-9377b074c475. The stage contains one action named "Source" using the "Amazon S3" provider, which succeeded 3 minutes ago.
- Deploy Stage:** Succeeded. Pipeline execution ID: 88151fa2-2636-447e-80c4-9377b074c475. The stage contains one action named "Deploy" using the "AWS CodeDeploy" provider, which succeeded 2 minutes ago.
- Production Stage:** Failed. Pipeline execution ID: 88151fa2-2636-447e-80c4-9377b074c475. The stage contains one action named "Deploy-Second-Deployment" using the "AWS CodeDeploy" provider, which failed just now.

Each stage has a "Disable transition" button. The pipeline is shown as a vertical flow with arrows indicating the sequence of stages. The "Production" stage is highlighted in red, indicating a failure. A "Retry" button is visible next to the failed stage.

6) Step 6: Disable and Enable Transitions Between Stages in CodePipeline

The screenshot shows the AWS CodePipeline console interface. At the top, a green banner indicates "Success Transition was disabled successfully". Below this, the pipeline execution details are shown for Pipeline execution ID: a532359a-5462-4074-8ee8-a15d5923100a. The first stage is "Source", which is "Succeeded - Just now". A "Disable transition" button is visible. The second stage is "Deploy", which is "Succeeded - Just now". A "Enable transition" button is visible. The third stage is "Production", which is "Failed - 9 minutes ago". A "Retry" button is visible. The source for all stages is Amazon S3 version id: c1q4Vl.p8psko3Hf9A17X_PG118F5Ck.

7) I wanted third stage to succeed, so I added 2 more instances and edited the CodePipelineProductionFleet deployment group before enabling of the transition:

The screenshot shows the AWS CodePipeline console interface. At the top, a green banner indicates "Success Transition was disabled successfully". Below this, the pipeline execution details are shown for Pipeline execution ID: a532359a-5462-4074-8ee8-a15d5923100a. The first stage is "Source", which is "Succeeded - Just now". A "Disable transition" button is visible. The second stage is "Deploy", which is "Succeeded - Just now". A "Enable transition" button is visible. The third stage is "Production", which is "Failed - 9 minutes ago". A "Retry" button is visible. The source for all stages is Amazon S3 version id: c1q4Vl.p8psko3Hf9A17X_PG118F5Ck.

| Name | Instance ID | Instance Type | Availability Zone | Instance State | Status Checks | Alarm Status | Public DNS (IPv4) | IPv4 Public IP | IPv6 IPs | Key Name | Monitoring | Launch Time | Security Groups | Owner |
|---------------|---------------------|---------------|-------------------|----------------|----------------|--------------|--|----------------|----------|----------|------------|---------------------------------|-----------------|----------|
| MyCodePipe... | i-02b44222cae000c7a | i2.micro | us-east-2c | running | 2/2 checks ... | None | ec2-3-19-53-186.us-east-2.compute.amazonaws.com | 3.19.53.186 | - | MyKey | disabled | April 4, 2020 at 5:03:42 PM ... | launch-wizard-1 | 85085944 |
| MyCodePipe... | i-0fa78043b9a9a81fc | i2.micro | us-east-2b | running | 2/2 checks ... | None | ec2-3-21-207-1.us-east-2.compute.amazonaws.com | 3.21.207.1 | - | MyKey | disabled | April 4, 2020 at 5:10:50 PM ... | launch-wizard-2 | 85085944 |
| MyCodePipe... | i-09a2c6349e43a02eb | i2.micro | us-east-2b | running | 2/2 checks ... | None | ec2-18-101-104-130.us-east-2.compute.amazonaws.com | 18.101.104.130 | - | MyKey | disabled | April 4, 2020 at 7:14:57 PM ... | launch-wizard-3 | 85085944 |
| MyCodePipe... | i-09b9f0bca1fada05a | i2.micro | us-east-2b | running | 2/2 checks ... | None | ec2-3-15-104-37.us-east-2.compute.amazonaws.com | 3.15.104.37 | - | MyKey | disabled | April 4, 2020 at 7:14:57 PM ... | launch-wizard-3 | 85085944 |

The screenshot shows the AWS CodePipeline console interface. At the top, a green banner indicates "Success Transition was disabled successfully". Below this, the pipeline execution details are shown for Pipeline execution ID: 6da0911f-2e27-47b0-bd49-0b1ea8c77264. The first stage is "Source", which is "Succeeded - 8 minutes ago". A "Disable transition" button is visible. The second stage is "Deploy", which is "Succeeded - 7 minutes ago". A "Disable transition" button is visible. The third stage is "Production", which is "Succeeded - Just now". A "Release change" button is visible. The source for all stages is Amazon S3 version id: c2KYS0CS2AION5yCRLw1DdJyL6FOTw.