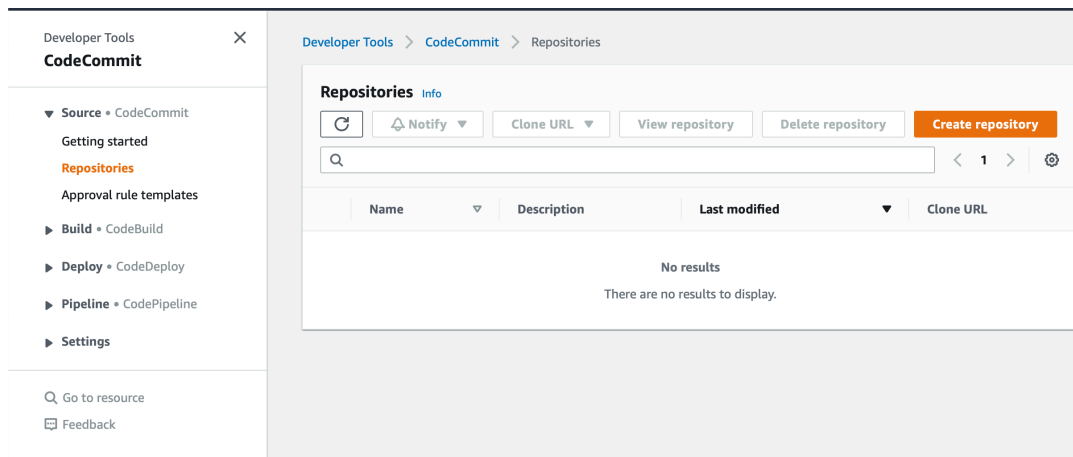
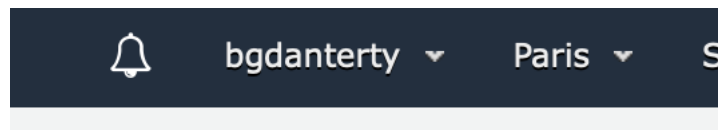


1. Open the CodeCommit console at [https://](https://console.aws.amazon.com/codecommit/)



console.aws.amazon.com/codecommit/

2. In the Region selector, choose the AWS Region where you want to create the repository and pipeline. For more information, see [AWS Regions and Endpoints](#).



3. On the Repositories page, choose Create repository. On the **Create repository** page, in **Repository name**, enter a name for your repository (for example, **MyDemoRepo**). Choose **Create**.

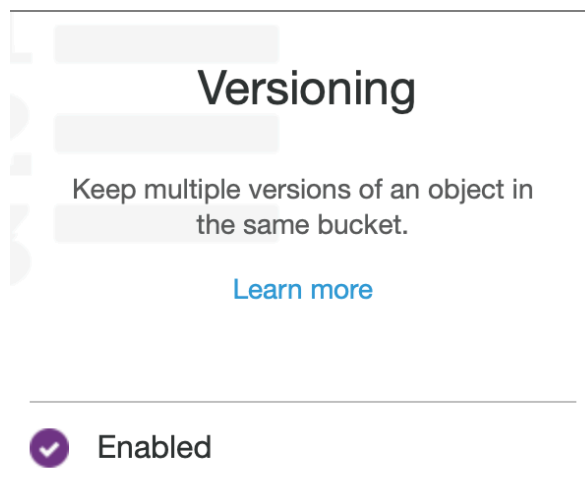
The screenshot shows the 'Create repository' form in the AWS CodeCommit console. The title is 'Create repository'. Below it is a descriptive paragraph: 'Create a secure repository to store and share your code. Begin by typing a repository name and a description for your repository. Repository names are included in the URLs for that repository.' The form is divided into a 'Repository settings' section. Inside this section, there are three fields: 'Repository name' with the value 'TertyshnyiDemo' and a note '100 characters maximum. Other limits apply.'; 'Description - optional' with the value 'For EPAM' and a note '1,000 characters maximum'; and 'Tags' with an 'Add' button. At the bottom right of the form are 'Cancel' and 'Create' buttons.

4. With your new repository open in the console, choose **Clone URL** on the top right of the page, and then choose **Clone SSH**. The address to clone your Git repository is copied to your clipboard. In your terminal or command line, navigate to a local directory where you'd like your local repository to be stored. In this tutorial, we use `/tmp`. Run the following command to clone the repository, replacing the SSH address with the one you copied in the previous step. This command creates a directory called `MyDemoRepo`. You copy a sample application to this directory. `git clone https://git-codecommit.us-west-2.amazonaws.com/v1/repos/MyDemoRepo`



1. Choose **Create bucket**. In Bucket name, enter a name for your bucket (for example, `awscodepipeline-demobucket-example-date`)

Name	Region	Access	Bucket created
tertyshnyi-pipeline-test	EU (Paris) eu-west-3	Not Public	2020-04-10T12:13:31.000Z

2. After the bucket is created, a success banner displays. Choose **Go to bucket details**. On the **Properties** tab, choose **Versioning**. Choose **Enable versioning**, and then choose **Save**.



- Next, download a sample from a GitHub repository and save it into a folder or directory on your local computer.




Name	Size	Kind	Date Added
 aws-codepip...eploy_linux.zip	11 KB	ZIP archive	Today, 17:39
 aws-codepip...edeploy_linux	--	Folder	Today, 17:39

- In the Amazon S3 console, for your bucket, upload the file:
 - Choose **Upload**.
 - Drag and drop the file or choose **Add files** and browse for the file.
 - Choose **Upload**.


tertyshnyi-pipeline-test

Overview Properties Permissions Management Access points

Q Type a prefix and press Enter to search. Press ESC to clear.

 Upload  Create folder Download Actions Versions Hide Show EU (Paris) 

Viewing 1 to 1

<input type="checkbox"/> Name	Last modified	Size	Storage class
<input type="checkbox"/>  aws-codepipeline-s3-aws-codedeploy_linux.zip	Apr 10, 2020 5:40:20 PM GMT+0300	10.8 KB	Standard

Viewing 1 to 1

- From the console dashboard, choose **Launch instance**, and select **Launch instance** from the options that pop up
On the **Step 1: Choose an Amazon Machine Image (AMI)** page, locate the **Microsoft Windows Server 2019 Base** option, and then choose **Select**. (This AMI is labeled "Free tier eligible" and can be found at the top of the list.)
On the **Step 2: Choose an Instance Type** page, choose the free tier eligible **t2.micro** type as the hardware configuration for your instance, and then choose **Next: Configure Instance Details**.
On the **Step 3: Configure Instance Details** page, do the following:
 - In **Number of instances**, enter **2**.
 - In **Auto-assign Public IP**, choose **Enable**.

- In **IAM role**, choose an IAM role that has been configured for use as an IAM instance profile for use with CodeDeploy.

Roles > CodeDeployDemo-EC2-Permissions

Summary

Delete role

Role ARN	arn:aws:iam::409570218504:role/CodeDeployDemo-EC2-Permissions 🔗
Role description	Allows EC2 instances to call AWS services on your behalf. Edit
Instance Profile ARNs	arn:aws:iam::409570218504:instance-profile/CodeDeployDemo-EC2-Permissions 🔗
Path	/
Creation time	2020-04-10 18:01 UTC+0300
Last activity	Not accessed in the tracking period
Maximum CLI/API session duration	1 hour Edit

Permissions

Trust relationships

Tags (1)

Access Advisor

Revoke sessions

▼ Permissions policies (1 policy applied)

Attach policies

[+ Add inline policy](#)

Policy name ▼	Policy type ▼
CodeDeployDemo-EC2-Permissions	Managed policy ✕

i-04942dd181...	t2.micro	eu-west-3c	running	Initial...	None	ec2-35-180-30-...	35.180.30.106	-	key-test-3...	disabled	April 10, 2020 at 6:0...	Firewall-HT...	40957021...
i-068d413765...	t2.micro	eu-west-3c	running	Initial...	None	ec2-35-180-118-...	35.180.118.54	-	key-test-3...	disabled	April 10, 2020 at 6:0...	Firewall-HT...	40957021...

Instance: [i-04942dd18107be9ea](#) Public DNS: [ec2-35-180-30-106.eu-west-3.compute.amazonaws.com](#)

Description	Status Checks	Monitoring	Tags
Instance ID i-04942dd18107be9ea	running		
Instance state t2.micro			
Instance type t2.micro			
Finding Opt-in to AWS Compute Optimizer for recommendations. Learn more			
Private DNS ip-172-31-39-83.eu-west-3.compute.internal			
Private IPs 172.31.39.83			
Secondary private IPs			
VPC ID vpc-010f3a68			
Subnet ID subnet-6658e42b			
Network interfaces eth0			
IAM role CodeDeployDemo-EC2-Permissions			
Key pair name key-test-3993			
Owner 409570218504			
Launch time April 10, 2020 at 6:08:38 PM UTC+3 (less than one hour)			
Termination protection False			
Lifecycle normal			
Monitoring basic			
Alarm status None			
Kernel ID -			
RAM disk ID -			
Placement group -			
Partition number -			
Virtualization hvm			
Reservation r-0a3c78dd183db926f			
AMI launch index 0			
Tenancy default			
Host ID -			
Affinity -			
State transition reason -			
State transition reason message			
Stop - Hibernation behavior	Disabled		
Number of vCPUs 1			

Public DNS (IPv4) ec2-35-180-30-106.eu-west-3.compute.amazonaws.com	
IPv4 Public IP 35.180.30.106	
IPv6 IPs -	
Elastic IPs	
Availability zone eu-west-3c	
Security groups Firewall-HTTP-HTTPS-RDP. view inbound rules . view outbound rules	
Scheduled events No scheduled events	
AMI ID Windows_Server-2019-English-Full-Base-2020.03.18 (ami-075f447b9d38f57e6)	
Platform details Windows	
Usage operation RunInstances:0002	
Source/dest. check True	
T2/T3 Unlimited Disabled	
EBS-optimized False	
Root device type ebs	
Root device /dev/sda1	
Block devices /dev/sda1	
Capacity Reservation -	
Capacity Reservation Settings	Open
Outpost Arn -	

5. To create an application in CodeDeploy

- Open the CodeDeploy console at <https://console.aws.amazon.com/codedeploy>.
- If the **Applications** page does not appear, on the AWS CodeDeploy menu, choose **Applications**.

3. Choose **Create application**.
4. Leave **Custom application** selected. In **Application name**, enter `MyDemoApplication`.
5. In **Compute Platform**, choose **EC2/On-premises**.
6. Choose **Create application**.

Application
Application
MyDemoApplication
Compute type
EC2/On-premises

6. To create a deployment group in CodeDeploy

1. On the page that displays your application, choose **Create deployment group**.
2. In **Deployment group name**, enter `MyDemoDeploymentGroup`.
3. In **Service Role**, choose a service role that trusts AWS CodeDeploy with, at minimum, the trust and permissions described in [Create a Service Role for CodeDeploy](#). To get the service role ARN, see [Get the Service Role ARN \(Console\)](#).
4. Under **Deployment type**, choose **In-place**.
5. Under **Environment configuration**, choose **Amazon EC2 Instances**. Choose **Name** in the **Key** field, and in the **Value** field, enter `MyCodePipelineDemo`.

Deployment group name
Enter a deployment group name
<input type="text" value="MyDemoDeploymentGroup"/>
100 character limit
Service role
Enter a service role
Enter a service role with CodeDeploy permissions that grants AWS CodeDeploy access to your target instances.
<input type="text" value="arn:aws:iam::409570218504:role/CodeDeployServiceRole"/>
Deployment type
Choose how to deploy your application
<input checked="" type="radio"/> In-place Updates the instances in the deployment group with the latest application revisions. During a deployment, each instance will be briefly taken offline for its update
<input type="radio"/> Blue/green Replaces the instances in the deployment group with new instances and deploys the latest application revision to them. After instances in the replacement environment are registered with a load balancer, instances from the original environment are deregistered and can be terminated.

Environment configuration

Select any combination of Amazon EC2 Auto Scaling groups, Amazon EC2 instances, and on-premises instances to add to this deployment

☐ Amazon EC2 Auto Scaling groups

☒ Amazon EC2 instances
2 unique matched instances. [Click here for details](#)

You can add up to three groups of tags for EC2 instances to this deployment group.

One tag group: Any instance identified by the tag group will be deployed to.

Multiple tag groups: Only instances identified by all the tag groups will be deployed to.

Tag group 1

Key

Value - optional

Remove tag

Add tag

+ Add tag group

☐ On-premises instances

Matching instances

2 unique matched instances. [Click here for details](#)

- Under **Deployment configuration**, choose **CodeDeployDefault.OneAtaTime**.
- Under **Load Balancer**, clear **Enable load balancing**. You do not need to set up a load balancer or choose a target group for this example.
- Expand the **Advanced** section. Under **Alarms**, choose **Ignore alarm configuration**.
- Choose **Create deployment group**.

Deployment settings

Deployment configuration

Choose from a list of default and custom deployment configurations. A deployment configuration is a set of rules that determines how fast an application is deployed and the success or failure conditions for a deployment.

CodeDeployDefault.OneAtaTime
or
Create deployment configuration

Load balancer

Select a load balancer to manage incoming traffic during the deployment process. The load balancer blocks traffic from each instance while it's being deployed to and allows traffic to it again after the deployment succeeds.

☐ Enable load balancing

▼ Advanced - optional

Triggers

Delete trigger
Create trigger

Name	Events	Type
No triggers have been created for this deployment group.		

Alarms

Delete alarm
Add alarm

To create a CodePipeline automated release process

1. Sign in to the AWS Management Console and open the CodePipeline console at <http://console.aws.amazon.com/codesuite/codepipeline/home>.
2. On the **Welcome** page, **Getting started** page, or the **Pipelines** page, choose **Create pipeline**.
3. In **Step 1: Choose pipeline settings**, in **Pipeline name**, enter **MyFirstPipeline**.
4. In **Service role**, Choose **Existing service role to use a service role already created in IAM**. In **Role name**, choose your service role from the list.

Choose pipeline settings

Pipeline settings

Pipeline name
Enter the pipeline name. You cannot edit the pipeline name after it is created.

No more than 100 characters

Service role

☒ **New service role**
Create a service role in your account

☐ **Existing service role**
Choose an existing service role from your account

Role name

Type your service role name
☒ Allow AWS CodePipeline to create a service role so it can be used with this new pipeline

5. Leave the settings under **Advanced settings** at their defaults, and then choose **Next**.
6. In **Step 2: Add source stage**, in **Source provider**, choose **Amazon S3**. In **Bucket**, enter the name of the S3 bucket you created in [Step 1: Create an S3 Bucket for Your Application](#). In **S3 object key**, enter the object key with or without a file path, and remember to include the file extension. For example, if

you named your downloaded ZIP file `SampleApp_Linux.zip`, enter the sample file name as shown in this example: `SampleApp_Linux.zip`

Add source stage

Source

Source provider

This is where you stored your input artifacts for your pipeline. Choose the provider and then provide the connection details.

Amazon S3

Bucket

tertyshnyi-pipeline-test

S3 object key

aws-codepipeline-s3-aws-codedeploy_linux.zip

Enter the object key. You can include a file path without the delimiter character (/) at the beginning. Include the file extension.
Example: SampleApp.zip

Change detection options

Choose a detection mode to automatically start your pipeline when a change occurs in the source code.


☒ **Amazon CloudWatch Events (recommended)**
Use Amazon CloudWatch Events to automatically start my pipeline when a change occurs

☐ **AWS CodePipeline**
Use AWS CodePipeline to check periodically for changes

7. In **Step 3: Add build stage**, choose **Skip build stage**, and then accept the warning message by choosing **Skip** again. Choose **Next**.
8. In **Step 4: Add deploy stage**, in **Deploy provider**, choose **AWS CodeDeploy**. The **Region** field defaults to the same AWS Region as your pipeline. In **Application name**, enter `MyDemoApplication`, or choose the **Refresh** button, and then choose the application name from the list. In **Deployment group**, enter `CodePipelineDemoFleet`, or choose it from the list, and then choose **Next**.

9. In **Step 5: Review**, review the information, and then choose **Create pipeline**.
10. The pipeline starts to run. You can view progress and success and failure messages as the CodePipeline sample deploys a webpage to each of the Amazon EC2 instances in the CodeDeploy deployment.

FirstPipeline


 Notify ▼

Edit

Stop execution

Clone pipeline


Release change

 **Source** Succeeded

Pipeline execution ID: c25a962f-12a0-4eff-a16a-1593696ad734


Source ⓘ

Amazon S3 [↗](#)

 Succeeded - 11 minutes ago

Source: Amazon S3 version id: rdBeTrDh79v4YP0D8zKI3wMFLnXnUJuF


Disable transition

 **Deploy** Succeeded

Pipeline execution ID: c25a962f-12a0-4eff-a16a-1593696ad734

Deploy ⓘ

AWS CodeDeploy

 Succeeded - 6 minutes ago

[Details](#)

Source: Amazon S3 version id: rdBeTrDh79v4YP0D8zKI3wMFLnXnUJuF

Sample Deployment

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](#).


To clean up the resources used in this tutorial

1. To clean up your CodePipeline resources, follow the instructions in [Delete a Pipeline in AWS CodePipeline](#).
2. To clean up your CodeDeploy resources, follow the instructions in [Clean Up Deployment Walkthrough Resources](#).
3. To delete the S3 bucket, follow the instructions in [Deleting or Emptying an S3 Bucket](#). If you do not intend to create more pipelines, delete the S3 bucket created for storing your pipeline artifacts. For more information about this bucket, see [CodePipeline Concepts](#).

Developer Tools > CodePipeline > Pipelines

Pipelines [Info](#)


  Notify ▼ [View pipeline](#) [View history](#) [Delete pipeline](#) [Create pipeline](#)


< 1 > 

Name ▼	Most recent execution	Latest source revisions	Last executed
No results			
There are no results to display.			

	i-017c104370c9cc6cd	t2.micro	eu-west-3b	 terminated
	i-0c10af7974fd14288	t2.micro	eu-west-3b	 terminated

Buckets (0)

 Copy ARN [Empty](#) [Delete](#) [Create bucket](#)

< 1 > 

Name ▼	Region	Access	Bucket created ▼
No buckets			
You don't have any buckets.			

Create bucket

