

Create Service role for ec2 instance and code deploy for ec2 instance



Create EC2 Instance with tags



Login to ec2 instance



Install codedeploy agent on your ec2 instance



#Install CodeDeploy agent on your EC2 instance:

```
sudo yum update
sudo yum install ruby
sudo yum install wget
cd /home/ec2-user
wget https://aws-codedeploy-eu-west-2.s3.amazonaws.com/latest/install
chmod +x ./install
sudo ./install auto
sudo service codedeploy-agent status
```

#Create your application.zip and load it into CodeDeploy:

```
aws deploy create-application --application-name mywebapp
aws deploy push --application-name mywebapp --s3-location s3://<MY_BUCKET_NAME>/webapp.zip --j
```

We need to configure our local machine as developer machine which is going to connect to codedeploy and which is going to package up our code and upload it to s3 for code deploy to use

Create IAM user and configure local machine

```
Last login: Thu Nov 15 16:29:11 on ttys001
Fayes-iMac:Downloads fayeellis$ aws configure
AWS Access Key ID [*****Y0BA]: AKIAJG5XIJ57UR2PWTVA
AWS Secret Access Key [*****7+GF]: hrBTlhFypdiKSHKuCv9sJGSSD5
RzbHxZC5p8JRbX
Default region name [eu-west-2]:
```

```
Fayes-iMac:CodeDeployLab fayeellis$ ls
mywebapp          mywebapp.zip
Fayes-iMac:CodeDeployLab fayeellis$ cd mywebapp
Fayes-iMac:mywebapp fayeellis$ ls
appspec.yml      index.html      scripts
Fayes-iMac:mywebapp fayeellis$
```

```
codeDeployLab/mywebapp/appspec.yml
version: 0.0
os: linux
files:
  - source: /index.html
    destination: /var/www/html/
hooks:
  BeforeInstall:
    - location: scripts/install_dependencies.sh
      timeout: 300
      runas: root
  - location: scripts/start_server.sh
    timeout: 300
    runas: root
  ApplicationStop:
    - location: scripts/stop_server.sh
      timeout: 300
      runas: root
```

```
~/CodeDeployLab/mywebapp/index.html
7   body {
8     color: #000000;
9     background-color: #FFFF00;
10    font-family: Arial, sans-serif;
11    font-size: 14px;
12  }
13
14  h1 {
15    font-size: 500%;
16    font-weight: normal;
17    margin-bottom: 0;
18  }
19
20  h2 {
21    font-size: 200%;
22    font-weight: normal;
23    margin-bottom: 0;
24  }
25  </style>
26 </head>
27 <body>
28   <div align="center">
29     <h1>Hello Cloud Gurus!</h1>
30     <h2>This is version 1.0 of my application.</h2>
31   </div>
32 </body>
33 </html>
```

Currently Open Documents	~/CodeDeployLab/mywebapp/scripts/install_dependencies.sh
appspec.yml	1 #!/bin/bash
CodeDeployCommand...	2 yum install -y httpd
CodeDeployDemo-EC...	3
index.html	4
install_dependencies.sh	
start_server.sh	
stop_server.sh	

Currently Open Documents	~/CodeDeployLab/mywebapp/scripts/start_server.sh
appspec.yml	1 #!/bin/bash
CodeDeployCommand...	2 service httpd start
CodeDeployDemo-EC...	3
index.html	4
install_dependencies.sh	
start_server.sh	
stop_server.sh	

Currently Open Documents	~/CodeDeployLab/mywebapp/scripts/stop_server.sh
appspec.yml	1 #!/bin/bash
CodeDeployCommand...	2 service httpd stop
CodeDeployDemo-EC...	3
index.html	4
install_dependencies.sh	
start_server.sh	
stop_server.sh	



Create an application in code deploy and push it to s3

```
Fayes-iMac:mywebapp fayeellis$ aws deploy create-application --application-name mywebapp
fb43760c-dd97-4912-a246-5343303218d5
Fayes-iMac:mywebapp fayeellis$ aws deploy push --application-name mywebapp --s3-location s3://cdbucket-faye/webapp.zip --ignore-hidden-files
To deploy with this revision, run:
aws deploy create-deployment --application-name mywebapp --s3-location bucket=cdbucket-faye,key=webapp.zip,bundleType=zip,eTag=d88be55925a0495f16736bd66cdb0ba3 --deployment-group-name <deployment-group-name> --deployment-config-name <deployment-config-name> --description <description>
Fayes-iMac:mywebapp fayeellis$ ls
appspec.yml      index.html      scripts
Fayes-iMac:mywebapp fayeellis$
```

Developer Tools  
CodeDeploy

Source • CodeCommit

Build • CodeBuild

▼ Deploy • CodeDeploy

Getting started

Deployments

Authentication

Introducing the new AWS CodeDeploy console experience!  
We have updated the AWS CodeDeploy console experience to make it easier to use. [Return to the old experience](#) or [permanently dismiss this message](#).

Developer Tools > CodeDeploy > Applications

Applications

View detailsDeploy applicationCreate application

< 1 >

Application name	Compute platform	Created
<input type="radio"/> mywebapp	EC2/On-premises	2 minutes ago

DeploymentsDeployment groupsRevisions

Deployment groups

View detailsEditCreate deployment group

< 1 >

Name	Status	Last attempted deployment	Last successful deployment	Trigger count
No deployment groups				
Before you can deploy your application using CodeDeploy, you must create a deployment group.				
Create deployment group				

Deployment group name

Enter a deployment group name

100 character limit

Service role

Choose a service role

Select a service role with CodeDeploy permissions that grants AWS CodeDeploy access to your target instances.

cdservicerole

Deployment type

Choose how to deploy your application

☒ 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

☐ 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.

☒ Amazon EC2 instances

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

Q AppName X

Value - optional

Q mywebapp X

Remove tag

Add tag

+ Add tag group

☐ On-premises instances

## 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 will be deployed and the success or failure conditions for a deployment.

CodeDeployDefault.AllAtOnce ▼

or

Create deployment configuration

CodeDeployDefault.OneAtATime

CodeDeployDefault.HalfAtATime

CodeDeployDefault.AllAtOnce

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.

☒ Choose a load balancer

☒ Application Load Balancer or Network Load Balancer

☐ Classic Load Balancer

✓ Success

Deployment group created

Developer Tools > CodeDeploy > Applications > mywebapp > mydg

mydg

Edit

Delete

Create deployment

### Deployment group details

Deployment group name  
mydg

Application name  
mywebapp

Compute platform  
EC2/On-premises

Deployment type  
In-place

Service role ARN  
arn:aws:iam::757250003982:role/cdservicerole

Deployment configuration  
CodeDeployDefault.AllAtOnce

Rollback enabled

mydg

Application  
mywebapp

Compute platform  
EC2/On-premises

Deployment type  
In-place

Revision type

☒ My application is stored in Amazon S3 ☐ My application is stored in GitHub

Revision location  
Copy and paste the Amazon S3 bucket where your revision is stored

s3://bucket-name/folder/object.[zip|tar|tgz]

Revision file type  
.zip

▼ Additional deployment behavior settings

ApplicationStop lifecycle event failure  
Type a deployment group name

☐ Don't fail the deployment to an instance if this lifecycle event on the instance fails

Content options  
Choose what to do during a deployment when a file on a target instance has the same name as a file in the application revision

☐ Fail the deployment  
An error is reported and the deployment status is changed to Failed.

☐ Overwrite the content  
The file in the application revision is copied to the target location on the instance, replacing the previous file.

☐ Retain the content  
The file in the application revision is not copied to the instance. The existing file is kept at the target location and treated as part of the new deployment.

▼ Rollback configuration overrides

You can override your deployment group rollback settings for this deployment only.

☐ Roll back when a deployment fails


☐ Roll back when alarm thresholds are met

☒ Disable rollbacks

Developer Tools > CodeDeploy > Deployments > d-E8D9004NU

## d-E8D9004NU

Deployment status

Installing application on your instances	0 of 1 instances updated	 Succeeded
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