

## Interaction of ec2 and s3 in Ubuntu Instance and run of java file

1. Create IAM role for EC2 to access S3 bucket.
2. Create one s3 bucket
3. Create Ubuntu 20.0 EC2 instance
4. Connect to instance and Install Java Create one directory as “Java code”
5. Create one directory as “Java code”
6. Create a java file
7. Compile the java file.
8. Move that java file to s3.

### Step 1 : Create IAM role for EC2 to access S3 bucket.

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": [
        "sts:AssumeRole"
      ],
      "Principal": {
        "Service": [
          "ec2.amazonaws.com"
        ]
      }
    }
  ]
}
```

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IAM Roles ec2-fullaccess-s3

### ec2-fullaccess-s3

Allows EC2 instances to call AWS services on your behalf

Summary

Creation date: March 21, 2022, 13:23 (UTC+05:30) ARN: arn:aws:iam:986041421187:role/ec2-fullaccess-s3 Instance profile ARN: arn:aws:iam:986041421187:instance-profile/ec2-fullaccess-s3

Last activity: None Maximum session duration: 1 hour

Permissions Trust relationships Tags Access Advisor Revoke sessions

Permissions policies (1)

You can attach up to 10 managed policies.

Filter policies by property or policy name and press enter

Policy name	Type	Description
AmazonS3FullAccess	AWS managed	Provides full access to all buckets via the AWS Management Console.

Permissions boundary - (not set)

Set a permissions boundary to control the maximum permissions this role can have. This is not a common setting but can be used to delegate permission management to others.

## Step 2 : Create one s3 bucket

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Amazon S3 ec2-fullaccess-s3-21-03-2022

### ec2-fullaccess-s3-21-03-2022

Objects Properties Permissions Metrics Management Access Points

Objects (0)

Objects are the fundamental entities stored in Amazon S3. You can use [Amazon S3 Inventory](#) to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

Copy S3 URI Copy URL Download Open Delete Actions Create folder Upload

Find objects by prefix

Name	Type	Last modified	Size	Storage class
No objects				

You don't have any objects in this bucket.

Upload

## Step 3 : Create Ubuntu 20.0 EC2 instance

During the configuration process select IAM Role which one created in step1.

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1. Choose AMI 2. Choose Instance Type 3. Configure Instance Details 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

### Step 3: Configure Instance Details

**DNS Hostname** ⓘ ☐ Enable IP name IPv4 (A record) DNS requests  
☒ Enable resource-based IPv4 (A record) DNS requests  
☐ Enable resource-based IPv6 (AAAA record) DNS requests

**Placement group** ⓘ ☐ Add instance to placement group

**Capacity Reservation** ⓘ Open

**Domain join directory** ⓘ No directory [Create new directory](#)

**IAM role** ⓘ ec2-fullaccess-s3 [Create new IAM role](#)

**Shutdown behavior** ⓘ Stop

**Stop - Hibernate behavior** ⓘ ☐ Enable hibernation as an additional stop behavior

**Enable termination protection** ⓘ ☐ Protect against accidental termination

**Monitoring** ⓘ ☐ Enable CloudWatch detailed monitoring  
[Additional charges apply.](#)

**Tenancy** ⓘ Shared - Run a shared hardware instance

[Cancel](#) [Previous](#) [Review and Launch](#) [Next: Add Storage](#)

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Instances (1/1) Info [Connect](#) [Instance state](#) [Actions](#) [Launch instances](#)

Search

<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
<input checked="" type="checkbox"/>	ec2-fullaccess-s3	i-0659ae29204fa24a1	Running	t2.micro	Initializing	No alarms	us-east-1d	ec2-3-82-102-108.co

**Instance: i-0659ae29204fa24a1 (ec2-fullaccess-s3)**

**Details** Security Networking Storage Status checks Monitoring Tags

**Instance summary** Info

Instance ID	i-0659ae29204fa24a1 (ec2-fullaccess-s3)	Public IPv4 address	3.82.102.108   <a href="#">open address</a>	Private IPv4 addresses	172.31.82.174
IPv6 address	-	Instance state	Running	Public IPv4 DNS	ec2-3-82-102-108.compute-1.amazonaws.com   <a href="#">open</a>

#### Step 4 : connect to instance and Install java

sudo apt update

sudo apt install default-jre -y

java -version

```
openjdk version "11.0.14" 2022-01-18
OpenJDK Runtime Environment (build 11.0.14+9-Ubuntu-0ubuntu2.20.04)
OpenJDK 64-Bit Server VM (build 11.0.14+9-Ubuntu-0ubuntu2.20.04, mixed mode, sharing)
root@ip-172-31-82-174:~#
```

sudo apt install default-jdk -y

javac -version

#### Step 5 : Create one directory as "Java code"

```
root@ip-172-31-82-174:~# mkdir javacode
root@ip-172-31-82-174:~# ls
javacode  snap
root@ip-172-31-82-174:~#
```

#### Step 6 : Create a java file "simple.java "

```
root@ip-172-31-82-174:~/javacode# cat simple.java
public class simple{
    public static void main(String args[]){
        System.out.println("hello world");
    }
}
root@ip-172-31-82-174:~/javacode#
```

#### Step 7 : Compile the java file and run

Javac simple.java

Java simple

```
root@ip-172-31-82-174:~/javacode# javac simple.java
root@ip-172-31-82-174:~/javacode# java simple
hello world
root@ip-172-31-82-174:~/javacode#
```

## Step 8 : Install Awscli and Move that java file to s3.

Sudo apt install awscli

```
aws s3 cp local_folder_path s3://bucket_name/
```

```
aws s3 cp /root/javacode/simple.java s3://ec2-fullaccess-s3-21-03-2022
```

## Step 9 : Observe the s3 bucket in management console, file is got uploaded.



