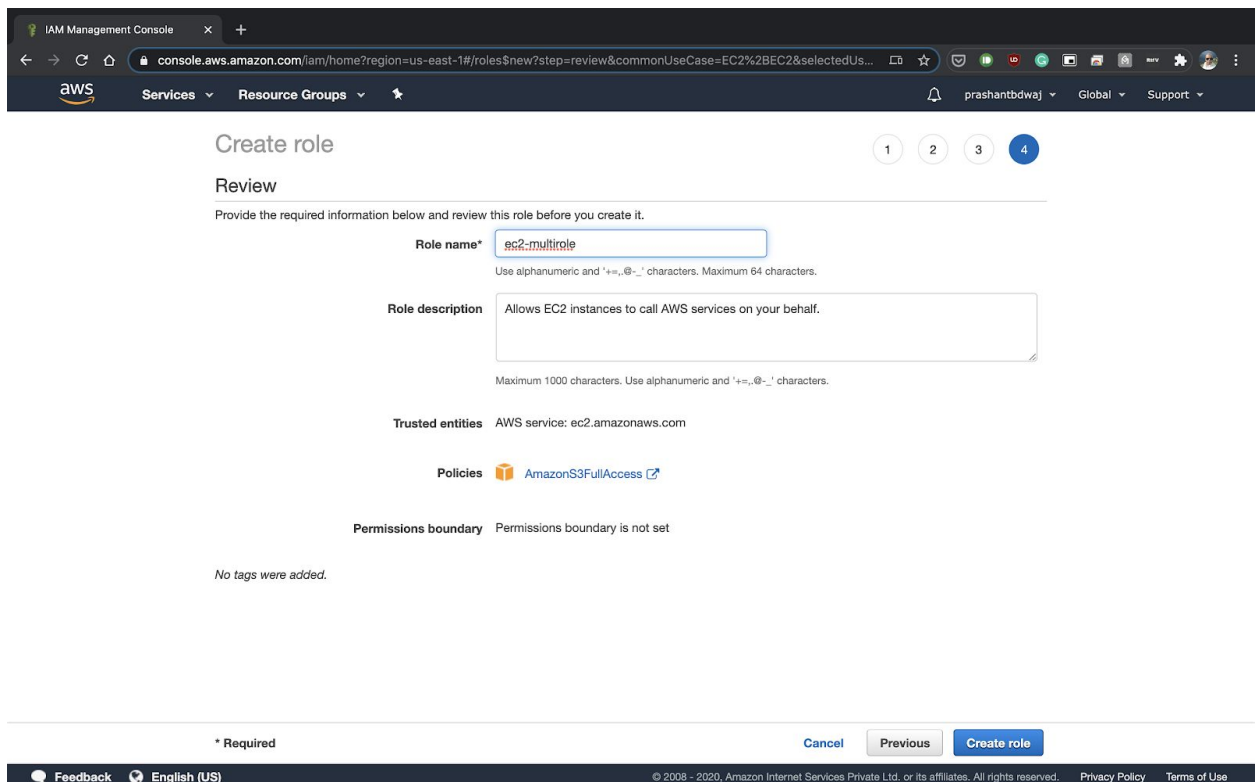


Requirements

- An AWS account
- An S3 bucket
- An EC2 instance running Ubuntu 18.04 LTS

Steps to be followed

1. Create an IAM role with the name “ec2-multirole” and attach the policy “AmazonS3FullAccess” to it

The screenshot shows the AWS IAM Management Console in a web browser. The page title is "Create role" and it is on the "Review" step of a 4-step process. The "Role name" field contains "ec2-multirole". The "Role description" field contains "Allows EC2 instances to call AWS services on your behalf." The "Trusted entities" field shows "AWS service: ec2.amazonaws.com". The "Policies" section shows "AmazonS3FullAccess" with a blue checkmark. The "Permissions boundary" field is empty, with a note "Permissions boundary is not set". At the bottom, there are buttons for "Cancel", "Previous", and "Create role". The footer includes "Feedback", "English (US)", and copyright information for Amazon Internet Services Private Ltd. © 2008 - 2020.

2. Navigate to EC2-> Instances
3. Attach the above role to the EC2 instance by selecting “Actions”->” Instance Settings”->” Attach/Replace IAM role” and selecting “ec2-multirole” from the dropdown

The screenshot shows the AWS IAM Management Console. The left sidebar contains navigation links for EC2 Dashboard, Events, Tags, Limits, Instances, Images, Elastic Block Store, and Network & Security. The main content area displays a list of instances. The 'Actions' menu for the selected instance is open, showing options like 'Connect', 'Create Template From Instance', 'Launch More Like This', 'Instance State', 'Instance Settings', 'Image', 'Networking', and 'CloudWatch Monitoring'. The 'Attach/Replace IAM Role' option is highlighted. Below the menu, the instance details for 'i-00001157cb4387cf1' are shown, including its state (running), type (t2.micro), and various network and security settings.

The screenshot shows the 'Attach/Replace IAM Role' page in the AWS IAM Management Console. The page title is 'Attach/Replace IAM Role'. Below the title, there is a paragraph explaining the purpose of the page: 'Select an IAM role to attach to your instance. If you don't have any IAM roles, choose Create new IAM role to create a role in the IAM console. If an IAM role is already attached to your instance, the IAM role you choose will replace the existing role.' The 'Instance ID' is 'i-00001157cb4387cf1'. The 'IAM role' dropdown is set to 'ec2-multitrole'. The 'Create new IAM role' button is visible. At the bottom, there are 'Cancel' and 'Apply' buttons.

4. Log in to the EC2 instance via SSH and install S3FS using the following command

sudo apt update

sudo apt install s3fs

```
ubuntu@ip-172-31-32-73:~$ sudo apt install s3fs
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following NEW packages will be installed:
  s3fs
0 upgraded, 1 newly installed, 0 to remove and 17 not upgraded.
Need to get 200 kB of archives.
After this operation, 557 kB of additional disk space will be used.
Get:1 http://us-east-1-ec2.archive.ubuntu.com/ubuntu bionic/universe amd64 s3fs amd64 1.82-1 [200 kB]
Fetched 200 kB in 0s (14.9 MB/s)
Selecting previously unselected package s3fs.
(Reading database ... 57065 files and directories currently installed.)
Preparing to unpack .../archives/s3fs_1.82-1_amd64.deb ...
Unpacking s3fs (1.82-1) ...
Setting up s3fs (1.82-1) ...
Processing triggers for man-db (2.8.3-2ubuntu0.1) ...
ubuntu@ip-172-31-32-73:~$
```

5. Create the directory to be used as the mount point and mount the bucket to that directory using the commands below

mkdir <directory-name>

s3fs <bucket name> <directory-name> -o iam_role='ec2-multirole'

```
ubuntu@ip-172-31-32-73:~$ mkdir s3mntpt
ubuntu@ip-172-31-32-73:~$ s3fs testglbckt s3mntpt -o iam_role='ec2-multirole'
ubuntu@ip-172-31-32-73:~$
```

- To check whether the bucket has been mounted properly, create a text file inside the mount directory

echo "This file is created from EC2" > ~/<directory name>/sample.txt

```
ubuntu@ip-172-31-32-73:~$ echo "This file is created from EC2" > ~/s3mntpt/sample.txt
ubuntu@ip-172-31-32-73:~$
```

- Check the S3 bucket to see if the file has been created

The screenshot shows the AWS S3 console interface for a bucket named 'testglbckt'. The 'Overview' tab is selected. The console displays the bucket's location as 'US East (N. Virginia)'. Below the navigation tabs, there is a search bar and a list of actions: 'Upload', 'Create folder', 'Download', and 'Actions'. A table lists the contents of the bucket, showing a single file named 'sample.txt' with a size of 30.0 B and a storage class of 'Standard'. The file was last modified on Jul 1, 2020, at 1:45:29 PM GMT+0530. The bottom of the console shows a status bar with '0 In progress', '2 Success', and '0 Error' operations.

Name	Last modified	Size	Storage class
sample.txt	Jul 1, 2020 1:45:29 PM GMT+0530	30.0 B	Standard

8. To unmount the bucket, use the commands below
sudo umount -l <mount directory>

```
ubuntu@ip-172-31-32-73:~$ sudo umount -l ~/s3mntpt
ubuntu@ip-172-31-32-73:~$
```

9. Follow the link below to learn more about s3fs and its installation in other operating systems.

<https://github.com/s3fs-fuse/s3fs-fuse>