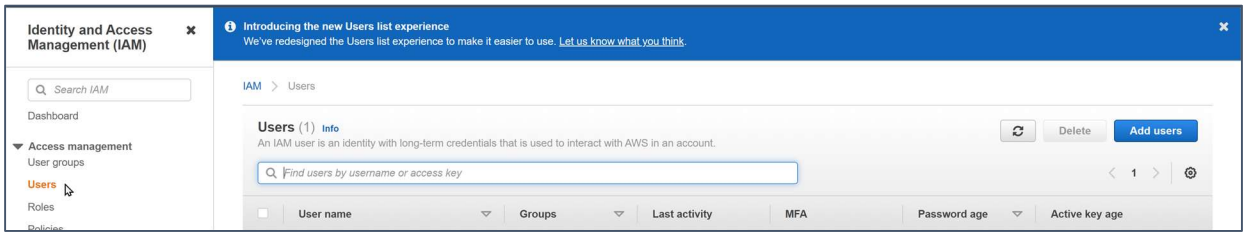
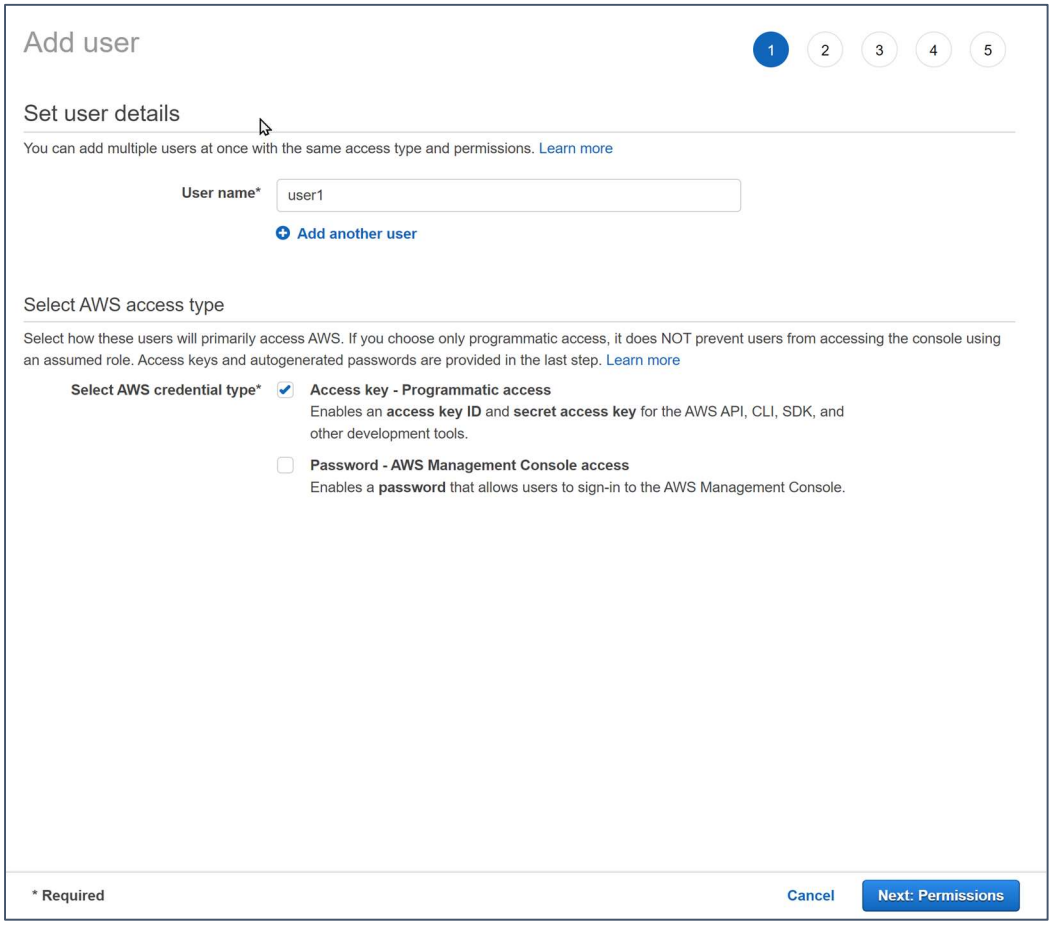
AWS IAM

User creation:

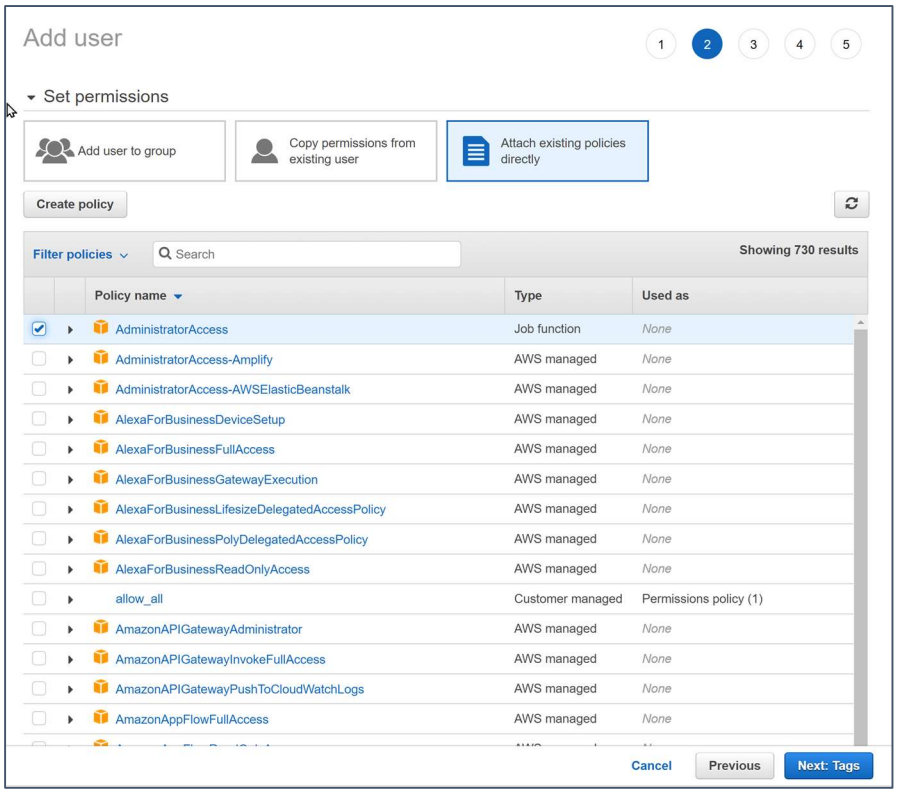
Navigate to IAM Dashboard and click on users



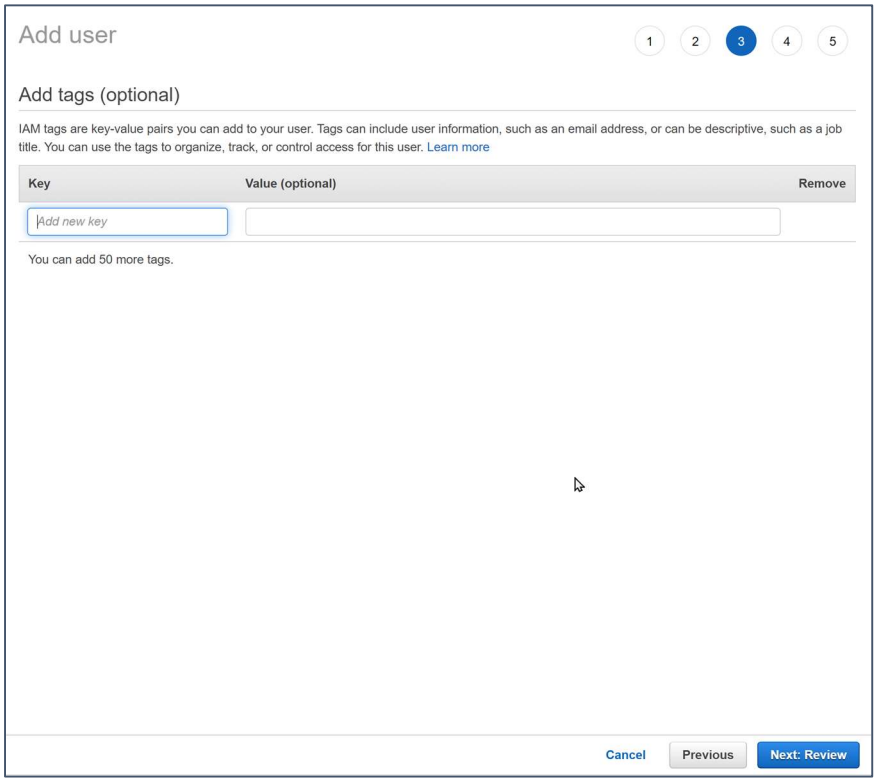
Enter username “user1” and select AWS credential type as “Access key”



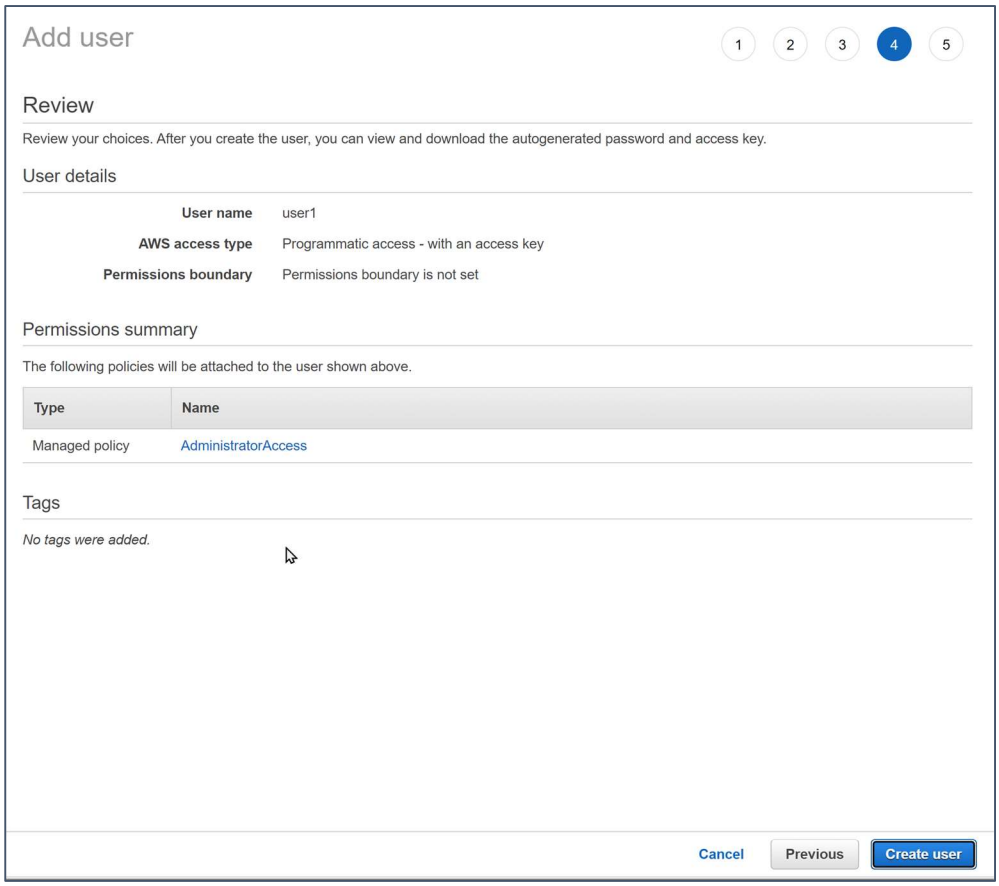
Attach the Administrator Access for this demo purpose so that we do not have any restrictions



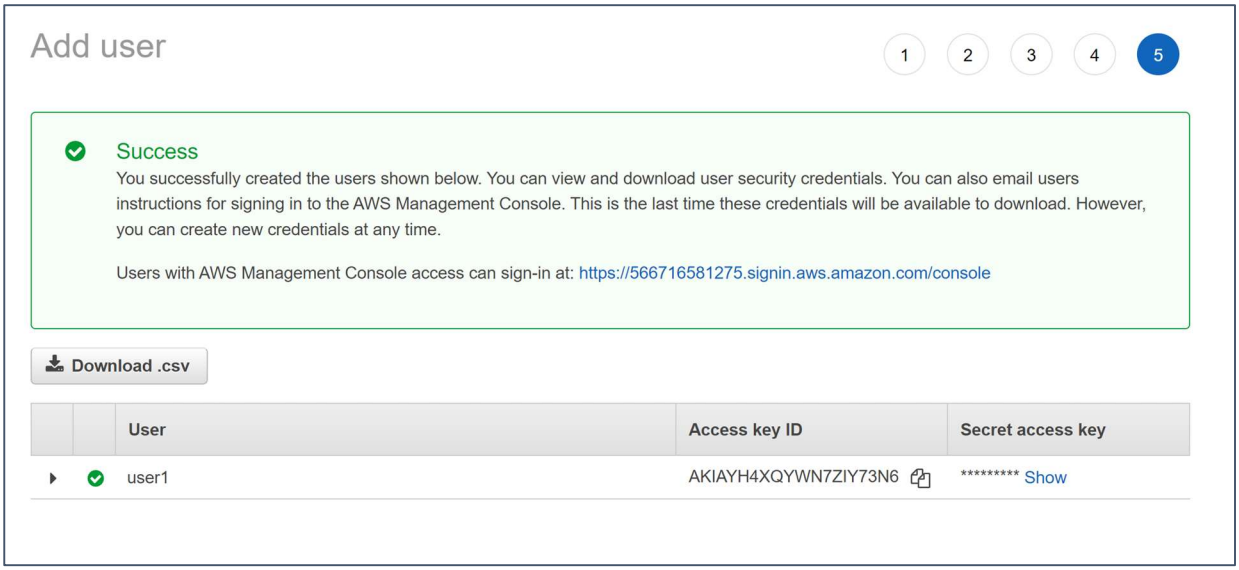
Add tags (optional)



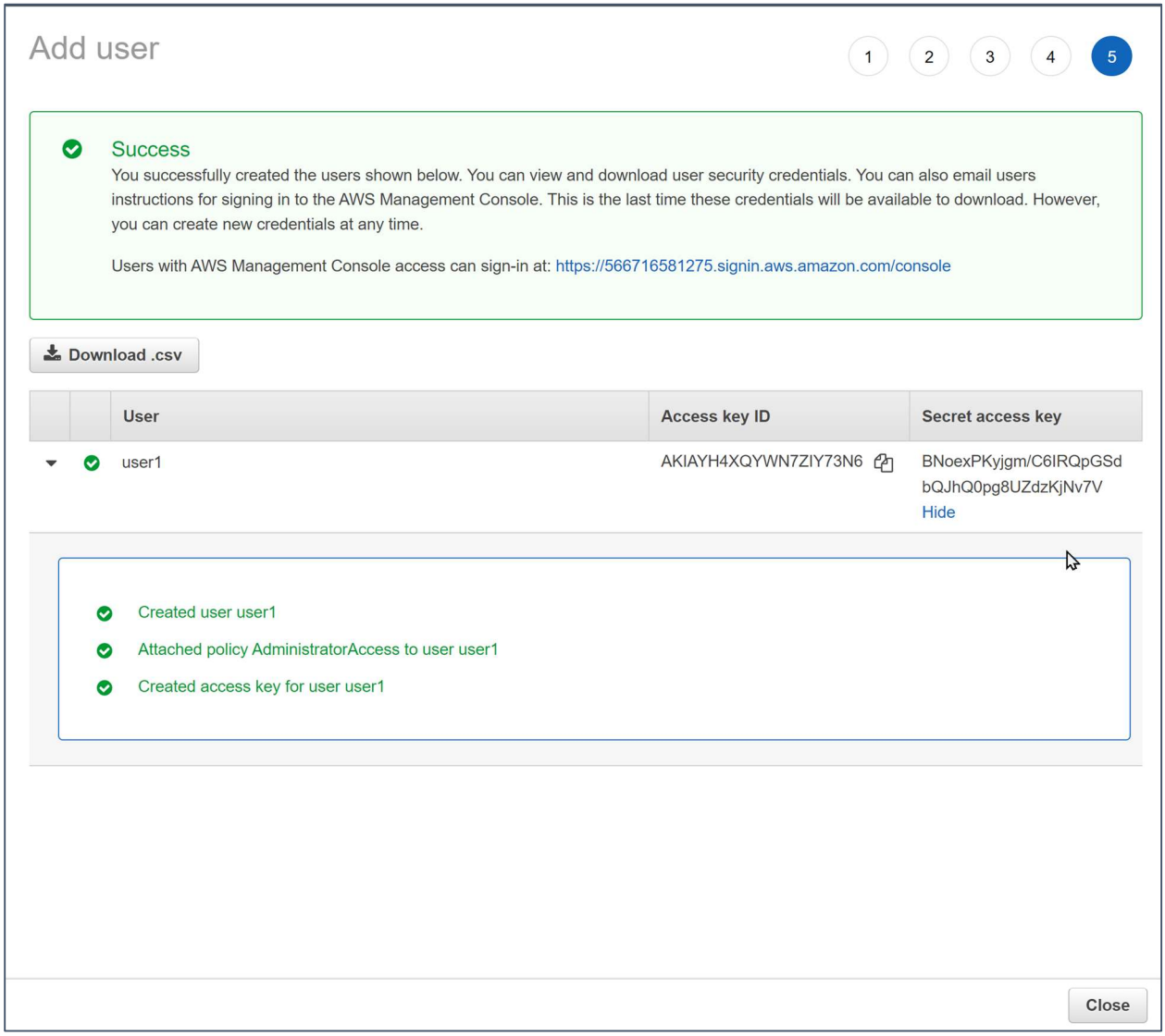
Review and Create user.



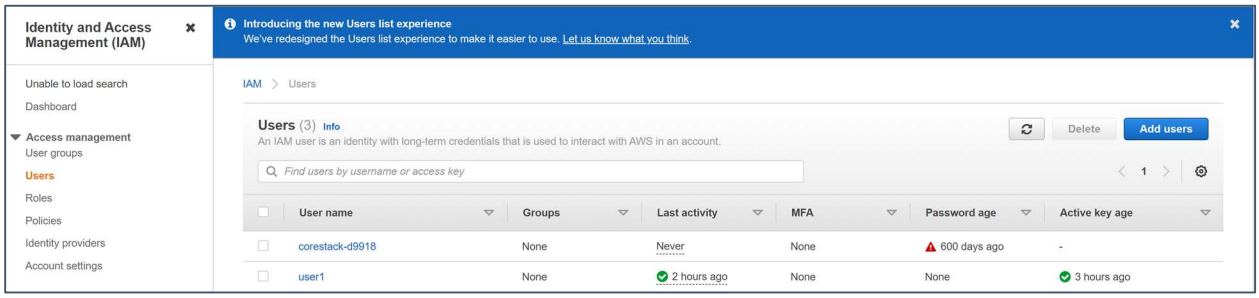
User creation complete.



Save the Access Key ID and Secrete access key that will be used in configuring on the EC2 instance under ~/**.aws/credentials** file

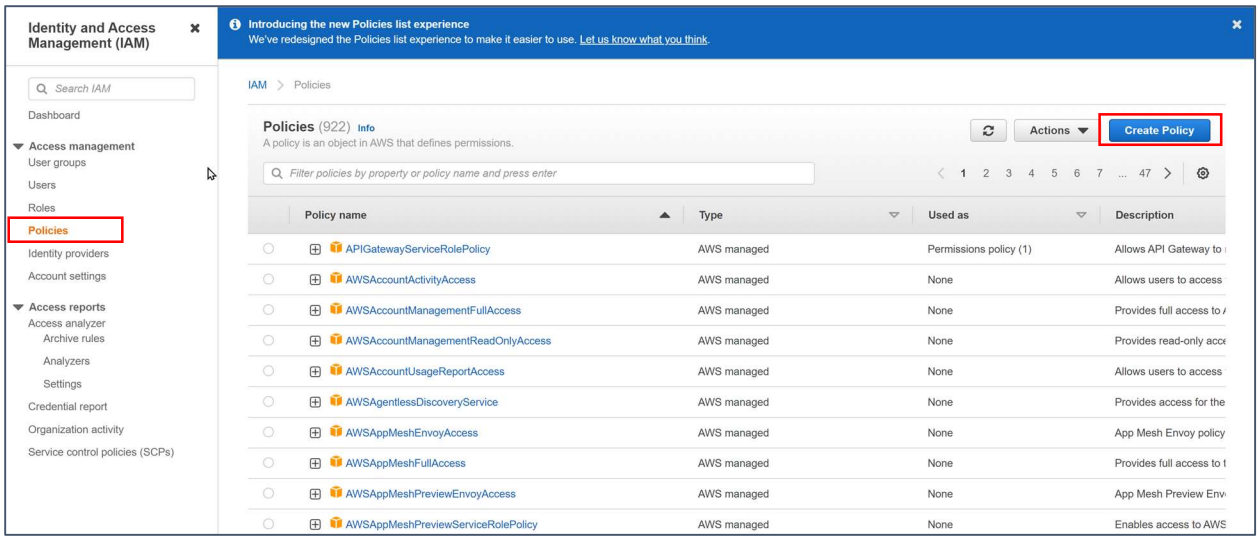


After creation, User listed under IAM dashboard.



Policy Creation:

On the IAM dashboard, navigate to Policies and **Create Policy**

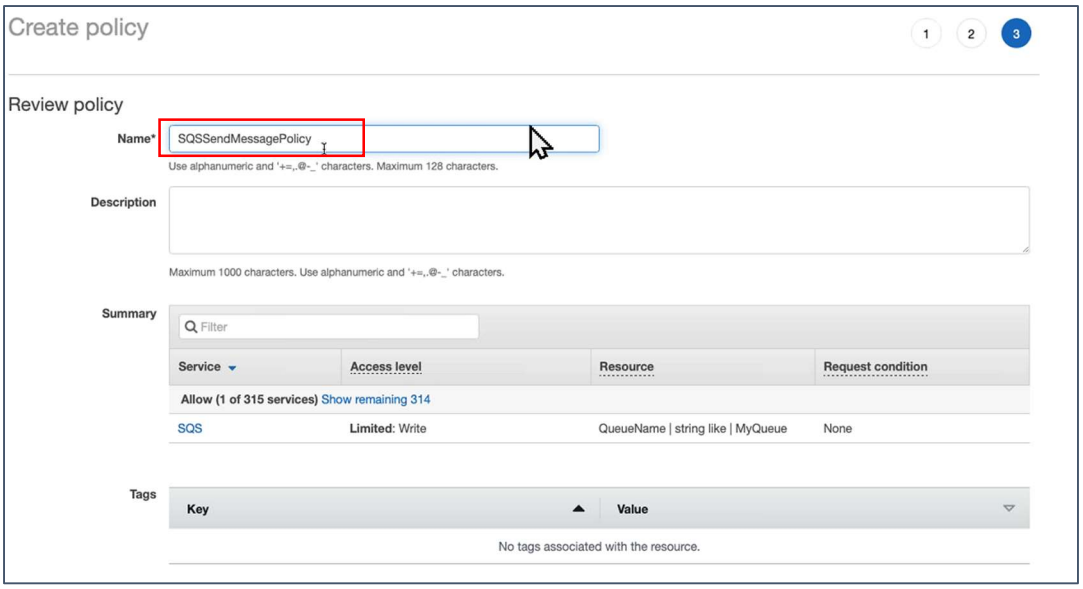


Create a policy to Send Message Action. Use the JSON panel to add the following code snippet

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Sid": "SQSSendMessage",
            "Effect": "Allow",
            "Action": "sqs:SendMessage",
            "Resource": "arn:aws:sqs:us-east-1:410439414220:myqueue"
        }
    ]
}
```

Next, adding tags is not mandatory but can be useful for filtering. We will not add any tags at this point.

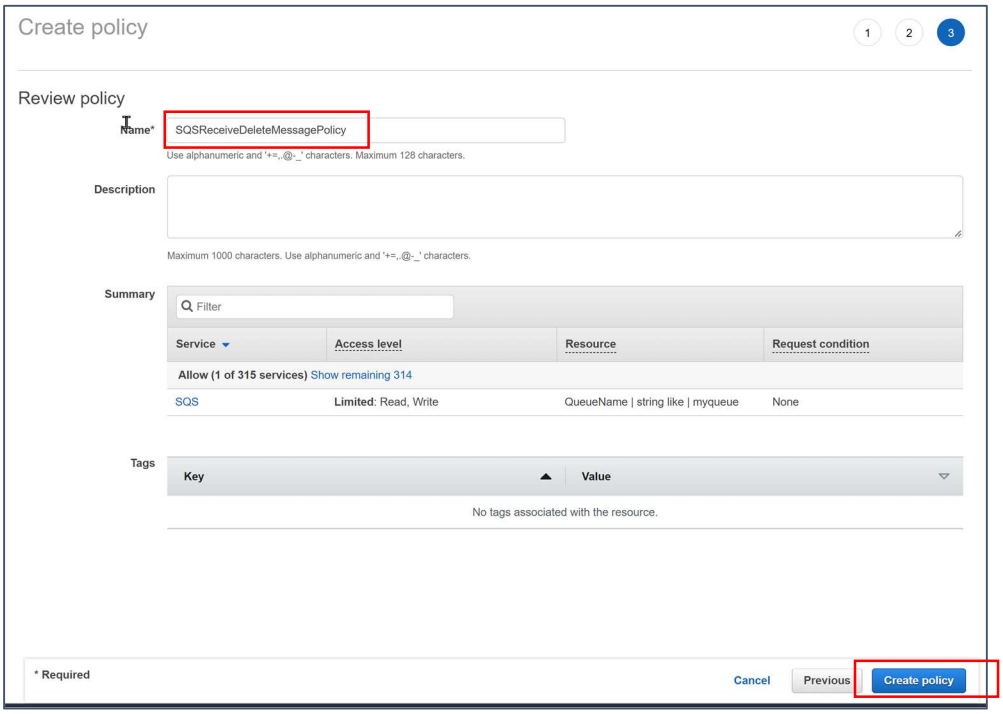
Review and Create Policy SQSSendMessagePolicy



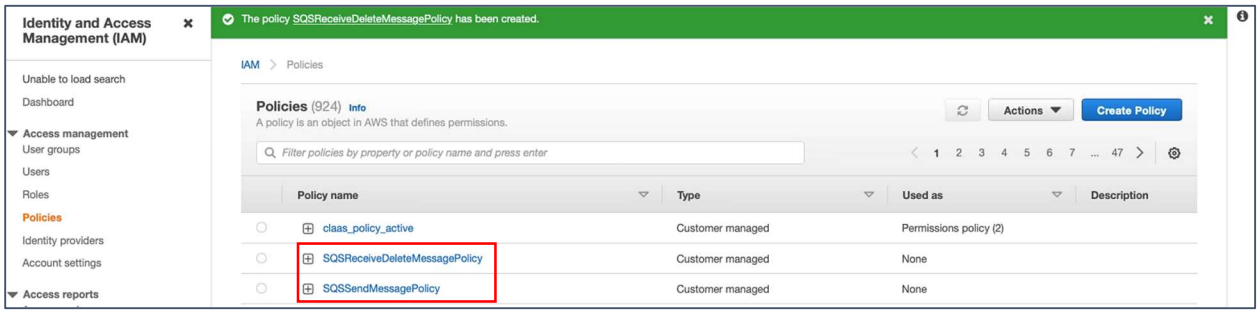
Create another policy to Receive and Delete Message Action. Use the JSON panel to add the following code snippet

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Sid": "SQSReceiveDeleteMessage",
            "Effect": "Allow",
            "Action": [
                "sqs:ReceiveMessage",
                "sqs:DeleteMessage"
            ],
            "Resource": "arn:aws:sqs:us-east-1:410439414220:myqueue"
        }
    ]
}
```

Review and Create Policy **SQSReceiveDeleteMessagePolicy**

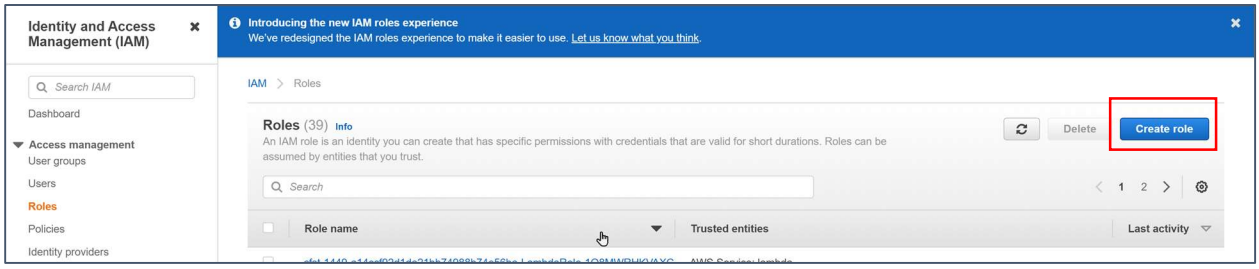


View the created Policies on the IAM Dashboard.

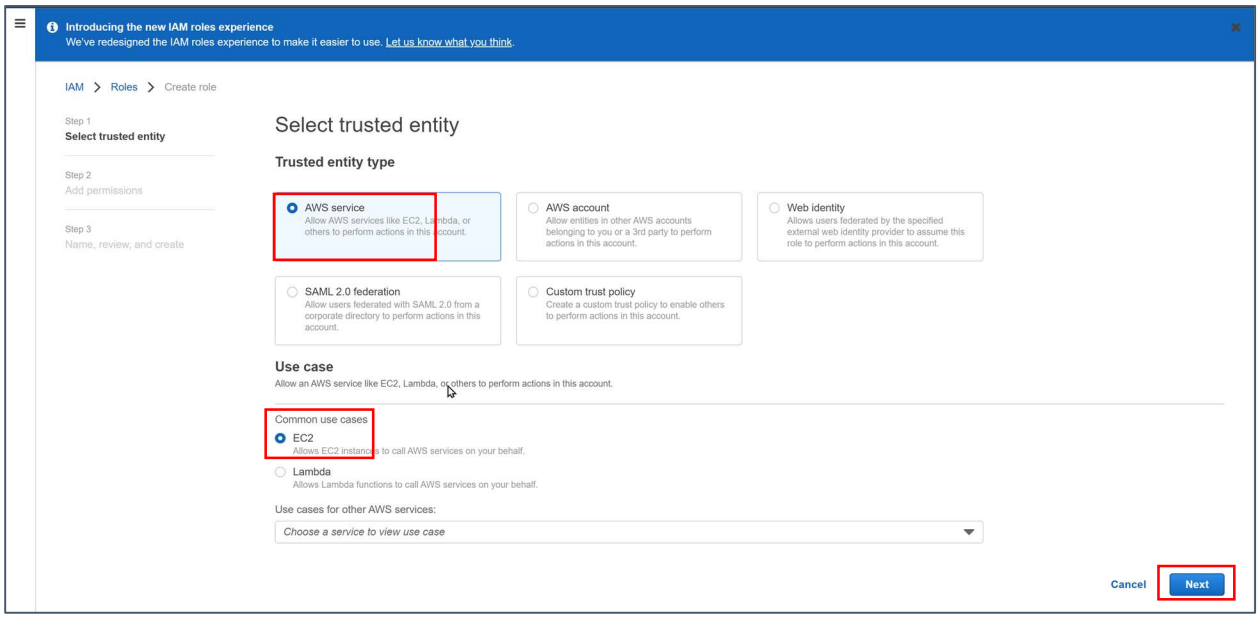


Creating Roles

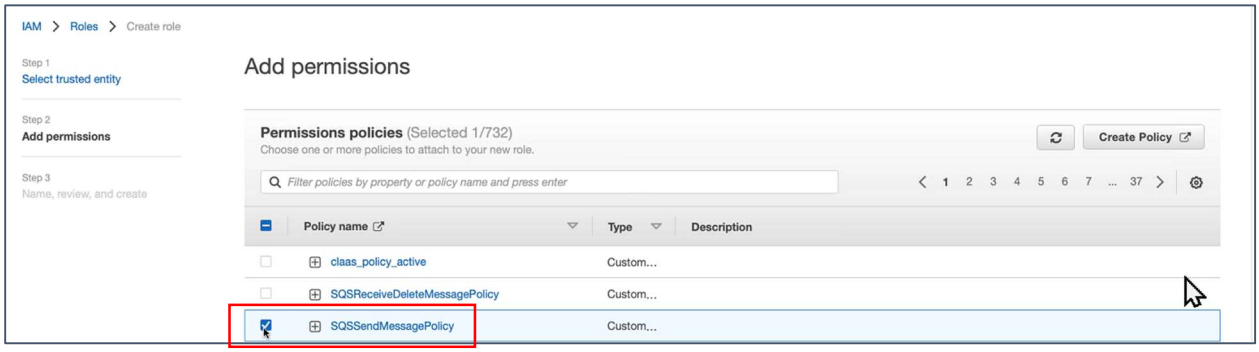
On the IAM dashboard, navigate to Roles and **Create role**



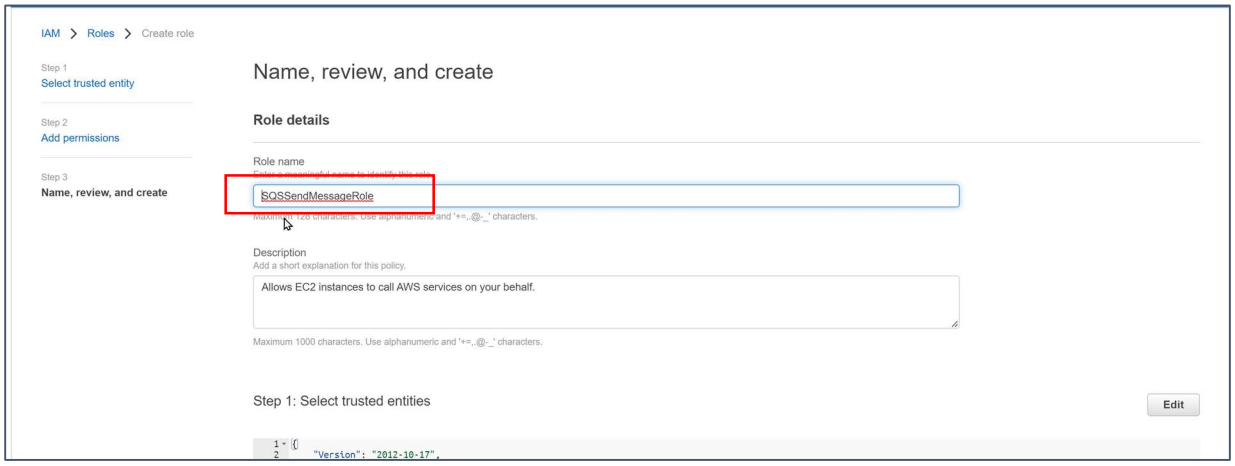
Select AWS service and EC2 use case



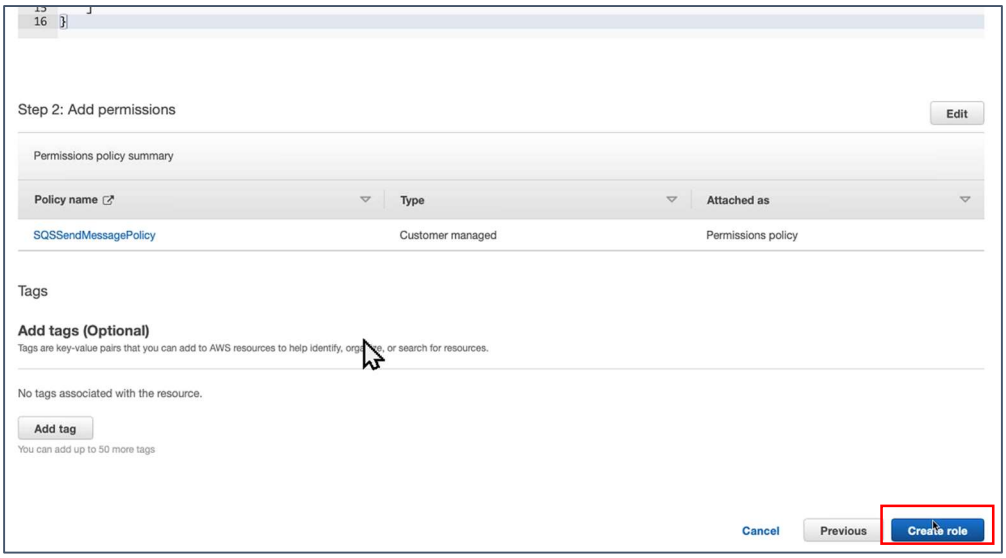
Add the **SQSSendMessagePolicy** to the role



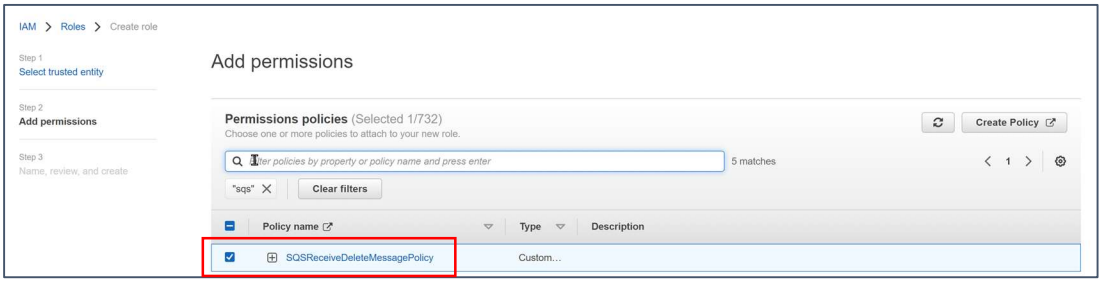
add Role name as **SQSSendMessageRole**.

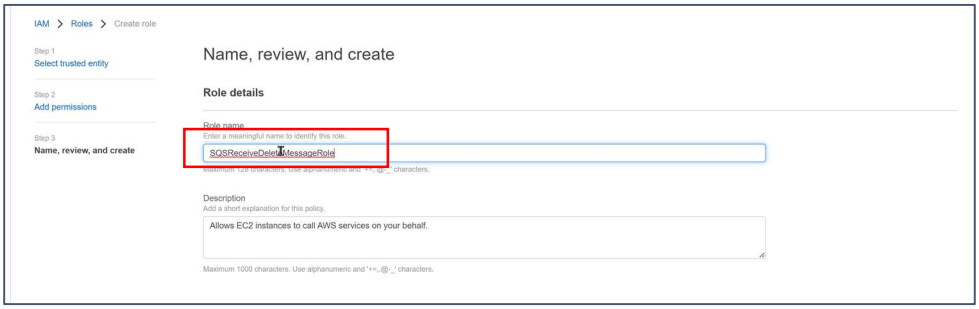


Review the config and Create role

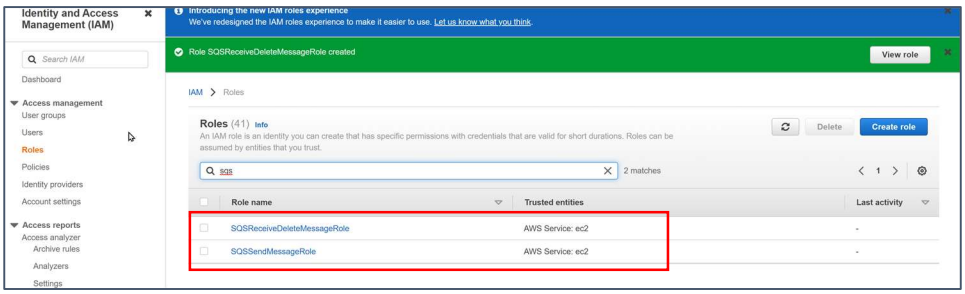


Similarly, create another role named **SQSReceiveDeleteMessageRole** and attach the SQSReceiveDeleteMessagePolicy.





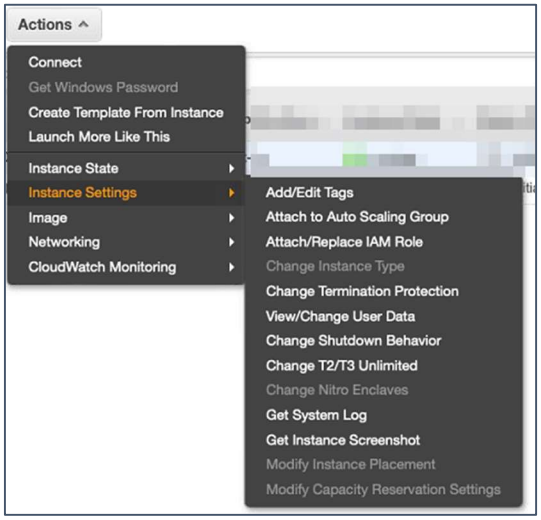
View the roles created on the IAM Dashboard

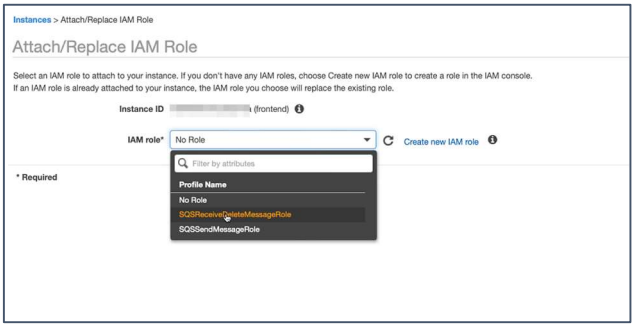


Attach the roles to Frontend and Backend EC2 instance.

Navigate to EC2 dashboard and select an instance and click on Actions → Instance Settings → Attach/Replace IAM Role.

On Frontend select the “SQSSendMessageRole” and on Backend “SQSReceiveDeleteMessageRole”





Attach the respective roles and save.