IAM LS -- Moving Data Between S3 and EC2 Instances

Pre-Requisite

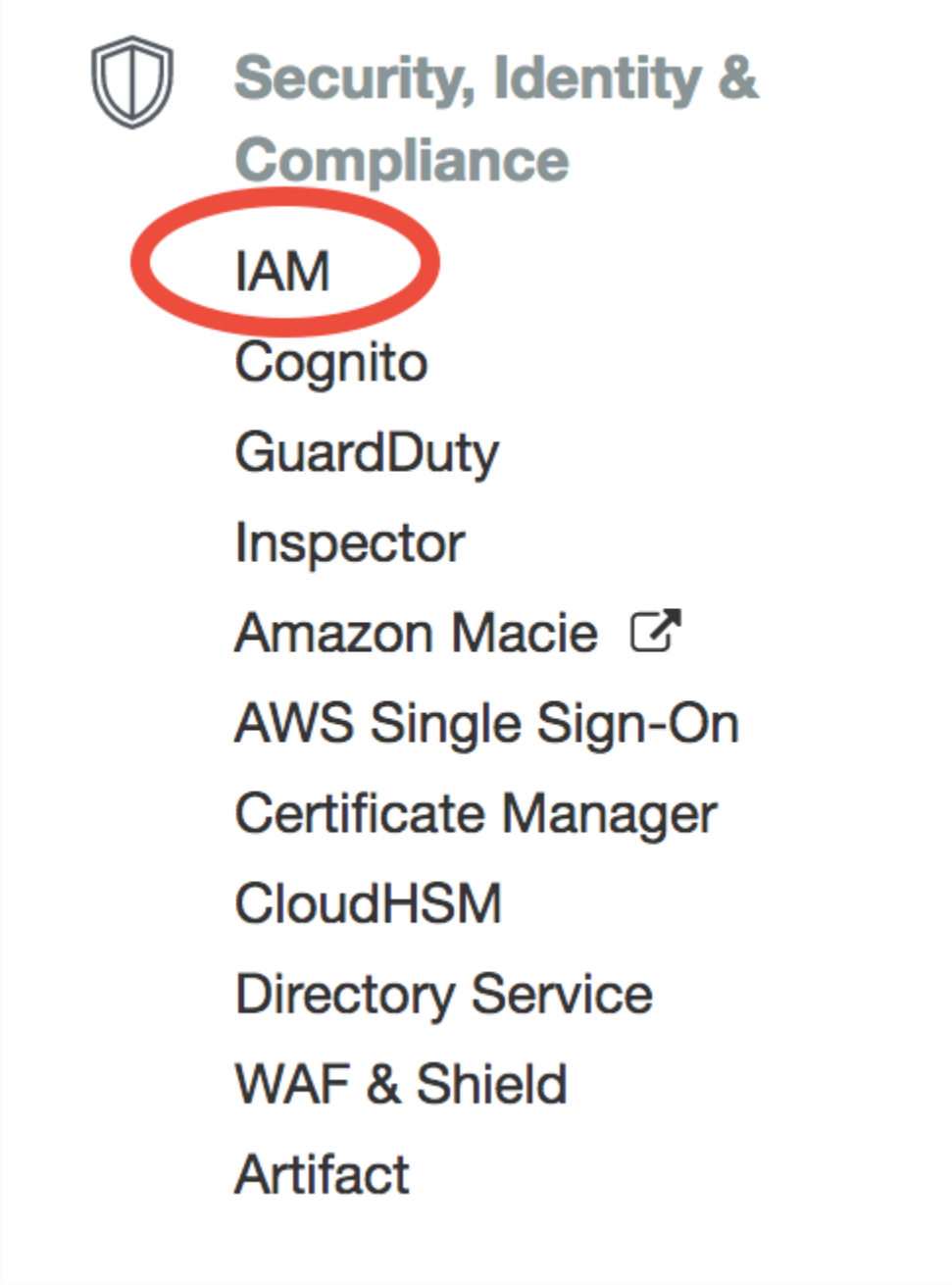
1. **Create an IAM role with S3 read and write access.**
2. **Create an EC2 instance with the above role**
3. **Access the data in the S3 from EC2.**

1. **Create an IAM role with S3 read and write access.**

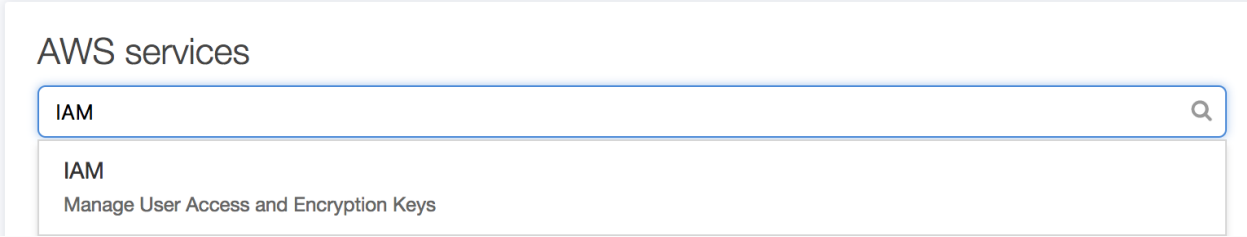
Grant S3 permission to EC2

Create a new IAM role

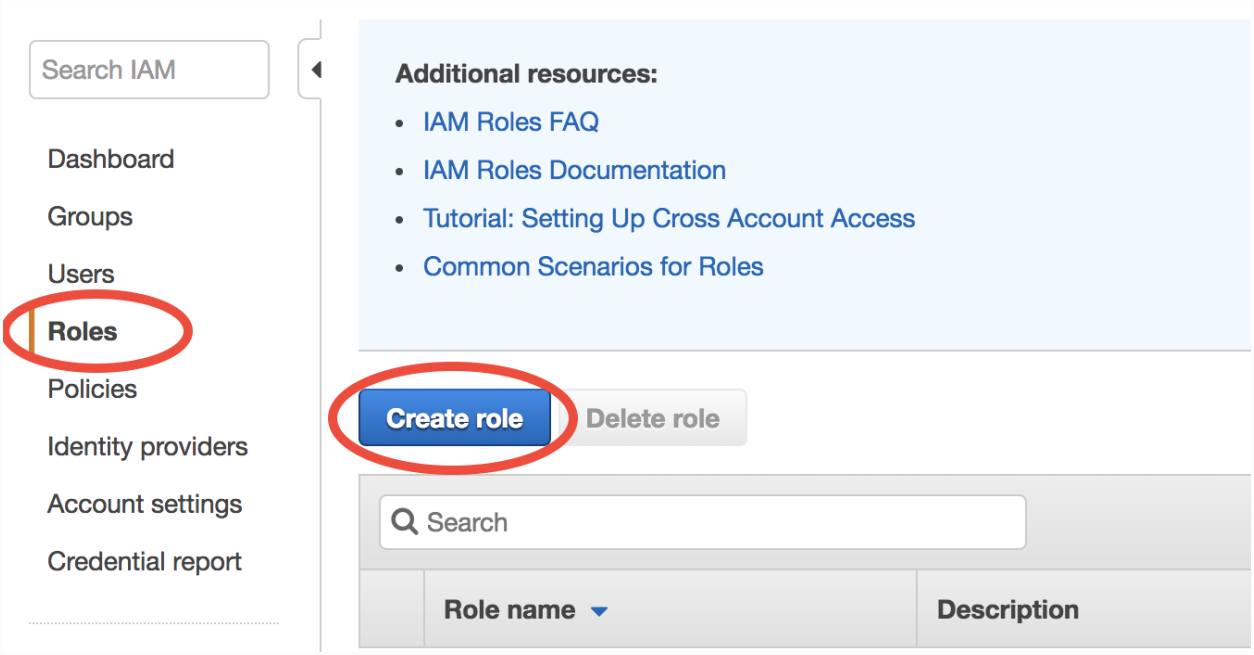
Choose “IAM” in the AWS main console:



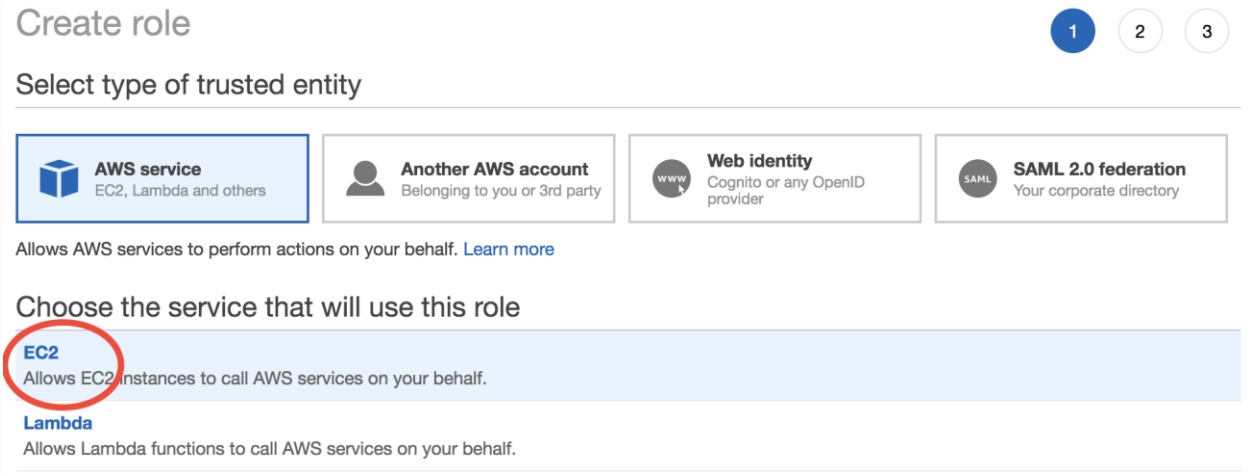
It can also be searched from the top search bar, so you don't have to look through hundreds of AWS services:



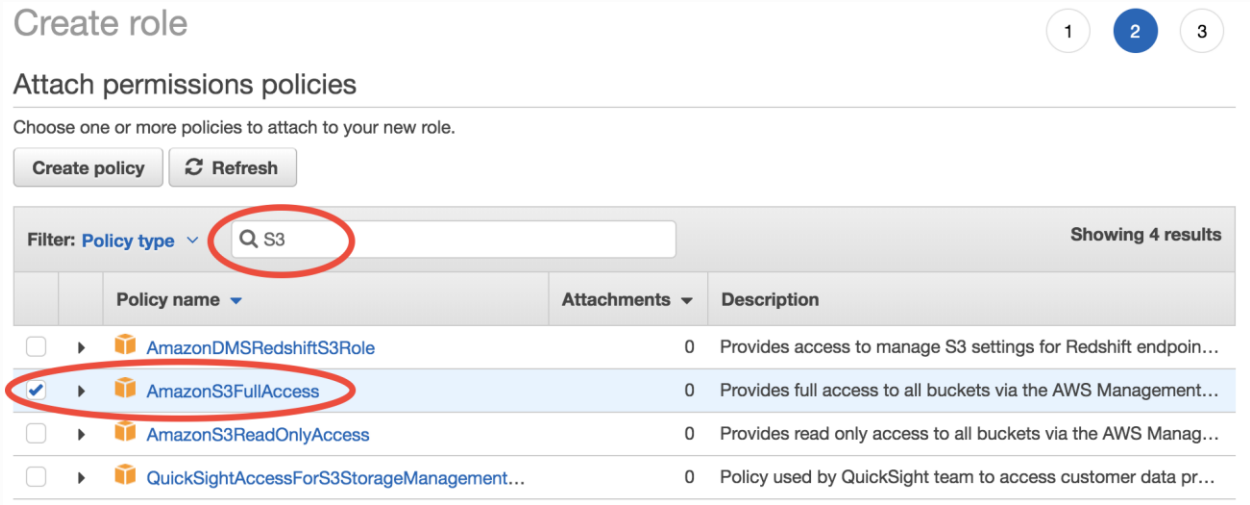
Then choose "Roles" in the IAM console and click on "Create role":



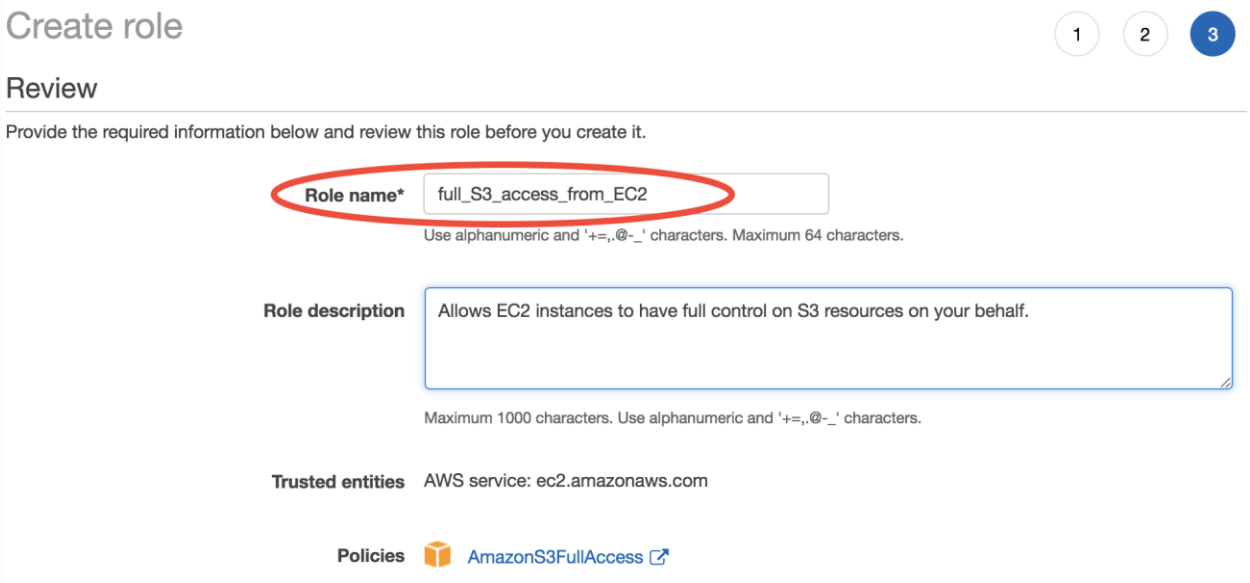
The first step is to choose "X" (which will be allowed to access "Y"). AWS calls it "trusted entity". Select EC2, of course.



The second step is to choose “Y”. Search for “S3” and then select “AmazonS3FullAccess”:



Finally, give this role a descriptive name. Here I use “full_S3_access_from_EC2”. (For the “Role description”, enter whatever you like or just keep default.)

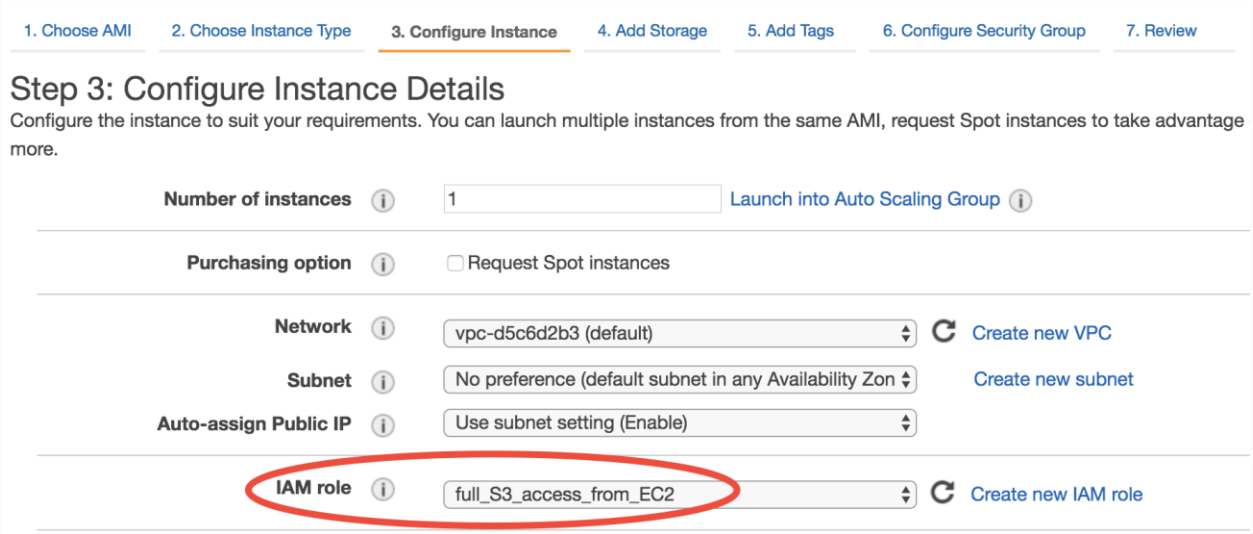


Now a new IAM role is created. This only needs to be done once.

Assign that role to EC2

Whenever you launch a new EC2 instance, in “Step 3: Configure Instance Details”, select the IAM role you created previously for the “IAM role” option.

2. Create an EC2 instance with the above role



No need to touch other options on this page and just launch as usual. On this EC2 instance**, you don't need to run** `aws configure`,

and commands like `aws s3 ls` will just work (as long as AWSCLI is installed). .

This is actually a better practice since you never type your security credentials on this server (which might be stolen if your server gets hacked).

```
[root@ip-172-31-26-222 ec2-user]# aws s3 cp s3://b15-bucket001/Index.html index.html
download: s3://b15-bucket001/Index.html to ./index.html
[root@ip-172-31-26-222 ec2-user]# ls
file1  fold1  index.html
```

The above command is to download the file from S3 bucket

```
[root@ip-172-31-26-222 ec2-user]# aws s3 cp  file1 s3://b15-bucket001
upload: ./file1 to s3://b15-bucket001/file1
```

$ aws s3 cp <local filename> s3://<<bucketname>>

This is to upload the file to s3 bucket.