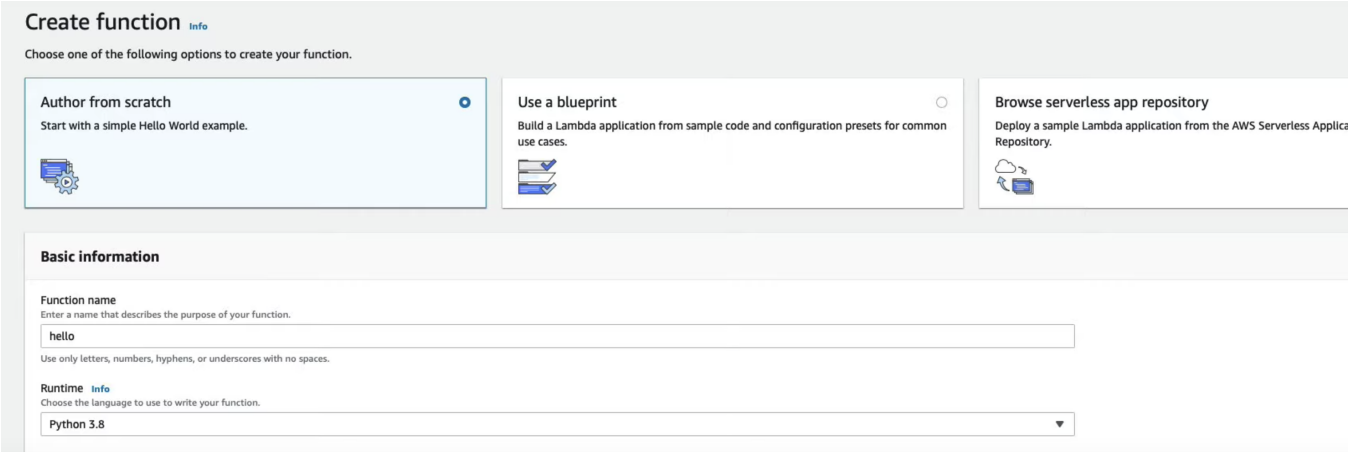
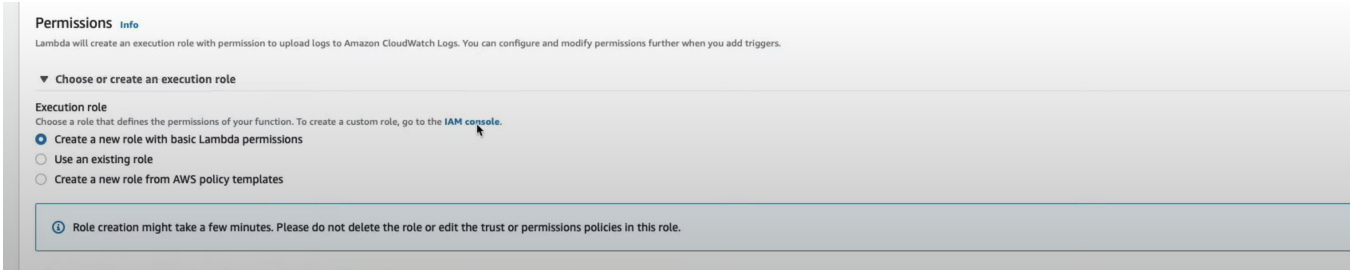
Solution: Uploading a Lambda Function

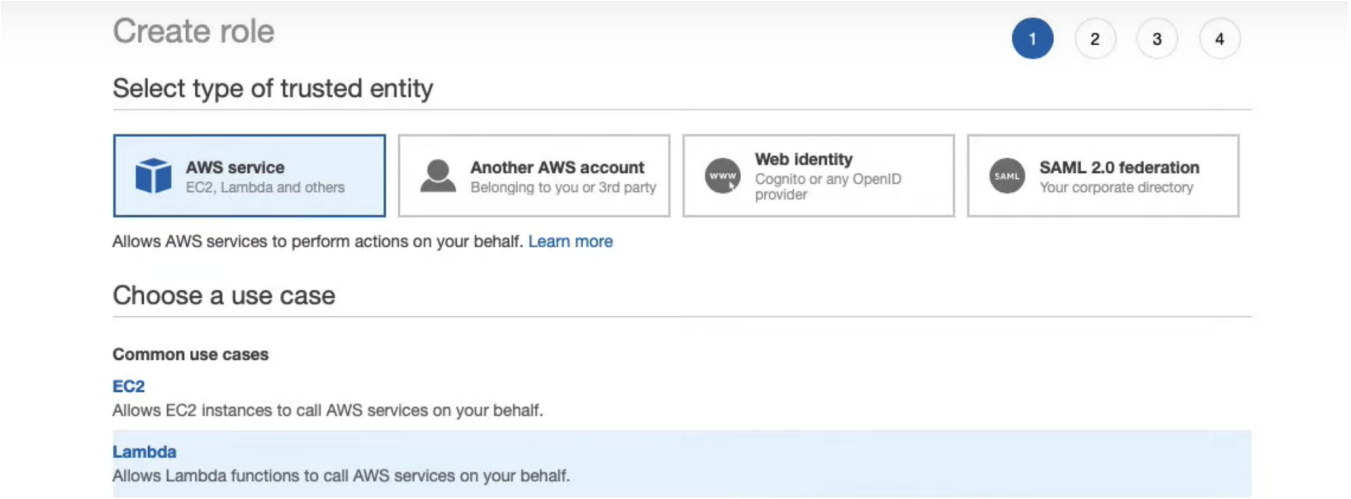
1. Navigate to the Lambda Console
2. Create a new Lambda Function
3. Use **Author from scratch**, **Python3.8**, and name the function **hello**



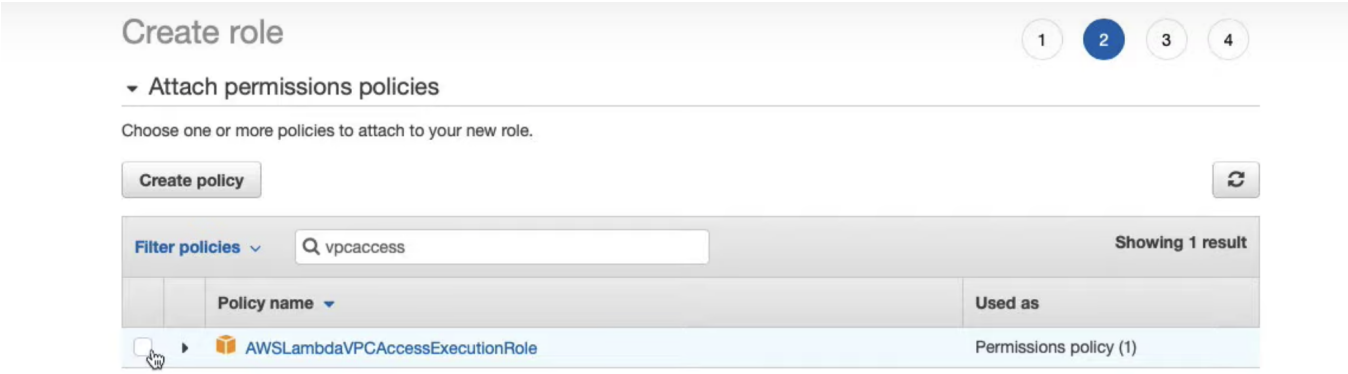
4. Expand the permissions section
5. Click the **IAM Console** link



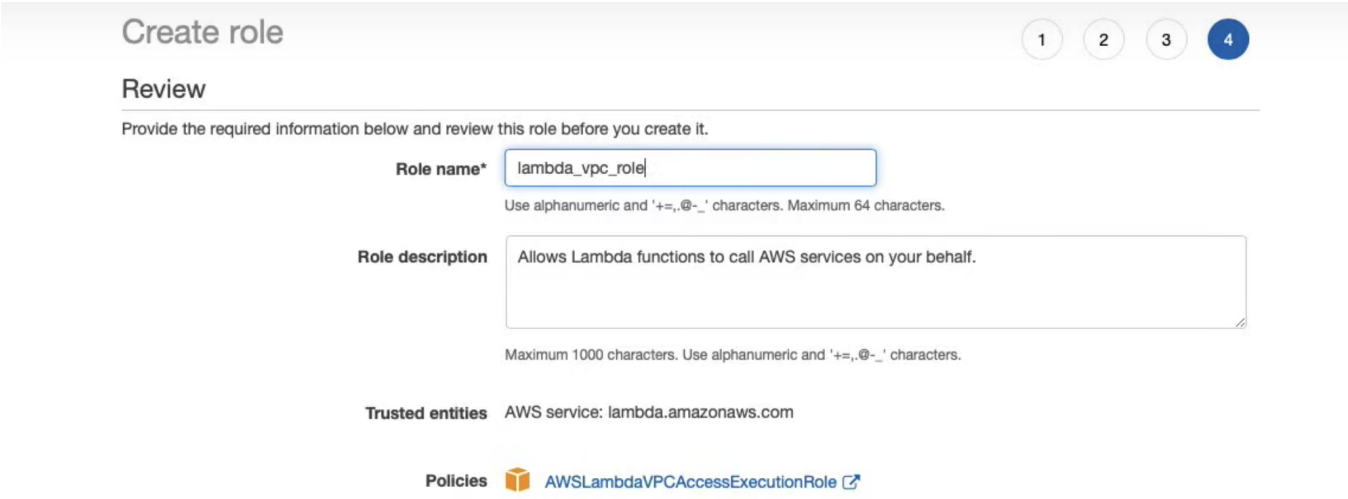
6. Click on **Roles** from the left sidebar
7. Create a new role
8. Set the type of trust identity to Lambda



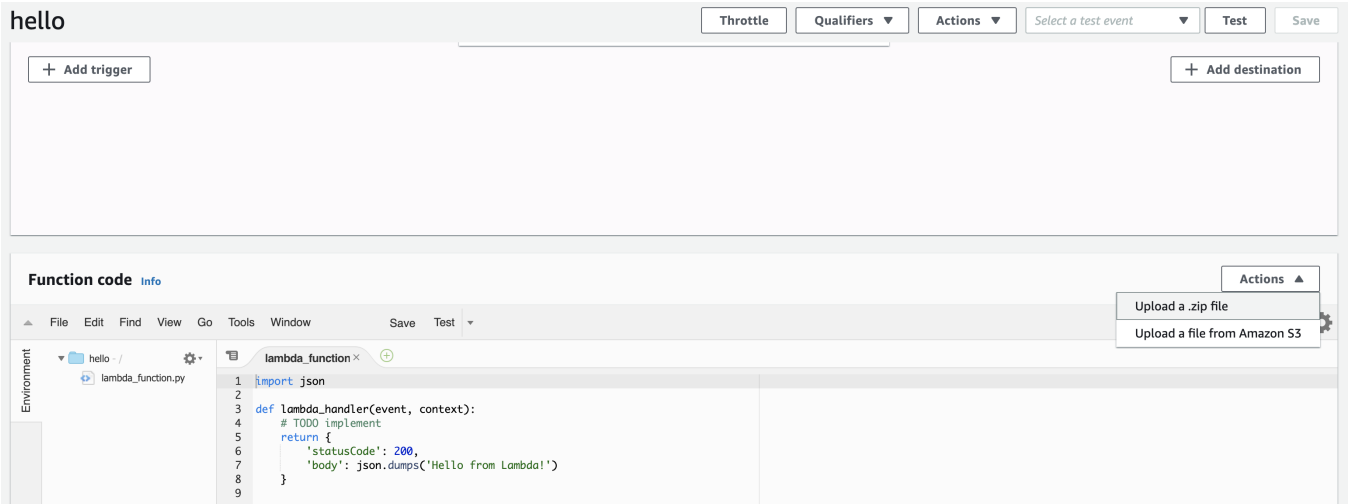
9. Attach the built-in policy: **"AWSLambdaVPCAccessExecutionRole"**



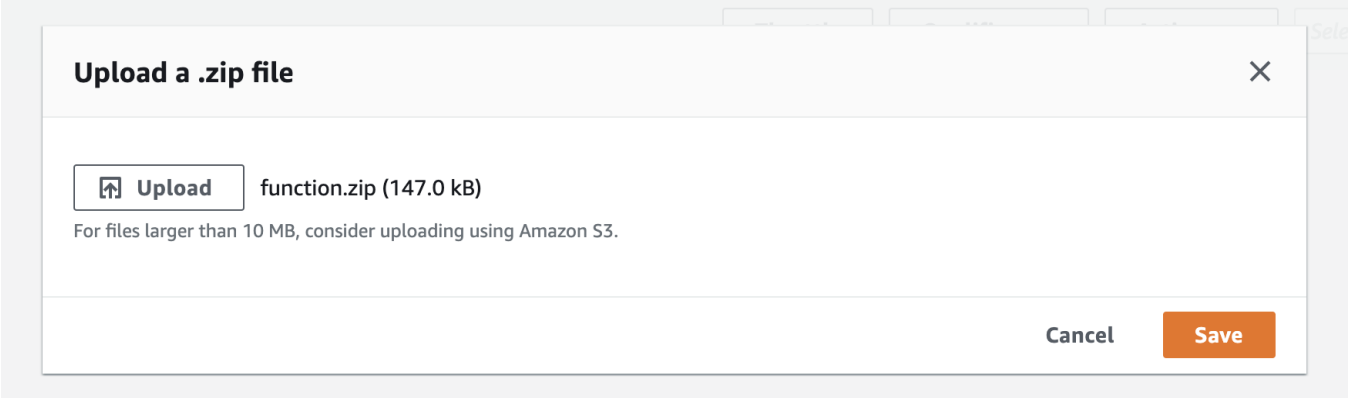
10. Name the role **lambda_vpc_role**



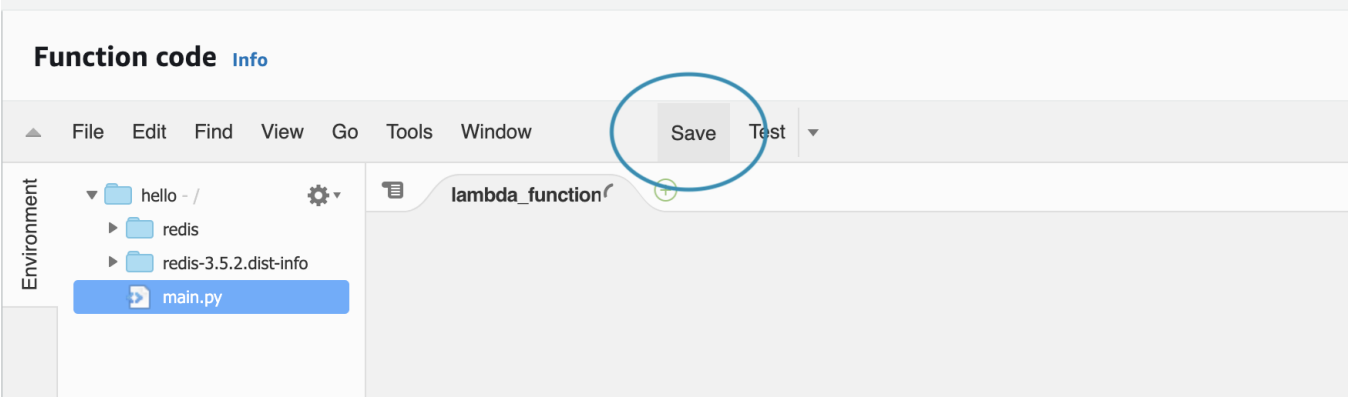
11. Click the **Actions** drop-down menu from the **Function code** section of the Lamba Function Console
12. Select **Upload a .zip file**



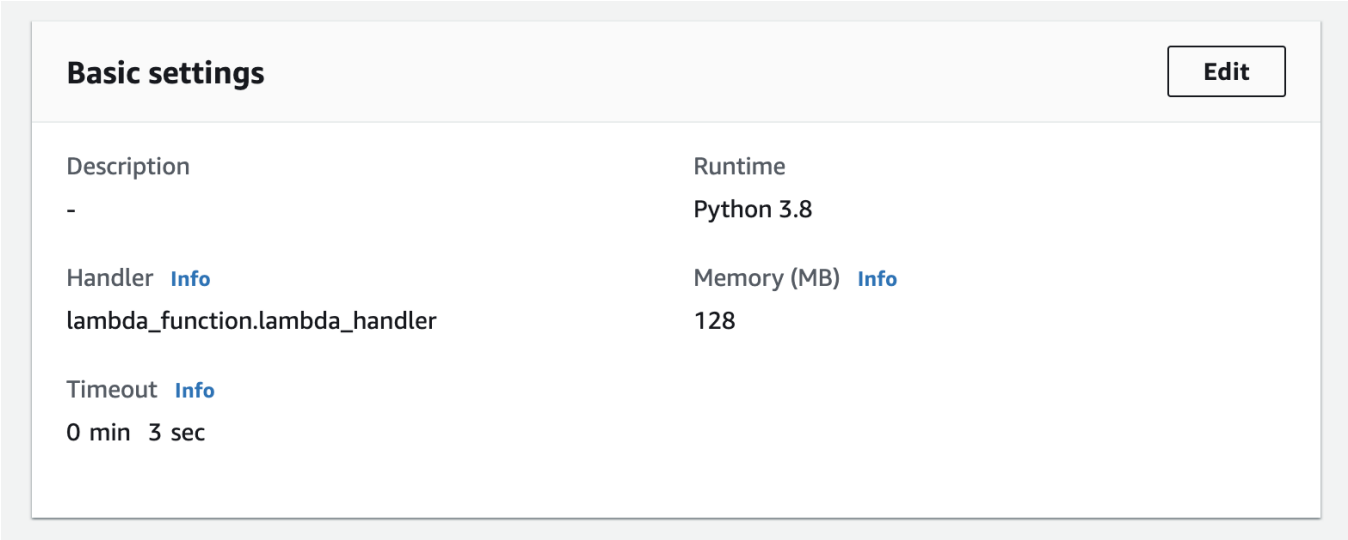
13. Select the **function.zip** package created in the previous exercise



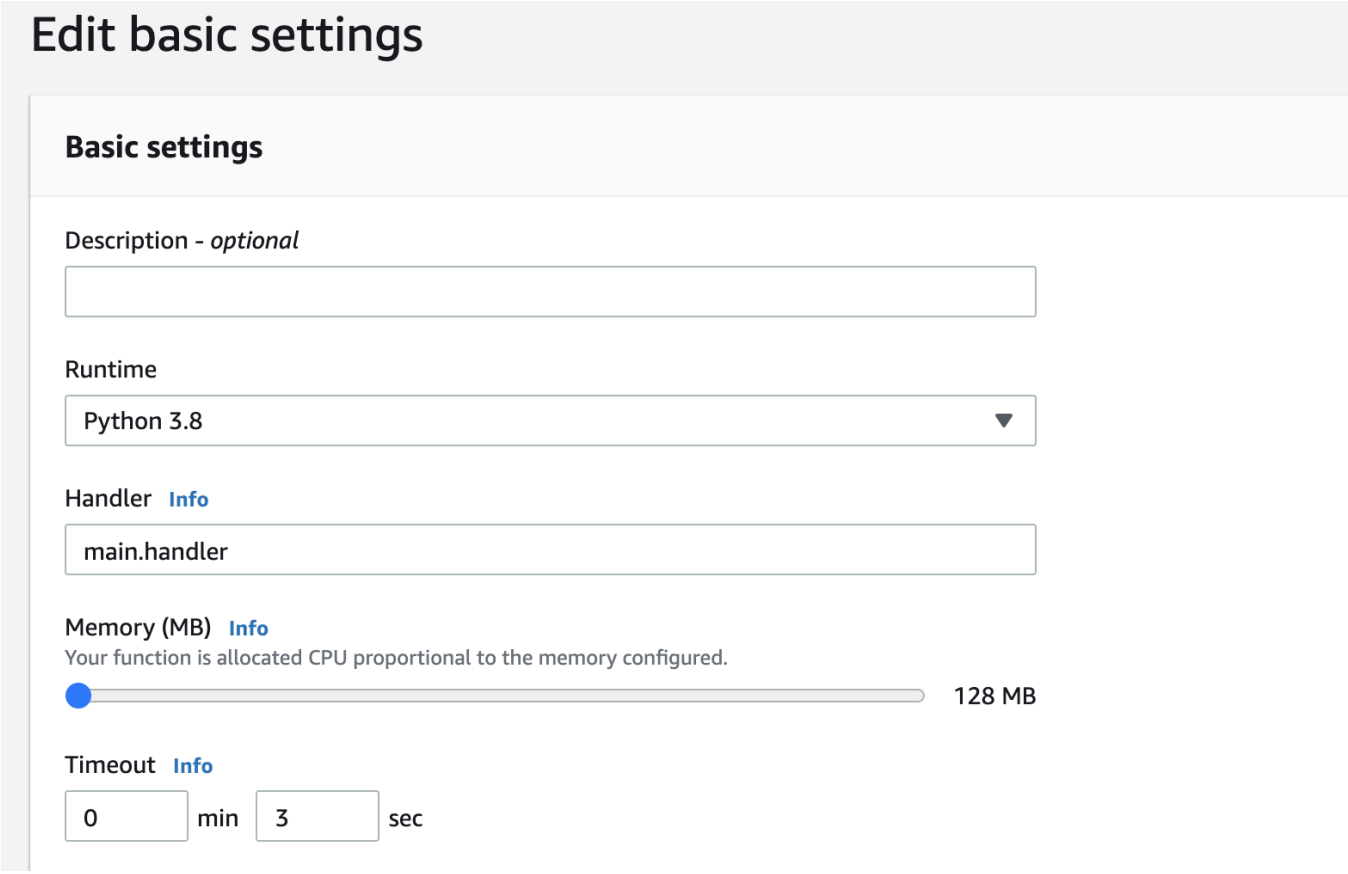
Once selected, you **MUST** click **Save**



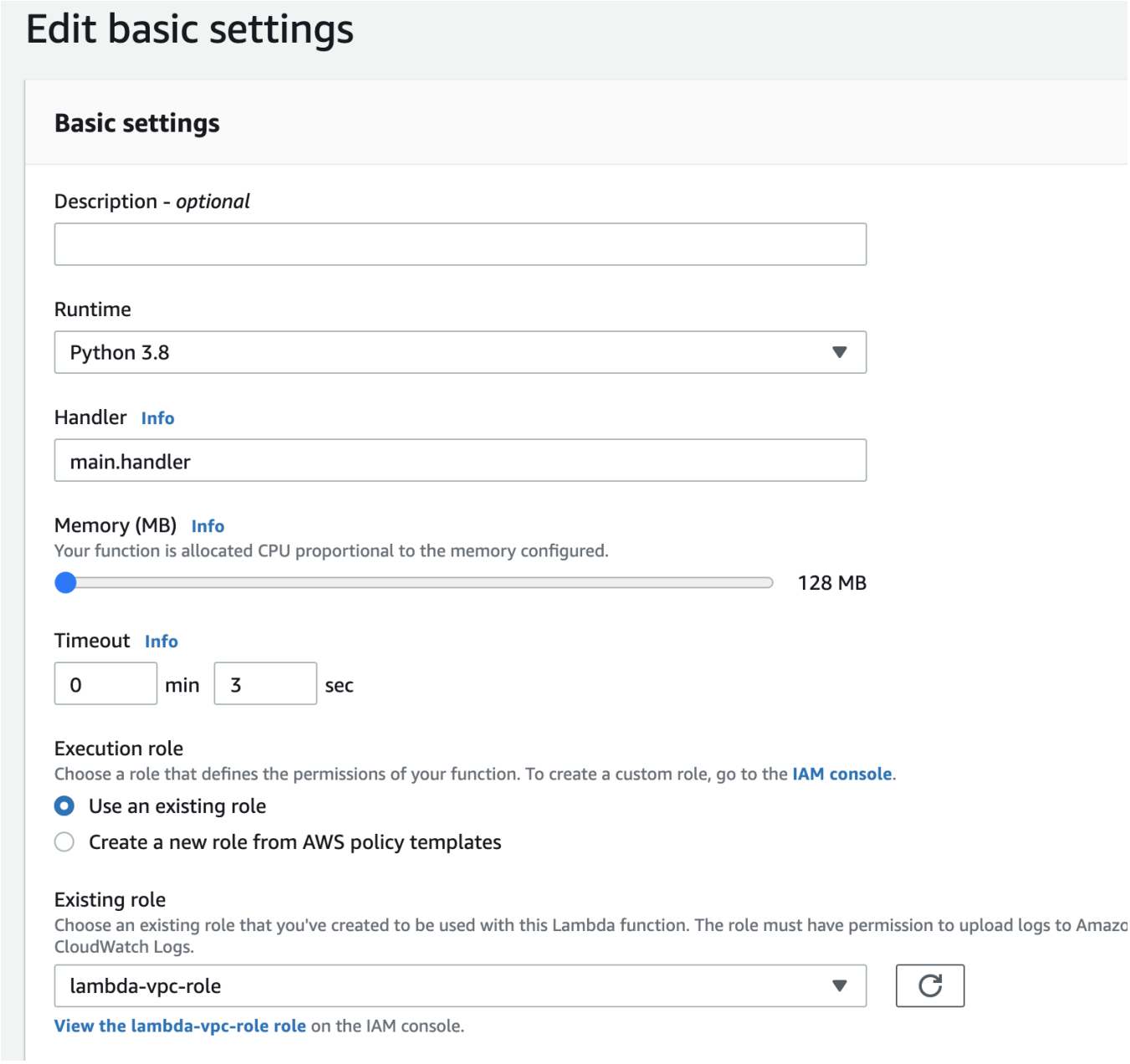
14. Scroll down to the **Basic settings** section
15. Click the **Edit** button



16. Set the **Handler** field to **main.handler**

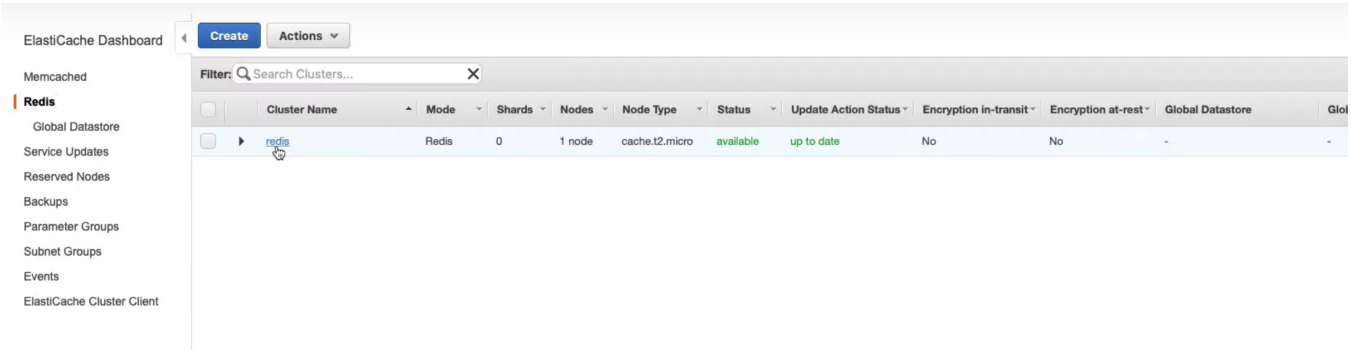


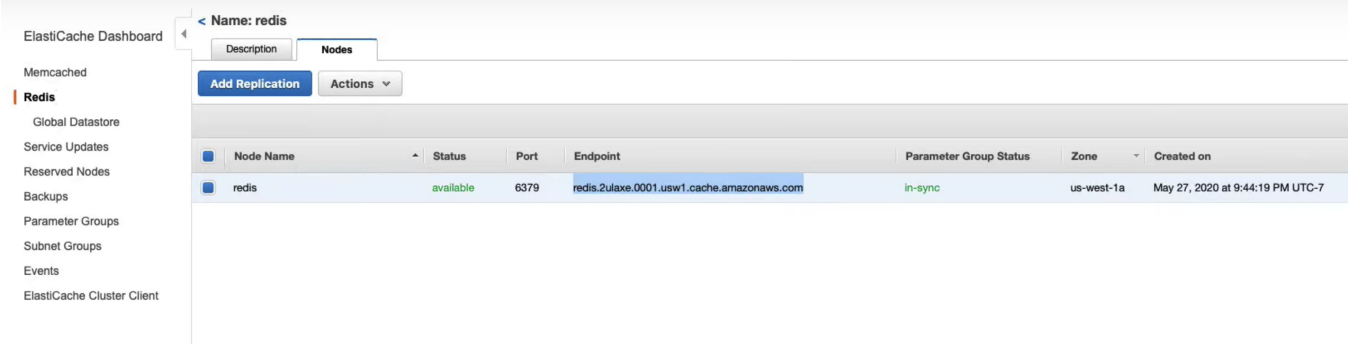
17. Select **Use an existing role**
18. Select **lambda-vpc-role** from the drop-down menu of existing roles



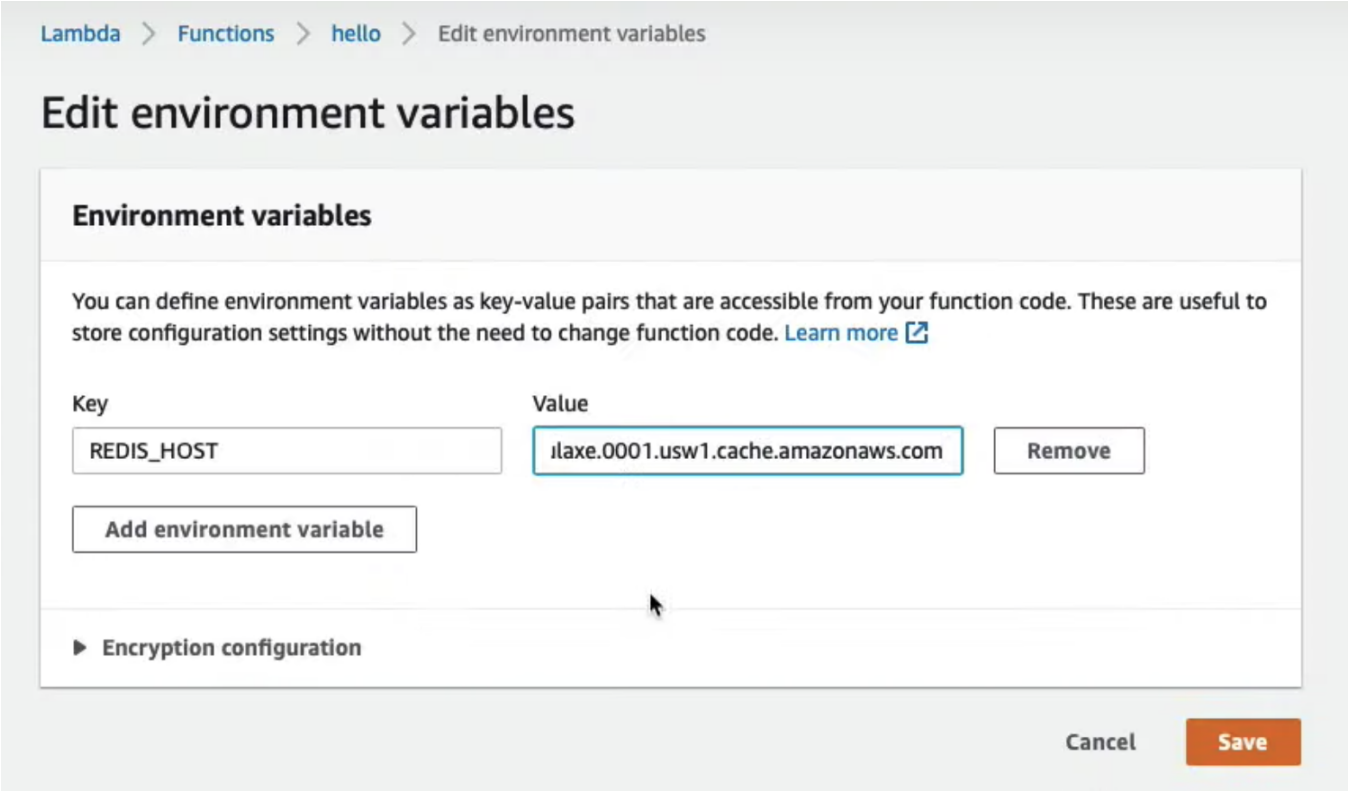
Setting the REDIS_HOST Environment Variable

1. In another tab, open the ElastiCache Console
2. Expand the "redis" node
3. Copy the node's endpoint



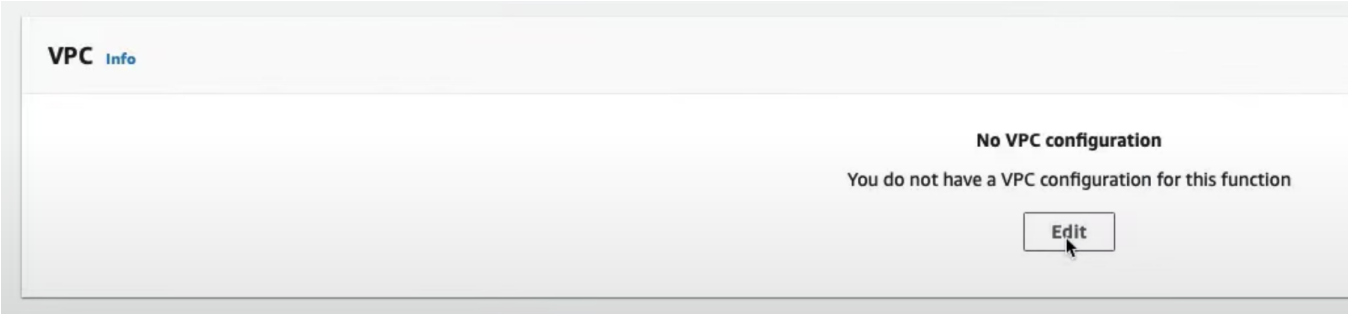


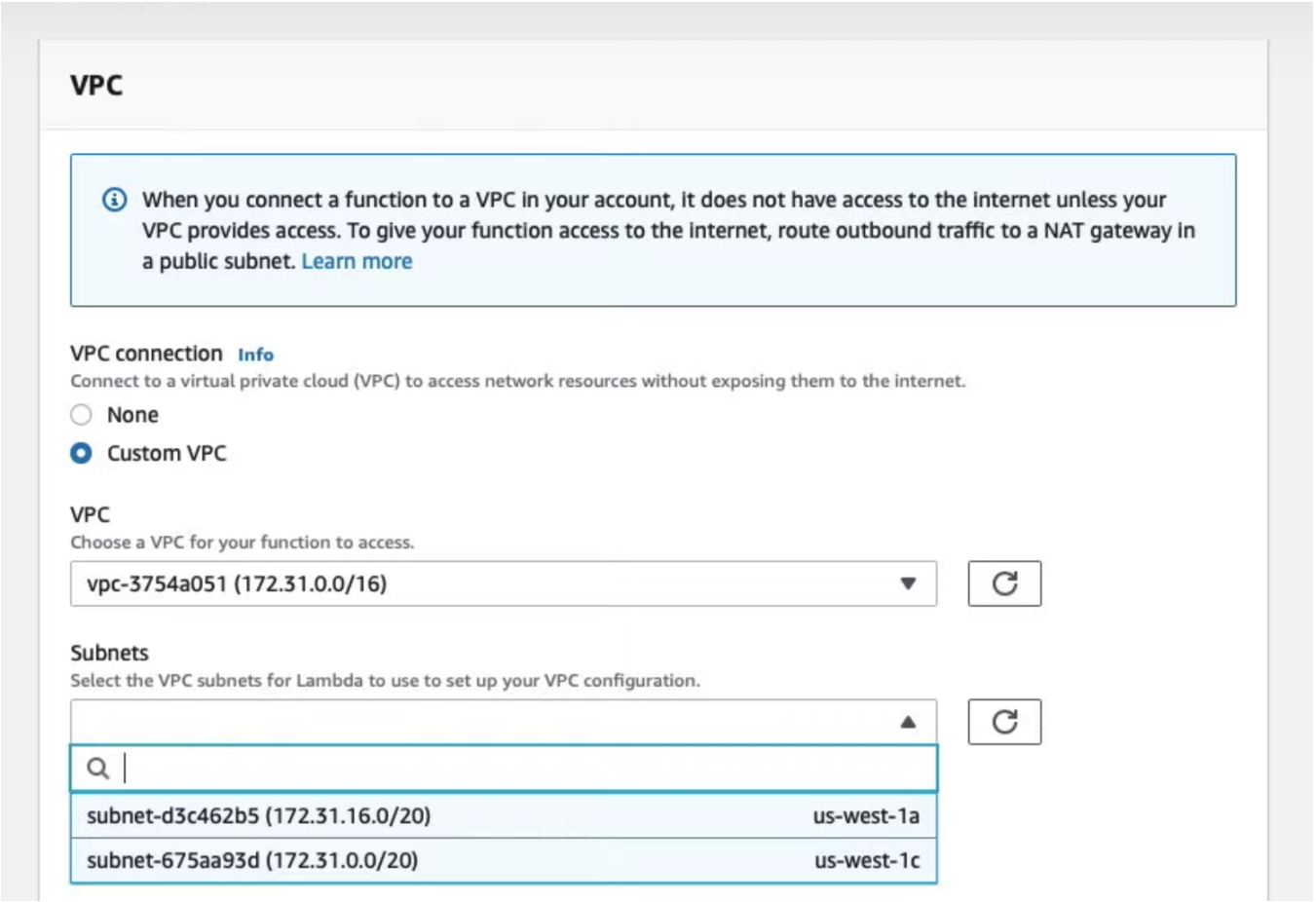
4. Click the **Edit** button in the **Environment Variables** section
5. Set the **key** to **REDIS_HOST** and paste the node endpoint as the **value**

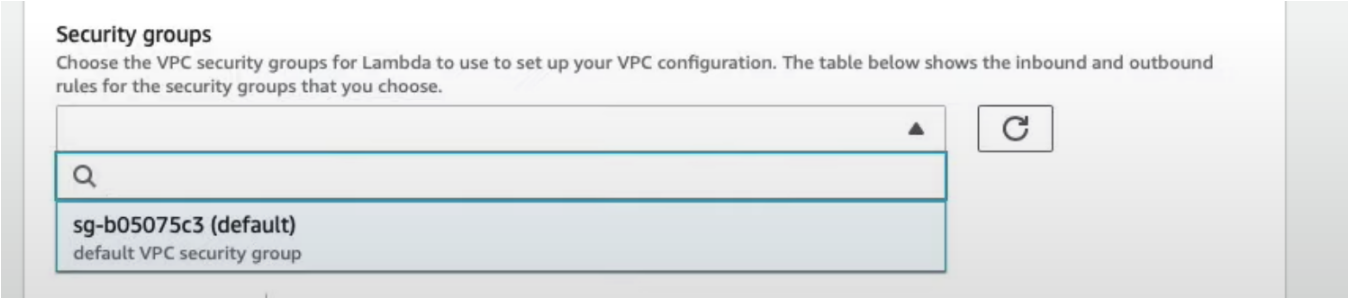


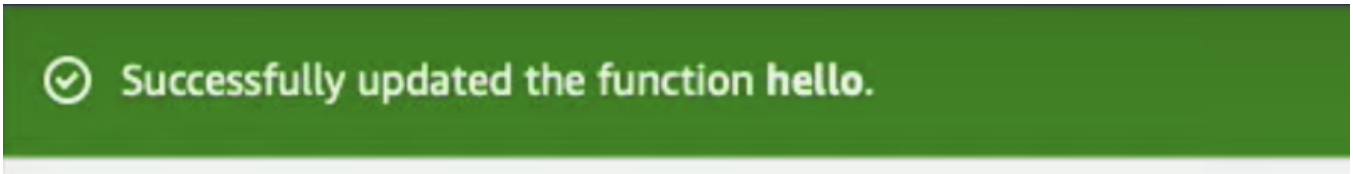
Connect The Lambda to the ElastiCache Redis Network

1. Click on the Edit button on the **VPC** section
2. Select **Custom VPC** and select the **default vpc**
3. Select all the subnets under **Subnets**
4. Under the **Security groups** select the **(default)** security group - this enables the Lambda to access the ElastiCache for Redis
5. Click **Save**


VPC Info
No VPC configuration
You do not have a VPC configuration for this function
Edit


VPC
When you connect a function to a VPC in your account, it does not have access to the internet unless your VPC provides access. To give your function access to the internet, route outbound traffic to a NAT gateway in a public subnet. Learn more
VPC connection Info
Connect to a virtual private cloud (VPC) to access network resources without exposing them to the internet.
None
Custom VPC
VPC
Choose a VPC for your function to access.
vpc-3754a051 (172.31.0.0/16)
Subnets
Select the VPC subnets for Lambda to use to set up your VPC configuration.
subnet-d3c462b5 (172.31.16.0/20) us-west-1a
subnet-675aa93d (172.31.0.0/20) us-west-1c


Security groups
Choose the VPC security groups for Lambda to use to set up your VPC configuration. The table below shows the inbound and outbound rules for the security groups that you choose.
sg-b05075c3 (default)
default VPC security group


Successfully updated the function hello.