

# Use AWS Lambda to Start and Stop EC2 After 10 Minutes

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## Step 1 : launch a EC2 instance

## Step 2 :Create IAM role for lamda

- On the left menu: Click Roles → **Create role**
- Trusted entity: Choose **Lambda**
- Click **Next**

The screenshot shows the AWS IAM console 'Create role' page. The browser address bar shows the URL: `us-east-1.console.aws.amazon.com/iam/home?region=ap-south-1#/roles/create?trustedEnti...`. The left sidebar shows the navigation menu with 'IAM' selected. The main content area is titled 'Create role' and has a progress indicator on the left showing three steps: 'Step 2: Add permissions', 'Step 3: Name, review, and create', and 'Step 4: Attach permissions'. The 'Trusted entity type' section has five options: 'AWS service' (selected), 'AWS account', 'Web identity', 'SAML 2.0 federation', and 'Custom trust policy'. The 'Use case' section has a dropdown menu with 'Lambda' selected and a radio button selection with 'Lambda' selected. The 'Next' button is highlighted in orange.

## Attach Permissions

- **AmazonEC2FullAccess**
- **CloudWatchEventsFullAccess**

## Step 2: Add permissions

### Permissions policy summary

Policy name 	Type	Attached as
<a href="#">AmazonEC2FullAccess</a>	AWS managed	Permissions policy
<a href="#">CloudWatchEventsFullAccess</a>	AWS managed	Permissions policy

## Name the Role

- Name it: LambdaEC2ControlRole
- Click **Create Role**

## Step 3: Create Lambda Function to START EC2

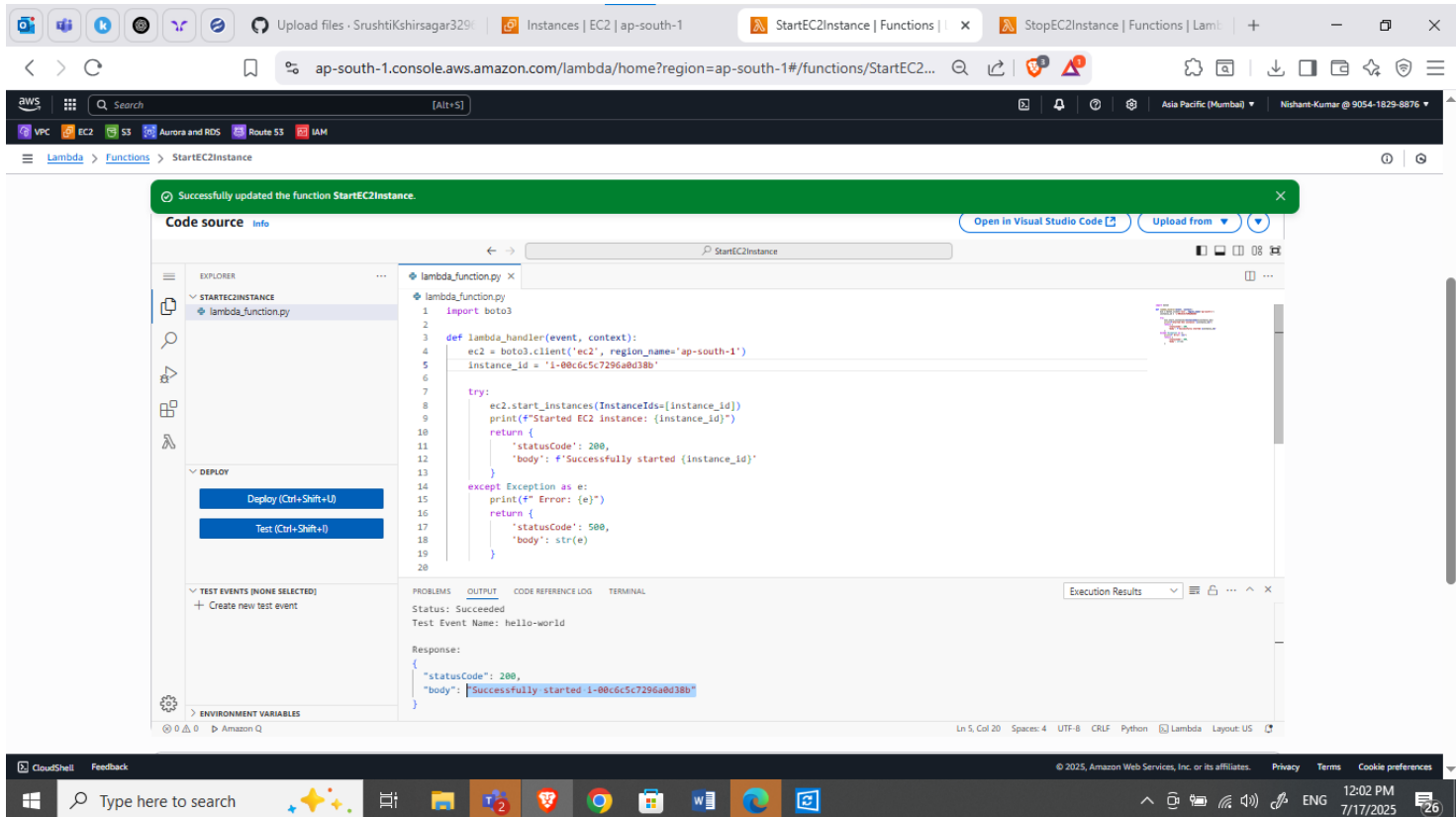
### Create Lambda Function

1. Go to **lambda**
2. Click **Create Function**
3. Choose:
  - **Author from scratch**
  - Function name: StartEC2Instance
  - Runtime: **Python 3.12**
  - Execution role: Use existing role → choose LambdaEC2ControlRole
4. Click **Create Function**

**#python code to start instance once only when u run the code**

```
5. import boto3
6.
7. def lambda_handler(event, context):
8.     ec2 = boto3.client('ec2', region_name='ap-south-1')
9.     instance_id = 'i-00c6c5c7296a0d38b'
10.
11.     try:
12.         ec2.start_instances(InstanceIds=[instance_id])
13.         print(f"Started EC2 instance: {instance_id}")
14.         return {
15.             'statusCode': 200,
16.             'body': f'Successfully started {instance_id}'
17.         }
18.     except Exception as e:
19.         print(f"Error: {e}")
20.     return {
```

21. `'statusCode': 500,`
22. `'body': str(e)`
23. `}`
- 24.



#### Step 4: Create Lambda to STOP EC2 After 10 Minutes

##### Create Stop Lambda

1. Go to Lambda → **Create Function**
2. Function name: StopEC2Instance
3. Runtime: Python 3.12
4. Execution Role: Choose existing → LambdaEC2ControlRole

#python code to stop instance once only when u run the code

```
import boto3

def lambda_handler(event, context):
    ec2 = boto3.client('ec2', region_name='ap-south-1') # Change region
    instance_id = 'i-xxxxxxxxxxxxxxxx' # Replace with your instance ID

    try:
        ec2.stop_instances(InstanceIds=[instance_id])
        print(f"EC2 instance: {instance_id}")
        return {
            'statusCode': 200,
            'body': f'Successfully stopped {instance_id}'
        }
    except Exception as e:
        print(f"Error: {e}")
        return {
            'statusCode': 500,
            'body': str(e)
        }
```

srushti_test	i-00c6c5c7296a0d38b	Stopping	t3.micro	View alarms +	ap-south-1a	ec2-15-206-
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### Function Logs:

START RequestId: 4d025411-9d26-439f-807b-a5784051e207 Version: \$LATEST

END RequestId: 4d025411-9d26-439f-807b-a5784051e207

REPORT RequestId: 4d025411-9d26-439f-807b-a5784051e207 Duration: 3000.00 ms Billed Duration: 3000 ms Memory Size: 128 MB Max Memory Used: 98 MB Init Duration: 309.51 ms Status: timeout

Request ID: 4d025411-9d26-439f-807b-a5784051e207

## Step 5: Schedule Stop After 10 Minutes (CloudWatch Events)

### Create Scheduled Rule

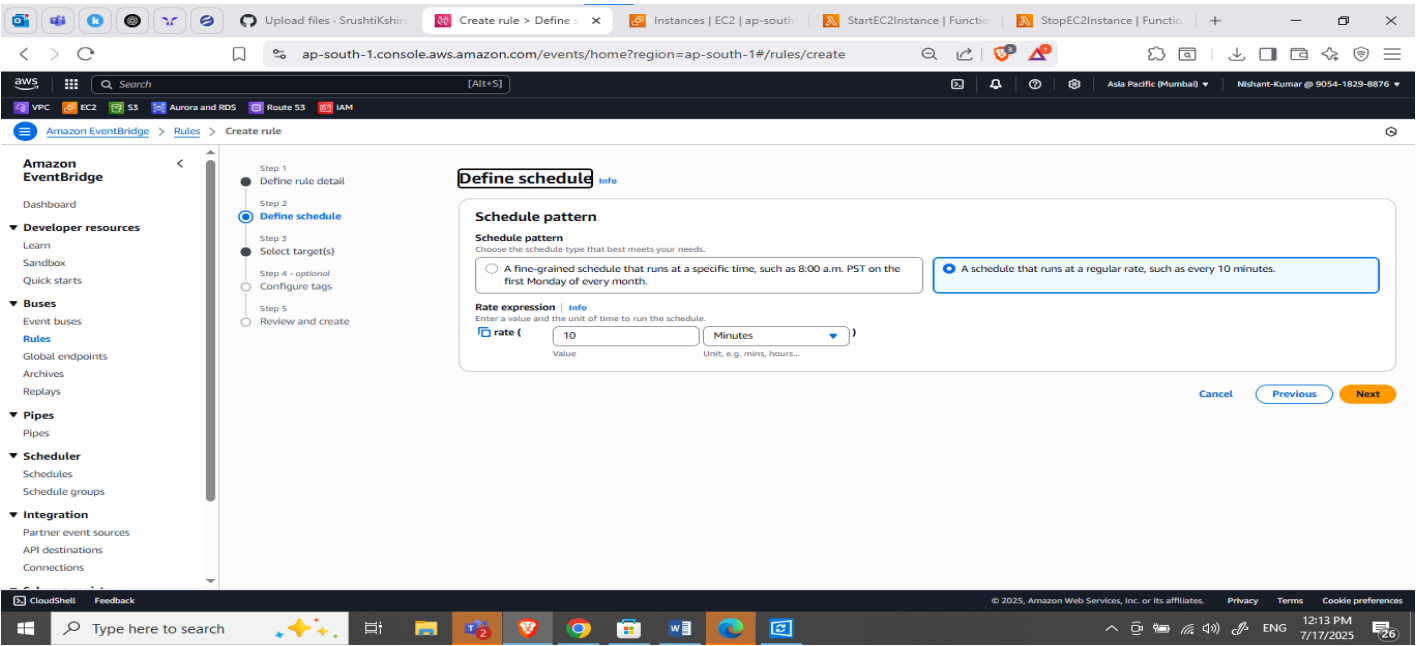
We'll now auto-run the Stop Lambda **after 10 minutes**.

1. Go to **Amazon EventBridge** → **Rules** → **Create rule**
2. Name it: StopEC2After10Min

Set Schedule Time :

- A schedule that runs at a regular rate, such as every 10 minutes."

Field	Value to Enter
Value	10
Unit	minutes



Add Target

- Target type: Lambda Function
- Choose: StopEC2Instance

