**Steps to start and stop EC2 instances at regular intervals using Lambda:**

1.    Create a custom AWS Identity and Access Management (IAM) policy and execution role for your Lambda function.

2.    Create Lambda functions that start and stop your EC2 instances.

3.    Test your Lambda functions.

4.    [Create EventBridge rules that trigger your function on a schedule](https://docs.aws.amazon.com/eventbridge/latest/userguide/eb-create-rule-schedule.html).

**Create Lambda functions that start and stop your EC2 instances**

1. In the [AWS Lambda console](https://console.aws.amazon.com/lambda/), choose Create function.
2. Choose Author from scratch.
3. Under Basic information, add the following:

For Function name, enter a name that identifies it as the function used to stop your EC2 instances.

* For example, "StopEC2Instances".
* For Runtime, choose Python 3.9.
* Under Permissions, expand Change default execution role.  
  Under Execution role, choose Use an existing role.  
  Under Existing role, choose the IAM role that you created.

1. Choose Create function.
2. Under Code, Code source, copy and paste the following code into the [editor pane in the code editor](https://docs.aws.amazon.com/lambda/latest/dg/code-editor.html#code-editor-code)
3. Choose Deploy.

|  |
| --- |
| import json  import boto3  instance\_ids\_list= ['i-0c9f0d24caad683cb']  region='us-east-1'  ec2 = boto3.client('ec2', region\_name=region)  def lambda\_handler(event, context):  print(event)  action = event["action"]  if action == 'start':  # Stop the instance  ec2.start\_instances(  InstanceIds=instance\_ids\_list,  )  print("Successfully started instance: " +str(instance\_ids\_list))  elif action == 'stop':  # Stop the instance  ec2.stop\_instances(  InstanceIds=instance\_ids\_list,  )  print("Successfully stopped instance: " +str(instance\_ids\_list)) |

### Create EventBridge rules that trigger your Lambda functions

1. Open the [Eventbridge console](https://console.aws.amazon.com/events/" \t "_blank).
2. Select Create rule.
3. Enter a Name for your rule, such as "StopEC2Instances". You can optionally enter a Description.
4. In Define pattern, select Schedule.
5. Do either of the following:
6. For Fixed rate of, enter an interval of time in minutes, hours, or days.  
   For Cron expression, enter an expression that tells Lambda when to stop your instances. For information on expression syntax, see [Schedule expressions for rules](https://docs.aws.amazon.com/AmazonCloudWatch/latest/events/ScheduledEvents.html).  
   Note: Cron expressions are evaluated in UTC. Make sure that you adjust the expression for your preferred time zone.
7. In Select targets, choose Lambda function from the Target drop-down menu.
8. For Function, choose the function that stops your EC2 instances.
9. Scroll down and then select Create.
10. Repeat steps 1-8 to create a rule to start your EC2 instances. Do the following differently:
11. Enter a name for your rule, such as "StartEC2Instances".  
    (Optional) Enter a Description, such as "Starts EC2 instances every morning at 7 AM."  
    In step 5, for Cron expression, enter an expression that tells Lambda when to start your instances.  
    In step 7, for Function, choose the function that starts your EC2 instances.