













```
Description: CloudFormation Template for SNS VPC Endpoints Tutorial
   Description: Name of an existing EC2 KeyPair to enable SSH access to the instance
   ConstraintDescription: must be the name of an existing EC2 KeyPair.
   Description: The IP address range that can be used to SSH to the EC2 instance
   Type: String
   Default: 0.0.0.0/0
   ConstraintDescription: must be a valid IP CIDR range of the form x.x.x.x/x.
     AMI: ami-0c293f3f676ec4f90
     AMI: ami-08b6f2a5c291246a0
     AMI: ami-051317f1184dd6e92
     AMI: ami-0b9f27b05e1de14e9
     CidrBlock: 10.0.0.0/16
         Key: Name
         Value: VPCE-Tutorial-VPC
     VpcId: !Ref VPC
     CidrBlock: 10.0.1.0/24
        - Key: Name
         Key: Name
         Value: VPCE-Tutorial-InternetGateway
```

AWSTemplateFormatVersion: 2010-09-09



```
VpcId: !Ref VPC
  InternetGatewayId: !Ref InternetGateway
Properties:
 VpcId: !Ref VPC
    - Key: Name
      Value: VPCE-Tutorial-RouteTable
Type: 'AWS::EC2::SubnetRouteTableAssociation'
 RouteTableId: !Ref RouteTable
  SubnetId: !Ref Subnet
Properties:
 RouteTableId: !Ref RouteTable
 GatewayId: !Ref InternetGateway
 DestinationCidrBlock: 0.0.0.0/0
Type: 'AWS::EC2::SecurityGroup'
 GroupName: Tutorial Security Group
 GroupDescription: Security group for SNS VPC endpoing tutorial
 VpcId: !Ref VPC
  SecurityGroupIngress:
     CidrIp: 10.0.0.0/16
     CidrIp: !Ref SSHLocation
  SecurityGroupEgress:
     CidrIp: 10.0.0.0/16
    - Key: Name
      Value: VPCE-Tutorial-SecurityGroup
 KeyName: !Ref KeyName
  InstanceType: t2.micro
      RegionMap
```

```
- AssociatePublicIpAddress: 'true'
         - !Ref SecurityGroup
       SubnetId: !Ref Subnet
   IamInstanceProfile: !Ref EC2InstanceProfile
       Key: Name
       Value: VPCE-Tutorial-EC2Instance
 Type: 'AWS::IAM::InstanceProfile'
      - !Ref EC2InstanceRole
   InstanceProfileName: myEC2InstanceProfile-Sudip
   RoleName: VPCE-Tutorial-EC2InstanceRole
       - Effect: Allow
           Service: ec2.amazonaws.com
         Action: 'sts:AssumeRole'
     - 'arn:aws:iam::aws:policy/AmazonSNSFullAccess'
      - Effect: Allow
         Service: lambda.amazonaws.com
LambdaFunction1:
       from __future__ import print_function
       print('Loading function')
       def lambda_handler(event, context):
         message = event['Records'][0]['Sns']['Message']
         print("From SNS: " + message)
         return message
```

```
return message
   Description: SNS VPC endpoint tutorial lambda function 1
   FunctionName: VPCE-Tutorial-Lambda-1
   Handler: index.lambda handler
     - LambdaExecutionRole
     - Arn
   Runtime: python3.9
   Action: 'lambda:InvokeFunction'
   FunctionName: !Ref LambdaFunction1
   Principal: sns.amazonaws.com
   SourceArn: !Ref SNSTopic
 Type: 'AWS::Logs::LogGroup'
       from _future_ import print_function print('Loading function')
       def lambda_handler(event, context):
         message = event['Records'][0]['Sns']['Message']
         print("From SNS: " + message)
         return message
   Description: SNS VPC endpoint tutorial lambda function 2
   FunctionName: VPCE-Tutorial-Lambda-2
   Handler: index.lambda_handler
     - LambdaExecutionRole
   Runtime: python3.9
LambdaPermission2:
 Type: 'AWS::Lambda::Permission'
   Action: 'lambda:InvokeFunction'
   FunctionName: !Ref LambdaFunction2
   Principal: sns.amazonaws.com
   SourceArn: !Ref SNSTopic
```

```
194 LambdaPermission2:
195 Type: 'AWS::Lambda::Permission'
196 Properties:
197 Action: 'lambda:InvokeFunction'
198 FunctionName: !Ref LambdaFunction2
199 Principal: sns.amazonaws.com
200 SourceArn: !Ref SNSTopic
201 LambdaLogGroup2:
202 Type: 'AWS::Logs::LogGroup'
203 Properties:
204 LogGroupName: !Sub "/aws/lambda/${LambdaFunction2}"
205 RetentionInDays: '7'
206 SNSTopic:
207 Type: 'AWS::SNS::Topic'
208 Properties:
209 DisplayName: VPCE-Tutorial-Topic
210 TopicName: VPCE-Tutorial-Topic
211 Subscription:
212 - Endpoint: !GetAtt
213 - LambdaFunction1
214 - Arn
215 Protocol: lambda
216 - Endpoint: !GetAtt
217 - LambdaFunction2
218 - Arn
219 Protocol: lambda
```























