VPC Setup:

1. AWSTemplateFormatVersion: '2010-09-09'
2. Description: VPC Stack with all networking components and exports
3. Resources:
4. MyVPC:
5. Type: AWS::EC2::VPC
6. Properties:
7. CidrBlock: 10.0.0.0/16
8. EnableDnsSupport: true
9. EnableDnsHostnames: true
10. InternetGateway:
11. Type: AWS::EC2::InternetGateway
12. VPCGatewayAttachment:
13. Type: AWS::EC2::VPCGatewayAttachment
14. Properties:
15. VpcId: !Ref MyVPC
16. InternetGatewayId: !Ref InternetGateway
17. PublicSubnet:
18. Type: AWS::EC2::Subnet
19. Properties:
20. VpcId: !Ref MyVPC
21. CidrBlock: 10.0.1.0/24
22. MapPublicIpOnLaunch: true
23. PrivateSubnet:
24. Type: AWS::EC2::Subnet
25. Properties:
26. VpcId: !Ref MyVPC
27. CidrBlock: 10.0.2.0/24
28. PublicRouteTable:
29. Type: AWS::EC2::RouteTable
30. Properties:
31. VpcId: !Ref MyVPC
32. PublicRoute:
33. Type: AWS::EC2::Route
34. Properties:
35. RouteTableId: !Ref PublicRouteTable
36. DestinationCidrBlock: 0.0.0.0/0
37. GatewayId: !Ref InternetGateway
38. PublicSubnetRouteTableAssociation:
39. Type: AWS::EC2::SubnetRouteTableAssociation
40. Properties:
41. SubnetId: !Ref PublicSubnet
42. RouteTableId: !Ref PublicRouteTable
43. Outputs:
44. ExportedVPCID:
45. Description: The ID of the VPC
46. Value: !Ref MyVPC
47. Export:
48. Name: !Sub ${AWS::StackName}-VPCID
49. ExportedPublicSubnetID:
50. Description: The ID of the Public Subnet
51. Value: !Ref PublicSubnet
52. Export:
53. Name: !Sub ${AWS::StackName}-PublicSubnetID
54. ExportedPrivateSubnetID:
55. Description: The ID of the Private Subnet
56. Value: !Ref PrivateSubnet
57. Export:
58. Name: !Sub ${AWS::StackName}-PrivateSubnetID

EC2 instance launch in VPC

1. AWSTemplateFormatVersion: '2010-09-09'
2. Description: Launch an EC2 instance using directly imported VPC and Subnet IDs
3. from another stack
4. Parameters:
5. KeyName:
6. Type: AWS::EC2::KeyPair::KeyName
7. Description: Name of an existing EC2 KeyPair to enable SSH access to the instance
8. Resources:
9. MySecurityGroup:
10. Type: AWS::EC2::SecurityGroup
11. Properties:
12. GroupDescription: Security group for my instance
13. VpcId: !ImportValue Stack-VPC-VPCID *# Direct reference*
14. SecurityGroupIngress:
15. - IpProtocol: tcp
16. FromPort: 22
17. ToPort: 22
18. CidrIp: 0.0.0.0/0
19. - IpProtocol: tcp
20. FromPort: 80
21. ToPort: 80
22. CidrIp: 0.0.0.0/0
23. MyEC2Instance:
24. Type: AWS::EC2::Instance
25. Properties:
26. InstanceType: t2.micro
27. ImageId: ami-07caf09b362be10b8
28. SubnetId: !ImportValue Stack-VPC-PublicSubnetID *# Direct reference*
29. SecurityGroupIds:
30. - !Ref MySecurityGroup
31. KeyName: !Ref KeyName
32. Outputs:
33. InstanceId:
34. Description: The ID of the created EC2 instance
35. Value: !Ref MyEC2Instance