

Assignment 7

Ques: Create your own new custom VPC

- Create 3 subnets of that VPC
- and then configure your EC2 linux instance inside your custom VPC
- Attach an internet gateway to your custom VPC

Created our Custom VPC

VPC > Your VPCs > vpc-092927124a5d2cf6d

vpc-092927124a5d2cf6d / Custom_VPC

Actions ▼

Details Info

VPC ID vpc-092927124a5d2cf6d	State Available	DNS hostnames Disabled	DNS resolution Enabled
Tenancy Default	DHCP option set dopt-008477bce4be31450	Main route table rtb-02d9a8352be74bcf1	Main network ACL acl-0cd82b0ffe3638778
Default VPC No	IPv4 CIDR 10.0.0.0/16	IPv6 pool -	IPv6 CIDR (Network border group) -
Network Address Usage metrics Disabled	Route 53 Resolver DNS Firewall rule groups -	Owner ID 685418332193	

Created 4 subnets in our custom VPC

VPC dashboard X

EC2 Global View New

Filter by VPC:

Select a VPC ▼

vpc-092927124a5d2cf6d Custom_VPC Owner: 685418332193 X

Virtual private cloud

Your VPCs

Subnets

Route tables

Subnets (4) Info

Filter subnets

search: vpc-092927124a5d2cf6d X Clear filters

Actions ▼ Create subnet

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<input type="checkbox"/>	Name ▼	Subnet ID ▼	State ▼	VPC ▼	IPv4 CIDR ▼	IPv6 CIDR
<input type="checkbox"/>	publicSubnetA	subnet-055618b93814544bd	Available	vpc-092927124a5d2cf6d Cus...	10.0.0.0/24	-
<input type="checkbox"/>	privateSubnetA	subnet-0d61b035a7eb675f1	Available	vpc-092927124a5d2cf6d Cus...	10.0.1.0/24	-
<input type="checkbox"/>	publicSubnetB	subnet-04ae47ec170ea4d80	Available	vpc-092927124a5d2cf6d Cus...	10.0.2.0/24	-
<input type="checkbox"/>	privateSubnetB	subnet-0c9174a8ca5924987	Available	vpc-092927124a5d2cf6d Cus...	10.0.3.0/24	-

Select a subnet

Launching our custom-igw and attaching it to our Custom_VPC

VPC > Internet gateways > igw-0d34b216965ae6bb7

igw-0d34b216965ae6bb7 / Custom_igw

Actions

Details

Info

Internet gateway ID	State	VPC ID	Owner
igw-0d34b216965ae6bb7	Attached	vpc-092927124a5d2cf6d Custom_VPC	685418332193

Created a public_RT and modified its content

rtb-01f803f9b240e5197 / publicRT

Actions

You can now check network connectivity with Reachability Analyzer

Run Reachability Analyzer

X

Details

Info

Route table ID	Main	Explicit subnet associations	Edge associations
rtb-01f803f9b240e5197	No	2 subnets	–
VPC	Owner ID		
vpc-092927124a5d2cf6d Custom_VPC	685418332193		

Routes

Subnet associations

Edge associations

Route propagation

Tags

Routes (2)

Edit routes

Filter routes

Both

< 1 >

Destination	Target	Status	Propagated
0.0.0.0/0	igw-0d34b216965ae6bb7	Active	No
10.0.0.0/16	local	Active	No

Launched ec2_instance in custom_VPC

Instances (1 / 4) filter									
Find instance by attribute or tag (case-sensitive)									
	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DN	
<input type="checkbox"/>	A	i-04492777d34d41506	Terminated	t2.micro	-	No alarms	ap-south-1a	-	
<input checked="" type="checkbox"/>	publicA	i-00e9dbcacaab6542e	Running	t2.micro	2/2 checks passed	No alarms	ap-south-1a	-	

Instance: i-00e9dbcacaab6542e (publicA)

▼ Instance summary Info

Instance ID

i-00e9dbcacaab6542e (publicA)

IPv6 address

-

Hostname type

IP name: ip-10-0-0-97.ap-south-1.compute.internal

Answer private resource DNS name

IPv4 (A)

Auto-assigned IP address

15.206.158.81 [Public IP]

Public IPv4 address

15.206.158.81 | [open address](#)

Instance state

Running

Private IP DNS name (IPv4 only)

ip-10-0-0-97.ap-south-1.compute.internal

Instance type

t2.micro

VPC ID

vpc-092927124a5d2cf6d (Custom_VPC)

Private IPv4 addresses

10.0.0.97

Public IPv4 DNS

-

Elastic IP addresses

-

AWS Compute Optimizer finding

[Opt-in to AWS Compute Optimizer for recommendations.](#)

checking :if we could do an instance connect and ping Google; if yes, then everything went well.

ap-south-1.console.aws.amazon.com/ec2-instance-connect/ssh?region=ap-south-1&connType=standard

aws Services Search [Alt+S]

Amazon Linux 2 AMI

<https://aws.amazon.com/amazon-linux-2/>

```
[ec2-user@ip-10-0-0-97 ~]$ ping google.com
PING google.com (142.250.76.206) 56(84) bytes of data:
64 bytes from bom12s10-in-f14.1e100.net (142.250.76.206): icmp_seq=1 ttl=51 time=1.44 ms
64 bytes from bom12s10-in-f14.1e100.net (142.250.76.206): icmp_seq=2 ttl=51 time=1.46 ms
64 bytes from bom12s10-in-f14.1e100.net (142.250.76.206): icmp_seq=3 ttl=51 time=1.48 ms
^C
--- google.com ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2003ms
rtt min/avg/max/mdev = 1.442/1.463/1.487/0.036 ms
[ec2-user@ip-10-0-0-97 ~]$
```

i-00e9dbcacaab6542e (publicA)

PublicIPs: 15.206.158.81 PrivateIPs: 10.0.0.97