

### Question1:

Implement a vpc with cidr 10.0.0.0/16 with 2 public subnets with cidrs 10.0.0.0/24 and 10.0.0.2.0/24 with a load balancer to Distribute the traffic between 2 machines with nginx installed in them as a proxy and 2 private subnets with the below cidrs 10.0.1.0/24 and 10.0.0.3.0/24 then a 2 instances attached in autoscaling in the private subnets with apache installed without SSH and load balancer to install between them

New EC2 Experience

EC2 Dashboard

EC2 Global View

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Lifecycle Manager

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Security Groups

Elastic IPs

Placement Groups

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Actions

Filter by tags and attributes or search by keyword

	Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm S
<input checked="" type="checkbox"/>	private insta...	i-0746a8d92157313...	t2.micro	us-east-1a	running	Initializing	None
<input type="checkbox"/>	public-instance	i-0e16d9cee7a251443	t2.micro	us-east-1a	running	Initializing	None

Instance: **i-0746a8d9215731301 (private instance)** Private IP: 10.0.1.185

DescriptionStatus ChecksMonitoringTags

Instance ID

Instance state

Instance type

Finding

Private DNS

Private IPs

Secondary private IPs

VPC ID

Platform

Platform details

Usage operation

Source/dest. check

T2/T3 Unlimited

EBS-optimized

Root device type

Root device

Block devices

Elastic Graphics ID

i-0746a8d9215731301

running

t2.micro

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

ip-10-0-1-185.ec2.internal

10.0.1.185

vpc-03d426abe60a8560c (sprints-vpc)

Amazon Linux

Linux/UNIX

RunInstances

True

Disabled

False

ebs

/dev/xvda

/dev/xvda

-

aws

Services

Search

[Alt+S]

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Instance State : Running Add filter

	Name	Instance ID	Instance Type	Availability Zone	Instance State
<input checked="" type="checkbox"/>	public-instance	i-0e16d9cee7a251443	t2.micro	us-east-1a	running

- ▼ Security
  - Network ACLs
  - Security groups
- ▼ Network Analysis
  - Reachability Analyzer
  - Network Access Analyzer
- ▼ DNS firewall
  - Rule groups
  - Domain lists

Route table: **rtb-0eb90ac46ac38a177** / my-route-table

Routes (2)

🔍 *Filter routes*

Destination	Target
10.0.0.0/16	local
0.0.0.0/0	<a href="#">igw-0917c1</a>

VPC dashboard



EC2 Global View New

Filter by VPC:

Select a VPC

Virtual private cloud

Your VPCs

Subnets

Route tables

Internet gateways

Egress-only Internet gateways

Carrier gateways

DHCP option sets

Elastic IPs

Managed prefix lists

Endpoints

Subnets (1/8) Info

Filter subnets

	Name	Subnet ID	State	VPC
<input type="checkbox"/>	–	subnet-0309b7c9eb69886cb	Available	vpc-
<input type="checkbox"/>	–	subnet-0c9c4719235a15d98	Available	vpc-
<input type="checkbox"/>	–	subnet-0e95c9af2f64854f9	Available	vpc-
<input checked="" type="checkbox"/>	public-subnet	subnet-0aaeed941c4bb855d	Available	vpc-
<input type="checkbox"/>	–	subnet-045800b1c1ca9be2b	Available	vpc-
<input type="checkbox"/>	–	subnet-0c0e158859ff438e5	Available	vpc-
<input type="checkbox"/>	–	subnet-07b3e6f70f4c3dbb5	Available	vpc-
<input type="checkbox"/>	private-subnet	subnet-0fe2708571e967699	Available	vpc-

VPC > Your VPCs > vpc-0b9d3d12d8e9ed169

vpc-0b9d3d12d8e9ed169 / lab\_3\_VPC

Actions

Details Info

VPC ID  
vpc-0b9d3d12d8e9ed169

Tenancy  
Default

Default VPC  
No

Network Address Usage metrics  
Disabled

State  
Available

DHCP option set  
dopt-05683ce2b1cafd275

IPv4 CIDR  
10.0.0.0/24

Route 53 Resolver DNS Firewall rule groups  
–

DNS hostnames  
Disabled

Main route table  
rtb-0e0658301876a005b

IPv6 pool  
–

Owner ID  
422097883691

DNS resolution  
Enabled

Main network ACL  
acl-041373c4b957e6f29

IPv6 CIDR (Network border group)  
–

<input type="checkbox"/>	lab_3_private_subnet	subnet-056224b2031ba9df3	Available	vpc-0b9d3d12d8e9ed169   la...	10.0.0.0/28
<input type="checkbox"/>	–	subnet-0389e947a137e5844	Available	vpc-0b92a5634ea5f6681	172.31.64.0/20
<input type="checkbox"/>	–	subnet-017a96ebe738057c1	Available	vpc-0b92a5634ea5f6681	172.31.48.0/20
<input type="checkbox"/>	–	subnet-0bfb20b31494eb28c	Available	vpc-0b92a5634ea5f6681	172.31.32.0/20
<input type="checkbox"/>	–	subnet-00a9893f561206386	Available	vpc-0b92a5634ea5f6681	172.31.16.0/20
<input type="checkbox"/>	–	subnet-004e015fe541826e5	Available	vpc-0b92a5634ea5f6681	172.31.0.0/20
<input type="checkbox"/>	–	subnet-07c360f9f96452860	Available	vpc-0b92a5634ea5f6681	172.31.80.0/20
<input type="checkbox"/>	lab_3_puplic_subnet	subnet-0e0496ba4ef77116d	Available	vpc-0b9d3d12d8e9ed169   la...	10.0.0.16/28

	Name	Internet gateway ID	State	VPC ID	Owner
<input type="checkbox"/>	Lab_3_GW	igw-02c820d3bbf60dcb4	Attached	vpc-0b9d3d12d8e9ed169   lab_3_VPC	422097883691
<input type="checkbox"/>	–	igw-0547a15c8f579d2e7	Attached	vpc-0b92a5634ea5f6681	422097883691