

Set up a VPC with an Internet gateway, create a public subnet with 256 IP addresses, a private subnet with 256 IP addresses, make a route table connecting the Internet gateway and the subnets, and launch a Linux EC2 instance by using the above VPC and public subnet.

STEP 1 - Create a VPC and internet gateway and attach it to the VPC

VPC > Your VPCs > vpc-084dd80ee8a7b9fd9

vpc-084dd80ee8a7b9fd9 / squad

Actions ▼

DetailsInfo

VPC ID vpc-084dd80ee8a7b9fd9	State Available	DNS hostnames Disabled	DNS resolution Enabled
Tenancy Default	DHCP option set dopt-08ea289ef555f01f0	Main route table rtb-090422411b2c25efd	Main network ACL acl-011a2a80b11bc4df7
Default VPC No	IPv4 CIDR 16.12.0.0/17	IPv6 pool -	IPv6 CIDR (Network border group) -
Network Address Usage metrics Disabled	Route 53 Resolver DNS Firewall rule groups -	Owner ID 762233750461	

Resource mapCIDRsFlow logsTagsIntegrations

VPC > Internet gateways > igw-071aed9a9abcfe847

igw-071aed9a9abcfe847 / squad

Actions ▼

DetailsInfo

Internet gateway ID igw-071aed9a9abcfe847	State Attached	VPC ID vpc-084dd80ee8a7b9fd9   squad	Owner 762233750461
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## STEP 2 - Create a public subnet with 256 IP addresses

### Squad-01 as public

**Subnet 1 of 1**

**Subnet name**  
Create a tag with a key of 'Name' and a value that you specify.  
  
The name can be up to 256 characters long.

**Availability Zone** [Info](#)  
Choose the zone in which your subnet will reside, or let Amazon choose one for you.

**IPv4 VPC CIDR block** [Info](#)  
Choose the VPC's IPv4 CIDR block for the subnet. The subnet's IPv4 CIDR must lie within this block.

**IPv4 subnet CIDR block**  
 256 IPs  

< > ^ v

**Tags - optional**

Key	Value - optional
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## STEP 3 - Create private subnet with 256 IP addresses

### Squad-02 as private

**Subnet 2 of 2**

**Subnet name**  
Create a tag with a key of 'Name' and a value that you specify.  
  
The name can be up to 256 characters long.

**Availability Zone** [Info](#)  
Choose the zone in which your subnet will reside, or let Amazon choose one for you.

**IPv4 VPC CIDR block** [Info](#)  
Choose the VPC's IPv4 CIDR block for the subnet. The subnet's IPv4 CIDR must lie within this block.

**IPv4 subnet CIDR block**  
 256 IPs  

< > ^ v

**Tags - optional**

STEP 4 - Create a route table connecting the Internet gateway and the Subnets is public

rtb-0b53822ad84d26480 / squad

Details Info

Route table ID

rtb-0b53822ad84d26480

VPC

vpc-084dd80ee8a7b9fd9 | squad

Main

No

Owner ID

762233750461

Explicit subnet associations

subnet-0b634ab252e370b51 / squad-01

Edge associations

-

Routes

Subnet associations

Edge associations

Route propagation

Tags

Routes (2)

Both Edit routes

Filter routes

Destination	Target	Status	Propagated
0.0.0.0/0	igw-071aed9a9abcfe847	Active	No
16.12.0.0/17	local	Active	No

Status connection of internet gate way

Search

	Name	Internet gateway ID	State	VPC ID
<input type="checkbox"/>	-	igw-0094bee28a46df8b4	Attached	vpc-0f29214e8a09cba66
<input type="checkbox"/>	squad	igw-071aed9a9abcfe847	Attached	vpc-084dd80ee8a7b9fd9   squad

STEP 5 - Create a route table connecting to the subnet but not connecting to the internet gateway is private

rtb-027b4bd601f3dd182 / squad 02

Details Info

Route table ID

rtb-027b4bd601f3dd182

VPC

vpc-084dd80ee8a7b9fd9 | squad

Main

No

Owner ID

762233750461

Explicit subnet associations

subnet-04875a2c3bddf45d7 / squad-02

Edge associations

-

Routes

Subnet associations

Edge associations

Route propagation

Tags

Routes (1)

Both Edit routes

Filter routes

Destination	Target	Status	Propagated
16.12.0.0/17	local	Active	No

## STEP 6 - launch a Linux EC2 instance by using the above VPC and public subnet

Launch Instance > squad 01 as as name > set the OS > set AMI > Network setting add vpc,subnet,enable public ip> inbound security http access > finance launch ec2 instance

▼ Network settings [Info](#)

VPC - required [Info](#)

vpc-084dd80ee8a7b9fd9 (squad)  
16.12.0.0/17

↻

Subnet [Info](#)

subnet-0b634ab252e370b51 squad-01  
VPC: vpc-084dd80ee8a7b9fd9 Owner: 762233750461  
Availability Zone: ap-southeast-2a Zone type: Availability Zone  
IP addresses available: 251 CIDR: 16.12.0.0/24

↻ Create new subnet [↗](#)

Auto-assign public IP [Info](#)

Enable

Additional charges apply when outside of [free tier allowance](#)

Firewall (security groups) [Info](#)

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

☒ Create security group

☐ Select existing security group

Inbound Security Group Rules

▼ Security group rule 1 (TCP, 22, 0.0.0.0/0) 

Remove

Type <a href="#">Info</a>	Protocol <a href="#">Info</a>	Port range <a href="#">Info</a>
ssh	TCP	22
Source type <a href="#">Info</a>	Source <a href="#">Info</a>	Description - optional <a href="#">Info</a>
Anywhere	<div><div>🔍 Add CIDR, prefix list or security</div><div>0.0.0.0/0 ✕</div></div>	<div>e.g. SSH for admin desktop</div>

▼ Security group rule 2 (TCP, 80, 0.0.0.0/0) 

Remove

Type <a href="#">Info</a>	Protocol <a href="#">Info</a>	Port range <a href="#">Info</a>
HTTP	TCP	80
Source type <a href="#">Info</a>	Source <a href="#">Info</a>	Description - optional <a href="#">Info</a>
Anywhere	<div><div>🔍 Add CIDR, prefix list or security</div><div>0.0.0.0/0 ✕</div></div>	<div>e.g. SSH for admin desktop</div>

Instance summary for i-06a4b19508f764069 (squad01) [Info](#)














↻

Connect

Instance state ▼

Actions ▼

Updated less than a minute ago

<div>Instance ID</div> <div> i-06a4b19508f764069 (squad01)</div>	<div>Public IPv4 address</div> <div> 3.27.225.183   <a href="#">open address</a> </div>	<div>Private IPv4 addresses</div> <div> 16.12.0.155</div>
<div>IPv6 address</div> <div>–</div>	<div>Instance state</div> <div> <b>Running</b></div>	<div>Public IPv4 DNS</div> <div>–</div>
<div>Hostname type</div> <div>IP name: ip-16-12-0-155.ap-southeast-2.compute.internal</div>	<div>Private IP DNS name (IPv4 only)</div> <div> ip-16-12-0-155.ap-southeast-2.compute.internal</div>	
<div>Answer private resource DNS name</div> <div>–</div>	<div>Instance type</div> <div>t2.micro</div>	<div>Elastic IP addresses</div> <div>–</div>
<div>Auto-assigned IP address</div> <div> 3.27.225.183 [Public IP]</div>	<div>VPC ID</div> <div> vpc-084dd80ee8a7b9fd9 (squad) </div>	<div>AWS Compute Optimizer finding</div> <div> <a href="#">Opt-in to AWS Compute Optimizer for recommendations.</a> <a href="#">  Learn more</a> </div>
<div>IAM Role</div> <div>–</div>	<div>Subnet ID</div> <div> subnet-0b634ab252e370b51 (squad-01) </div>	<div>Auto Scaling Group name</div> <div>–</div>