

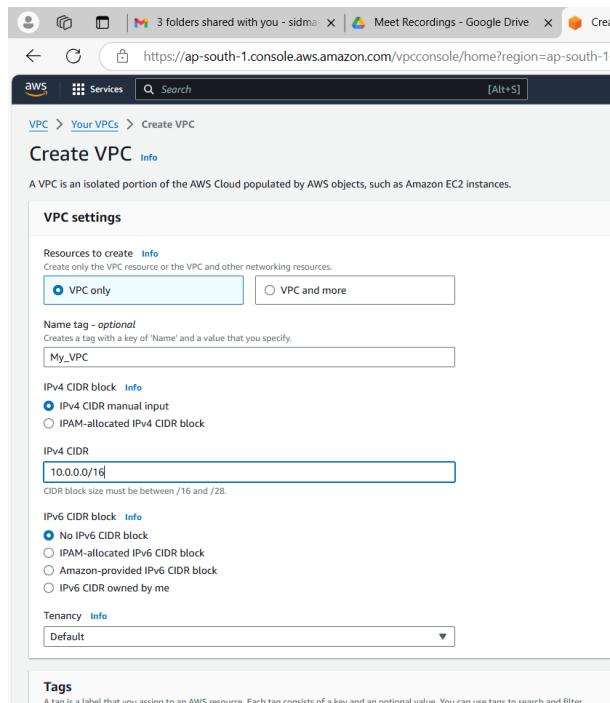
AWS-Virtual Private Cloud (VPC)

Siddesh Mandhare || 18/09/24

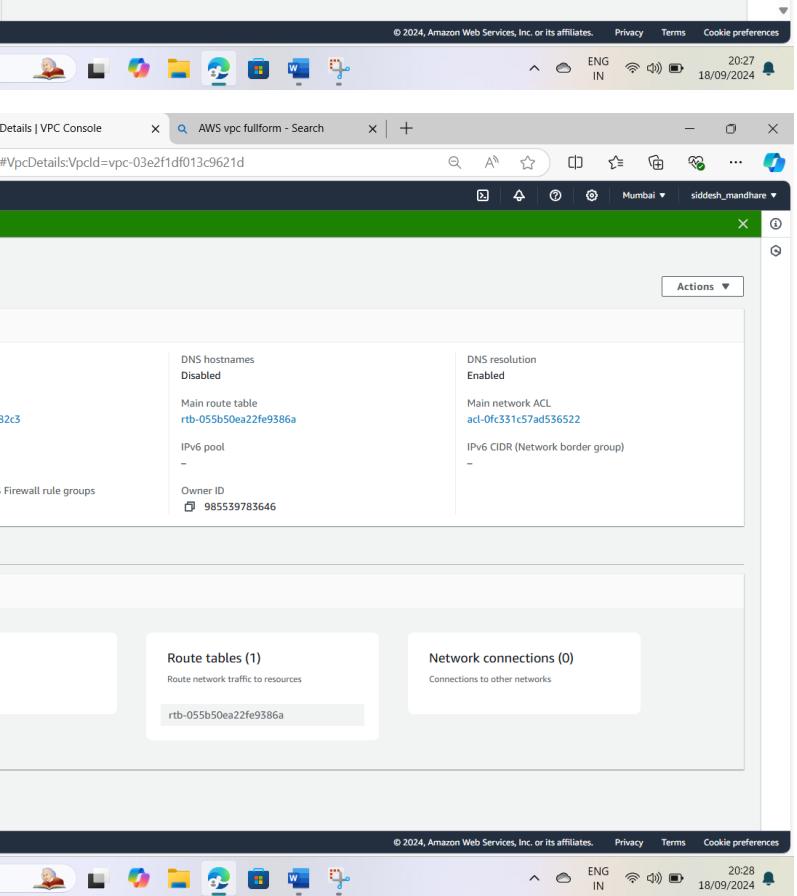
Name: - Virtual Private Cloud (VPC)

Step 1: - Create VPC

- Give name as My_VPC
- Give IP rage as 10.0.0.0/16 (we got 65536 ips)



The screenshot shows the 'Create VPC' wizard in the AWS VPC console. Under 'VPC settings', the 'Resources to create' dropdown is set to 'VPC only'. The 'Name tag - optional' field contains 'My_VPC'. The 'IPv4 CIDR block' field is set to '10.0.0.0/16'. Under 'Tags', it says 'A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.' A green success message at the top of the page reads 'You successfully created vpc-03e2f1df013c9621d / My_VPC'.



The screenshot shows the 'VPC dashboard' in the AWS VPC console. It displays the details of the newly created VPC, 'vpc-03e2f1df013c9621d / My_VPC'. Key details include:

- VPC ID:** vpc-03e2f1df013c9621d
- State:** Available
- Tenancy:** Default
- Default VPC:** No
- IPv4 CIDR:** 10.0.0.0/16
- Network Address Usage metrics:** Disabled
- DNS resolution:** Enabled
- Main network ACL:** acl-0fc331c57ad536522
- IPv6 CIDR (Network border group):** -

The dashboard also shows sections for Resource map, Subnets, Route tables, and Network connections.

Step 2: - Create 2 Subnet

- Select VPC ID (My_VPC)

The screenshot shows the 'Create subnet' wizard in the AWS VPC console. The first step, 'VPC', is selected. Under 'VPC ID', it says 'Create subnets in this VPC.' and shows a dropdown menu with 'vpc-03e2f1df013c9621d (My_VPC)'. Below this, under 'Associated VPC CIDRs', it shows 'IPv4 CIDRs' and '10.0.0.0/16'.

- Give 1st subnet name as Public_Subnet_1a
- Select availability zone as ap-south-1a
- Give CIDR block as 10.0.1.0/28

The screenshot shows the 'CreateSubnet' wizard in the AWS VPC console. The 'Subnet settings' step is active. It shows 'Subnet 1 of 1' with the following details:

- Subnet name:** Public_Subnet_1a
- Availability Zone:** Asia Pacific (Mumbai) / ap-south-1a
- IPv4 VPC CIDR block:** 10.0.0.0/16
- IPv4 subnet CIDR block:** 10.0.1.0/28
- Tags - optional:** A tag 'Name' is added with value 'Public_Subnet_1a'.

At the bottom, there are 'Cancel' and 'Create subnet' buttons.

- Give 2nd subnet name as Private_Subnet_1b
- Select availability zone as ap-south-1b
- Give CIDR block as 10.0.2.0/28

VPC ID: Create subnets in this VPC. **vpc-03e2f1df013c9621d (My_VPC)**

Associated VPC CIDRs

IPv4 CIDRs: 10.0.0/16

Subnet settings

Specify the CIDR blocks and Availability Zone for the subnet.

Subnet 1 of 1

Subnet name: Create a tag with a key of 'Name' and a value that you specify. **Private_Subnet_1b**. The name can be up to 256 characters long.

Availability Zone: Choose the zone in which your subnet will reside, or let Amazon choose one for you. **Asia Pacific (Mumbai) / ap-south-1b**.

IPv4 VPC CIDR block: Choose the VPC's IPv4 CIDR block for the subnet. The subnet's IPv4 CIDR must lie within this block. **10.0.0.0/16**.

IPv4 subnet CIDR block: **10.0.2.0/28** (65,536 IPs).

Tags - optional

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Step:-3 Create 1 Internet Gateway

- Give name as My-IGW

VPC > Internet gateways > Create internet gateway

Create internet gateway

An internet gateway is a virtual router that connects a VPC to the internet. To create a new internet gateway specify the name for the gateway below.

Internet gateway settings

Name tag: Creates a tag with a key of 'Name' and a value that you specify. **My-IGW**.

Tags - optional: A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

Key	Value - optional
<input type="text" value="Name"/>	<input type="text" value="My-IGW"/>
<input type="button" value="Add new tag"/>	
You can add 49 more tags.	

Create internet gateway

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- Attached My-IGW to VPC(My_VPC)

The screenshot shows the AWS VPC dashboard. In the left sidebar, under 'Virtual private cloud', 'Internet gateways' is selected. The main area displays a table of 'Internet gateways (1/2)'. One row is selected, showing details for 'igw-Of3e290b8ca33a3fd / My_IGW'. A context menu is open over this row, with 'Actions' expanded. The 'Attach to VPC' option is highlighted in blue.

Name	Internet gateway ID	State	VPC ID	Owner
-	igw-0445bdb25619521b1	Attached	vpc-0e1949bc8cd950dd9	985539783646
<input checked="" type="checkbox"/> My_IGW	igw-Of3e290b8ca33a3fd	Detached	-	985539783646

The screenshot shows a modal window titled 'Attach to VPC (igw-Of3e290b8ca33a3fd)'. The top navigation bar includes 'VPC > Internet_gateways > Attach to VPC (igw-Of3e290b8ca33a3fd)'. The main content area has a heading 'Available VPCs' with a note: 'Attach the internet gateway to this VPC.' Below is a search bar containing 'vpc-03e2f1df013c9621d'. At the bottom is a 'Cancel' button and an orange 'Attach internet gateway' button.

Step 4: - Create 2 Route Table

- Give 1st Route table Name as Public_Route_Table
- Assigned VPC

The screenshot shows the 'Create route table' page in the AWS VPC console. In the 'Route table settings' section, the name 'Public_Route_table' is entered. Under 'VPC', the VPC 'My_VPC' is selected. In the 'Tags' section, a single tag 'Name: Public_Route_table' is added. The 'Create route table' button is highlighted in orange at the bottom.

- Give 2nd Route table Name as Private_Route_Table
- Assigned VPC

The screenshot shows the 'Create route table' page in the AWS VPC console. In the 'Route table settings' section, the name 'Private_Route_table' is entered. Under 'VPC', the VPC 'My_VPC' is selected. In the 'Tags' section, a single tag 'Name: Private_Route_table' is added. The 'Create route table' button is highlighted in orange at the bottom.

Step 5: - Add Route in Routs table

- Select Public_Route_table.

- Go to Route then go to “Edit Route”
- Go to “Add route”
- Search for “0.0.0.0/0” and “Internet Gateway” and then search which we have created “IGW”

Step 6: - Associate Subnet to internate Gateway

- In Public_Route_Table, go to the “subnet association”

VPC dashboard

Route tables (1/4) Info

Name	Route table ID	Explicit subnet assoc...	Main	VPC
-	rtb-0e6c210dfaac4a7b9	-	-	Yes vpc-0e1949bc8cd950dd9
-	rtb-055b50ea22fe9386a	-	-	Yes vpc-03e2f1df013c9621d N
<input checked="" type="checkbox"/> Public_Route_table	rtb-0e873579a7528ff5f	-	-	No vpc-03e2f1df013c9621d N
-	rtb-09c706dc83d72aff8	-	-	No vpc-03e2f1df013c9621d N

rtb-0e873579a7528ff5f / Public_Route_table

Details Routes Subnet associations Edge associations Route propagation Tags

Explicit subnet associations (0)

No subnet associations
You do not have any subnet associations.

Subnets without explicit associations (2)

The following subnets have not been explicitly associated with any route tables and are therefore associated with the main route table:

Edit subnet associations

- Go to the “Edit subnet association” and select our “Public_Subnet_1a”

VPC > Route tables > rtb-0e873579a7528ff5f > Edit subnet associations

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (1/2)

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
Private_Subnet_1b	subnet-05fe265fce38196a8	10.0.2.0/28	-	Main (rtb-055b50ea22fe9386a)
<input checked="" type="checkbox"/> Public_Subnet_1a	subnet-0c21fa47cd5447d51	10.0.1.0/28	-	Main (rtb-055b50ea22fe9386a)

Selected subnets

subnet-0c21fa47cd5447d51 / Public_Subnet_1a X

Cancel Save associations

Step 7: - Create NAT Gateway

- Give NAT Gateway name as “My_NAT_Gateway”
- assignee public subnet
- Allocate Elastic IP

Elastic IP address 13.235.201.226 (eipalloc-0c2a65fe7d7278a91) allocated.

Create NAT gateway Info

A highly available, managed Network Address Translation (NAT) service that instances in private subnets can use to connect to services in other VPCs, on-premises networks, or the internet.

NAT gateway settings

Name - *optional*
Create a tag with a key of 'Name' and a value that you specify.

The name can be up to 256 characters long.

Subnet
Select a subnet in which to create the NAT gateway.

Connectivity type
Select a connectivity type for the NAT gateway.
 Public
 Private

Elastic IP allocation ID Info
Assign an Elastic IP address to the NAT gateway.

Additional settings Info

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Step 8: - Configure Private Route Table

- In “Private_Route_table”, Go to Route then go to “Edit Route”
- Go to “Add route”
- Search for “0.0.0.0/0” and “NAT Gateway” and then search which we have created “NAT”

Edit routes

Destination	Target	Status	Propagated
10.0.0.0/16	local	<input checked="" type="checkbox"/> Active	No
0.0.0.0/0	NAT Gateway	-	No

Add route

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- In Private_Route_Table, go to the “subnet association”

Route tables (1/4) [Info](#)

Name	Route table ID	Explicit subnet assoc...	Main	VPC
-	rtb-0e6c210dfa4c4a7b9	-	-	vpc-0e1949bc8cd950dd9
-	rtb-055b50ea22fe9386a	-	-	vpc-03e2f1df013c9621d N
Public_Route_table	rtb-0e873579a7528ff5f	subnet-0c21fa47cd5447d51	No	vpc-03e2f1df013c9621d N
Private_Route_table	rtb-09c706dc83d72aff8	-	-	vpc-03e2f1df013c9621d N

rtb-09c706dc83d72aff8 / Private_Route_table

Details | Routes | **Subnet associations** | Edge associations | Route propagation | Tags

Explicit subnet associations (0)

[Edit subnet associations](#)

Subnets without explicit associations (1)

The following subnets have not been explicitly associated with any route tables and are therefore associated with the main route table:

[Edit subnet associations](#)

- Go to the “Edit subnet association” and select our “Private_Subnet_1b”

VPC > Route tables > rtb-09c706dc83d72aff8 > Edit subnet associations

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (1/2)

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
<input checked="" type="checkbox"/> Private_Subnet_1b	subnet-05fe265cfe38196a8	10.0.2.0/28	-	rtb-09c706dc83d72aff8 / Private_Route_table
<input type="checkbox"/> Public_Subnet_1a	subnet-0c21fa47cd5447d51	10.0.1.0/28	-	rtb-0e873579a7528ff5f / Public_Route_table

Selected subnets

[subnet-05fe265cfe38196a8 / Private_Subnet_1b X](#)

[Cancel](#) **Save associations**

Step 9:-

- In subnet, select “Public_Subnet_1a” and go to “action” and selecet “edit subnet settings”
- Click on “Enable auto-assign public IPv4 address”

Screenshot of the AWS VPC Console showing the Subnets (1/5) page. A context menu is open for the selected subnet 'Public_Subnet_1a'.

Subnets (1/5) Info

Name	Subnet ID	State	VPC
-	subnet-056a9faf4162ea00f	Available	vpc-0e1949bc8cd950dd9
-	subnet-0b5c0b648687c1d7b	Available	vpc-0e1949bc8cd950dd9
-	subnet-069f4bde34103fab9	Available	vpc-0e1949bc8cd950dd9
Private_Subnet_1b	subnet-05fe265cfe38196a8	Available	vpc-03e2f1df013c9621d My_VPC
Public_Subnet_1a	subnet-0c21fa47cd5447d51	Available	vpc-03e2f1df013c9621d My_VPC

Actions

- Create subnet
- View details
- Create flow log
- Edit subnet settings (highlighted)
- Edit IPv6 CIDRs
- Edit network ACL association
- Edit route table association
- Edit CIDR reservations
- Share subnet
- Manage tags
- Delete subnet

subnet-0c21fa47cd5447d51 / Public_Subnet_1a

Details

Subnet ID subnet-0c21fa47cd5447d51	Subnet ARN arn:aws:ec2:ap-south-1:985539783646:subnet/subnet-0c21fa47cd5447d51	State Available	IPv4 CIDR 10.0.1.0/28
Available IPv4 addresses 10	IPv6 CIDR -	IPv6 CIDR association ID -	Availability Zone ap-south-1a
Availability Zone ID aps1-az1	VPC vpc-03e2f1df013c9621d My_VPC	Route table rtb-0e873579a7528ff5f Public_Route_table	Network border group

Screenshot of the AWS VPC Console showing the 'Edit subnet settings' page for subnet 'Public_Subnet_1a'.

Edit subnet settings

Subnet

Subnet ID subnet-0c21fa47cd5447d51	Name Public_Subnet_1a
---------------------------------------	--------------------------

Auto-assign IP settings

Enable AWS to automatically assign a public IPv4 or IPv6 address to a new primary network interface for an instance in this subnet.

Enable auto-assign public IPv4 address

Enable auto-assign customer-owned IPv4 address

Option disabled because no customer owned pools found.

Resource-based name (RBN) settings

Specify the hostname type for EC2 instances in this subnet and optional RBN DNS query settings.

Enable resource name DNS A record on launch

Enable resource name DNS AAAA record on launch

Hostname type

Resource name

IP name

Step 10: - Create 2 instances

- Go to EC2 and give 1st instance name as “Node_Public”
- In Network Setting, assigned VPC which we created earlier (My_VPC)
- Assigned subnet which is we created earlier (Public_Subnet_1a)

Network settings

VPC - required [Info](#)
vpc-05e2f1df013c9621d (My_VPC)
10.0.0.0/16

Subnet [Info](#)
subnet-0c21fa47cd5447d51
VPC: vpc-05e2f1df013c9621d Owner: 985539783646 Availability Zone: ap-south-1a Zone type: Availability Zone IP addresses available: 10 CIDR: 10.0.1.0/28

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

Security group name - required
launch-wizard-9

This security group will be added to all network interfaces. The name can't be edited after the security group is created. Max length is 255 characters. Valid characters: a-z, A-Z, 0-9, spaces, and _-:/()#,@[]+=;&:;!\$*

Description - required [Info](#)
Description - required

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- Go to EC2 and give 2nd instance name as “Node_Private”
- In Network Setting, assigned VPC which we created earlier (My_VPC)
- Assigned subnet which is we created earlier (Private_Subnet_1b)

Network settings

VPC - required [Info](#)
vpc-05e2f1df013c9621d (My_VPC)
10.0.0.0/16

Subnet [Info](#)
subnet-05fe265fce38196a8
VPC: vpc-05e2f1df013c9621d Owner: 985539783646 Availability Zone: ap-south-1b Zone type: Availability Zone IP addresses available: 11 CIDR: 10.0.2.0/28

Auto-assign public IP [Info](#)
Disable

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

Security group name - required
launch-wizard-10

This security group will be added to all network interfaces. The name can't be edited after the security group is created. Max length is 255 characters. Valid characters: a-z, A-Z, 0-9, spaces, and _-:/()#,@[]+=;&:;!\$*

Description - required [Info](#)
Description - required

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- **Note-** In Public subnet we get public as well as private ips

The screenshot shows the AWS EC2 Instances page for an instance with ID i-0a2027465d46ec425. The instance is named 'Node_Public' and is currently running. It has a public IPv4 address of 13.201.63.124 and a private IP DNS name of ip-10-0-1-12.ap-south-1.compute.internal. The instance type is t2.micro, and it is associated with a VPC ID of vpc-03e2f1df013c9621d (My_VPC). The instance is located in a subnet with ID subnet-0c21fa47cd5447d51 (Public_Subnet_1a). The instance ARN is arn:aws:ec2:ap-south-1:985539783646:instance/i-0a2027465d46ec425.

- Note- In Private subnet we only get private IP

The screenshot shows the AWS EC2 Instances page for an instance with ID i-00575c251d181e63d. The instance is named 'Node_Private' and is currently running. It has a private IP DNS name of ip-10-0-2-14.ap-south-1.compute.internal and is associated with a VPC ID of vpc-03e2f1df013c9621d (My_VPC). The instance is located in a subnet with ID subnet-05fe265cf38196a8 (Private_Subnet_1b). The instance ARN is arn:aws:ec2:ap-south-1:985539783646:instance/i-00575c251d181e63d.

Step 11: - Launch instance

- Using public IP launch public instance

```
[root@ip-10-0-1-12 ~]#  
 ,      #  
 ~\ _###_      Amazon Linux 2023  
 ~~ \_#####\_  
 ~~ \###|  
 ~~ \#/   ____  https://aws.amazon.com/linux/amazon-linux-2023  
 ~~     V~' '-'>  
 ~~~ /  
 ~~ .- / /  
 /m/'-  
[ec2-user@ip-10-0-1-12 ~]$ sudo -su  
sudo: option requires an argument -- 'u'  
usage: sudo -h | -K | -k | -V  
usage: sudo -v [-ABkNnS] [-g group] [-h host] [-p prompt] [-u user]  
usage: sudo -l [-ABkNnS] [-g group] [-h host] [-p prompt] [-U user]  
      [-u user] [command [arg ...]]  
usage: sudo [-ABbEHkNnPS] [-r role] [-t type] [-C num] [-D directory]  
      [-g group] [-h host] [-p prompt] [-R directory] [-T timeout]  
      [-u user] [VAR=value] [-i | -s] [command [arg ...]]  
usage: sudo -e [-ABkNnS] [-r role] [-t type] [-C num] [-D directory]  
      [-g group] [-h host] [-p prompt] [-R directory] [-T timeout]  
      [-u user] file ...  
[ec2-user@ip-10-0-1-12 ~]$ sudo su -  
[root@ip-10-0-1-12 ~]#
```

- Check ping response

```
[root@ip-10-0-1-12 ~]#  
 ,      #  
 ~\ _###_      Amazon Linux 2023  
 ~~ \_#####\_  
 ~~ \###|  
 ~~ \#/   ____  https://aws.amazon.com/linux/amazon-linux-2023  
 ~~     V~' '-'>  
 ~~~ /  
 ~~ .- / /  
 /m/'-  
[ec2-user@ip-10-0-1-12 ~]$ sudo -su  
sudo: option requires an argument -- 'u'  
usage: sudo -h | -K | -k | -V  
usage: sudo -v [-ABkNnS] [-g group] [-h host] [-p prompt] [-u user]  
usage: sudo -l [-ABkNnS] [-g group] [-h host] [-p prompt] [-U user]  
      [-u user] [command [arg ...]]  
usage: sudo [-ABbEHkNnPS] [-r role] [-t type] [-C num] [-D directory]  
      [-g group] [-h host] [-p prompt] [-R directory] [-T timeout]  
      [-u user] [VAR=value] [-i | -s] [command [arg ...]]  
usage: sudo -e [-ABkNnS] [-r role] [-t type] [-C num] [-D directory]  
      [-g group] [-h host] [-p prompt] [-R directory] [-T timeout]  
      [-u user] file ...  
[ec2-user@ip-10-0-1-12 ~]$ sudo su -  
[root@ip-10-0-1-12 ~]#
```

- Checking if package is installing or not ? (yum install telnet)

```
[root@ip-10-0-1-12 ~]# yum install telnet
Last metadata expiration check: 0:10:10 ago on Wed Sep 18 16:13:52 2024.
Dependencies resolved.
=====
 Package      Architecture Version      Repository      Size
=====
Installing:
 telnet       x86_64        1:0.17-83.amzn2023.0.2      amazonlinux    64 k
Transaction Summary
=====
Install 1 Package

Total download size: 64 k
Installed size: 121 k
Is this ok [y/N]: yes
Downloading Packages:
telnet-0.17-83.amzn2023.0.2.x86_64.rpm      1.5 MB/s | 64 kB   00:00
-----
Total                                         718 kB/s | 64 kB   00:00

Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
Preparing :                                                 1/1
Installing : telnet-1:0.17-83.amzn2023.0.2.x86_64      1/1
Running scriptlet: telnet-1:0.17-83.amzn2023.0.2.x86_64 1/1
Verifying  : telnet-1:0.17-83.amzn2023.0.2.x86_64      1/1

Installed:
 telnet-1:0.17-83.amzn2023.0.2.x86_64

Complete!
[root@ip-10-0-1-12 ~]#
```

Step 12: - Access Private instance using public instance

- Create pem file in public instance (cat > ec2.pem) press enter and then paste .pem key in that file manually.

```
Complete!
[root@ip-10-0-1-12 ~]# cat > ec2.pem
^?
-----BEGIN RSA PRIVATE KEY-----
MIIEpgIBAAKCAQEA4os4QbDto/aH7VQo5IV4haToDC0OKDWUOJJsKV/pIju7z+HU
zT/+A1JNF9CAJAbK9fla3f4C4o55DxzOKnH0x1VY6lniHpl9d07Kf39ogb9zhNYn
iAwIXZxsxFbjSYa0Eo7FDgxkIjPTT4g897bgci5tw29CqKHs39w4cEKhf9R0nMK
EKUrTXtytgNQtPY+iQj7H9kgYg1aj7p30V8B+/xoY7zgp8opunqmZ8rYoCf3Zm/w
905ua5MaxYzOmYaa0kt/hGTvt9k73AcyTPX1vWVEMURLFx38DHflaQ87/Rgu9J+U
vd5qcjOFZnODlQIWJ1/gWg4X2W3vTWC6Me02rwIDAQABAoIBAQc3mdE8HCJcsh6z
j3Oc0Tc+SMnvpExG9jVsK+8RETQmlhbAIeyPc/9vvbHRTR+tEvxGoZKtO4InDwS5
5MSJzdVt/5OSSsptk/i865V6nJORVvgIRfkWku/A1fOAK+1E27DxIVg+7Hfy6EG
nwWh38nSw1UQMEg3aEXGidB4hjT7Js1HrzIQWGHdhORoyu4eDWKFF/3+bED3Wjp9
gj4izbzEvOx2kXI6kqfh+2Q+m8xpXlgOLrKXoOp90+kIRF5yfVoE4WKCsxP2Kkgi
uy1U39TEFq7MAXJg4ZxUL9ROPDR7fRF451096/Jhb5ENI6sefNCeeS28hNF65CoM
j1zU5QrBAoGBAPTdVV5z8IE4CEx5So+UnLYwmKhpkxJ+csphBMWzzF13Cpu4XbuQ
J+xMzYeLzivPB5TOngxzFQByZvGBjXKeVAPz0e8uwCcvIX59r3MpJjdhDr75obML
VRlsWezwr9nIRn4m+OrclP+9/O3Y8tSDKPu3/0XERv8+SAIU1q91s0Q/AoGBAOzY
mXuvoE3wXMkmD+Rzb6wOWwqMMgapRzVZFY3ZBIp9UjCsbD3Hg7CSJYJK0FPqG9t2
RJLFAU6Xu6mT+wI1MFm5Q1JrMLWOp5KVOXzM6uG6z8EoeXi6aUCHI2ks+3xrmBB
LaT3qXIrA1D/LfSIQIp55dAk9lmC260W+00Q5LGRAoGBAJXoMu1iWWkingIC14zT
VKWNVsgz6iA2XZxcjQl7BmBcXMoCepcNLTLyEAlbREQ6/1EDYxR4Ben8jIEOE51
c9X/nRSrMGRMzFqeI52DIaxhtR9hwIbWd0DbPqp6J45SuCVfqQc2blmrPH94hCFq
Mtr4KEXUBgsZXAg6Lby5OF0NAoGBAmwIF8hWVmLt2/Coa15qF1S1FWOzvFDCuQY7
FPdacbAAH7Kwhpp96nNMoyVn36m6bn8TliU9s0+KJ08D/OMvOETC9GBd2Ns+5hq/
1INvMIReOP/TtMh+PrqYvanrrdkYLxjabUDE3WLtrPC0s1kJm1fvhMtXXCVmNmHp
6djM6cYRAoGBANdIFmjYyeINFJKNbn+gTlZWV5iyru8LoVltYGVPCnyQInKjdBdr
pENRKrz1s+4XBWsQArFnB+2Z12CdXi9aY/yE8tSWfLU128yR+EE5z25FCFXTce4
2OR8gwQ1YL5tpDACWekrc2BT0E+JrmQ75R8VH1/Z24PnwtRDjMOq+Fuz
-----END RSA PRIVATE KEY-----
```

- Change mode of this file (chmod 400 ec2.pem)

```
[root@ip-10-0-1-12 ~]# chmod 400 ec2.pem  
[root@ip-10-0-1-12 ~]#  
[root@ip-10-0-1-12 ~]#  
[root@ip-10-0-1-12 ~]# █
```

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