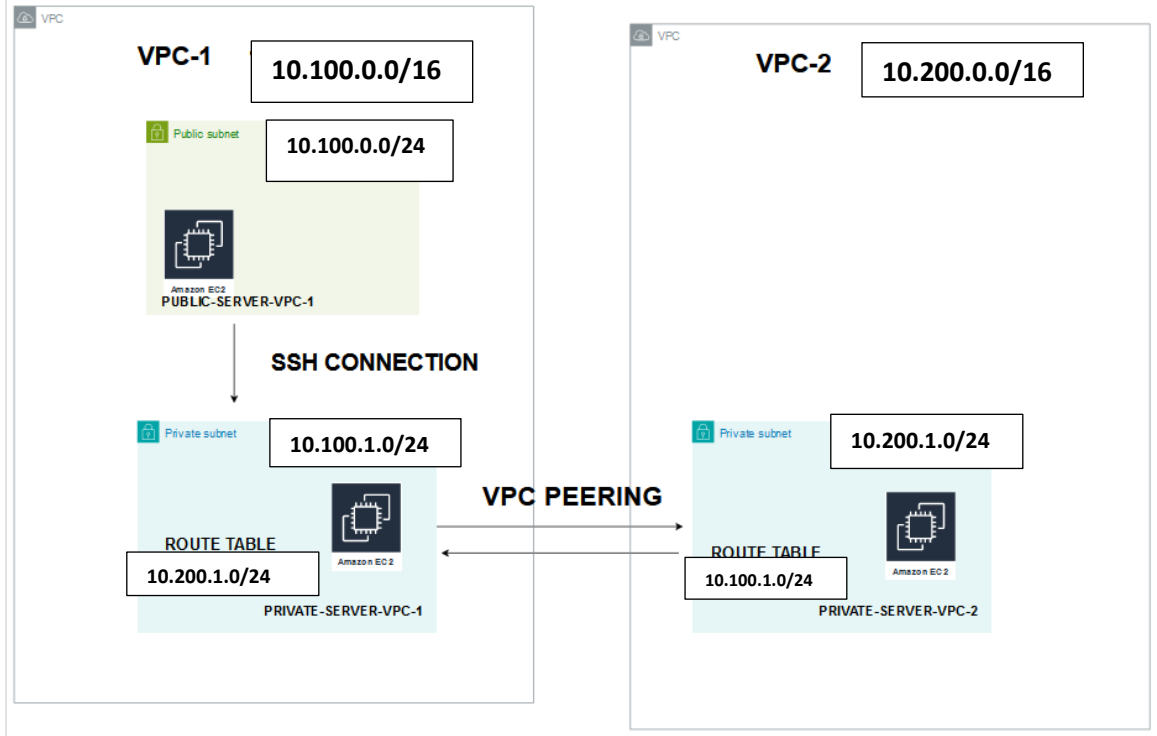


VPC PEERING:

- 1) CREATE 2 VPC'S -NAME IT AS VPC-1 & VPC-2
- 2) CREATE INTERNET GATEWAY – ATTACH INTERNET GATEWAY TO VPC-1
- 3) CREATE PUBLIC & PRIVATE SUBNET IN VPC-1
- 4) CREATE PRIVATE SUBNET IN VPC-2
- 5) CREATE ROUTE TABLE FOR PUBLIC SUBNET IN VPC-1
- 6) IN ROUTES, SELECT INTERNET GATEWAY ID -SAVE
- 7) IN SUBNET ASSOCIATION -SELECT PUBLIC SUBNET -SAVE CHANGES
- 8) CREATE ROUTE TABLE FOR PRIVATE SUBNET IN VPC-1
- 9) IN SUBNET ASSOCIATION -SELECT PRIVATE SUBNET-VPC-1 -SAVE CHANGES
- 10) CREATE ROUTE TABLE FOR PRIVATE SUBNET IN VPC-2
- 11) IN SUBNET ASSOCIATION -SELECT PRIVATE SUBNET-VPC-2 -SAVE CHANGES
- 12) CREATE PEERING CONNECTION -IN SOURCE- MENTION VPC-1 ID -IN DESTINATION MENTION VPC-2 ID
- 13) CREATE SECURITY GROUP FOR VPC-1- ALLOW SSH , ICMP
- 14) CREATE SECURITY GROUP FOR VPC-2- ALLOW SSH , ICMP
- 15) CREATE PUBLIC INSTANCE IN VPC-1
- 16) CREATE PRIVATE INSTANCE IN VPC-1
- 17) CREATE PRIVATE INSTANCE IN VPC-2
- 18) LOGIN TO PUBLIC INSTANCE IN MOBOXTERM
- 19) PING ENTER IP OF PRIVATE INSTANCE -VPC-1
- 20) DRAG AND DROP KEY
- 21) GIVE READ ONLY PERMISSION TO THAT KEY CHMOD 400 1-CLICK
- 22) ENTER TO PRIVATE INSTANCE OF VPC-1 FROM PUBLIC INSTANCE OF VPC-1 USING SSH COMMAND
- 23) IN PRIVATE INSTANCE OF VPC-1 – DRAG & DROP KEY OF PRIVATE INSTANCE OF VPC-2
- 24) GIVE READ ONLY PERMISSION TO THAT KEY CHMOD 400 1-CLICK
- 25) PING ENTER IP OF PRIVATE INSTANCE -VPC-2
- 26) ENTER TO PRIVATE INSTANCE OF VPC-2 FROM PRIVATE INSTANCE OF VPC-1 USING SSH COMMAND

VPC PEERING



The image displays two screenshots of the AWS Management Console interface, specifically the Virtual Private Cloud (VPC) section.

Top Screenshot: Your VPCs (3)

The left sidebar shows the navigation menu with 'Virtual private cloud' expanded. The main content area displays a table of VPCs:

Name	VPC ID	State	IPv4 CIDR	IPv6 CIDR
-	vpc-0f3d6fc6e7e1f37fb	Available	172.31.0.0/16	-
vpc-1	vpc-056c0ef5cc6a4f172	Available	10.100.0.0/16	-
VPC-2	vpc-04a1346dddec3c353	Available	10.200.0.0/16	-

Below the table, there is a section titled 'Select a VPC above' with a search bar and a list of VPCs.

Bottom Screenshot: Internet gateways (2+)

The left sidebar shows the navigation menu with 'Internet gateways' selected. The main content area displays a table of Internet Gateways:

Name	Internet gateway ID	State	VPC ID
-	igw-043af5d27f10cc891	Attached	vpc-0f3d6fc6e7e1f37fb
igw-vpc-1	igw-010734fe9e3db7469	Attached	vpc-056c0ef5cc6a4f172 vpc-1

Below the table, there is a section titled 'Select an internet gateway above' with a search bar and a list of Internet Gateways.

The image displays two screenshots of the AWS Management Console interface, specifically the Virtual Private Cloud (VPC) section.

Top Screenshot: Subnets (6)

The left sidebar shows the navigation menu with 'Subnets' selected under 'Virtual private cloud'. The main content area displays a table of subnets:

Name	Subnet ID	State	VPC	IPv4 CIDR
-	subnet-0b6b580c2cdc876da	Available	vpc-0f3d6fc6e7e1f37fb	172.31.0.0/20
-	subnet-08cc9d1e1f41dae9c	Available	vpc-0f3d6fc6e7e1f37fb	172.31.16.0/20
Public-Sub-Vpc-1	subnet-07906afb3e8196bad	Available	vpc-056c0ef5cc6a4f172 vpc-1	10.100.0.0/24
Private-Sub-Vpc-1	subnet-0a9bfd3ba29344e2f	Available	vpc-056c0ef5cc6a4f172 vpc-1	10.100.1.0/24
PRIVATE-SUB-VPC-2	subnet-0450f96fab459923f	Available	vpc-04a1346dddec3c353 VPC-2	10.200.1.0/24

Bottom Screenshot: Route tables (3/6)

The left sidebar shows 'Route tables' selected. The main content area displays a table of route tables:

Name	Route table ID	Explicit subnet associ...	Edge...	Main	VPC
-	rtb-04259f0946c548e36	-	-	Yes	vpc-0f3d6fc6e7e1f37fb
Public-SUB-RT-VPC-1	rtb-0d40d5277962f4cb6	subnet-07906afb3e8196...	-	No	vpc-056c0ef5cc6a4f172 vpc-1
-	rtb-08fc5110983bd5318	-	-	Yes	vpc-056c0ef5cc6a4f172 vpc-1
PRIVATE-SUB-RT-VPC-1	rtb-09cf16739ebb566fc	subnet-0a9bfd3ba29344...	-	No	vpc-056c0ef5cc6a4f172 vpc-1
-	rtb-0d15f70b8577ad5e9	-	-	Yes	vpc-04a1346dddec3c353 VPC-2
PRIVATE-SUB-RT-VPC-2	rtb-04b03053ad5df5064	subnet-0450f96fab4599...	-	No	vpc-04a1346dddec3c353 VPC-2

Below the table, the text 'Route tables: rtb-0d40d5277962f4cb6, rtb-09cf16739ebb566fc, rtb-04b03053ad5df5064' is displayed.

The screenshot displays the AWS Management Console interface for the 'Route tables (1/6)' section. The left sidebar shows the 'Virtual private cloud' menu with options like 'Your VPCs', 'Subnets', 'Route tables', 'Internet gateways', etc. The main content area shows the 'Routes (2)' tab for the route table 'rtb-0d40d5277962f4cb6 / Public-SUB-RT-VPC-1'. The 'Routes' table lists two routes: one for destination '0.0.0.0/0' targeting 'igw-010734fe9e3db7469' (Active), and another for destination '10.100.0.0/16' targeting 'local' (Active). The bottom section shows 'Explicit subnet associations (1)' with a table listing 'Public-Sub-Vpc-1' associated with 'subnet-07906afb3e8196bad' for the '10.100.0.0/24' CIDR. Below this, it states 'Subnets without explicit associations (0)'.

Route tables (1/6) Info

Find resources by attribute or tag

Name	Route table ID	Explicit subnet associ...	Edge...	Main	VPC
-	rtb-04259f0946c548e36	-	-	Yes	vpc-0f3d6fc6e7e1f37fb
Public-SUB-RT-VPC-1	rtb-0d40d5277962f4cb6	subnet-07906afb3e8196...	-	No	vpc-056c0ef5cc6a4f172 vpc-1
-	rtb-08fc5110983bd5318	-	-	Yes	vpc-056c0ef5cc6a4f172 vpc-1

rtb-0d40d5277962f4cb6 / Public-SUB-RT-VPC-1

Details Routes Subnet associations Edge associations Route propagation Tags

Routes (2)

Filter routes

Destination	Target	Status	Propagated
0.0.0.0/0	igw-010734fe9e3db7469	Active	No
10.100.0.0/16	local	Active	No

Explicit subnet associations (1)

Find subnet association

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR
Public-Sub-Vpc-1	subnet-07906afb3e8196bad	10.100.0.0/24	-

Subnets without explicit associations (0)

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

The screenshot displays the AWS Management Console interface for Route Tables. The left sidebar shows the navigation menu with 'Virtual private cloud' expanded, highlighting 'Route tables'. The main content area shows the 'Route tables (1/6)' page. The top table lists route tables, with 'PRIVATE-SUB-RT-VPC-1' and 'PRIVATE-SUB-RT-VPC-2' selected. Below each table, the 'Subnet associations' tab is active, showing explicit subnet associations and subnets without explicit associations.

Route tables (1/6)

Name	Route table ID	Explicit subnet associ...	Edge...	Main	VPC
PRIVATE-SUB-RT-VPC-1	rtb-09cf16739ebb566fc	subnet-0a9bfd3ba29344...	-	No	vpc-056c0ef5cc6a4f172 vpc-1
-	rtb-0d15f70b8577ad5e9	-	-	Yes	vpc-04a1346dddec3c353 VPC-2
PRIVATE-SUB-RT-VPC-2	rtb-04b03053ad5df5064	subnet-0450f96fab4599...	-	No	vpc-04a1346dddec3c353 VPC-2

rtb-09cf16739ebb566fc / PRIVATE-SUB-RT-VPC-1

Explicit subnet associations (1)

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR
Private-Sub-Vpc-1	subnet-0a9bfd3ba29344e2f	10.100.1.0/24	-

Subnets without explicit associations (0)

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

rtb-04b03053ad5df5064 / PRIVATE-SUB-RT-VPC-2

Explicit subnet associations (1)

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR
PRIVATE-SUB-VPC-2	subnet-0450f96fab459923f	10.200.1.0/24	-

Subnets without explicit associations (0)

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

The image shows two screenshots of the AWS Management Console. The top screenshot displays the 'Peering connections (1+)' page, which lists a single active peering connection. The bottom screenshot shows the 'Create peering connection' wizard, where a local VPC is selected and its associated CIDR is confirmed.

Peering connections (1+)

Name	Peering connection ID	Status	Requester VPC	Accepter VPC
peering connection	pcx-02292e73a02c93e11	Active	vpc-056c0ef5cc6a4f172 / vpc-1	vpc-04a134

Select a peering connection above

Create peering connection

A VPC peering connection is a networking connection between two VPCs that enables you to route traffic between them privately.

Peering connection settings

Name - optional
Create a tag with a key of 'Name' and a value that you specify.
PEERING CONNECTION FOR VPC-1 TO VPC-2

Select a local VPC to peer with

VPC ID (Requester)
vpc-056c0ef5cc6a4f172 (vpc-1)

VPC CIDRs for vpc-056c0ef5cc6a4f172 (vpc-1)

CIDR	Status	Status reason
10.100.0.0/16	Associated	-

The image shows two screenshots from the AWS Management Console. The top screenshot displays the 'Create peering connection' wizard. The 'Region' is set to 'This Region (ap-south-1)'. The 'VPC ID (Acceptor)' is 'vpc-04a1346dddec3c353 (VPC-2)'. The 'VPC CIDRs for vpc-04a1346dddec3c353 (VPC-2)' table shows a single entry: CIDR '10.200.0.0/16' with Status 'Associated' and Status reason '-'. The 'Tags' section shows a key 'PEERING CONNECTION FOR VPC' with a value. The bottom screenshot shows the 'Peering connections (1)' page. It contains a table with one entry: Name 'peering connection', Peering connection ID 'pcx-02292e73a02c93e11', Status 'Active', Requester VPC 'vpc-056c0ef5cc6a4f172 / vpc-1', and Acceptor VPC 'vpc-04a1346dddec3c353 / vpc-2'. The left sidebar shows the 'Virtual private cloud' menu with 'Peering connections' selected.

Top Screenshot: Create peering connection wizard

Region: ☒ This Region (ap-south-1) ☐ Another Region

VPC ID (Acceptor):

VPC CIDRs for vpc-04a1346dddec3c353 (VPC-2)

CIDR	Status	Status reason
10.200.0.0/16	Associated	-

Tags

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:

You can add 49 more tags.

Bottom Screenshot: Peering connections list

Peering connections (1) Info

Find resources by attribute or tag

Name	Peering connection ID	Status	Requester VPC	Acceptor VPC
peering connection	pcx-02292e73a02c93e11	Active	vpc-056c0ef5cc6a4f172 / vpc-1	vpc-04a1346dddec3c353 / vpc-2

Select a peering connection above

The image displays two screenshots of the AWS Management Console interface, specifically focusing on VPC (Virtual Private Cloud) configurations.

Top Screenshot: VPC Peering connection details

The top screenshot shows the "pcx-02292e73a02c93e11 / peering connection" page. The left sidebar lists various VPC services, including "Virtual private cloud", "Subnets", "Route tables", "Internet gateways", "Egress-only internet gateways", "DHCP option sets", "Elastic IPs", "Managed prefix lists", "Endpoints", "Endpoint services", and "NAT gateways". The main content area displays the details of the peering connection, including the Requester owner ID (709398145454), Peering connection ID (pcx-02292e73a02c93e11), Status (Active), and Expiration time. The Requester VPC is vpc-056c0ef5cc6a4f172 / vpc-1, and the Requester CIDRs are 10.100.0.0/16. The Requester Region is Mumbai (ap-south-1). The Accepter VPC is vpc-04a1346dddec3c353 / VPC-2, and the Accepter CIDRs are 10.200.0.0/16. The Accepter Region is Mumbai (ap-south-1). The "Actions" menu includes options like "Accept request", "Reject request", "Edit DNS settings", "Manage tags", and "Delete peering connection".

Bottom Screenshot: Route tables configuration

The bottom screenshot shows the "Route tables (1/6)" page. The left sidebar lists various VPC services, including "Virtual private cloud", "Subnets", "Route tables", "Internet gateways", "Egress-only internet gateways", "DHCP option sets", "Elastic IPs", "Managed prefix lists", "Endpoints", "Endpoint services", and "NAT gateways". The main content area displays a list of route tables. The selected route table is "PRIVATE-SUB-RT-VPC-1" (rtb-09cf16739ebb566fc). The "Routes" tab is active, showing a list of routes. The routes are:

Destination	Target	Status	Propagated
10.100.0.0/16	local	Active	No
10.200.1.0/24	pcx-02292e73a02c93e11	Active	No

The image displays two screenshots of the AWS Management Console. The top screenshot shows the 'Route tables (1/6)' page for the VPC 'PRIVATE-SUB-RT-VPC-2'. It lists two routes: one for destination 10.100.1.0/24 pointing to target pcx-02292e73a02c93e11, and another for 10.200.0.0/16 pointing to 'local'. Both routes are in an 'Active' state. The bottom screenshot shows the 'Instances (3)' page, displaying three EC2 instances: PRIVATE-SERVER-VPC-2, PRIVATE-SERVER-VPC-1, and PUBLIC-SERVER-VPC-1. All three instances are in a 'Running' state and are t2.micro instances. Below the instance list, there is a 'Select an instance' dialog box.

Route tables (1/6)

Name	Route table ID	Explicit subnet associ...	Edge...	Main	VPC
-	rtb-0d15f70b8577ad5e9	-	-	Yes	vpc-04a1346dddec3c353 VPC-2
PRIVATE-SUB-RT-VPC-2	rtb-04b03053ad5df5064	subnet-0450f96fab4599...	-	No	vpc-04a1346dddec3c353 VPC-2

rtb-04b03053ad5df5064 / PRIVATE-SUB-RT-VPC-2

Routes (2)

Destination	Target	Status	Propagated
10.100.1.0/24	pcx-02292e73a02c93e11	Active	No
10.200.0.0/16	local	Active	No

Instances (3)

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 D
PRIVATE-SERVER-VPC-2	i-06d6106d97c76c97e	Running	t2.micro	2/2 checks passed	View alarms +	us-east-1b	-
PRIVATE-SERVER-VPC-1	i-08154452b60bad5b2	Running	t2.micro	2/2 checks passed	View alarms +	us-east-1b	-
PUBLIC-SERVER-VPC-1	i-067ade1c451ec3602	Running	t2.micro	2/2 checks passed	View alarms +	us-east-1a	-

Select an instance

The image displays two screenshots of the AWS Management Console, showing the details of two security groups.

Top Screenshot: sg-0e2c35f947145d167 - VPC-1-SG

Details:

- Security group name: VPC-1-SG
- Security group ID: sg-0e2c35f947145d167
- Description: VPC-1-SG
- VPC ID: vpc-00234855cb820e1a
- Owner: 709398145454
- Inbound rules count: 3 Permission entries
- Outbound rules count: 1 Permission entry

Inbound rules (3):

Name	Security group rule...	IP version	Type	Protocol	Port range	Source
-	sgr-06a3a34bf6e7cb5c5	IPv4	All ICMP - IPv4	ICMP	All	0.0.0.0/0
-	sgr-0f3ba44a6aa464d67	IPv4	All traffic	All	All	0.0.0.0/0
-	sgr-00ea1afe1f1c27930	IPv4	SSH	TCP	22	0.0.0.0/0

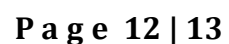
Bottom Screenshot: sg-008204830240506b7 - SG-VPC-2

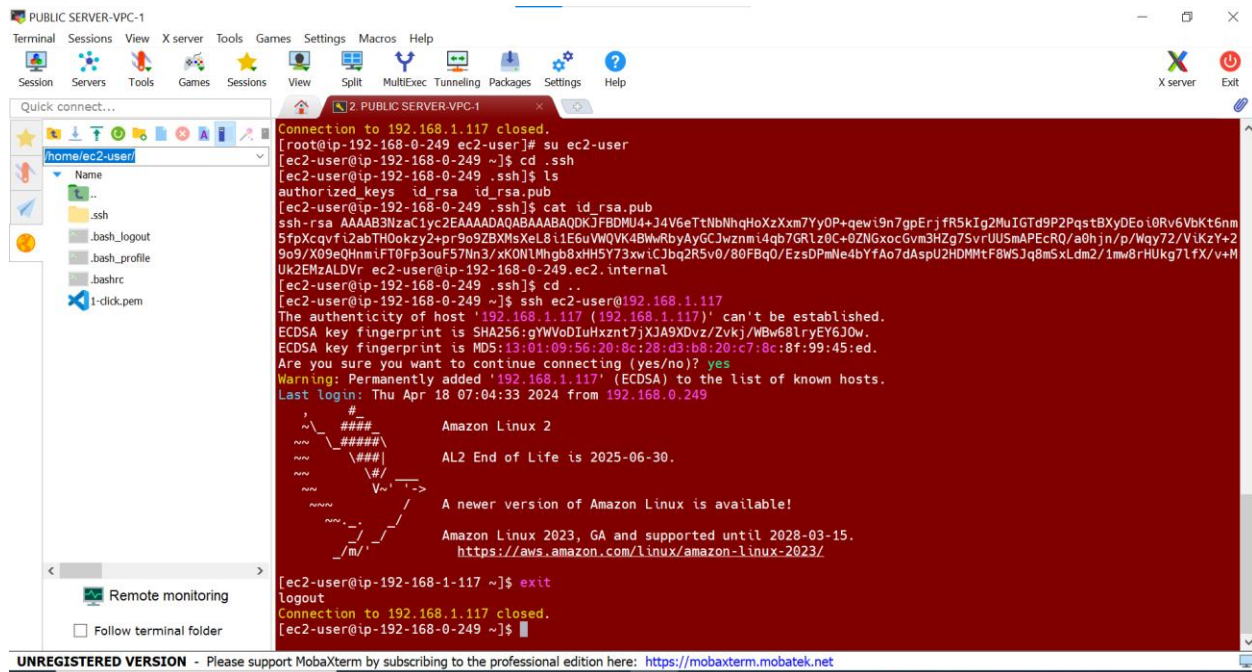
Details:

- Security group name: SG-VPC-2
- Security group ID: sg-008204830240506b7
- Description: SG-VPC-2
- VPC ID: vpc-071a4c0a1e4ee9257
- Owner: 709398145454
- Inbound rules count: 2 Permission entries
- Outbound rules count: 1 Permission entry

Inbound rules (2):

Name	Security group rule...	IP version	Type	Protocol	Port range	Source
-	sgr-0ca1d4302ef2ab16e	IPv4	All traffic	All	All	0.0.0.0/0
-	sgr-051c7762f2a6c36b8	IPv4	SSH	TCP	22	0.0.0.0/0





The screenshot shows a MobaXterm window titled 'PUBLIC SERVER-VPC-1'. The left sidebar displays a file explorer for the user 'ec2-user' at 'home/ec2-user', showing files like '.ssh', '.bash_logout', '.bash_profile', '.bashrc', and '1-click.pem'. The main terminal area shows the following commands and output:

```
Connection to 192.168.1.117 closed.
[root@ip-192-168-0-249 ec2-user]# su ec2-user
[ec2-user@ip-192-168-0-249 ~]$ cd .ssh
[ec2-user@ip-192-168-0-249 .ssh]$ ls
authorized_keys  id_rsa  id_rsa.pub
[ec2-user@ip-192-168-0-249 .ssh]$ cat id_rsa.pub
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQDKJFBDMU4+J4V6eTtNbNhgHoXzXm7YyOP+qewi9n7gpErjfr5kIg2MuIGTd9P2PqstBXyDEoi0Rv6VbKt6nm
5fpXcqvf12abTH0okzy2+pr9o9ZBXMsXeL8i1E6uVWQVK4BwRbyAyGCJwznm14qb7GRLz0C+0ZNGxocGvm3HZg7SvrUUSmAPeCRQ/a0hjn/p/Wqy72/ViKzY+2
9o9/X09eQHnmiFT0Fp3ouF57Nn3/xKONLMhgb8xHHSY73xwiCJbq2R5v0/80FBq0/EzsDPmNe4bYfAo7dAsPU2HDMMtF8WSJq8mSxLdm2/1mw8rHUKg7lfx/v+M
Uk2EMzALDvr ec2-user@ip-192-168-0-249.ec2.internal
[ec2-user@ip-192-168-0-249 .ssh]$ cd ..
[ec2-user@ip-192-168-0-249 ~]$ ssh ec2-user@192.168.1.117
The authenticity of host '192.168.1.117 (192.168.1.117)' can't be established.
ECDSA key fingerprint is SHA256:gYWVoDIuHxznt7jXJA9XDvz/Zvkj/MBw68lryEY6J0w.
ECDSA key fingerprint is MD5:13:01:09:56:20:8c:28:d3:b8:20:c7:8c:8f:99:45:ed.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '192.168.1.117' (ECDSA) to the list of known hosts.
Last login: Thu Apr 18 07:04:33 2024 from 192.168.0.249

      ##
     ##      Amazon Linux 2
    ##      AL2 End of Life is 2025-06-30.
   ##
  ##      A newer version of Amazon Linux is available!
 ##
##      Amazon Linux 2023, GA and supported until 2028-03-15.
##      https://aws.amazon.com/linux/amazon-linux-2023/

[ec2-user@ip-192-168-1-117 ~]$ exit
logout
Connection to 192.168.1.117 closed.
[ec2-user@ip-192-168-0-249 ~]$
```

At the bottom of the terminal window, there is a notice: "UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <https://mobaxterm.mobatek.net>".