

VPC ASSIGNMENT

Module - 4

Module-4

Case Study Problem Statement:

You work for XYZ Corporation and based on the expansion requirements of your corporation you have been asked to create and setup distinct Amazon VPC for production and development team. You are expected to perform the following tasks for the respective VPCs:

Production Network:

1. Design and build a 4 tier architecture
2. Create 5 subnets out of which 4 should be private with names app1, app2, dbcache and db and one should be public named web.
3. Launch instances in all subnets and name them as per the subnet that they have been launched in.
4. Allow dbcache instance and app1 subnet to send internet requests
5. Manage security groups and NACLs.

Development Network:

1. Design and build 2 tier architecture with two subnets named web and db and launch instances in both subnets and name them as per the subnet names.
2. Make sure only web subnet can send internet requests
3. Create peering connection between production network and development network
4. Setup connection between db subnets of both production network and development network respectively.

Production Network Setup:

The screenshot shows the AWS VPC settings page for creating a new VPC. The 'VPC only' option is selected under 'Resources to create'. The VPC is named 'Production Network'. The IPv4 CIDR block is set to 10.10.0.0/16. The IPv6 CIDR block is set to 'No IPv6 CIDR block'. The tenancy is set to 'Default'. A tag 'Name' is added with the value 'Production Network'. The 'Create VPC' button is highlighted in orange at the bottom.

VPC settings

Resources to create [Info](#)
Create only the VPC resource or the VPC and other networking resources.

VPC only VPC and more

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

Production Network

IPv4 CIDR block [Info](#)
 IPv4 CIDR manual input IPAM-allocated IPv4 CIDR block

IPv4 CIDR
10.10.0.0/16

IPv6 CIDR block [Info](#)
 No IPv6 CIDR block IPAM-allocated IPv6 CIDR block Amazon-provided IPv6 CIDR block IPv6 CIDR owned by me

Tenancy [Info](#)
Default

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
 Name Production Network Remove tag

Add tag
You can add 49 more tags

Cancel

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VPC > Internet gateways > Attach to VPC (igw-0f0c5241d3a07d5c9)

Attach to VPC (igw-0f0c5241d3a07d5c9) Info

VPC
Attach an internet gateway to a VPC to enable the VPC to communicate with the internet. Specify the VPC to attach below.

Available VPCs
Attach the internet gateway to this VPC.

X

▶ AWS Command Line Interface command

Cancel **Attach internet gateway**

AWS Services Search [Alt+S] VPC Subnets Create subnet N. Virginia Vaitheswari C

Create subnet [Info](#)

VPC

VPC ID
Create subnets in this VPC.
vpc-0ee094f65f150ab5e (Production Network)

Associated VPC CIDRs
IPv4 CIDRs
10.10.0.0/16

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.
App 1
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.
No preference

IPv4 CIDR block [Info](#)
Q 10.10.1.0/24 X

▼ Tags - optional
Key Value - optional
Q Name Q App 1 Remove
Add new tag
You can add 49 more tags.

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VPC dashboard X

EC2 Global View New

Filter by VPC: Select a VPC

Virtual private cloud

- Your VPCs New
- Subnets**
- Route tables
- Internet gateways
- Egress-only internet gateways
- Carrier gateways
- DHCP option sets
- Elastic IPs
- Managed prefix lists
- Endpoints
- Endpoint services
- NAT gateways
- Peering connections

Security

- Network ACLs
- Security groups

DNS firewall

- Rule groups
- Domain lists

Network Firewall

- Firewalls
- Firewall policies

Subnets (1/13) Info

Filter subnets

<input type="checkbox"/>	-	subnet-0d0b807d507a4b0a1	Available	vpc-068a9fe7028bc61aa	172.31.0.0/20	-
<input type="checkbox"/>	-	subnet-0351e70fc5d5c85ed	Available	vpc-068a9fe7028bc61aa	172.31.32.0/20	-
<input checked="" type="checkbox"/>	DB	subnet-020828045476430b0	Available	vpc-0ee094f65f150ab5e Pro...	10.10.4.0/24	-
<input type="checkbox"/>	Web	subnet-0693b88fcfedf002fc	Available	vpc-0ee094f65f150ab5e Pro...	10.10.5.0/24	-
<input type="checkbox"/>	Dbcache	subnet-00a7da9d3d2ba723c	Available	vpc-0ee094f65f150ab5e Pro...	10.10.3.0/24	-
<input type="checkbox"/>	App 2	subnet-041de41366423b9af	Available	vpc-0ee094f65f150ab5e Pro...	10.10.2.0/24	-
<input type="checkbox"/>	Dev-Web	subnet-00c73e9dfd88b9f99	Available	vpc-0e281d25abb833bfe De...	11.11.1.0/24	-
<input type="checkbox"/>	App 1	subnet-06264e7bdf7b1bfe7	Available	vpc-0ee094f65f150ab5e Pro...	10.10.1.0/24	-
<input type="checkbox"/>	-	subnet-0cb788df402358294	Available	vpc-068a9fe7028bc61aa	172.31.80.0/20	-
<input type="checkbox"/>	-	subnet-0b336bb7174eae816	Available	vpc-068a9fe7028bc61aa	172.31.64.0/20	-
<input type="checkbox"/>	Dev-Db	subnet-0515cb5c5c70d0abf	Available	vpc-0e281d25abb833bfe De...	11.11.2.0/24	-
<input type="checkbox"/>	-	subnet-0b08ccfadaa29bf75	Available	vpc-068a9fe7028bc61aa	172.31.16.0/20	-
<input type="checkbox"/>	-	subnet-0a93a4bfe028f8e8c	Available	vpc-068a9fe7028bc61aa	172.31.48.0/20	-

subnet-020828045476430b0 / DB

Details Flow logs Route table Network ACL CIDR reservations Sharing Tags

Details

Subnet ID subnet-020828045476430b0	Subnet ARN arn:aws:ec2:us-east-1:741793240394:subnet/subnet-020828045476430b0	State Available	IPv4 CIDR 10.10.4.0/24
Available IPv4 addresses 250	IPv6 CIDR -	Availability Zone us-east-1f	Availability Zone ID use1-az5
Network border group -	Route table -	Route table -	Network ACL -

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VPC 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](#)

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 - <i>optional</i>
<input type="text" value="Name"/> X	<input type="text" value="NAT-Production"/> X
<input type="button" value="Remove"/>	
<input type="button" value="Add new tag"/>	

You can add 49 more tags.

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VPC Route tables Create route table

Create route table ⓘ

A route table specifies how packets are forwarded between the subnets within your VPC, the internet, and your VPN connection.

Route table settings

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

IGW-Production

VPC
The VPC to use for this route table.

vpc-0ee094f65f150ab5e (Production Network)

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

Q Name X Q IGW-Production X Remove

Add new tag

You can add 49 more tags.

Cancel Create route table

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VPC > Route tables > rtb-067eeb01ae487b1ac > Edit routes

Edit routes

Destination	Target	Status	Propagated
10.10.0.0/16	local	Active	No
0.0.0.0/0	igw-0f0c5241d3a07d5c9	-	No

Add route

Cancel Preview Save changes

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VPC > Route tables > rtb-067eeb01ae487b1ac > Edit subnet associations

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (1/5)

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
Dbcache	subnet-00a7da9d3d2ba723c	10.10.3.0/24	-	Main (rtb-01bfd1e95caa0f5fe)
App 2	subnet-041de41366423b9af	10.10.2.0/24	-	Main (rtb-01bfd1e95caa0f5fe)
App 1	subnet-06264e7bdf7b1bfe7	10.10.1.0/24	-	Main (rtb-01bfd1e95caa0f5fe)
DB	subnet-020828045476430b0	10.10.4.0/24	-	Main (rtb-01bfd1e95caa0f5fe)
<input checked="" type="checkbox"/> Web	subnet-0693b88fcfdf002fc	10.10.5.0/24	-	Main (rtb-01bfd1e95caa0f5fe)

Selected subnets

subnet-0693b88fcfdf002fc / Web X

Cancel Save associations

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AWS Services Search [Alt+S] N. Virginia Valtheeswari C VPC

VPC > Route tables > Create route table

Create route table Info

A route table specifies how packets are forwarded between the subnets within your VPC, the internet, and your VPN connection.

Route table settings

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

NAT-Production

VPC
The VPC to use for this route table.

vpc-0ee094f65f150ab5e (Production Network)

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*

Name NAT-Production Remove

Add new tag

You can add 49 more tags.

Cancel Create route table

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VPC > Route tables > rtb-0aa8ff7a2ce9756cf > Edit routes

Edit routes

Destination	Target	Status	Propagated
10.10.0.0/16	local	Active	No
0.0.0.0/0	nat-093845a67c18aed4c	-	No

Add route Remove

Cancel Preview Save changes

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VPC > Route tables > rtb-0aa8ff7a2ce9756cf > Edit subnet associations

Edit subnet associations

Change which subnets are associated with this route table.

Available subnets (2/5)

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
<input checked="" type="checkbox"/> Dbcache	subnet-00a7da9d3d2ba723c	10.10.3.0/24	-	Main (rtb-01bfd1e95caa0f5fe)
<input type="checkbox"/> App 2	subnet-041de41366423b9af	10.10.2.0/24	-	Main (rtb-01bfd1e95caa0f5fe)
<input checked="" type="checkbox"/> App 1	subnet-06264e7bdf7b1bfe7	10.10.1.0/24	-	Main (rtb-01bfd1e95caa0f5fe)
<input type="checkbox"/> DB	subnet-020828045476430b0	10.10.4.0/24	-	Main (rtb-01bfd1e95caa0f5fe)
<input type="checkbox"/> Web	subnet-0693b88fcdef002fc	10.10.5.0/24	-	rtb-067eeb01ae487b1ac / IGW-Produ...

Selected subnets

subnet-06264e7bdf7b1bfe7 / App 1 X subnet-00a7da9d3d2ba723c / Dbcache X

Cancel **Save associations**

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VPC EC2 New EC2 Experience Tell us what you think

EC2 Dashboard EC2 Global View Events Instances Instances Instance Types Launch Templates Spot Requests Savings Plans Reserved Instances Dedicated Hosts Scheduled Instances Capacity Reservations Images AMIs AMI Catalog Elastic Block Store Volumes Snapshots Lifecycle Manager Network & Security Security Groups Elastic IPs Placement Groups Key Pairs Network Interfaces CloudShell Feedback Language

Instances (1/4) Info Find instance by attribute or tag (case-sensitive)

Instance state = running Clear filters

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
Production_Db	i-0863a06841ae9dcd4	Running	t2.micro	2/2 checks passed	No alarms	us-east-1f	-
Production_Web	i-04b962e30cd693b9c	Running	t2.micro	2/2 checks passed	No alarms	us-east-1f	-

Instance: i-04b962e30cd693b9c (Production_Web)

Details Security Networking Storage Status checks Monitoring Tags

Instance summary Public IPv4 address Private IPv4 addresses

Instance ID: i-04b962e30cd693b9c (Production_Web)	Public IPv4 address: 3.239.91.241 open address	Private IPv4 addresses: 10.10.5.144
IPv6 address: -	Instance state: Running	Public IPv4 DNS: -
Hostname type: IP name: ip-10-10-5-144.ec2.internal	Private IP DNS name (IPv4 only): ip-10-10-5-144.ec2.internal	Elastic IP addresses: -
Answer private resource DNS name: -	Instance type: t2.micro	AWS Compute Optimizer finding: Opt-in to AWS Compute Optimizer for recommendations. Learn more
Auto-assigned IP address: 3.239.91.241 [Public IP]	VPC ID: vpc-0ee094f65f150ab5e (Production Network)	Auto Scaling Group name: -
IAM Role: -	Subnet ID: subnet-0693b88fcfedf002fc (Web)	
IMDSv2: Optional	AMI ID: ami-053b0d53c279arc90	Monitoring: disabled
Platform: Ubuntu (Inferred)		

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Instances (1/4) Info Find instance by attribute or tag (case-sensitive)

Instance state = running Clear filters

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
Production_Db	i-0863a06841ae9dcd4	Running	t2.micro	2/2 checks passed	No alarms	us-east-1f	-
Production_Web	i-04b962e30cd693b9c	Running	t2.micro	2/2 checks passed	No alarms	us-east-1f	-

Instance: i-0863a06841ae9dcd4 (Production_Db)

Details Security Networking Storage Status checks Monitoring Tags

Instance summary

Instance ID i-0863a06841ae9dcd4 (Production_Db)	Public IPv4 address -	Private IPv4 addresses 10.10.4.95
IPv6 address -	Instance state Running	Public IPv4 DNS -
Hostname type IP name: ip-10-10-4-95.ec2.internal	Private IP DNS name (IPv4 only) ip-10-10-4-95.ec2.internal	Elastic IP addresses -
Answer private resource DNS name -	Instance type t2.micro	AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations. Learn more
Auto-assigned IP address -	VPC ID vpc-0ee094f65f150ab5e (Production Network)	Subnet ID subnet-020828045476430b0 (DB)
IAM Role -	AMI ID ami-053b0d53c279acc90	Monitoring disabled
IMDSv2 Optional		
Instance details		
Platform Ubuntu (Inferred)		

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Development Network Setup :

The screenshot shows the AWS VPC Details page for the VPC ID `vpc-0e281d25abb833bfe`, titled "Development network". The page includes a navigation bar with links like "VPC dashboard", "EC2 Global View", "Filter by VPC", and "Select a VPC". On the left, a sidebar lists various VPC management options such as Subnets, Route tables, Internet gateways, Egress-only internet gateways, Carrier gateways, DHCP option sets, Elastic IPs, Managed prefix lists, Endpoints, Endpoint services, NAT gateways, Peering connections, Security (Network ACLs, Security groups), DNS firewall (Rule groups, Domain lists), and Network Firewall (Firewalls, Firewall policies). The main content area displays the "Details" tab with the following information:

VPC ID	State	DNS hostnames	DNS resolution
<code>vpc-0e281d25abb833bfe</code>	Available	Disabled	Enabled
Tenancy	DHCP option set	Main route table	Main network ACL
Default	<code>dopt-0b61a7d08826ec311</code>	<code>rtb-023b2e3ac1325cc53</code>	<code>acl-074710dc47bc85390</code>
Default VPC	IPv4 CIDR	IPv6 pool	IPv6 CIDR (Network border group)
No	<code>11.11.0.0/16</code>	-	-
Network Address Usage metrics	Route 53 Resolver DNS Firewall rule groups	Owner ID	
Disabled	-	<code>741793240394</code>	

Below the details, there are tabs for "Resource map", "CIDRs", "Flow logs", and "Tags". The "Resource map" tab is active, showing a summary of resources: "VPC" (Show details), "Subnets (0)", "Route tables (1)", and "Network connections (0)". A callout box provides an introduction to the VPC resource map, stating: "Introducing the VPC resource map. Solid lines represent relationships between resources in your VPC. Dotted lines represent network traffic to network functions. This feature is under development." At the bottom, standard AWS footer links are present: CloudShell, Feedback, Language, © 2023, Amazon Web Services India Private Limited or its affiliates., Privacy, Terms, and Cookie preferences.

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VPC EC2

VPC > Internet gateways > Create internet gateway

Create internet gateway Info

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.

Development network

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

Name Development network Remove

Add new tag

You can add 49 more tags.

Cancel Create internet gateway

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aws Services Search [Alt+S]

VPC EC2

VPC > Internet gateways > Attach to VPC (igw-0645fac78d33911d2)

Attach to VPC (igw-0645fac78d33911d2) [Info](#)

VPC
Attach an internet gateway to a VPC to enable the VPC to communicate with the internet. Specify the VPC to attach below.

Available VPCs
Attach the internet gateway to this VPC.

[X](#)

▶ AWS Command Line Interface command

Cancel **Attach internet gateway**

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VPC EC2

VPC > Subnets > Create subnet

Create subnet Info

VPC

VPC ID
Create subnets in this VPC.
vpc-0e281d25abb833bfe (Development network)

Associated VPC CIDRs
IPv4 CIDRs
11.11.0.0/16

Subnet settings
Specify the CIDR blocks and Availability Zone for the subnet.

Subnet 1 of 2

Subnet name
Create a tag with a key of 'Name' and a value that you specify.
Dev-Web

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.
No preference

IPv4 CIDR block Info
11.11.1.0/24

Tags - optional

Key	Value - optional
Q Name	Q Dev-Web

Add new tag

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VPC EC2

No preference ▾

IPv4 CIDR block [Info](#)
Q 11.11.1.0/24 X

▼ Tags - optional

Key Value - optional

Q Name X Q Dev-Web X Remove

Add new tag

You can add 49 more tags.

Remove

Subnet 2 of 2

Subnet name
Create a tag with a key of 'Name' and a value that you specify.
Dev-Db

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.
No preference ▾

IPv4 CIDR block [Info](#)
Q 11.11.2.0/24 X

▼ Tags - optional

Key Value - optional

Q Name X Q Dev-Db X Remove

Add new tag

You can add 49 more tags.

Remove

Add new subnet

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VPC > Route tables > Create route table

Create route table Info

A route table specifies how packets are forwarded between the subnets within your VPC, the internet, and your VPN connection.

Route table settings

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

Dev-Rtb

VPC
The VPC to use for this route table.

vpc-0e281d25abb833bfe (Development network)

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 - <i>optional</i>
<input type="text" value="Name"/> <input type="button" value="X"/>	<input type="text" value="Dev-Rtb"/> <input type="button" value="X"/> <input type="button" value="Remove"/>

Add new tag

You can add 49 more tags.

Cancel

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VPC EC2

VPC > Route tables > rtb-01d18d9cfb0253588 > Edit routes

Edit routes

Destination	Target	Status	Propagated
11.11.0.0/16	local	Active	No
0.0.0.0/0	igw-0645fac78d33911d2	-	No

Add route Remove

Cancel Preview Save changes

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VPC EC2

EC2 Dashboard EC2 Global View Events Instances Instances Instance Types Launch Templates Spot Requests Savings Plans Reserved Instances Dedicated Hosts Scheduled Instances Capacity Reservations Images AMIs AMI Catalog Elastic Block Store Volumes Snapshots Lifecycle Manager Network & Security Security Groups Elastic IPs Placement Groups Key Pairs Network Interfaces

Instances (1/4) Info Find instance by attribute or tag (case-sensitive)

Instance state = running Clear filters

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
Development_Web	i-035471d6974a6af74	Running	t2.micro	2/2 checks passed	No alarms	us-east-1c	-
Development_Db	i-0541df5439ae940ed	Running	t2.micro	2/2 checks passed	No alarms	us-east-1c	-
Production_Db	i-00c7-00c11-00d44	Running	t2.micro	2/2 checks passed	No alarms	us-east-1c	-

Instance: i-035471d6974a6af74 (Development_Web)

Details Security Networking Storage Status checks Monitoring Tags

Instance summary Public IPv4 address 3.83.83.59 | open address Private IPv4 addresses 11.11.1.66 Public IPv4 DNS -

Instance ID i-035471d6974a6af74 (Development_Web) Instance state Running

IPv6 address -

Hostname type IP name: ip-11-11-1-66.ec2.internal Private IP DNS name (IPv4 only) ip-11-11-1-66.ec2.internal

Answer private resource DNS name -

Auto-assigned IP address 3.83.83.59 [Public IP] Instance type t2.micro

VPC ID vpc-0e281d25abb833bf (Development network) Subnet ID subnet-00c73e9dfd88b9f99 (Dev-Web)

IAM Role -

IMDSv2 Optional

Instance details Platform Ubuntu (Inferred) AMI ID ami-053b0d53c279acr90 Monitoring disabled

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VPC EC2 New EC2 Experience Tell us what you think

EC2 Dashboard EC2 Global View Events Instances Instances Instance Types Launch Templates Spot Requests Savings Plans Reserved Instances Dedicated Hosts Scheduled Instances Capacity Reservations Images AMIs AMI Catalog Elastic Block Store Volumes Snapshots Lifecycle Manager Network & Security Security Groups Elastic IPs Placement Groups Key Pairs Network Interfaces CloudShell Feedback Language

Instances (1/4) Info Find instance by attribute or tag (case-sensitive)

Instance state = running Clear filters

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
Development_Web	i-035471d6974a6af74	Running	t2.micro	2/2 checks passed	No alarms	us-east-1c	-
Development_Db	i-0541df5439ae940ed	Running	t2.micro	2/2 checks passed	No alarms	us-east-1c	-
Production_Db	i-0867-06841-12345678	Running	t2.micro	2/2 checks passed	No alarms	us-east-1c	-

Instance: i-0541df5439ae940ed (Development_Db)

Details Security Networking Storage Status checks Monitoring Tags

Instance summary

Instance ID i-0541df5439ae940ed (Development_Db)	Public IPv4 address -	Private IPv4 addresses 11.11.2.163
IPv6 address -	Instance state Running	Public IPv4 DNS -
Hostname type IP name: ip-11-11-2-163.ec2.internal	Private IP DNS name (IPv4 only) ip-11-11-2-163.ec2.internal	Elastic IP addresses -
Answer private resource DNS name -	Instance type t2.micro	AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations. Learn more
Auto-assigned IP address -	VPC ID vpc-0e281d25abb833bfe (Development network)	Auto Scaling Group name -
IAM Role -	Subnet ID subnet-0515cb5c5c70d0abf (Dev-Db)	
IMDSv2 Optional		

Instance details

Platform Ubuntu (Inferred)	AMI ID ami-053b0d53c279acc90	Monitoring disabled
-------------------------------	---------------------------------	------------------------

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```
ubuntu@ip-10-10-4-95: ~

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/*copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-10-10-5-144:~$ sudo nano Vth_ky.pem
ubuntu@ip-10-10-5-144:~$ ls
Vth_ky.pem
ubuntu@ip-10-10-5-144:~$ chmod 400 Vth_ky.pem
chmod: changing permissions of 'Vth_ky.pem': Operation not permitted
ubuntu@ip-10-10-5-144:~$ sudo chmod 400 Vth_ky.pem
ubuntu@ip-10-10-5-144:~$ sudo ssh -i Vth_ky.pem ubuntu@10.10.4.95
The authenticity of host '10.10.4.95 (10.10.4.95)' can't be established.
ED25519 key fingerprint is SHA256:PV43Egg5OJbRhhWq/rubRi+5vwz5FEeMWH5tI/8Vo8.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '10.10.4.95' (ED25519) to the list of known hosts.
Welcome to Ubuntu 22.04.2 LTS (GNU/Linux 5.19.0-1025-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Thu Jul  6 15:48:08 UTC 2023

System load:  0.01025390625   Processes:           100
Usage of /:   20.6% of 7.57GB  Users logged in:     0
Memory usage: 23%
Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/*copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-10-10-4-95:~$
```

```
[root] ubuntu@ip-11-11-2-163: ~
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-11-11-1-66:~$ sudo su nano Vth_ky.pem
su: user nano does not exist or the user entry does not contain all the required fields
ubuntu@ip-11-11-1-66:~$ sudo nano vth_ky.pem
ubuntu@ip-11-11-1-66:~$ ls
vth_ky.pem
ubuntu@ip-11-11-1-66:~$ sudo chmod 400 Vth_ky.pem
chmod: cannot access 'Vth_ky.pem': No such file or directory
ubuntu@ip-11-11-1-66:~$ sudo chmod 400 vth_ky.pem
ubuntu@ip-11-11-1-66:~$ sudo ssh -i Vth_ky.pem ubuntu@11.11.2.163
Warning: Identity file Vth_ky.pem not accessible: No such file or directory.
The authenticity of host '11.11.2.163 (11.11.2.163)' can't be established.
ED25519 key fingerprint is SHA256:ljK74Ap5bvIIEUSUN/Ou0BxyY6PgvE6WY4JUUjblId4.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '11.11.2.163' (ED25519) to the list of known hosts.
ubuntu@11.11.2.163: Permission denied (publickey).
ubuntu@ip-11-11-1-66:~$ sudo ssh -i vth_ky.pem ubuntu@11.11.2.163
Welcome to Ubuntu 22.04.2 LTS (GNU/Linux 5.19.0-1025-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Thu Jul  6 15:54:32 UTC 2023

System load:  0.15380859375      Processes:          96
Usage of /:   20.6% of 7.57GB   Users logged in:     0
Memory usage: 23%                  IPv4 address for eth0: 11.11.2.163
Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/*copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-11-11-2-163:~$ ~
```

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VPC EC2

VPC > Peering connections > Create peering connection

Create peering connection

A VPC peering connection is a networking connection between two VPCs that enables you to route traffic between them privately. [Info](#)

Peering connection settings

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

Production-Development

Select a local VPC to peer with

VPC ID (Requester)

vpc-0ee094f65f150ab5e (Production Network)

VPC CIDRs for vpc-0ee094f65f150ab5e (Production Network)

CIDR	Status	Status reason
10.10.0.0/16	Associated	-

Select another VPC to peer with

Account

My account
 Another account

Region

This Region (us-east-1)
 Another Region

VPC ID (Acceptor)

vpc-0e281d25abb833bfe (Development network)

VPC CIDRs for vpc-0e281d25abb833bfe (Development network)

CIDR	Status	Status reason
10.10.0.0/16	Not Associated	-

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VPC PEERING :

The screenshot shows the AWS Management Console interface for creating a VPC peering connection. The top navigation bar includes the AWS logo, Services dropdown, a search bar, and user information (N. Virginia, Vaitheswari C). The breadcrumb path is VPC > Peering connections > Create peering connection. The main title is "Create peering connection". A descriptive text states: "A VPC peering connection is a networking connection between two VPCs that enables you to route traffic between them privately." Below this is an "Info" link.

Peering connection settings

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

Select a local VPC to peer with
VPC ID (Requester)
vpc-0ee094f65f150ab5e (Production Network)

VPC CIDRs for vpc-0ee094f65f150ab5e (Production Network)

CIDR	Status	Status reason
10.10.0.0/16	Associated	-

Select another VPC to peer with
Account
 My account
 Another account
Region
 This Region (us-east-1)
 Another Region
VPC ID (Acceptor)
vpc-0e281d25abb833bfe (Development network)

VPC CIDRs for vpc-0e281d25abb833bfe (Development network)

CIDR	Status	Status reason

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VPC EC2 Select a VPC

Virtual private cloud Your VPCs New Subnets Route tables Internet gateways Egress-only internet gateways Carrier gateways DHCP option sets Elastic IPs Managed prefix lists Endpoints Endpoint services NAT gateways Peering connections

Peering connections (1/1) Info Filter peering connections

Name	Peering connection ID	Status	Requester VPC	Acceptor
Production-De...	pcx-046ab223f7504d60a	Pending acceptance	vpc-0ee094f65f150ab5e / Pro...	vpc-0e28

Actions View details Accept request Reject request Edit DNS settings Edit ClassicLink settings Manage tags Delete peering connection

pcx-046ab223f7504d60a / Production-Development

Pending acceptance You can accept or reject this peering connection request using the 'Actions' menu. You have until Thursday, July 13, 2023 at 21:35:45 GMT+5:30 to accept or reject the request, otherwise it expires.

Details ClassicLink DNS Route tables Tags

Details Requester owner ID Acceptor owner ID VPC Peering connection ARN
741793240394 741793240394 arn:aws:ec2:us-east-1:741793240394:vpc-peering-

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VPC EC2 Select a VPC

Virtual private cloud

- Your VPCs [New](#)
- Subnets
- Route tables
- Internet gateways
- Egress-only internet gateways
- Carrier gateways
- DHCP option sets
- Elastic IPs
- Managed prefix lists
- Endpoints
- Endpoint services
- NAT gateways
- Peering connections**

Peering connections (1/1) [Info](#)

Filter peering connections

Name	Peering connection ID	Status	Requester VPC	Acceptor VPC	Requester CIDRs	Acceptor CIDRs
Production-De...	pcx-046ab223f7504d60a	Pending acceptance	vpc-0ee094f65f150ab5e / Production Network	vpc-0e281d25abb833bfe / Development network	10.10.0.0/16	-

Accept VPC peering connection request [Info](#)

Are you sure you want to accept this VPC peering connection request? (pcx-046ab223f7504d60a / Production-Development)

Requester VPC vpc-0ee094f65f150ab5e / Production Network	Acceptor VPC vpc-0e281d25abb833bfe / Development network	Requester CIDRs 10.10.0.0/16
Acceptor CIDRs -	Requester Region N. Virginia (us-east-1)	Acceptor Region N. Virginia (us-east-1)
Requester owner ID 741793240394 (This account)	Acceptor owner ID 741793240394 (This account)	

[Cancel](#) **Accept request**

pcx-046ab223f7504d60 Pending acceptance You can accept or decline it expires.

Details ClassicLink DNS Route tables Tags

Details

Requester owner ID 741793240394	Acceptor owner ID 741793240394	VPC Peering connection ARN arn:aws:ec2:us-east-1:741793240394:vpc-peering-...
--	---	--

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VPC EC2 Select a VPC Virtual private cloud Your VPCs New Subnets Route tables Internet gateways Egress-only internet gateways Carrier gateways DHCP option sets Elastic IPs Managed prefix lists Endpoints Endpoint services NAT gateways Peering connections Security Network ACLs Security groups DNS firewall Rule groups Domain lists Network Firewall Firewalls Firewall policies Network Firewall rule groups TLS inspection configurations New

Your VPC peering connection (pcx-046ab223f7504d60a / Production-Development) has been established. To send and receive traffic across this VPC peering connection, you must add a route to the peered VPC in one or more of your VPC route tables. Info Modify my route tables now X ⓘ

Peering connections (1/1) Info Filter peering connections Actions Create peering connection

Name	Peering connection ID	Status	Requester VPC	Acceptor VPC	Requester CIDRs	Accepter CIDRs
Production-De...	pcx-046ab223f7504d60a	Active	vpc-0ee094f65f150ab5e / Pro...	vpc-0e281d25abb833bfe / De...	10.10.0.0/16	11.1.1.0/24

pcx-046ab223f7504d60a / Production-Development

Details ClassicLink DNS Route tables Tags

Details Requester owner ID Acceptor owner ID VPC Peering connection ARN
741793240394 741793240394 arn:aws:ec2:us-east-1:741793240394:vpc-peering-connection/pcx-046ab223f7504d60a

Peering connection ID Requester VPC Acceptor VPC
pcx-046ab223f7504d60a vpc-0ee094f65f150ab5e / Production Network vpc-0e281d25abb833bfe / Development network

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VPC EC2

Select a VPC ▾

Virtual private cloud

- Your VPCs [New](#)
- Subnets
- Route tables**
- Internet gateways
- Egress-only internet gateways
- Carrier gateways
- DHCP option sets
- Elastic IPs
- Managed prefix lists
- Endpoints
- Endpoint services
- NAT gateways
- Peering connections

Security

- Network ACLs
- Security groups

DNS firewall

- Rule groups
- Domain lists

Network Firewall

- Firewalls
- Firewall policies
- Network Firewall rule groups
- TLS inspection configurations [New](#)

Route tables (1/6) Info

Find resources by attribute or tag

Name	Route table ID	Explicit subnet associations	Edge associations	Main	VPC
db	rtb-01bfd1e95caa0f5fe	-	-	Yes	vpc-0ee094f65f150ab5e Prod...
-	rtb-0395b94bb2e2eb5fe	-	-	Yes	vpc-068a9fe7028bc61aa
IGW-Production	rtb-067eeb01ae487b1ac	subnet-0693b88fcfedf002...	-	No	vpc-0ee094f65f150ab5e Prod...
NAT-Production	rtb-0aa8ff7a2ce9756cf	2 subnets	-	No	vpc-0ee094f65f150ab5e Prod...
<input checked="" type="checkbox"/> Dev-db	rtb-023b2e3ac1325cc53	subnet-0515cb5c5c70d0abf...	-	Yes	vpc-0e281d25abb833bfe Dev...
<input type="checkbox"/> Dev-Rtb	rtb-01d18d9cfb0253588	subnet-00c73e9dfd88b9f...	-	No	vpc-0e281d25abb833bfe Dev...

rtb-023b2e3ac1325cc53 / Dev-db

Details Routes Subnet associations Edge associations Route propagation Tags

You can now check network connectivity with Reachability Analyzer Run Reachability Analyzer

Details

Route table ID rtb-023b2e3ac1325cc53	Main <input checked="" type="checkbox"/> Yes	Explicit subnet associations subnet-0515cb5c5c70d0abf / Dev-Db	Edge associations -
VPC vpc-0e281d25abb833bfe Development network	Owner ID 741793240394		

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Edit routes

Destination	Target	Status	Propagated
11.11.0.0/16	<input type="text" value="local"/> X	Active	No
Q 10.10.0.0/16	<input type="text" value="pcx-046ab223f7504d60a"/> X	-	No Remove
Add route			Cancel Preview Save changes

AWS Services Search [Alt+S] N. Virginia Vaitheeswari C

VPC EC2

VPC dashboard EC2 Global View New

Filter by VPC: Select a VPC

Virtual private cloud Your VPCs New Subnets Route tables Internet gateways Egress-only internet gateways Carrier gateways DHCP option sets Elastic IPs Managed prefix lists Endpoints Endpoint services NAT gateways Peering connections

Security Network ACLs Security groups

DNS firewall Rule groups Domain lists

Network Firewall Firewalls Firewall policies

Route tables (1/6) Info Find resources by attribute or tag

Name	Route table ID	Explicit subnet associations	Edge associations	Main	VPC
db	rtb-01bfd1e95caa0f5fe	-	-	Yes	vpc-0ee094f65f150ab5e Prod...
-	rtb-0395b94bb2e2eb5fe	-	-	Yes	vpc-068a9fe7028bc61aa
IGW-Production	rtb-067eeb01ae487b1ac	subnet-0693b88fcfedf002...	-	No	vpc-0ee094f65f150ab5e Prod...
NAT-Production	rtb-0aa8ff7a2ce9756cf	2 subnets	-	No	vpc-0ee094f65f150ab5e Prod...
Dev-db	rtb-023b2e3ac1325cc53	subnet-0515cb5c5c70d0...	-	Yes	vpc-0e281d25abb833bfe Dev...
Dev-Rtb	rtb-01d18d9cfb0253588	subnet-00c73e9dfd88b9f...	-	No	vpc-0e281d25abb833bfe Dev...

rtb-01bfd1e95caa0f5fe / db

Details Routes Subnet associations Edge associations Route propagation Tags

You can now check network connectivity with Reachability Analyzer Run Reachability Analyzer

Details

Route table ID rtb-01bfd1e95caa0f5fe	Main Yes	Explicit subnet associations -	Edge associations -
VPC vpc-0ee094f65f150ab5e Production Network	Owner ID 741793240394		

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VPC > Route tables > rtb-01bfd1e95caa0f5fe > Edit routes

Edit routes

Destination	Target	Status	Propagated
10.10.0.0/16	<input type="text" value="local"/> <input type="button" value="X"/>	<input checked="" type="checkbox"/> Active	No
11.11.0.0/16	<input type="text" value="pcx-046ab223f7504d60a"/> <input type="button" value="X"/>	-	No <input type="button" value="Remove"/>
<input type="button" value="Add route"/>			

```
ubuntu@ip-11-11-2-163: ~
  compliance features.

  https://ubuntu.com/aws/pro

Expanded Security Maintenance for Applications is not enabled.

27 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

*** System restart required ***
Last login: Mon Jul 10 14:10:51 2023 from 138.108.155.10
ubuntu@ip-11-11-1-66:~$ ls
vth_ky.pem
ubuntu@ip-11-11-1-66:~$ sudo chmod 400 vth_ky.pem
ubuntu@ip-11-11-1-66:~$ sudo ssh -i ubuntu@11.11.2.163
Warning: Identity file ubuntu@11.11.2.163 not accessible: No such file or directory.
usage: ssh [-46AcFGjkMNpqstTvxXY] [-bind_interface]
           [-b bind_address] [-c cipher_spec] [-D [bind_address:]port]
           [-E log_file] [-e escape_char] [-F configfile] [-I pkcs11]
           [-i identity_file] [-J [user@]host[:port]] [-L address]
           [-l login_name] [-m mac_spec] [-O ctl_cmd] [-o option] [-P port]
           [-Q query_option] [-R address] [-S ctl_path] [-W host:port]
           [-w local_tun[:remote_tun]] destination [command [argument ...]]
ubuntu@ip-11-11-1-66:~$ sudo ssh -i vth_ky.pem ubuntu@11.11.2.163
Welcome to Ubuntu 22.04.2 LTS (GNU/Linux 5.19.0-1025-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Mon Jul 10 16:09:37 UTC 2023

System load:  0.0          Processes:      94
Usage of /:   20.8% of 7.57GB  Users logged in:     0
Memory usage: 25%          IPv4 address for eth0: 11.11.2.163
Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

Last login: Thu Jul  6 15:54:38 2023 from 11.11.1.66
ubuntu@ip-11-11-2-163:~$ sudo ping 10.10.5.144
PING 10.10.5.144 (10.10.5.144) 56(84) bytes of data.
```

```
ca:~$ ubuntu@ip-10-10-4-95: ~
* Support: https://ubuntu.com/advantageWelcome to Ubuntu 22.04.2 LTS (GNU/Linux 5.19.0-1025-aws x86_64)
* Documentation: https://help.ubuntu.com
* Management: https://landscape.canonical.com
* Support: https://ubuntu.com/advantage

System information as of Mon Jul 10 16:10:45 UTC 2023

System load: 0.0      Processes: 96
Usage of /: 30.8% of 7.57GB  Users logged in: 0
Memory usage: 31%      IPv4 address for eth0: 10.10.5.144
Swap usage: 0%

* Ubuntu Pro delivers the most comprehensive open source security and
  compliance features.

https://ubuntu.com/aws/pro

Expanded Security Maintenance for Applications is not enabled.

27 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

*** System restart required ***
Last login: Fri Jul 7 15:09:09 2023 from 138.108.155.10
ubuntu@ip-10-10-5-144:~$ ls
Vth_ky.pem
ubuntu@ip-10-10-5-144:~$ sudo chmod 400 Vth_ky.pem
sudo: chmod: command not found
ubuntu@ip-10-10-5-144:~$ sudo chmod 400 Vth_ky.pem
ubuntu@ip-10-10-5-144:~$ sudo ssh -i Vth_ky.pem ubuntu@10.10.4.95
Welcome to Ubuntu 22.04.2 LTS (GNU/Linux 5.19.0-1025-aws x86_64)

* Documentation: https://help.ubuntu.com
* Management: https://landscape.canonical.com
* Support: https://ubuntu.com/advantage

System information as of Mon Jul 10 16:12:02 UTC 2023

System load: 0.0      Processes: 97
Usage of /: 20.8% of 7.57GB  Users logged in: 0
Memory usage: 25%      IPv4 address for eth0: 10.10.4.95
Swap usage: 0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

Last login: Thu Jul 6 15:48:10 2023 from 10.10.5.144
ubuntu@ip-10-10-4-95:~$ sudo ping 11.11.2.163
PING 11.11.2.163 (11.11.2.163) 56(84) bytes of data.
```

Select Command Prompt

```
4 bytes from 10.10.4.95: icmp_seq=3642 ttl=64 time=0.853 ms
4 bytes from 10.10.4.95: icmp_seq=3643 ttl=64 time=0.821 ms
4 bytes from 10.10.4.95: icmp_seq=3644 ttl=64 time=0.728 ms
4 bytes from 10.10.4.95: icmp_seq=3645 ttl=64 time=0.719 ms
4 bytes from 10.10.4.95: icmp_seq=3646 ttl=64 time=0.705 ms
4 bytes from 10.10.4.95: icmp_seq=3647 ttl=64 time=0.752 ms
4 bytes from 10.10.4.95: icmp_seq=3648 ttl=64 time=0.718 ms
4 bytes from 10.10.4.95: icmp_seq=3649 ttl=64 time=0.708 ms
4 bytes from 10.10.4.95: icmp_seq=3650 ttl=64 time=0.703 ms
4 bytes from 10.10.4.95: icmp_seq=3651 ttl=64 time=0.897 ms
4 bytes from 10.10.4.95: icmp_seq=3652 ttl=64 time=0.804 ms
4 bytes from 10.10.4.95: icmp_seq=3653 ttl=64 time=0.757 ms
4 bytes from 10.10.4.95: icmp_seq=3654 ttl=64 time=0.742 ms
4 bytes from 10.10.4.95: icmp_seq=3655 ttl=64 time=0.776 ms
4 bytes from 10.10.4.95: icmp_seq=3656 ttl=64 time=0.706 ms
4 bytes from 10.10.4.95: icmp_seq=3657 ttl=64 time=0.812 ms
4 bytes from 10.10.4.95: icmp_seq=3658 ttl=64 time=0.710 ms
4 bytes from 10.10.4.95: icmp_seq=3659 ttl=64 time=0.776 ms
4 bytes from 10.10.4.95: icmp_seq=3660 ttl=64 time=0.845 ms
4 bytes from 10.10.4.95: icmp_seq=3661 ttl=64 time=0.752 ms
4 bytes from 10.10.4.95: icmp_seq=3662 ttl=64 time=0.771 ms
4 bytes from 10.10.4.95: icmp_seq=3663 ttl=64 time=0.792 ms
4 bytes from 10.10.4.95: icmp_seq=3664 ttl=64 time=1.49 ms
4 bytes from 10.10.4.95: icmp_seq=3665 ttl=64 time=0.781 ms
4 bytes from 10.10.4.95: icmp_seq=3666 ttl=64 time=0.768 ms
4 bytes from 10.10.4.95: icmp_seq=3667 ttl=64 time=0.736 ms
4 bytes from 10.10.4.95: icmp_seq=3668 ttl=64 time=0.817 ms
4 bytes from 10.10.4.95: icmp_seq=3669 ttl=64 time=0.942 ms
4 bytes from 10.10.4.95: icmp_seq=3670 ttl=64 time=0.788 ms
4 bytes from 10.10.4.95: icmp_seq=3671 ttl=64 time=0.990 ms
4 bytes from 10.10.4.95: icmp_seq=3672 ttl=64 time=0.800 ms
4 bytes from 10.10.4.95: icmp_seq=3673 ttl=64 time=0.765 ms
4 bytes from 10.10.4.95: icmp_seq=3674 ttl=64 time=0.767 ms
4 bytes from 10.10.4.95: icmp_seq=3675 ttl=64 time=0.801 ms
4 bytes from 10.10.4.95: icmp_seq=3676 ttl=64 time=0.811 ms
4 bytes from 10.10.4.95: icmp_seq=3677 ttl=64 time=0.775 ms
4 bytes from 10.10.4.95: icmp_seq=3678 ttl=64 time=0.787 ms
4 bytes from 10.10.4.95: icmp_seq=3679 ttl=64 time=0.776 ms
4 bytes from 10.10.4.95: icmp_seq=3680 ttl=64 time=0.730 ms
4 bytes from 10.10.4.95: icmp_seq=3681 ttl=64 time=0.719 ms
4 bytes from 10.10.4.95: icmp_seq=3682 ttl=64 time=0.788 ms
4 bytes from 10.10.4.95: icmp_seq=3683 ttl=64 time=0.716 ms
4 bytes from 10.10.4.95: icmp_seq=3684 ttl=64 time=0.836 ms
4 bytes from 10.10.4.95: icmp_seq=3685 ttl=64 time=0.758 ms
4 bytes from 10.10.4.95: icmp_seq=3686 ttl=64 time=0.725 ms
4 bytes from 10.10.4.95: icmp_seq=3687 ttl=64 time=0.845 ms
4 bytes from 10.10.4.95: icmp_seq=3688 ttl=64 time=0.764 ms
4 bytes from 10.10.4.95: icmp_seq=3689 ttl=64 time=0.756 ms
4 bytes from 10.10.4.95: icmp_seq=3690 ttl=64 time=0.817 ms
4 bytes from 10.10.4.95: icmp_seq=3691 ttl=64 time=0.797 ms
4 bytes from 10.10.4.95: icmp_seq=3692 ttl=64 time=0.761 ms
4 bytes from 10.10.4.95: icmp_seq=3693 ttl=64 time=0.764 ms
4 bytes from 10.10.4.95: icmp_seq=3694 ttl=64 time=0.798 ms
4 bytes from 10.10.4.95: icmp_seq=3695 ttl=64 time=0.787 ms
4 bytes from 10.10.4.95: icmp_seq=3696 ttl=64 time=0.746 ms
4 bytes from 10.10.4.95: icmp_seq=3697 ttl=64 time=0.831 ms
4 bytes from 10.10.4.95: icmp_seq=3698 ttl=64 time=0.789 ms
4 bytes from 10.10.4.95: icmp_seq=3699 ttl=64 time=0.731 ms
4 bytes from 10.10.4.95: icmp_seq=3700 ttl=64 time=0.722 ms
4 bytes from 10.10.4.95: icmp_seq=3701 ttl=64 time=0.695 ms
4 bytes from 10.10.4.95: icmp_seq=3702 ttl=64 time=0.716 ms
4 bytes from 10.10.4.95: icmp_seq=3703 ttl=64 time=0.673 ms
4 bytes from 10.10.4.95: icmp_seq=3704 ttl=64 time=0.774 ms
4 bytes from 10.10.4.95: icmp_seq=3705 ttl=64 time=0.691 ms
```