

VPC network

VPC networks

- IP addresses

Bring your own IP

Firewall

Routes

- VPC network peering

Shared VPC

- Serverless VPC access

[← VPC network details](#)

 EDIT DELETE VPC NETWORK

customdemo-vpc

Subnet creation mode

Custom subnets

VPC network ULA internal IPv6 range ?

Enabling this feature will assign a /48 from Google defined ULA prefix fd20::/20.

☐ Enabled

 Disabled

Dynamic routing mode  Regional

Cloud Routers will learn routes only in the region in which they were created

☐ Global



Global routing lets you dynamically learn routes to and from all regions with a single VPN or Interconnect and Cloud Router

ADD SUBNET

FLOW LOGS ▾

<div><div>≡ Filter</div><div>Enter property name or value</div><div><div>?</div><div>⋮</div></div></div>						
<input type="checkbox"/>	Name ↑	Region	Stack Type	Internal IP ranges	External IP ranges	Secondary IPv4 ranges
<input type="checkbox"/>	subnet-asia-east11	asia-east1	IPv4	10.0.1.0/24	None	None
<input type="checkbox"/>	subnet-us-east11	us-east1	IPv4	10.0.2.0/24	None	None

 **Filter** Enter property name or value

<input type="checkbox"/>	Name	Enforcement order 	Type	Deployment scope	Rule priority	Targets	Source	Destination	Protocols and ports
	vpc-firewall-rules	1	VPC firewall rules	Global					

VM instances

[Filter](#) [Sort](#)

<input type="checkbox"/>	Status	Name ↑	Zone	Recommendations	In use by	Internal IP	External IP	Connect
<input type="checkbox"/>	✓	instance-1-us	us-east1-b			10.0.2.2 (nic0)	35.211.28.252 ↗ (nic0)	SSH ▼ ⋮
<input type="checkbox"/>	✓	instance-asia	asia-east1-b			10.0.1.2 (nic0)	35.206.233.150 ↗ (nic0)	SSH ▼ ⋮

Related actions

Linux instance-asia 5.10.0-21-cloud-amd64 #1 SMP Debian 5.10.162-1 (2023-01-21) x86_64

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

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.

furganquraishil61@instance-asia:~\$ ping 10.0.2.2

PING 10.0.2.2 (10.0.2.2) 56(84) bytes of data.

64 bytes from 10.0.2.2: icmp_seq=1 ttl=64 time=189 ms
64 bytes from 10.0.2.2: icmp_seq=2 ttl=64 time=185 ms
64 bytes from 10.0.2.2: icmp_seq=3 ttl=64 time=185 ms
64 bytes from 10.0.2.2: icmp_seq=4 ttl=64 time=185 ms
64 bytes from 10.0.2.2: icmp_seq=5 ttl=64 time=185 ms
64 bytes from 10.0.2.2: icmp_seq=6 ttl=64 time=185 ms
64 bytes from 10.0.2.2: icmp_seq=7 ttl=64 time=185 ms
64 bytes from 10.0.2.2: icmp_seq=8 ttl=64 time=185 ms
64 bytes from 10.0.2.2: icmp_seq=9 ttl=64 time=185 ms
64 bytes from 10.0.2.2: icmp_seq=10 ttl=64 time=185 ms
64 bytes from 10.0.2.2: icmp_seq=11 ttl=64 time=183 ms
64 bytes from 10.0.2.2: icmp_seq=12 ttl=64 time=183 ms
64 bytes from 10.0.2.2: icmp_seq=13 ttl=64 time=183 ms
64 bytes from 10.0.2.2: icmp_seq=14 ttl=64 time=183 ms
64 bytes from 10.0.2.2: icmp_seq=15 ttl=64 time=183 ms
64 bytes from 10.0.2.2: icmp_seq=16 ttl=64 time=183 ms
64 bytes from 10.0.2.2: icmp_seq=17 ttl=64 time=183 ms
64 bytes from 10.0.2.2: icmp_seq=18 ttl=64 time=227 ms
64 bytes from 10.0.2.2: icmp_seq=19 ttl=64 time=183 ms
64 bytes from 10.0.2.2: icmp_seq=20 ttl=64 time=183 ms
64 bytes from 10.0.2.2: icmp_seq=21 ttl=64 time=183 ms
64 bytes from 10.0.2.2: icmp_seq=22 ttl=64 time=183 ms
64 bytes from 10.0.2.2: icmp_seq=23 ttl=64 time=183 ms

← ↻ 🏠 🔒 https://shell.cloud.google.com/?hl=en_US&fromcloudshell=true&show=terminal



Cloud Shell Editor



(mydemoproject-380406) x + ▾



```
furqanquraishi161@cloudshell:~ (mydemoproject-380406)$ gcloud compute networks create customdemol-vpc --project=mydemoproject-380406 --subnet-mode=custom --mtu=1460 --bgp-routing-mode=regional
Created [https://www.googleapis.com/compute/v1/projects/mydemoproject-380406/global/networks/customdemol-vpc].
NAME: customdemol-vpc
SUBNET_MODE: CUSTOM
BGP_ROUTING_MODE: REGIONAL
IPV4_RANGE:
GATEWAY_IPV4:

Instances on this network will not be reachable until firewall rules
are created. As an example, you can allow all internal traffic between
instances as well as SSH, RDP, and ICMP by running:

$ gcloud compute firewall-rules create <FIREWALL_NAME> --network customdemol-vpc --allow tcp,udp,icmp --source-ranges <IP_RANGE>
$ gcloud compute firewall-rules create <FIREWALL_NAME> --network customdemol-vpc --allow tcp:22,tcp:3389,icmp

furqanquraishi161@cloudshell:~ (mydemoproject-380406)$ gcloud compute networks subnets create subnet-asia-east110 --project=mydemoproject-380406 --range=10.0.1.0/24 --stack-type=IPV4_ONLY --network=customdemol-vpc --region=asia-east1
Created [https://www.googleapis.com/compute/v1/projects/mydemoproject-380406/regions/asia-east1/subnetworks/subnet-asia-east110].
NAME: subnet-asia-east110
REGION: asia-east1
NETWORK: customdemol-vpc
RANGE: 10.0.1.0/24
STACK_TYPE: IPV4_ONLY
IPV6_ACCESS_TYPE:
INTERNAL_IPV6_PREFIX:
EXTERNAL_IPV6_PREFIX:
furqanquraishi161@cloudshell:~ (mydemoproject-380406)$
```

resses

your own IP

all

s

network peering

d VPC

less VPC access

SMTP port 25 disallowed in this project ?

VPC networks

Sort Enter property name or value ?

Name ↑	Subnets	MTU ?	Mode	Internal IP ranges	Gateways	Firewall rules	Global dynamic routing
customdemo-vpc	2	1460	Custom			4	Off
customdemo1-vpc	0	1460	Custom			0	Off
default	35	1460	Auto			0	Off

```
furqanquraishi161@cloudshell:~ (mydemoproject-380406) $ gcloud compute networks subnets create subnet-us-east10 --project=mydemoproject-380406 --range=10.0.2.0/24 --stack-type=IPV4_ONLY --network=customdemol-vpc --region=us-east1
Created [https://www.googleapis.com/compute/v1/projects/mydemoproject-380406/regions/us-east1/subnetworks/subnet-us-east10].
NAME: subnet-us-east10
REGION: us-east1
NETWORK: customdemol-vpc
RANGE: 10.0.2.0/24
STACK_TYPE: IPV4_ONLY
IPV6_ACCESS_TYPE:
INTERNAL_IPV6_PREFIX:
EXTERNAL_IPV6_PREFIX:
furqanquraishi161@cloudshell:~ (mydemoproject-380406) $
```


Name 	Subnets	MTU 	Mode	Internal IP ranges	Gateways	Firewall rules	Global dynamic routing
customdemo-vpc	2	1460	Custom			4	Off
customdemo1-vpc	2	1460	Custom			0	Off
default	35	1460	Auto			0	Off

```
furqanquraishil61@cloudshell:~ (mydemoproject-380406)$ gcloud compute firewall-rules create customdemol-vpc-allow-icmp --project=mydemoproject-380406 --network=projects/mydemoproject-380406/global/networks/customdemol-vpc --description=Allows ICMP connections from any source to any instance on the network --direction=INGRESS --priority=65534 --source-ranges=0.0.0.0/0 --action=ALLOW --rules=icmp
Creating firewall...working..Created [https://www.googleapis.com/compute/v1/projects/mydemoproject-380406/global/firewalls/customdemol-vpc-allow-icmp].
Creating firewall...done.
NAME: customdemol-vpc-allow-icmp
NETWORK: customdemol-vpc
DIRECTION: INGRESS
PRIORITY: 65534
ALLOW: icmp
DENY:
DISABLED: False
furqanquraishil61@cloudshell:~ (mydemoproject-380406)$
```

```
ALLOW: icmp
gcloud compute firewall-rules create customdemol-vpc-allow-ssh --project=mydemoproject-380406 --network=p
jects/mydemoproject-380406/global/networks/customdemol-vpc --description=Allows\ TCP\ connections\ from\ any\ source\ to\ any\ instance\ on\ the\ network\ usi
ng\ port\ 22. --direction=INGRESS --priority=65534 --source-ranges=0.0.0.0/0 --action=ALLOW --rules=tcp:22
Creating firewall...working..Created at [https://www.googleapis.com/compute/v1/projects/mydemoproject-380406/global/firewalls/customdemol-vpc-allow-ssh].-network=p
Creating firewall...done.406/global/networks/customdemol-vpc --description=Allows\ TCP\ connections\ from\ any\ source\ to\ any\ instance\ on\ the\ network\ usi
NAME: customdemol-vpc-allow-sshSS --priority=65534 --source-ranges=0.0.0.0/0 --action=ALLOW --rules=tcp:22
NETWORK: customdemol-vpc
DIRECTION: INGRESS
PRIORITY: 65534
ALLOW: tcp:22
gcloud compute firewall-rules create customdemol-vpc-allow-ssh --project=mydemoproject-380406 --network-p
```

```
Welcome to Cloud Shell! Type "help" to get started.
Your Cloud Platform project in this session is set to mydemoproject-380406.
Use "gcloud config set project [PROJECT_ID]" to change to a different project.
furqanquraishil61@cloudshell:~ (mydemoproject-380406) $ gcloud compute networks describe customdemo-vpc
-bash: gcloud: command not found
furqanquraishil61@cloudshell:~ (mydemoproject-380406) $ gcloud compute networks describe customdemo-vpc
autoCreateSubnetworks: false
creationTimestamp: '2023-03-12T00:32:45.320-08:00'
description: ''
id: '6019898848936210626'
kind: compute#network
mtu: 1460
name: customdemo-vpc
networkFirewallPolicyEnforcementOrder: AFTER_CLASSIC_FIREWALL
routingConfig:
  routingMode: REGIONAL
selfLink: https://www.googleapis.com/compute/v1/projects/mydemoproject-380406/global/networks/customdemo-vpc
selfLinkWithId: https://www.googleapis.com/compute/v1/projects/mydemoproject-380406/global/networks/6019898848936210626
subnetworks:
- https://www.googleapis.com/compute/v1/projects/mydemoproject-380406/regions/us-east1/subnetworks/subnet-us-east11
- https://www.googleapis.com/compute/v1/projects/mydemoproject-380406/regions/asia-east1/subnetworks/subnet-asia-east11
x_gcloud_bgp_routing_mode: REGIONAL
x_gcloud_subnet_mode: CUSTOM
furqanquraishil61@cloudshell:~ (mydemoproject-380406) $
```

```
gcloud help -- SEARCH TERMS
furqanquraishil61@cloudshell:~ (mydemoproject-380406)$ gcloud compute instances create myvm --zone=asia-east1-a --machine-type=n1-standard-1 --subnet=subnet-asi
a-east110
Created [https://www.googleapis.com/compute/v1/projects/mydemoproject-380406/zones/asia-east1-a/instances/myvm].
NAME: myvm
ZONE: asia-east1-a
MACHINE_TYPE: n1-standard-1
PREEMPTIBLE:
INTERNAL_IP: 10.0.1.2
EXTERNAL_IP: 34.80.193.65
STATUS: RUNNING
furqanquraishil61@cloudshell:~ (mydemoproject-380406)$
```

<input type="checkbox"/>	Status	Name ↑	Zone	Recommendations	In use by	Internal IP	External IP	Connect
<input type="checkbox"/>	✓	instance-1-us	us-east1-b			10.0.2.2 (nic0)	35.211.28.252 ↗ (nic0)	SSH ▼ ⋮
<input type="checkbox"/>	✓	instance-asia	asia-east1-b			10.0.1.2 (nic0)	35.206.233.150 ↗ (nic0)	SSH ▼ ⋮
<input type="checkbox"/>	✓	myvm	asia-east1-a			10.0.1.2 (nic0)	34.80.193.65 (nic0)	SSH ▼ ⋮