

Create VPC

Your VPCs (1/2) info								Actions ▾	Create VPC
<input type="text" value="Filter VPCs"/>									< 1 >
<input checked="" type="checkbox"/>	Name	VPC ID	State	IPv4 CIDR	IPv6 CIDR	DHCP option set			
<input checked="" type="checkbox"/>	myvpc-sprints	vpc-04129859c443af1	Available	192.168.0.0/16	-	dopt-0673e47449c83a056			
<input type="checkbox"/>	-	vpc-0d4b0da6277d7d9b0	Available	172.31.0.0/16	-	dopt-0673e47449c83a056			

Create 2 subnets (pub, private)

public subnet - sub1

Subnet ID

Subnet-0b1fc58b874420c59

Available IPv4 addresses

249

Network border group

eu-west-2

Default subnet

No

Customer-owned IPv4 pool

-

IPv6-only

No

DNS64

Disabled

Subnet ARN

arn:aws:ec2:eu-west-2:334316156435:subnet/subnet-0b1fc58b874420c59

IPv6 CIDR

-

VPC

vpc-041298596c4a434ff1 | myvpc-sprints

Auto-assign public: IPv4 address

No

Outpost ID

-

Hostname type

IP name

Owner

334316156435

State

Available

Availability Zone

eu-west-2c

Route table

rtb-00fab7cc24560a14 | tmp-rt

Auto-assign IPv6 address

No

IPv4 CIDR reservations

-

Resource name DNS A record

Disabled

IPv4 CIDR

192.168.0.0/24

Availability Zone ID

euw2-az1

Network ACL

acl-0c053f111f614b28c

Auto-assign customer-owned IPv4 address

No

IPv6 CIDR reservations

-

Resource name DNS AAAA record

Disabled

Flow logs

Route table

Network ACL

CIDR reservations

Sharing

Tags

You can now check network connectivity with Reachability Analyzer

Run Reachability Analyzer

Route table: rtb-00fab7cc24560a14 / tmp-rt

Edit route table association

Routes (2)

Filter routes

Destination	Target
192.168.0.0/16	local
0.0.0.0/0	igw-0f61445d0f4d910d5

private subnet - sub2

Subnet ID

☑ **subnet-09ac3f3fdb418a4e2**

Available IPv4 addresses

☑ 250

Network border group

☑ **eu-west-2**

Default subnet

No

Customer-owned IPv4 pool

-

IPv6-only

No

DNS64

Disabled

Subnet ARN

☑ **arn:aws:ec2:eu-west-2:334316156435:subnet/subnet-09ac3f3fdb418a4e2**

IPv6 CIDR

-

VPC

vpc-041298596c443a4f1 | myvpc-sprints

Auto-assign public IPv4 address

No

Outpost ID

-

Hostname type

IP name

Owner

☑ **334316156435**

State

☑ **Available**

Availability Zone

☑ **eu-west-2c**

Route table

rtb-042332c0a63d6ad45 | private-rt

Auto-assign IPv6 address

No

IPv4 CIDR reservations

-

Resource name DNS A record

Disabled

IPv4 CIDR

☑ **192.168.0/24**

Availability Zone ID

☑ **euw2-az1**

Network ACL

acl-0c053f111f614b28c

Auto-assign customer-owned IPv4 address

No

IPv6 CIDR reservations

-

Resource name DNS AAAA record

Disabled

Flow logs

Route table

Network ACL

CIDR reservations

Sharing

Tags

🔔 You can now check network connectivity with Reachability Analyzer

Run Reachability Analyzer

Route table: **rtb-042332c0a63d6ad45 / private-rt**

Edit route table association

Routes (2)

🔍 Filter routes

Destination	Target
192.168.0.0/16	local
0.0.0.0/0	nat-0cac65ab71f5c19ee

Create IGW, RT, NAT GW

Route Table for public subnet

VPC > Route tables > rtb-00fabb7cc24560a14

rtb-00fabb7cc24560a14 / tmp-rt

Actions

You can now check network connectivity with Reachability Analyzer

Run Reachability Analyzer

Details info

Route table ID
rtb-00fabb7cc24560a14

VPC
vpc-041298596c443a4f1 | myvpc-sprints

Main
No

Owner ID
334316156435

Explicit subnet associations
subnet-0b1f58b874420c59 / sub1

Edge associations
-

Routes

Subnet associations

Edge associations

Route propagation

Tags

Routes (2)

Edit routes

Filter routes

Both

< 1 > @

Destination	Target	Status	Propagated
0.0.0.0/0	igw-0f61445d0f4d910d3	Active	No
192.168.0.0/16	local	Active	No

Route Table for private subnet

VPC > Route tables > rtb-042332c0a63d6ad45

rtb-042332c0a63d6ad45 / private-rt

Actions

You can now check network connectivity with Reachability Analyzer

Run Reachability Analyzer

Details info

Route table ID
rtb-042332c0a63d6ad45

VPC
vpc-041298596c443a4f1 | myvpc-sprints

Main
No

Owner ID
334316156435

Explicit subnet associations
subnet-09ac3f3f0b418a4e2 / sub2

Edge associations
-

Routes

Subnet associations

Edge associations

Route propagation

Tags

Routes (2)

Edit routes

Filter routes

Both

< 1 > @

Destination	Target	Status	Propagated
0.0.0.0/0	nat-0cac55ab71f3c19ee	Active	No
192.168.0.0/16	local	Active	No

Internet Gate Way

VPC > Internet gateways > igw-0f61445d0f4d910d3

igw-0f61445d0f4d910d3 / new-igw

Actions

Details info

Internet gateway ID
igw-0f61445d0f4d910d3

State
Attached

VPC ID
vpc-041298596c443a4f1 | myvpc-sprints

Owner
334316156435

Tags

Manage tags

Search tags

< 1 > @

Key	Value
Name	new-igw

NAT Gate Way

VPC > NAT gateways > nat-0cac65ab71f3c19ee

nat-0cac65ab71f3c19ee / new-nat

Delete

Details

Info

NAT gateway ID
nat-0cac65ab71f3c19ee

NAT gateway ARN
arn:aws:ec2:eu-west-2:334316156435:natgateway/nat-0cac65ab71f3c19ee

VPC
vpc-041298596c443a4f1 / myvpc-sprints

Connectivity type
Public

Elastic IP address
13.41.156.77

Subnet
subnet-0b1fc58b874420c59 / sub1

State
Available

Private IP address
192.168.0.130

Created
Thursday, August 18, 2022 at 15:42:03 GMT+3

State message
-

Network interface ID
eni-09905de71547ea4ae

Deleted
-

Create 2 SGs (public_sg, private_sg) Public Security Group

EC2 > Security Groups > sg-075c7ced9f540911a - SG-browsing

sg-075c7ced9f540911a - SG-browsing

Actions

Details

Security group name
SG-browsing

Owner
334316156435

Security group ID
sg-075c7ced9f540911a

Inbound rules count
2 Permission entries

Description
launch-wizard created 2022-08-18T10:36:53.355Z

Outbound rules count
2 Permission entries

VPC ID
vpc-041298596c443a4f1

Inbound rules

Outbound rules

Tags

You can now check network connectivity with Reachability Analyzer

Run Reachability Analyzer

Inbound rules (2)

Manage tags

Edit inbound rules

Filter security group rules

<input type="checkbox"/>	Name	Security group rule ID	IP version	Type	Protocol	Port range	Source
<input type="checkbox"/>	-	sgr-00acd5aa9495d55c4	IPv4	SSH	TCP	22	0.0.0.0/0
<input type="checkbox"/>	-	sgr-073022040e1c2b7e7	IPv4	HTTP	TCP	80	0.0.0.0/0

Private Security Group

EC2 > Security Groups > sg-0601dd4a795531c22 - SG-private

sg-0601dd4a795531c22 - SG-private

Actions

Details

Security group name
SG-private

Owner
334316156435

Security group ID
sg-0601dd4a795531c22

Inbound rules count
1 Permission entry

Description
launch-wizard created 2022-08-18T13:18:54.885Z

Outbound rules count
1 Permission entry

VPC ID
vpc-041298596c443a4f1

Inbound rules

Outbound rules

Tags

You can now check network connectivity with Reachability Analyzer

Run Reachability Analyzer

Inbound rules (1/1)

Manage tags

Edit inbound rules

Filter security group rules

<input checked="" type="checkbox"/>	Name	Security group rule ID	IP version	Type	Protocol	Port range	Source
<input checked="" type="checkbox"/>	-	sgr-03fd736cc21f3113b	IPv4	SSH	TCP	22	192.168.0.0/24

Create 2 instances (one in pub, one in private), and attach them to SG (public_sg, private_sg) in sequence.

Public server

EC2 > Instances > i-051be07a3e6cd6806

Instance summary for i-051be07a3e6cd6806 (tmp-server) info

Refresh

Connect

Instance state

Actions

Instance ID

i-051be07a3e6cd6806 (tmp-server)

IPv6 address

-

Hostname type

IP name: ip-192-168-0-36.eu-west-2.compute.internal

Answer private resource DNS name

-

Auto-assigned IP address

35.176.125.131 [Public IP]

IAM Role

-

Public IPv4 address

35.176.125.131 | [open address](#)

Instance state

Running

Private IP DNS name (IPv4 only)

ip-192-168-0-36.eu-west-2.compute.internal

Instance type

t2.micro

VPC ID

vpc-041298596c443a4f1 (myvpc-sprints)

Subnet ID

subnet-0b1fc58b874420c59 (sub1)

Private IPv4 addresses

192.168.0.36

Public IPv4 DNS

-

Elastic IP addresses

-

AWS Compute Optimizer finding

Opt-in to AWS Compute Optimizer for recommendations. | [Learn more](#)

Auto Scaling Group name

-

Details

Security

Networking

Storage

Status checks

Monitoring

Tags

▼ Security details

IAM Role

-

Security groups

sg-075c7ced9f540911a (SG-browsing)

Owner ID

334316156435

Launch time

Thu Aug 18 2022 13:39:03 GMT+0300 (GMT+03:00)

▼ Inbound rules

Find it in the new Unified Settings

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security group of the public server

Details

Security

Networking

Storage

Status checks

Monitoring

Tags

▼ Security details

IAM Role

-

Security groups

sg-075c7ced9f540911a (SG-browsing)

Owner ID

334316156435

Launch time

Thu Aug 18 2022 13:39:03 GMT+0300 (GMT+03:00)

▼ Inbound rules

Filter rules

< 1 >

Security group rule ID	Port range	Protocol	Source	Security groups
sgr-00acd5aa9495d55c4	22	TCP	0.0.0.0/0	SG-browsing
sgr-073022040e1c2b7e7	80	TCP	0.0.0.0/0	SG-browsing

▼ Outbound rules

Filter rules

< 1 >

Security group rule ID	Port range	Protocol	Destination	Security groups
sgr-033322a6f90fc3e4b	All	All	0.0.0.0/0	SG-browsing
sgr-015c27e01103a7817	22	TCP	0.0.0.0/0	SG-browsing

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private server

EC2 > Instances > i-01fda0d5eabdd7771

Instance summary for i-01fda0d5eabdd7771 (private-ec2) info

Updated less than a minute ago

Refresh

Connect

Instance state ▼

Actions ▼

Instance ID i-01fda0d5eabdd7771 (private-ec2)	Public IPv4 address -	Private IPv4 addresses 192.168.128.130
IPv6 address -	Instance state Running	Public IPv4 DNS -
Hostname type IP name: ip-192-168-128-130.eu-west-2.compute.internal	Private IP DNS name (IPv4 only) ip-192-168-128-130.eu-west-2.compute.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-041298596c443a4f1 (myvpc-sprints)	Auto Scaling Group name -
IAM Role -	Subnet ID subnet-09ac3f3fdb418a4e2 (sub2)	

Details

Security

Networking

Storage

Status checks

Monitoring

Tags

▼ Security details

IAM Role -	Owner ID 334316156435	Launch time Thu Aug 18 2022 16:31:17 GMT+0300 (GMT+03:00)
Security groups sg-0601dd4a795531c22 (SG-private)		

▼ Inbound rules

security group of the private server

Details

Security

Networking

Storage

Status checks

Monitoring

Tags

▼ Security details

IAM Role -	Owner ID 334316156435	Launch time Thu Aug 18 2022 16:31:17 GMT+0300 (GMT+03:00)
Security groups sg-0601dd4a795531c22 (SG-private)		

▼ Inbound rules

Filter rules

< 1 >

Security group rule ID	Port range	Protocol	Source	Security groups
sgr-03fd736cc21f3113b	22	TCP	192.168.0.0/24	SG-private

▼ Outbound rules

Filter rules

< 1 >

Security group rule ID	Port range	Protocol	Destination	Security groups
sgr-0307ea8f576058f17	All	ICMP	0.0.0.0/0	SG-private

Find it in the new Unified Settings

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Connect to your public EC2 from your local server

Connect to private server from public server

```
dina@dina: ~/Downloads
dina@dina:~/Downloads$ ssh -i tmp-key.pem ec2-user@35.176.125.131
Last login: Thu Aug 18 17:06:32 2022 from ec2-3-8-235-255.eu-west-2.compute.amazonaws.com

  _|_  _|_  )
 _|_ ( _|_ /  Amazon Linux 2 AMI
__|_\_|_|_|_|

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-192-168-0-36 ~]$ ssh -i tmp-key.pem ec2-user@192.168.128.130
Last login: Thu Aug 18 17:14:46 2022 from 192.168.0.36

  _|_  _|_  )
 _|_ ( _|_ /  Amazon Linux 2 AMI
__|_\_|_|_|_|

https://aws.amazon.com/amazon-linux-2/
2 package(s) needed for security, out of 10 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-192-168-128-130 ~]$ ping ietf.org
PING ietf.org (50.223.129.194) 56(84) bytes of data.
64 bytes from mail.ietf.org (50.223.129.194): icmp_seq=1 ttl=36 time=134 ms
64 bytes from mail.ietf.org (50.223.129.194): icmp_seq=2 ttl=36 time=133 ms
64 bytes from mail.ietf.org (50.223.129.194): icmp_seq=3 ttl=36 time=133 ms
^C
--- ietf.org ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2002ms
rtt min/avg/max/mdev = 133.751/133.961/134.317/0.391 ms
[ec2-user@ip-192-168-128-130 ~]$ exit
logout
Connection to 192.168.128.130 closed.
[ec2-user@ip-192-168-0-36 ~]$ exit
logout
Connection to 35.176.125.131 closed.
dina@dina:~/Downloads$
```