

# AWS – Create VPC

## Lab manual – Create VPC

### 1.1 Create an VPC

### Create VPC

A VPC is an isolated portion of the AWS cloud populated by AWS objects, such as Amazon EC2 instances. You must specify an IPv4 address range for your VPC. Specify the IPv4 address range as a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16. You cannot specify an IPv4 CIDR block larger than /16. You can optionally associate an Amazon-provided IPv6 CIDR block with the VPC.

**Name tag**  ⓘ

**IPv4 CIDR block\***  ⓘ

**IPv6 CIDR block\*** ☐ No IPv6 CIDR Block ⓘ ☒ Amazon provided IPv6 CIDR block

**Tenancy**  ⓘ

[Cancel](#) [Yes, Create](#)

### 1.2 Create Subnets

[Subnets](#) > Create subnet

#### Create subnet

Specify your subnet's IP address block in CIDR format; for example, 10.0.0.0/24. IPv4 block sizes must be between a /16 netmask and /28 netmask, and can be the s

**Name tag**  ⓘ

**VPC\***  ⓘ

VPC CIDRs	CIDR	Status
	10.20.0.0/20	associated
	2600:1f18:4562:a700::/56	associated

**Availability Zone**  ⓘ

**IPv4 CIDR block\***  ⓘ

**IPv6 CIDR block**  ⓘ

2600:1f18:4562:a7  ::/64

Create the remaining 5 subnets similarly, as below. All in different Availability Zone.

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lab-sub-1	subnet-0b617f71a49a303e9	available	vpc-0f0828582d3efc1f8   VPC-LAB	10.20.0.0/23	507	2600:1f18:4562:a701::/64	us-east-1a	rtb-025fb869
lab-sub-2	subnet-06bad2104a3e71455	available	vpc-0f0828582d3efc1f8   VPC-LAB	10.20.2.0/23	507	2600:1f18:4562:a702::/64	us-east-1b	rtb-025fb869
lab-sub-3	subnet-013485d8b62fe9585	available	vpc-0f0828582d3efc1f8   VPC-LAB	10.20.4.0/23	507	2600:1f18:4562:a703::/64	us-east-1c	rtb-025fb869
lab-sub-4	subnet-0bee8e7f8f1eda386	available	vpc-0f0828582d3efc1f8   VPC-LAB	10.20.6.0/23	507	2600:1f18:4562:a704::/64	us-east-1d	rtb-025fb869
lab-sub5	subnet-0a886a39525ba89a4	available	vpc-0f0828582d3efc1f8   VPC-LAB	10.20.8.0/23	507	2600:1f18:4562:a705::/64	us-east-1e	rtb-025fb869
lab-sub6	subnet-0fac5330a501eee6e	available	vpc-0f0828582d3efc1f8   VPC-LAB	10.20.10.0/23	507	2600:1f18:4562:a706::/64	us-east-1f	rtb-025fb869

## 2.0 Create an Internet Gateway

[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.

Name tag

\* Required

[Cancel](#) [Create](#)

[Internet gateways](#) > Attach to VPC

### Attach to VPC

Attach an internet gateway to a VPC to enable communication with the internet. Specify the VPC you would like to attach below.

VPC\*

AWS Command Line

Filter by attributes	
VPC ID	Name
vpc-0f0828582d3efc1f8	VPC-LAB

\* Required

[Cancel](#) [Attach](#)

## 3.0 Add below Routing entries in the Routing Table

- "0.0.0.0/0" → "I.G that has been created".
- ":::/0" → "I.G that has been created".

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Create Route TableDelete Route TableSet As Main Table

Search Route Tables and their

<input type="checkbox"/>	Name	Route Table ID	Explicitly Associated	Main	VPC
<input checked="" type="checkbox"/>		rtb-025fb86943c05c04f	0 Subnets	Yes	vpc-0f0828582d3efc1f8   VPC-LAB
<input type="checkbox"/>	RT-02	rtb-0f15b4f050b8c1560	1 Subnet	No	vpc-ba8442c0   B18 VPC

rtb-025fb86943c05c04f

SummaryRoutesSubnet AssociationsRoute PropagationTags

CancelSave

View: All rules

Destination	Target	Status	Propagated	Remove
10.20.0.0/20	local	Active	No	
2600:1f18:4562:a700::/56	local	Active	No	
0.0.0.0/0		No		

Add another route

igw-0e2068c2b4c1dc4ec | lab-IG

Create Route TableDelete Route TableSet As Main Table

Search Route Tables and their

<input type="checkbox"/>	Name	Route Table ID	Explicitly Associated	Main	VPC
<input checked="" type="checkbox"/>		rtb-025fb86943c05c04f	0 Subnets	Yes	vpc-0f0828582d3efc1f8   VPC-LAB
<input type="checkbox"/>	RT-02	rtb-0f15b4f050b8c1560	1 Subnet	No	vpc-ba8442c0   B18 VPC

rtb-025fb86943c05c04f

SummaryRoutesSubnet AssociationsRoute PropagationTags

Edit

View: All rules

Destination	Target	Status	Propagated
10.20.0.0/20	local	Active	No
2600:1f18:4562:a700::/56	local	Active	No
0.0.0.0/0	igw-0e2068c2b4c1dc4ec	Active	No
::/0	igw-0e2068c2b4c1dc4ec	Active	No