**VPC**

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Amazon Virtual Private Cloud (Amazon VPC) enables you to provision a logically isolated section of the AWS Cloud

We will create a private cloud and assign ip range 10.0.0.0/16

32

- 16

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16

2 power 16 = 65536 (ip address)

So, in our private cloud we can have only 65536 machines only.

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We have different types of servers

1) Web servers

2) Application server

3) database servers

We cannot dump all the servers directly.

Web server - We want everyone in the world to access web server.

Always request will be sent to web server.

From the webserver, request will be sent to database server.

User request, should not sent to database directly.

So, we will be creating two subnets

one subnet for webserver

one subnet for database server.

For one subnet, I provide range 10.0.1.0/24

For 2nd subnet, I provide range 10.0.2.0/24

By default, subnets are private.

I want to make one subnet as public.

As, we want to make webserver as public

Practical

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Select Mumbai Region.

**Step 1:** Create VPC (10.0.0.0/16)

Services ---> Network and content delivery --> VPC

We have some default VPC, Default subnet, Default Route tables.

Your VPC ----> Create VPC -->

Name Tag - MyVPC

IPV4 CIDR Block - 10.0.0.0/16

(Note : Our VPC can have maximum 2 power 16 machines)

Create --> Close

**Step 2:**

Inside VPC, we are creating 1st subnet.

In dashboard ---> Subnets ---> Create subnet

Name Tag - (We will discuss later)

VPC -- MYVPC (Select our subnet)

Availability Zone -- ap-southeast-1a (Select any zone)

IPV4 CIDR Block - 10.0.1.0/24

Name Tag - 10.0.1.0/24 - ap-southeast-1a (IPV4 - availability is the naming convention)

Create ---> Close

**Step 3:**

Inside VPC, we are creating 2nd subnet.

In dashboard ---> Subnets ---> Create subnet

Name Tag - (We will discuss later)

VPC -- MYVPC (Select our subnet)

Availability Zone -- ap-southeast-1b (Select different zone /any zone)

IPV4 CIDR Block - 10.0.2.0/24

Name Tag - 10.0.2.0/24 - ap-southeast-1b (IPV4 - availability is the naming convention)

Create ---> Close