D.15/07/2020

VPC : Virtual Private Cloud :

VPC = Building

Public IP : Unique across the globe : IANA/ICANN--> Purchase from them.. BYOIP

Private IP : Internal communication : Works only with-in network.. : Free to use..

IPv4 : 32 bit : 2^32 IP Addresses

IPv6 : 128 bit : 2^128 IP Addresses

IPv4 :

Class A : 0-126 (/8)

Class B : 128-191 (/16)

Class C : 192-223 (/24)

Class D : Multicasting/broadcasting 224-239

Class E : Future / R&D 240-255

Every class contains a Private IP range, for internal usage without paying anything to any organisation /ISP.

Private IP :

CLASS A: 10.0.0.0 to 10.255.255.255

CLASS B: 172.16.0.0 to 172.31.255.255

CLASS C: 192.168.0.0 to 192.168.255.255

/32 /31 /30 /29 /28 /27 /26 /25 /24 ... /16 /0

2^0 2^1 2^2 2^3 2^4 2^5 2^6 2^7 2^8 ... 2^32

1 2 4 8 16 32 64 128 256 ... 65536 4B/N

AWS Reservs 5 IPs..

AWS Supports : /28 - /16 (Network 11 instance, 65531 instances)

Class A : N.H.H.H :

Class B : N.N.H.H :

Class C : N.N.N.H : 192.168.100.0

192.168.100.(0-255)

192.168.101.(0-255)

192.168.255.()

N.N.H.H

172.16.0.0

172.16.(0-255).(0-255)

172.17.(0-255).(0-255)

VPC : https://www.youtube.com/watch?v=Ze\_X53wdogA

192.168.0.0/16 --> Entire VPC

192.168.100.0/24 --> Subnet /1a (251 usable IPs)

192.168.200.0/24 --> Subnet /1b (251 usable IPs)