25/2/26 [DAY-3]

NETWORKS

route

SN 2

Dedicated to ....

CIDR [classless Inter - Domain routing]

192.0.2.0   24

→ Host
→ Host   Identifier.

Network
identifier   Flexible
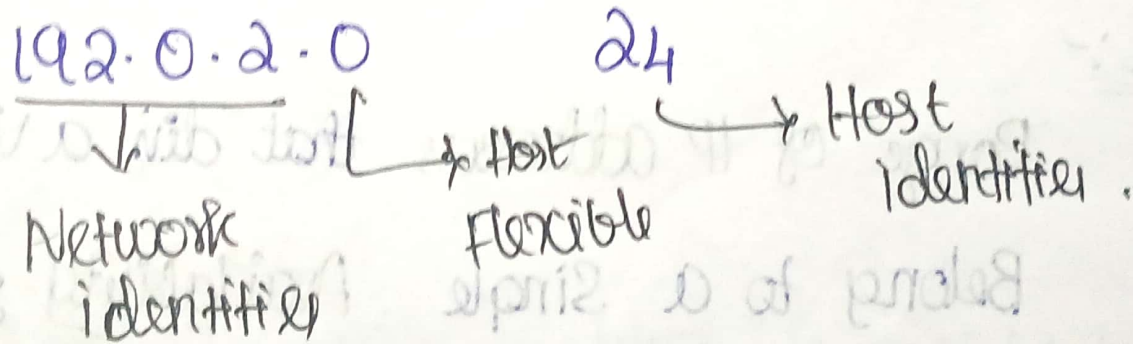
Fixed

Amazon VPC →

Enables you to provision a _logically_
isolated _section_ of the AWS resource in a virtual
network that define.

Give you Control over your virtual networking resource,
including:-

Selection of IP address range

Creation of Subnets

Configuration of route & network gateways

Enable you to Customize the network Configuration
for your VPC.

Enable you to Use multiple layers of Security

VPC s:-

Dedicated to your AWS account

Belong to a single AWS Region & can
Span multiple Avai zone.

Subnet :-

Range of IP addresses that divi a VPC

Belong to a single Availability zone

Classified Public → Access of network

· Private → If any network
of IP wants secure does not show to public persons

IP Addressing

Create VPC, Assign it to IPV4 CIDR block (range private IPV4).

Cannot change the add range after you Create the VPC.

Largest IPV4 CIDR Block Size /16

Smallest "   "   "   " /28

IPV6 is also supported (with a diff BlockSize limit)

CIDR blocks of subnet Cannot overlap

Elastic Network Interface

ENI is a virtual network interface

  ○ Attach to instance
  ○ Detach from " & Attach to another instance to redirect network traffic.

Network used to connect the network to the h/

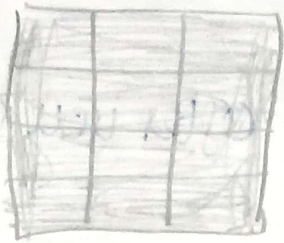It attribute follow when it is reattached to new instance.

Each instance in your VPC has default network interface.

Assign private IPV4 add from IPV4 add range of your VPC.

STORAGE

Block Storage: Change one block (piece of file) that contain the char
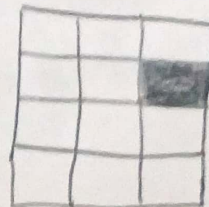
Object Storage : Entire file must be updated

Amazon EBS :

Volume types

	SSD		HDD	
	GP	Provisioned IOPS	Throughput Optimized	Cold
Max vol Size	16TIB	16	16	16
Max IOPS/v	16000	64000	500	250
Max Through-Put/Vol	250 MiB/s	1000	500	250

Homework:

Amazon S3

Ad	Disad
High availability	Cost Complexity
Cost-effective	Even Consistency
Security	No native file system
Easy to integrate	Cost for data transfer
Scalability	Security misconfiguration = risk
Reliable & Durable	

AWS Storage
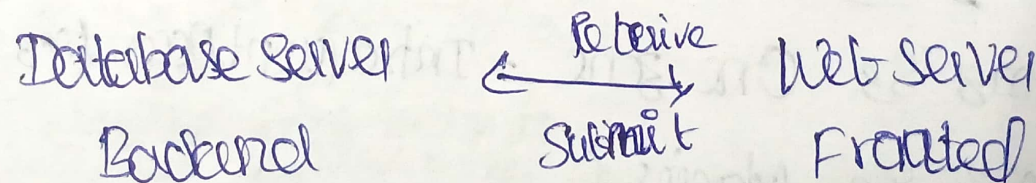
Object Storage - Amazon S3 Simple Storage Service

Block Storage - Amazon EBS (E Block Store

File Storage - Amazon EFS (E File Sys)

Archival Storage - Amazon S3 Glacier

Hybird Storage - AWS Storage Gateway

Internet Gateway → 2way communication

Database Server ← Retrive Web Server

Backend Submit Frontend

NAT Gateway 1way Communication

DB Server ← Web Server

Backend Submit Frontend