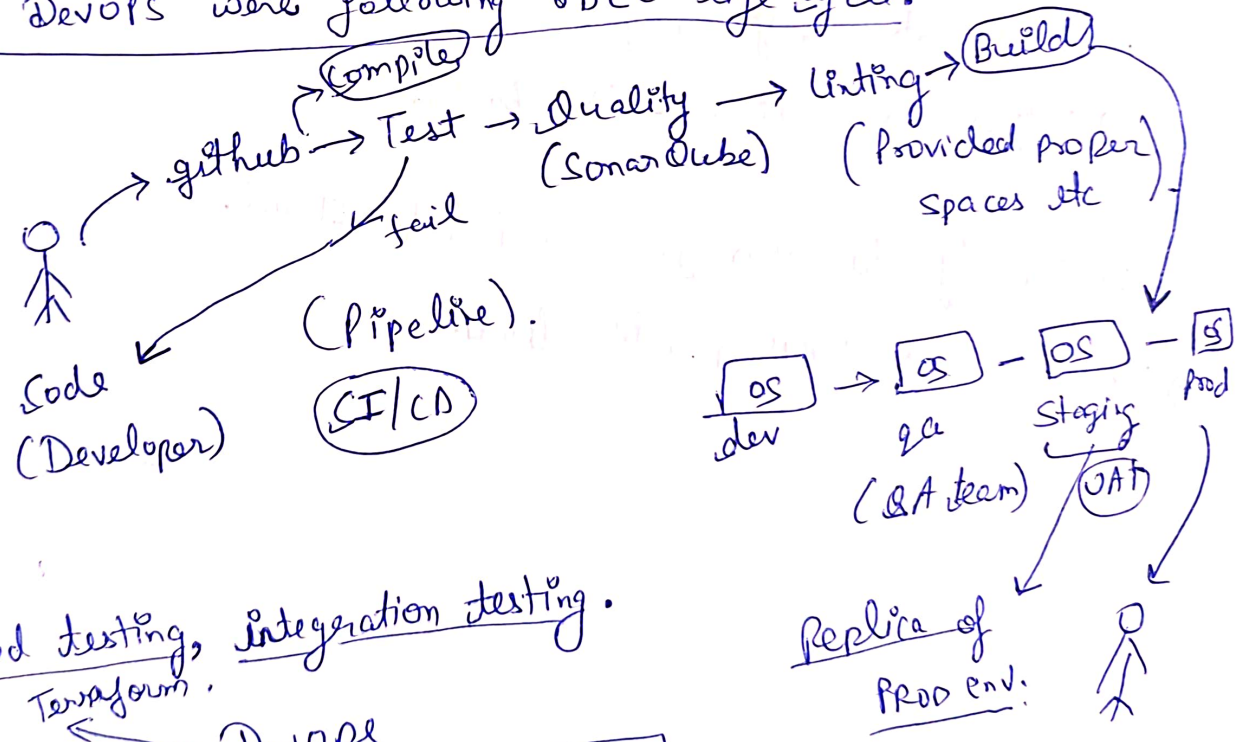


Second use case Zomato added one new feature to reduce order cancellation wastage of foods.

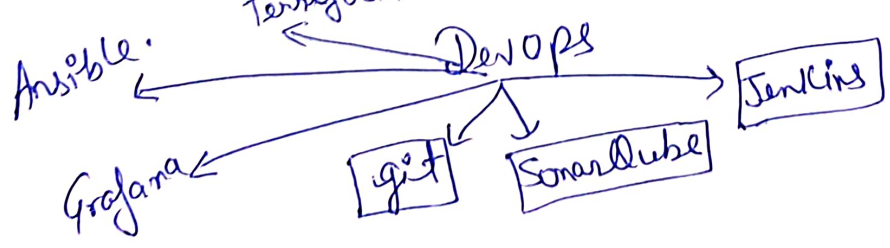
TTM (Time to Market)

DevOps → Automation (Error free).
↓
will be fast.

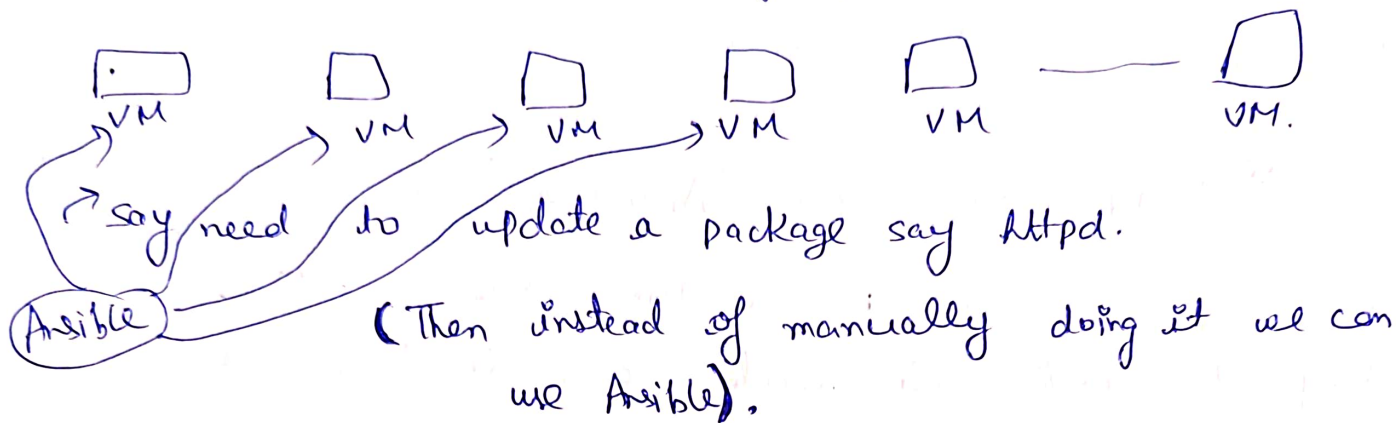
Before DevOps were following SDLC life cycle.



⇒ load testing, integration testing.
Terraform.



Ansible Configuration Management tool
(update a software, copy a file etc).



Public Cloud H/w shared.

Private Cloud H/w will not be shared & Dedicated to
single organization / one company. (More Security)

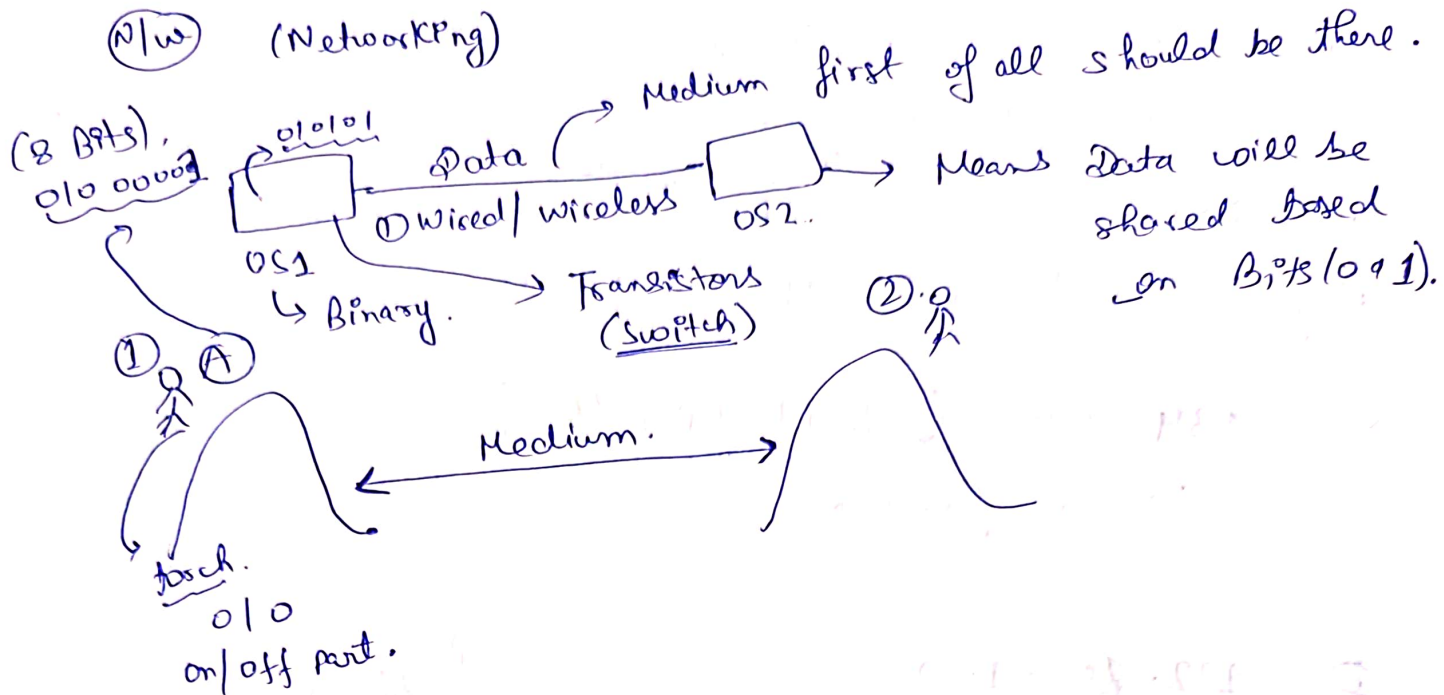
1. On-premises were mostly used before cloud computing.
↳ full control / self Manage.
↳ Highest upfront cost (drawback).

2. Third Party to manage our Private Cloud.

eg VMware by IBM private clouds.

⇒ How to share data b/w Different OS (Operating System).

(N/w) (Networking)



Basic N/w rules

1. Medium (wired/wireless)
2. Must have a valid IP Address.
3. Must have on the same N/w (network).

4. Private IP → Private IP
Public IP → Public IP.

Valid IP Address

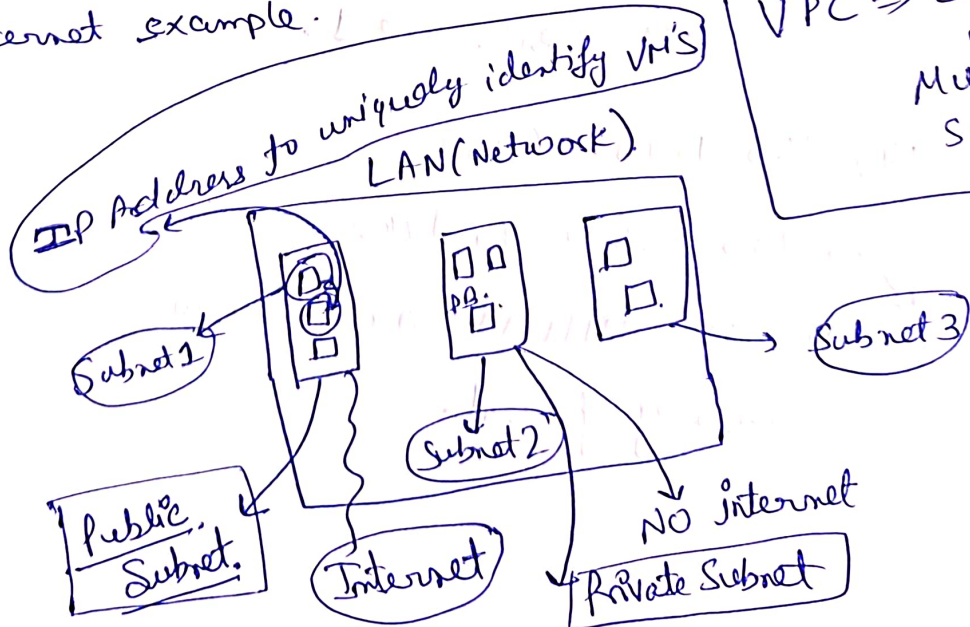
PC ⇒ N/w Card

LAN ⇒ Local Area N/w

Connect Devices with a certain Area.

WAN ⇒ Internet example.
(wide Area Network).

Virtual Private Cloud.
VPC ⇒ LAN
Multiple Sub N/w



⇒ which is valid IP Address (ipconfig)

IP → Any No which is of 32 Bit Size is a valid IP Address.

Google DNS ⇒ 8.8.8.8 ⁴ (octet) (8 Bits). → octet format.

(Ping) to check connectivity B/w 2 Parts.

(ex) 134 74 40 72 (Valid IP Address)
(Decimal format).

① 192.168.1.90
② 8.8.8.8
③ 134744072 } All 3 are Valid IP Address.

(NetMask) All IP Address will Have NetMask as well.
↳ 255.255.255.0
↳ whether 2 Systems are on Same N/w or not.

11111111 } → 255
All 8 Bits are 1.

(ex) 192.168.1.90. (IP)
255.255.255.0 (NetMask)
↓
11111111 11111111 11111111 00000000.
Binary format.

⇒ Bitwise AND b/w IP & Netmask then we get
Network Name

⇒ 192.168.1.40 (IP) → CIDR Notification.
 & 255.255.255.0 (Netmask)
 192.168.1 → N/w Name.
 (24)
 255.255.0.0 → /16 CIDR

↓ How Many Bits are 1.
 Classless Inter-Domain Routing

* ⇒ All the Bits which are 1 represent the N/w Name and 0 as the Host Name.

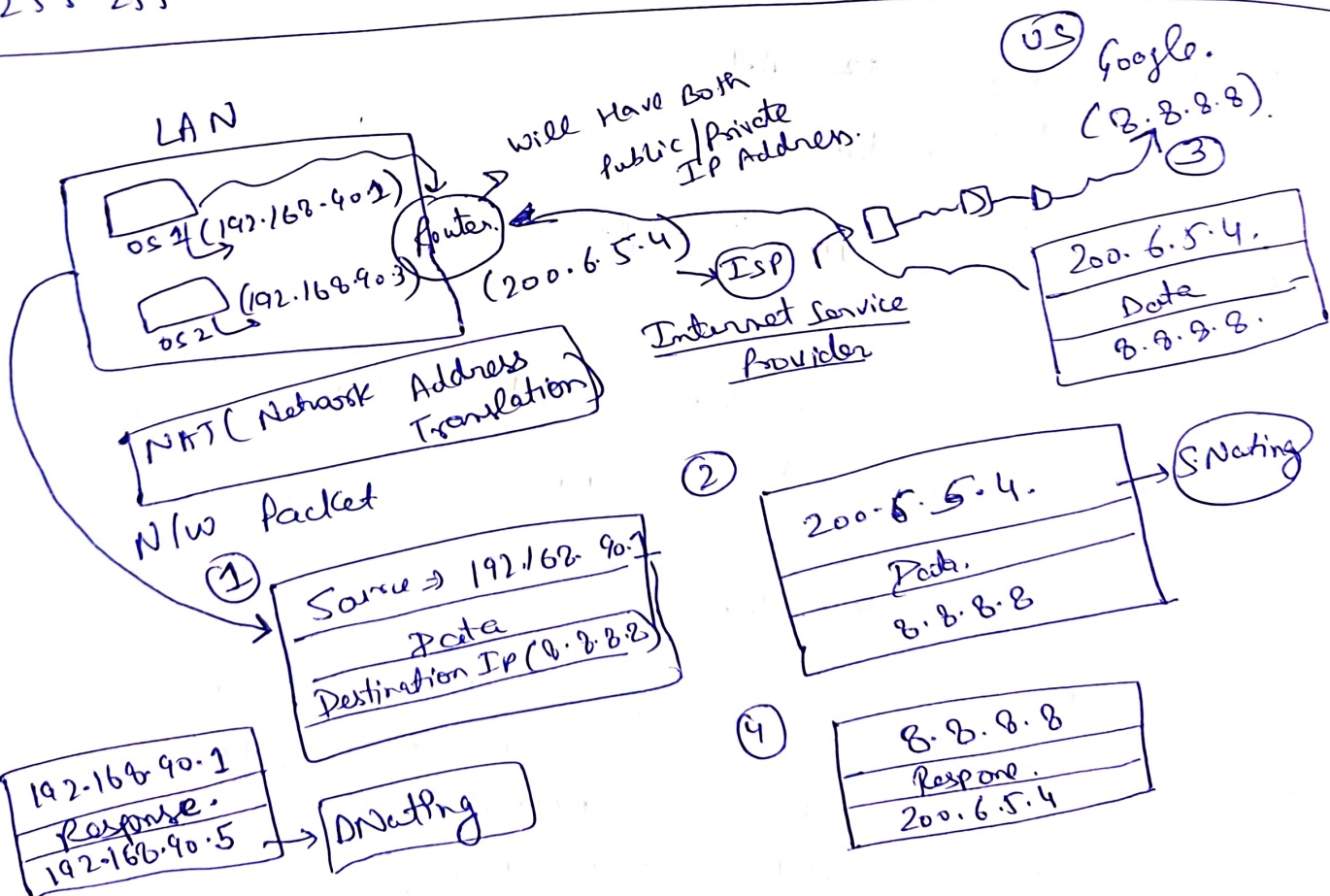
Ex

OS1

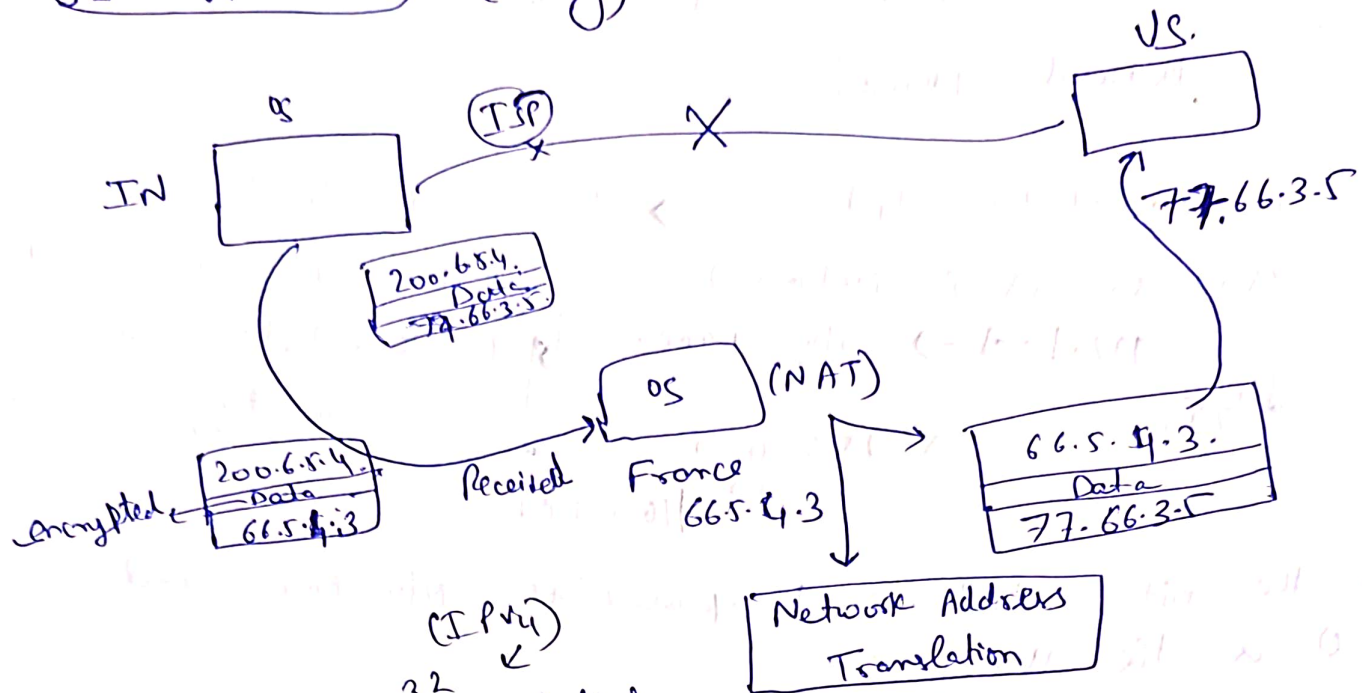
192.168.1.3 -
 255.255.

OS2

192.



How VPN works (Proxy)



⇒ ifconfig

(IPv4)
 $2^{32} \Rightarrow$ Valid
 (4.5 billion) IP Address (earlier)

IPv4 $\Rightarrow 2^{32}$ Bit (can only be created).

IPv6 \Rightarrow Size $\Rightarrow 128$ Bit
 $\Rightarrow 2^{128} \Rightarrow$ Limitless.

IPv6 \Rightarrow can skip NAT part.

⇒ launch on EC2 instance and then rest of the part is on next page.

⇒ launch 2 instances.

OS1 instance

ifconfig
 IP \Rightarrow 172.31.22.69

Now check if OS2 can ping OS1

OS2 instance

ifconfig
 172.31.22.69

Able to ping, since they are running in the same VPC, same Subnet, have same netmask as well
 ⇒ Install Apache Server