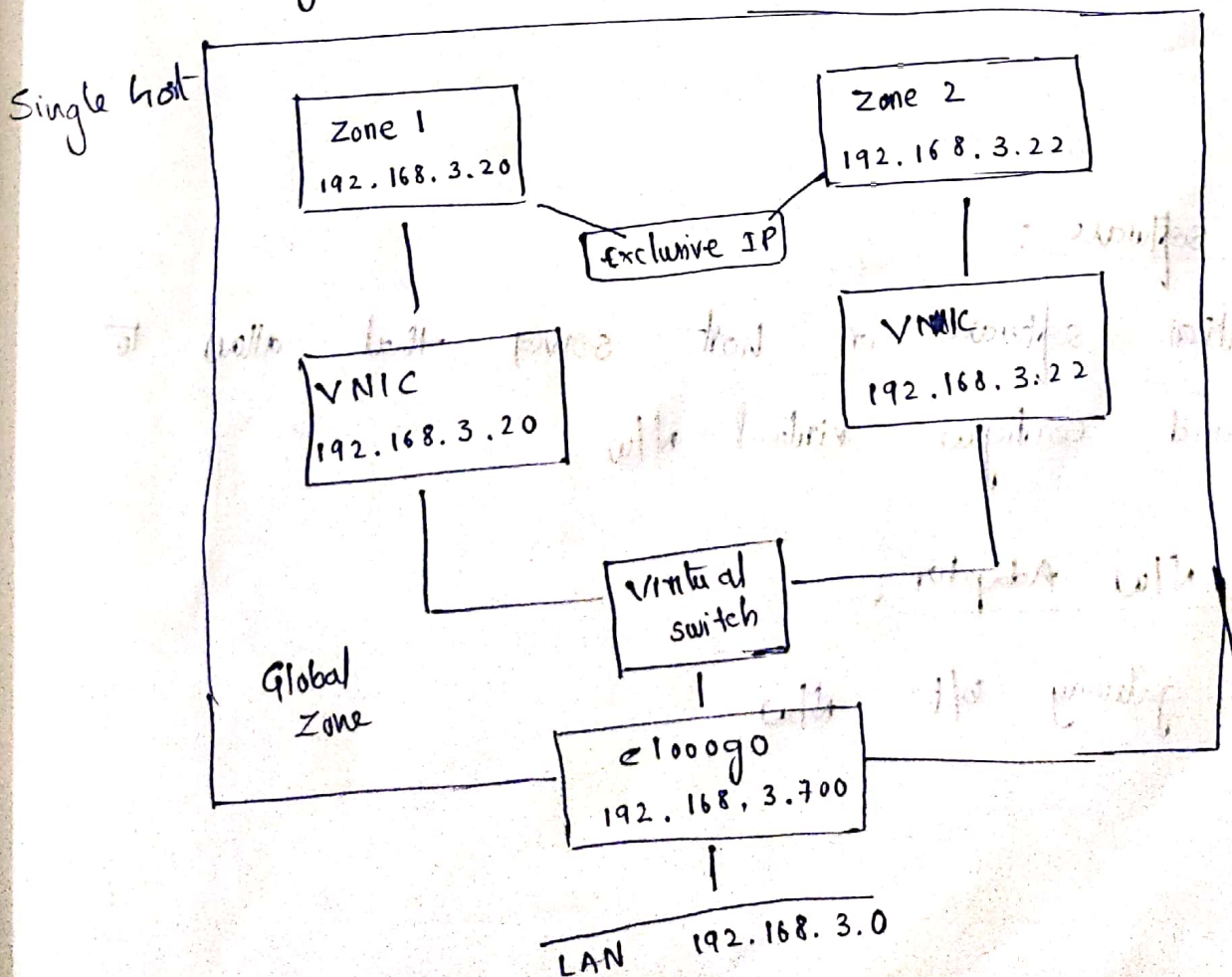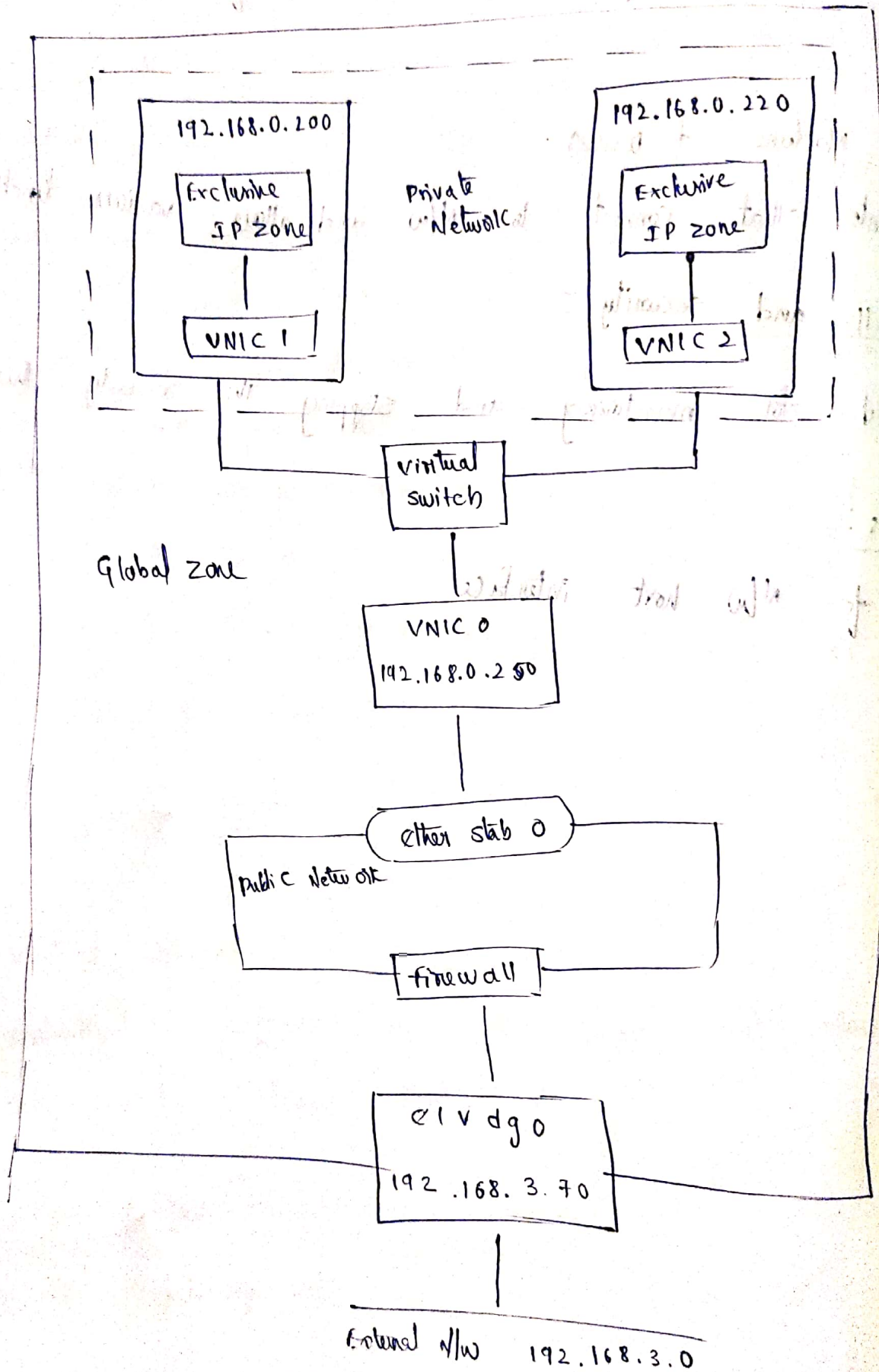# Unit - 3

Virtual Network:

→ it enable communication b/t multiple computer virtual machines, virtual server or other device across different office and Data Center through software and wireless technology.

→ ① Basically virtual N/w includes two scenarios / zones especially useful for:
  ⓐ Consoludating N/w service from the local N/w onto single host

  ② private virtual N/w useful for development environment where you isolate Application and service from public N/w

Single host

```
   Zone 1                          Zone 2
   192.168.3.20                    192.168.3.22

              Exclusive IP

                                   VNIC
                                   192.168.3.22
   VNIC
   192.168.3.20
                      Virtual
                      switch
   Global
   Zone
                      e1000g0
                      192.168.3.700

                      LAN    192.168.3.0
```
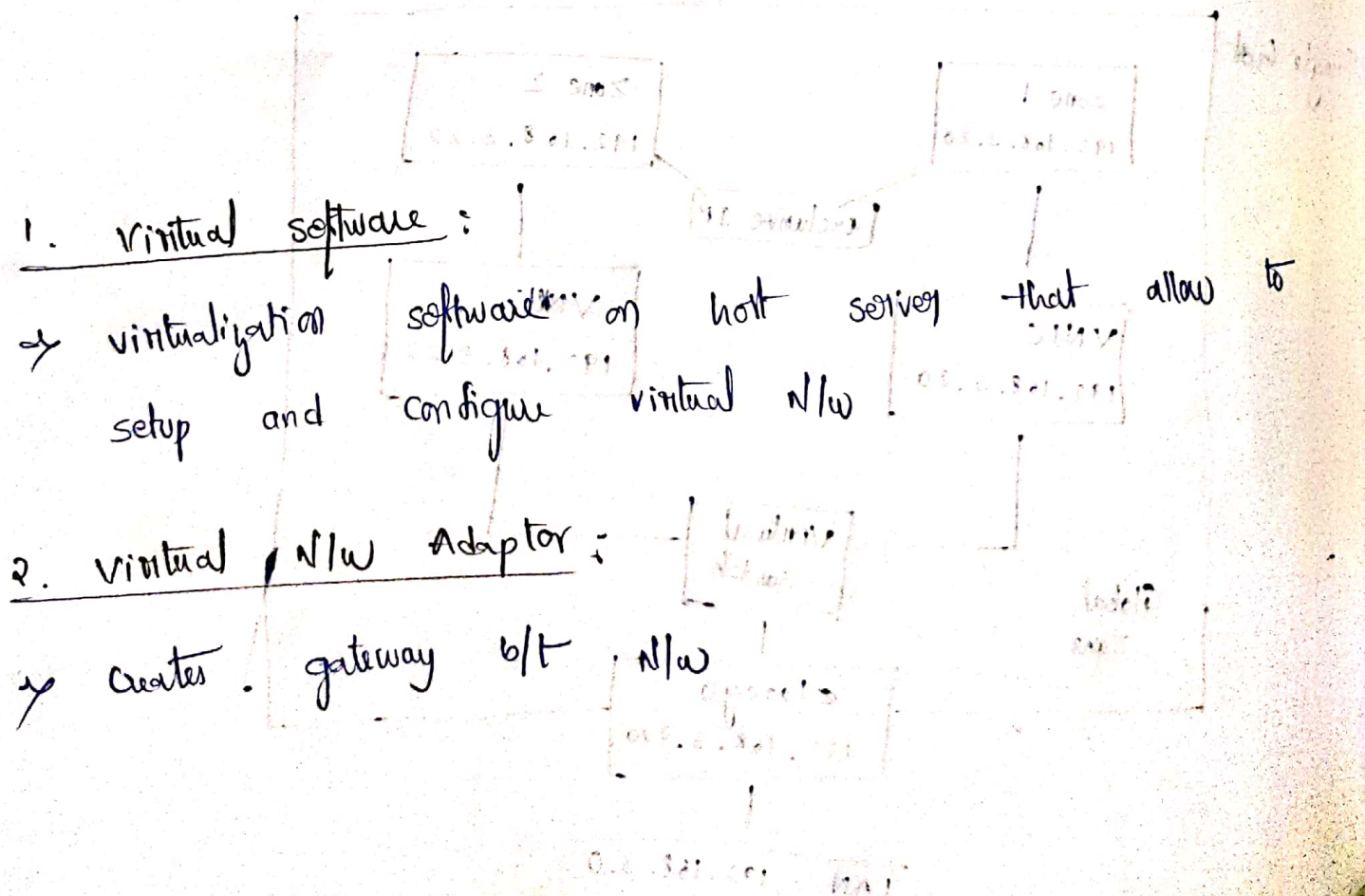
Private virtual Network

→ VNIC's and zones in this configuration allow access to the public there fore zone passes traffic beyond eloogo interface like wise user on external N/w can each application and service offered by the zone

Virtual N/w Technology

1. Virtual software
2. Virtual N/w Adaptor
3. physical N/w
4. Virtual machine & Devices
5. Servers
6. firewall and security

1. Virtual software :

→ virtualization software on host server that allow to setup and configure virtual N/w

2. Virtual N/w Adaptor :

→ Creates gateway b/t N/w

3. physical N/w :
- physical N/w required has a host for virtual N/w
  interface

4. virtual Machine of Devices :
- instruments that connect to N/w and allow various functionality

5. firewall and security :
- designed for monitoring and stopping the security threats

6. Servers :
- part of N/w host interface