

What is Networking

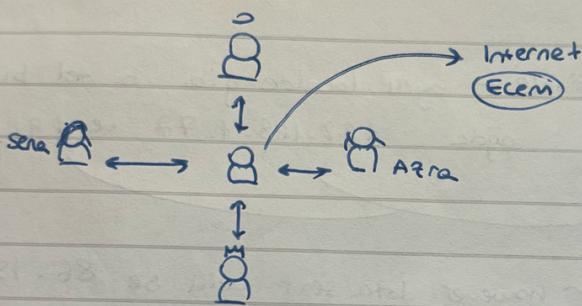


=> Network

2 ya da
daha fazla
nesne = lufturduyu ağ
degisebilir

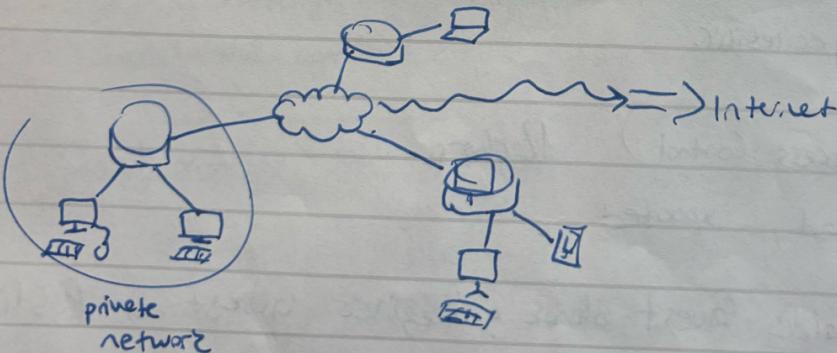
- Internet

• Giant Network



? forms a new network
Afra ve senə'nın iletişimini
sağlıyor
ben ittişle de aynı
dili懂得biliyorum.

- ilk deneme ARPANET 1960'lı seneleri US Defense Departm.
- 1989 WWW Tim Berners Lee



Identifying Devices

İsmiini deşifrelebilir ve portu izlemek için

İsim = IP address (P = Internet protocol)

Portu = MAC

IP = identifying host of a network for a period of time where that IP address can be associated w another device without the IP address changing.

IP addressing & subnetting for another day

oyun
area

T

IP can change from device to device but cannot be active simultaneously more than once within the same network

IPs follows protocols → backbone of networking force many devices to communicate in the same language. devices can be on both a private and public network depending on where they are will determine what type of IP address they have public or private

public → on internet

86.157.52.21

private → oyuncularde gibi bir tel bir PC oyun
oyna

192.168.1.77 ve 192.168.1.74

able 2 comm w each other however data sent will be 86.157.52.21
public IPs are given by ISP (Internet Service Provider)

IPv4 kullanıldığından ve IP adres sayısını qiderək oturğan bitcətəbi
bu yoldan IPv6'ye qələbələr.

M.A.C (Media Access Control) 12 chars

they can be forged, spoofed

otel, kafeler genelde Guest olurken girişinde Guest or Public

- END OF INFOSEC -- Intro to Networks -

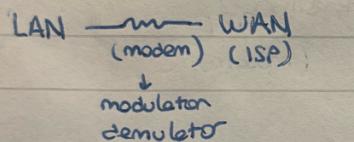
nodes: endpoint devices, indv. devices connected to a network

links: comm. pathways that connects nodes. (wired or wireless)

Data sharing : primary purpose

2 primary types → LAN local area → within building, small area speed ↑
 → WAN wide area → slower media → fiber optics, satellite

(LANs can connect to WANs)



modem converts digital signals to suitable transmission over various media like telephone lines
 fiber optics

- Network Concepts -- Open System Interconnection (OSI) model

conceptual framework that standardizes the func. of a telecomm.
 or computing systems into 7 abstract layers. This model can be used

1. Physical	Ethernet cables ...
2. Data links	switches, MAC ...
3. Network	routers, IP ...
4. Transport	TCP, UDP ...
5. Session	APIs, session protocols ...
6. presentation	Encryption protocols ...
7. Application	HTTP, SMTP, DNS ...

cat/etc/issue

- "ping"

ICMP (Internet Control message protocol) to determine performance
btwn devices

- The time taken for ICMP packets travelling btwn devices is measured by ping

- measuring is done by ICMP's echo packet and ICMP's echo reply from the
target device