Asadullah

CCNA

10/10/21

SAMII

① → Cisco → American company

② Huawei → China's product → strong Relation with China.
↳ Mostly used in Pak.

③ gumbler

④ Checkpoint → Israiel product.

② → Re
→ Huawei → cheapest in Rate
10 → Cisco → More Reliable.
Rs ↳ Life time is more.

→ Huawei Not use in Europe.
→ Cisco used in Europe.

↳ Cisco has users
↳ Cisco-ICE

Why We Stydy Cisco?
* All Venders have same concept.
* but CISCO is tough.

Cisco to Huawei → 80% cored → 20% Command.

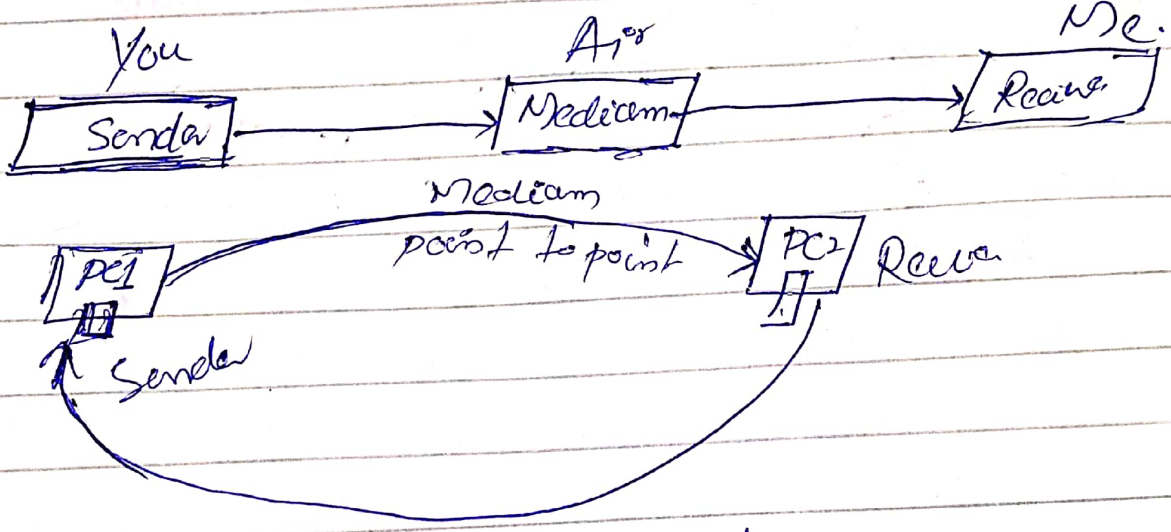
Huawei to Cisco is difficult.
60% 40% decreases.
20%
Concept Same 10% → only difference of Commands

HCIA → Huawei Certificate Associate

AP → Access point.
↳ Support 250 users.

Communication Model

① ↳ ~~Transceiver~~ Sender
② ↳ Receiver
③ ↳ Channel / Medium



Medium Two type.

Wired Wireless.

Electrical impulse (Coaxale cable)
↳ Light from ← fibers

for internet access use WAN

Networks.
LAN
WAN
WLAN
MAN

NIC → Network Interface CARd.

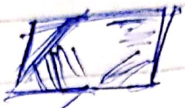
ONU → optical network unit

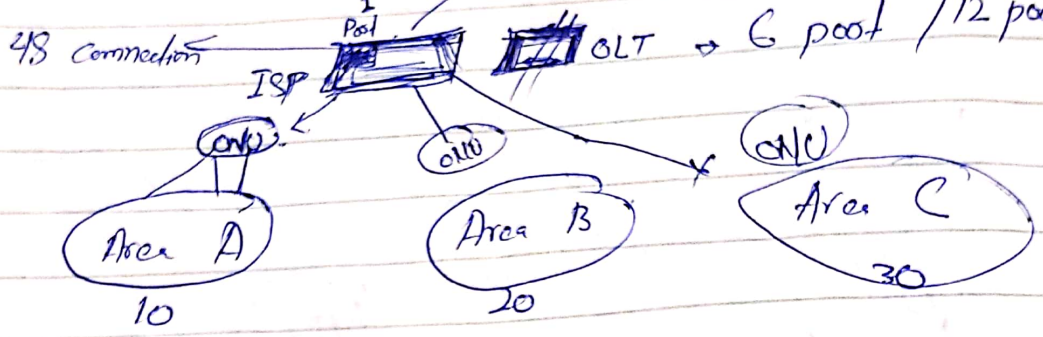
(FTTH)

→ HTTPS → Fiber to the Home

OLT → optical Line terminal

Defrantage
↓
Video Streaming good
Connection Loss is Less





→ fiber is expensive and dificult to instel.

→ Ethernet is easy to use and Cheapest.

① Switch

Repeater

→ in fiber No Concept of Repeat

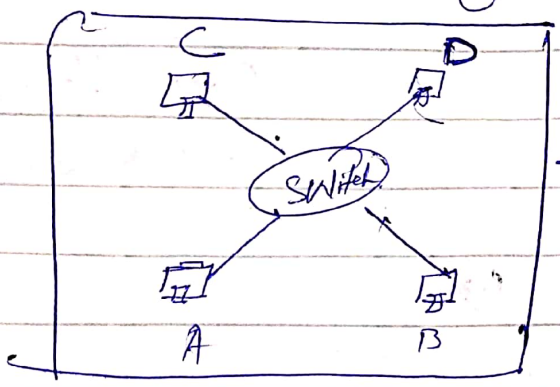
Repeat use in Long distan (1000 K

⇒ Routing Switching → 70%

30% → WLAN - Cloudis
↳ Seccurity.

Network:- Group of end device that can shared data to each other.

⇒ Interconnection of different devices.



→ different device connect each other devices. called Switch.

PING → Check Connectivity of two devices.
Command ① IP Address → 192.168.10.1
② MAC Address

* Without IP Communication is not performed

two Version of Ip.
IPV4 IPV6

For example PC1 → PC2 (communicate)

IPv4 → has four Octets. (8)

4 bytes ← 192. 168 . 10 . 1 ⇒ 32 bits.
10000000 8bit 8bit 8bits

1 byte → 8 bits.

2^{32} ⇒ Addresses.

Class A
A → 126
Class B
127 → 191
Class C
192 → 223
Class D
224 → 239
Class E
240 → 255

D → Multicast
E → Research

10.
/ 139 →

IPv4 has 2 part
① Network part ② Host part

* More Host bits Most Ips are get Out.

24 Host bits

Class	A	→	① Network 8 bit	③ Host 24 bit
Class	B		② Network 16 bit	② Host 16 b
Class	C		③ Network 24 bit	④ Host 8 bi

class A	Subnet	Mask
	255.	0. 0. 0
class B	255.	255. 0. 0
class C	255.	255. 255. 0

CISCO Packet Tracer