UbuCon Korea 2024

좌충우돌 DebConf24 인프라 구축기

이동민(Dongmin Lee)
신도윤(Doyun Shin)
김경택(Gyeongtaek Kim)

DebConf24?

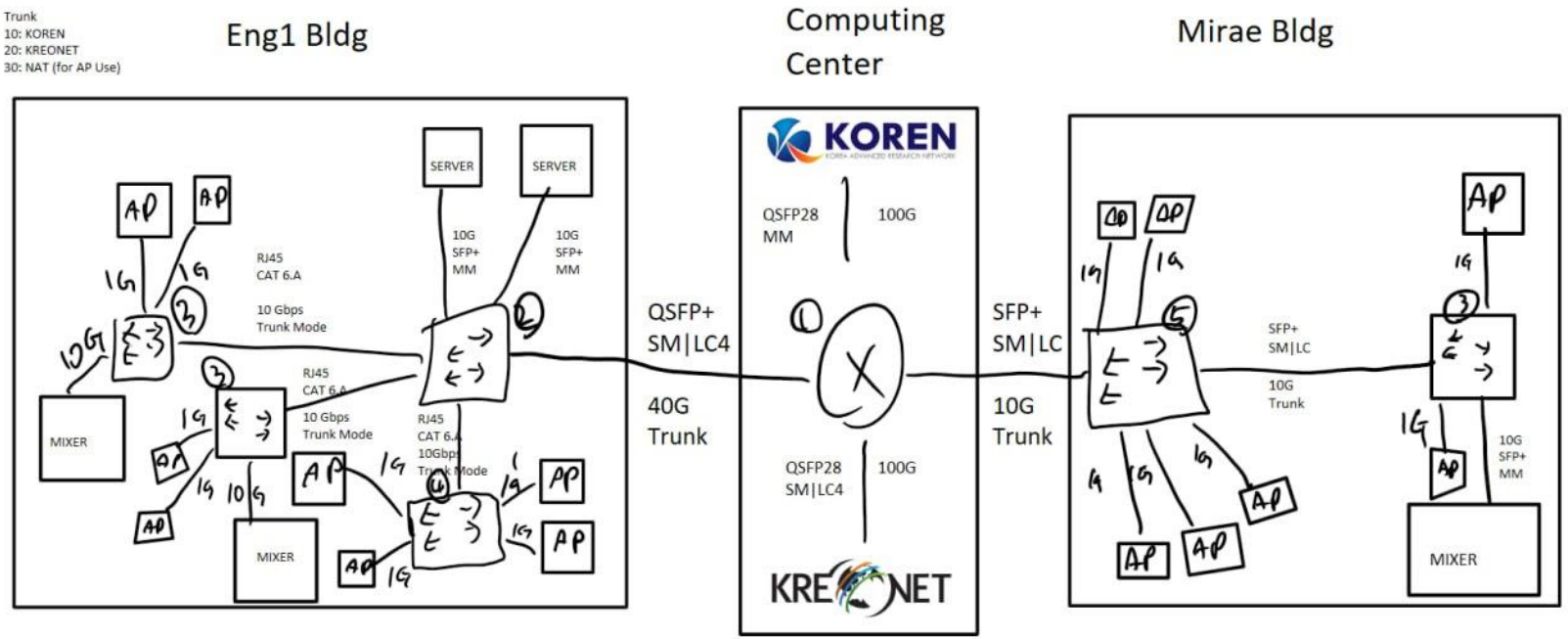
And then I realised. My kind of people ... I am surrounded by my kind of people.
Debconf 24
Busan, South Korea
Next year:
Debconf 25
Brest, France
BREST
DebConf 25

초기 구상 1

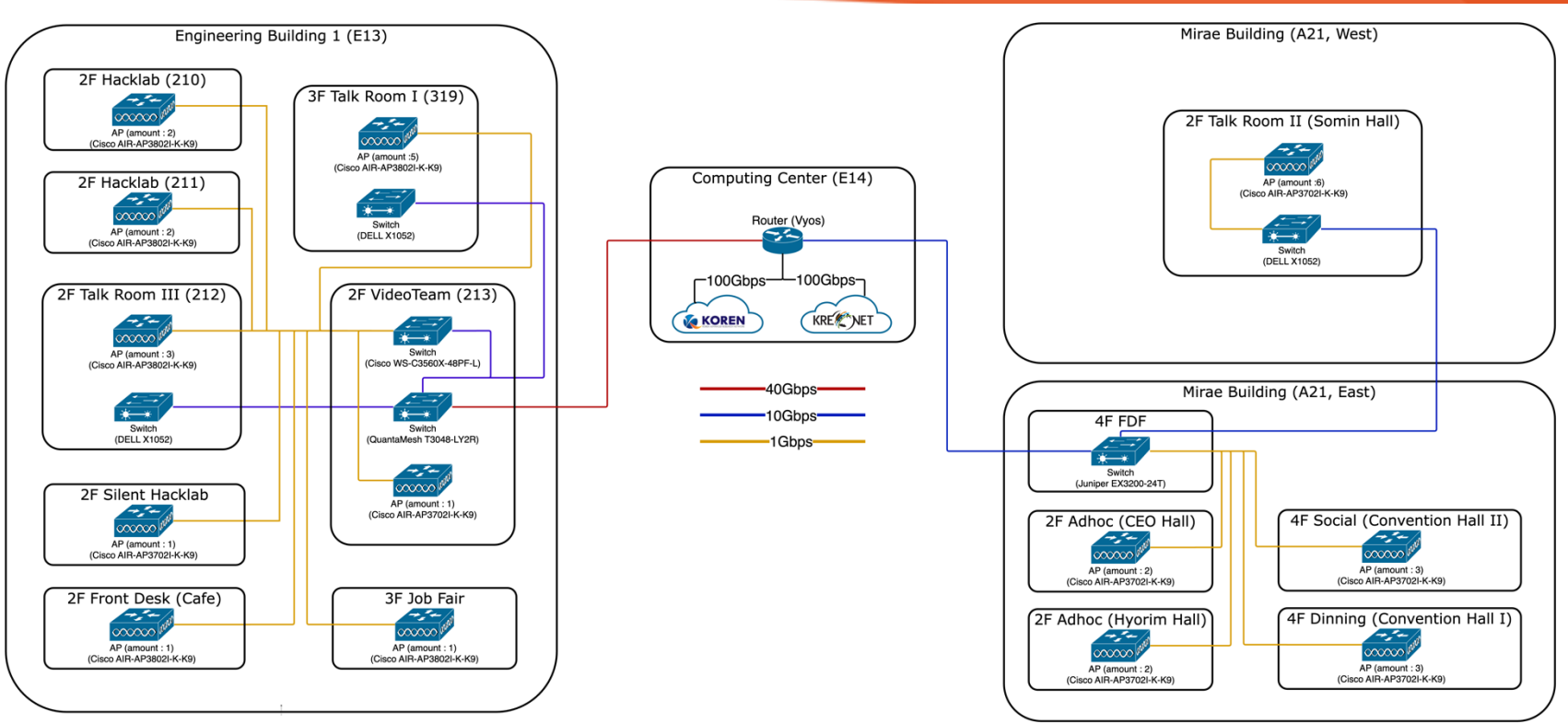
1: Supermicro VyOS 100G + 40G
2: QuantaMesh T3048-LY2R
3: Dell X1052
4: CISCO WS-C3560X-48PF-L
5: Juniper EX3200-24T

Trunk
10: KOREN
20: KREONET
30: NAT (for AP Use)

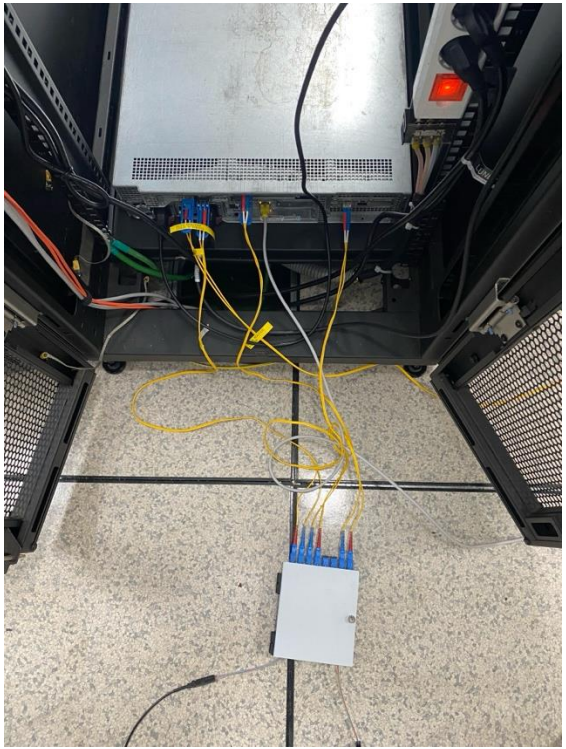
Public Ips will be assigned to servers



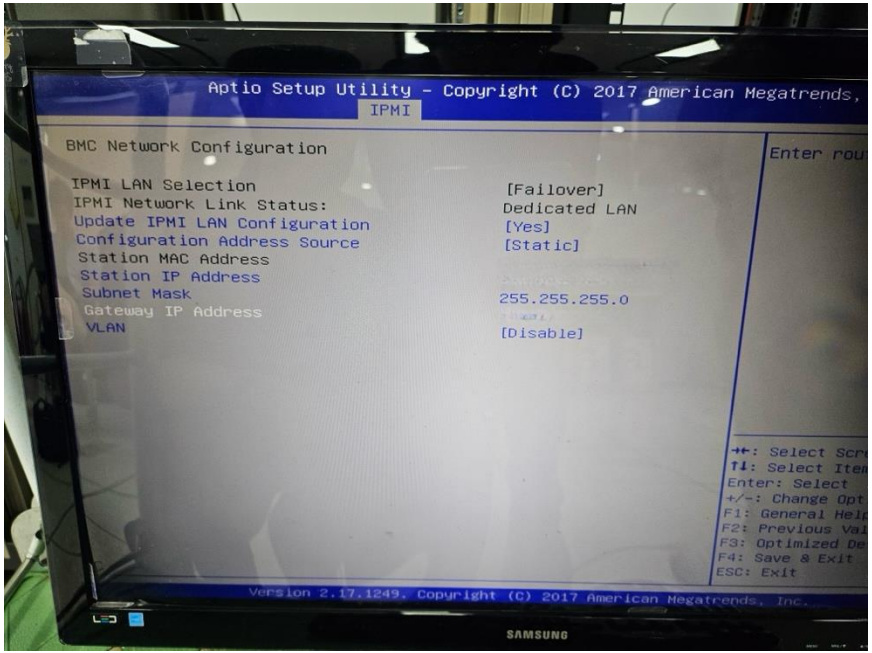
초기 구상 2

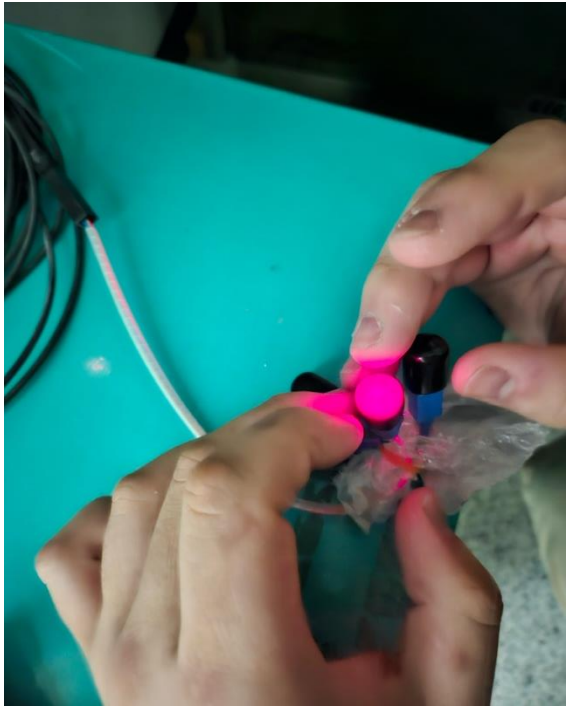

Engineering Building 1 (E13)
2F Hacklab (210)
AP (amount : 2)
(Cisco AIR-AP3802I-K-K9)
2F Hacklab (211)
AP (amount : 2)
(Cisco AIR-AP3802I-K-K9)
2F Talk Room III (212)
AP (amount : 3)
(Cisco AIR-AP3802I-K-K9)
Switch
(DELL X1052)
2F Silent Hacklab
AP (amount : 1)
(Cisco AIR-AP3702I-K-K9)
2F Front Desk (Cafe)
AP (amount : 1)
(Cisco AIR-AP3802I-K-K9)
3F Talk Room I (319)
AP (amount :5)
(Cisco AIR-AP3802I-K-K9)
Switch
(DELL X1052)
2F VideoTeam (213)
Switch
(Cisco WS-C3560X-48PF-L)
Switch
(QuantaMesh T3048-LY2R)
AP (amount : 1)
(Cisco AIR-AP3702I-K-K9)
3F Job Fair
AP (amount : 1)
(Cisco AIR-AP3802I-K-K9)
Computing Center (E14)
Router (Vyos)
100Gbps
100Gbps
KOREN
KREONET
40Gbps
10Gbps
1Gbps
Mirae Building (A21, West)
2F Talk Room II (Somin Hall)
AP (amount :6)
(Cisco AIR-AP3702I-K-K9)
Switch
(DELL X1052)
Mirae Building (A21, East)
4F FDF
Switch
(Juniper EX3200-24T)
2F Adhoc (CEO Hall)
AP (amount : 2)
(Cisco AIR-AP3702I-K-K9)
2F Adhoc (Hyorim Hall)
AP (amount : 2)
(Cisco AIR-AP3702I-K-K9)
4F Social (Convention Hall II)
AP (amount : 3)
(Cisco AIR-AP3702I-K-K9)
4F Dinning (Convention Hall I)
AP (amount : 3)
(Cisco AIR-AP3702I-K-K9)

커스텀 라우터



커스텀 라우터 (cont.)


Aptio Setup Utility – Copyright (C) 2017 American Megatrends,
IPMI
BMC Network Configuration
IPMI LAN Selection [Failover]
IPMI Network Link Status: Dedicated LAN
Update IPMI LAN Configuration [Yes]
Configuration Address Source [Static]
Station MAC Address
Station IP Address
Subnet Mask 255.255.255.0
Gateway IP Address
VLAN [Disable]
Enter: Select
F1: General Help
F2: Previous Val
F3: Optimized De
F4: Save & Exit
ESC: Exit
Version 2.17.1249. Copyright (C) 2017 American Megatrends, Inc.
SAMSUNG



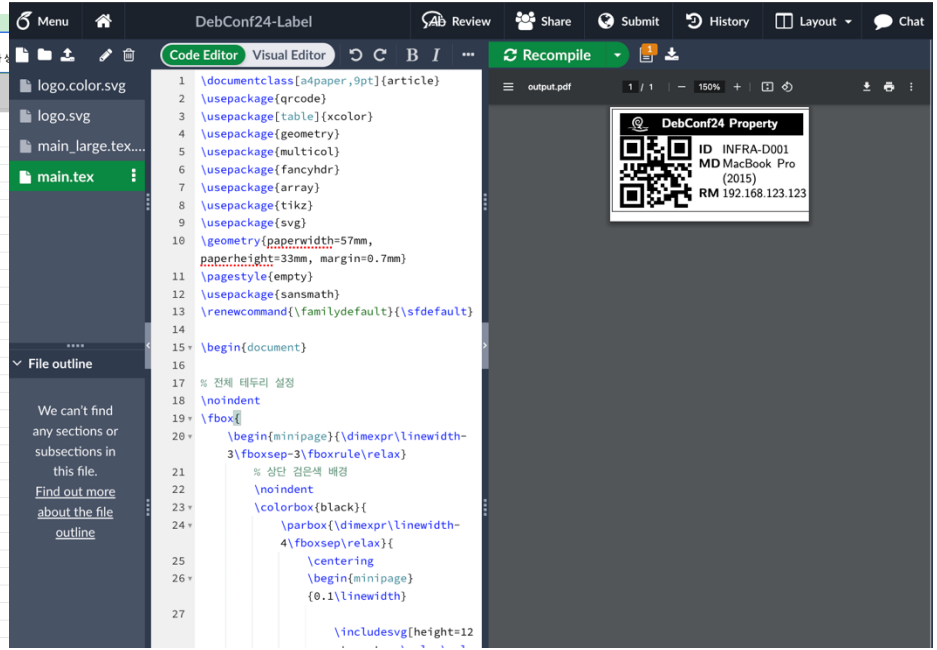
사용된 장비 벤더

- Vyos
- QuantaMesh
- Juniper
- Cisco
- Dell

Asset Management Label

- Made with LaTeX and pdflatex

	A	B	C	D	E	F	G	H
1	** 안내사항 ** Team ~ 소유자까지 모두 값이 있어야 재고 ID가							
2	재고 ID (자동생성)	Team	카테고리	No.	용도	모델명	소유자	도착예정일자
3	INFRA-A001	INFRA	Network	1	Router	Supermicro VyOS	Infra Team	
4	INFRA-A002	INFRA	Network	2	Switch	QuantaMeshT3048-LY2R	Infra Team	
5	INFRA-A003	INFRA	Network	3	Switch	Juniper EX3200-24T	Infra Team	
6	INFRA-A004	INFRA	Network	4	Switch	Dell X1052	Infra Team	
7	INFRA-A005	INFRA	Network	5	Switch	Dell X1052	Infra Team	
8	INFRA-A006	INFRA	Network	6	Switch	Dell X1052	Infra Team	
9	INFRA-A007	INFRA	Network	7	Switch	Cisco WS-C3560X-48PF-L	Infra Team	
10	INFRA-A008	INFRA	Network	8	Switch Module	Cisco C3KX-SM-10G	Infra Team	
11	INFRA-A009	INFRA	Network	9	GBIC	40G QSFP LC SM 2KM	Infra Team	
12	INFRA-A010	INFRA	Network	10	GBIC	40G QSFP LC SM 2KM	Infra Team	
13	INFRA-A011	INFRA	Network	11	GBIC	10G SFP+ LC MM 300M	Infra Team	
14	INFRA-A012	INFRA	Network	12	GBIC	10G SFP+ LC MM 300M	Infra Team	
15	INFRA-A013	INFRA	Network	13	GBIC	10G SFP+ LC MM 300M	Infra Team	
16	INFRA-A014	INFRA	Network	14	GBIC	10G SFP+ LC MM 300M	Infra Team	
17	INFRA-A015	INFRA	Network	15	GBIC	10G SFP+ LC MM 300M	Infra Team	
18	INFRA-A016	INFRA	Network	16	GBIC	10G SFP+ LC MM 300M	Infra Team	
19	INFRA-A017	INFRA	Network	17	GBIC	10G SFP+ LC SM	Infra Team	
20	INFRA-A018	INFRA	Network	18	GBIC	10G SFP+ LC SM	Infra Team	
21	INFRA-A019	INFRA	Network	19	GBIC	10G SFP+ LC SM	Infra Team	
22	INFRA-A020	INFRA	Network	20	GBIC	10G SFP+ LC SM	Infra Team	
23	INFRA-A021	INFRA	Network	21	GBIC	XFP SM LR 10KM	Roul	
24	INFRA-A022	INFRA	Network	22	PoE 인젝터	PoE 인젝터	Infra Team	
25	INFRA-A023	INFRA	Network	23	PoE 인젝터	PoE 인젝터	Infra Team	
26	INFRA-A024	INFRA	Network	24	PoE 인젝터	PoE 인젝터	Infra Team	
27	INFRA-A025	INFRA	Network	25	PoE 인젝터	PoE 인젝터	Infra Team	
28	INFRA-A026	INFRA	Network	26	PoE 인젝터	PoE 인젝터	Infra Team	
29	INFRA-A027	INFRA	Network	27	PoE 인젝터	PoE 인젝터	Infra Team	
30	INFRA-A028	INFRA	Network	28	PoE 인젝터	PoE 인젝터	Infra Team	
31	INFRA-A029	INFRA	Network	29	PoE 인젝터	PoE 인젝터	Infra Team	
32	INFRA-A030	INFRA	Network	30	PoE 인젝터	PoE 인젝터	Infra Team	



그래서 어떤 결과를 얻었는가?

Traffic:

- Total upstream bandwidth: 200 Gbps
- KREONET (In) 1.12 TB (Out) 6.75 TB
- KOREN (In) 437 GB (Out) 75 GB

Deployments:

- Access Point deployed: 20
- Fibres deployed: 1.6 km
- UTP deployed: 2.2 km
- Cables out of windows: 5 = (3 x UTP) + (2 x Fibres)

고장난 것들..

Brokens:

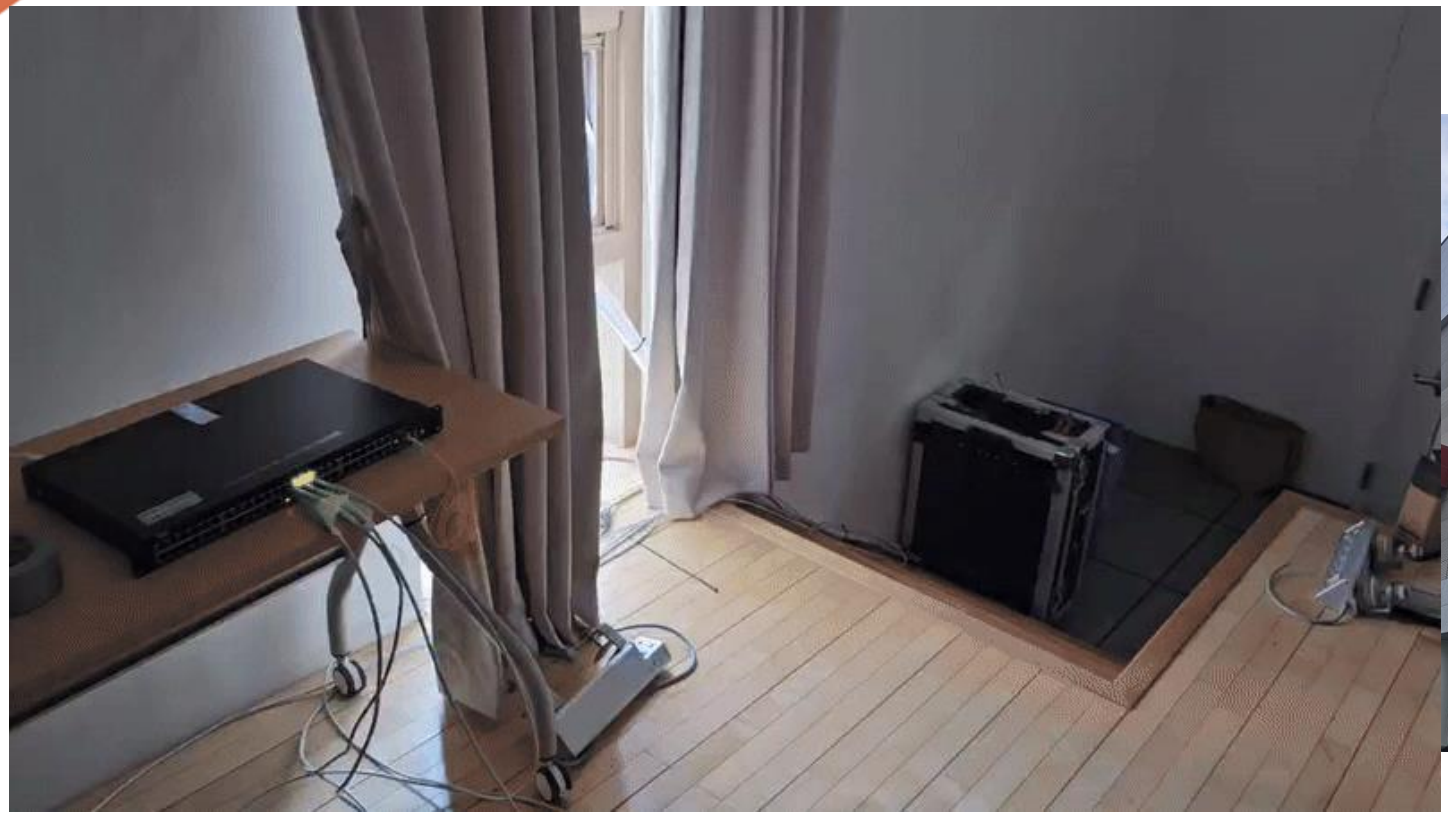
- Broken Fibre: 1
- Broken Wireless Microphone: 1
- Univ. PCs that now run Debian: 1 (was Windows)
- Uplinks eagerly torn down: 1

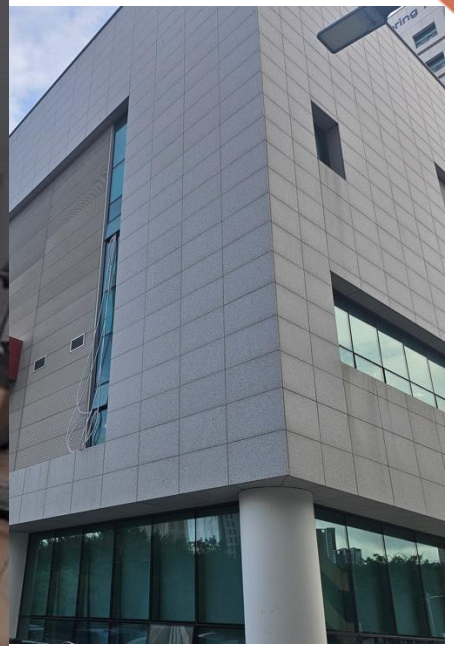
회선 연결 (물리)

UTP: 2.2 km

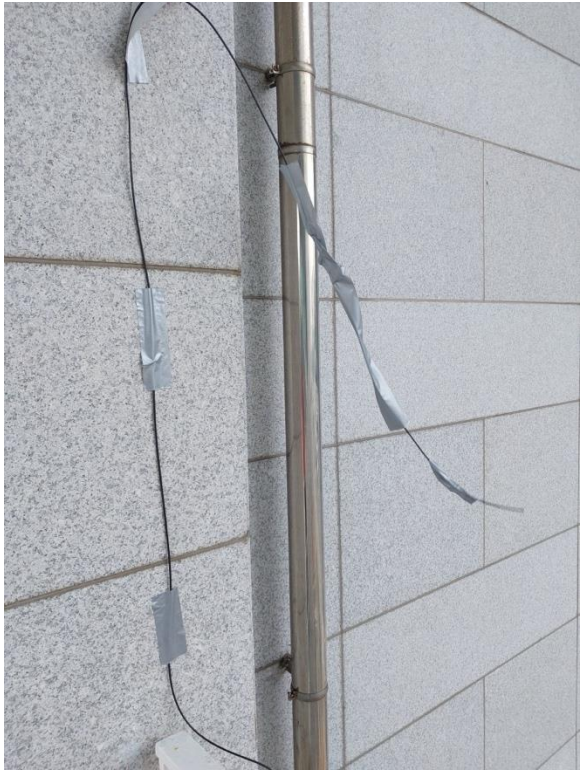
Fiber: 1.6 km

Cables out of windows

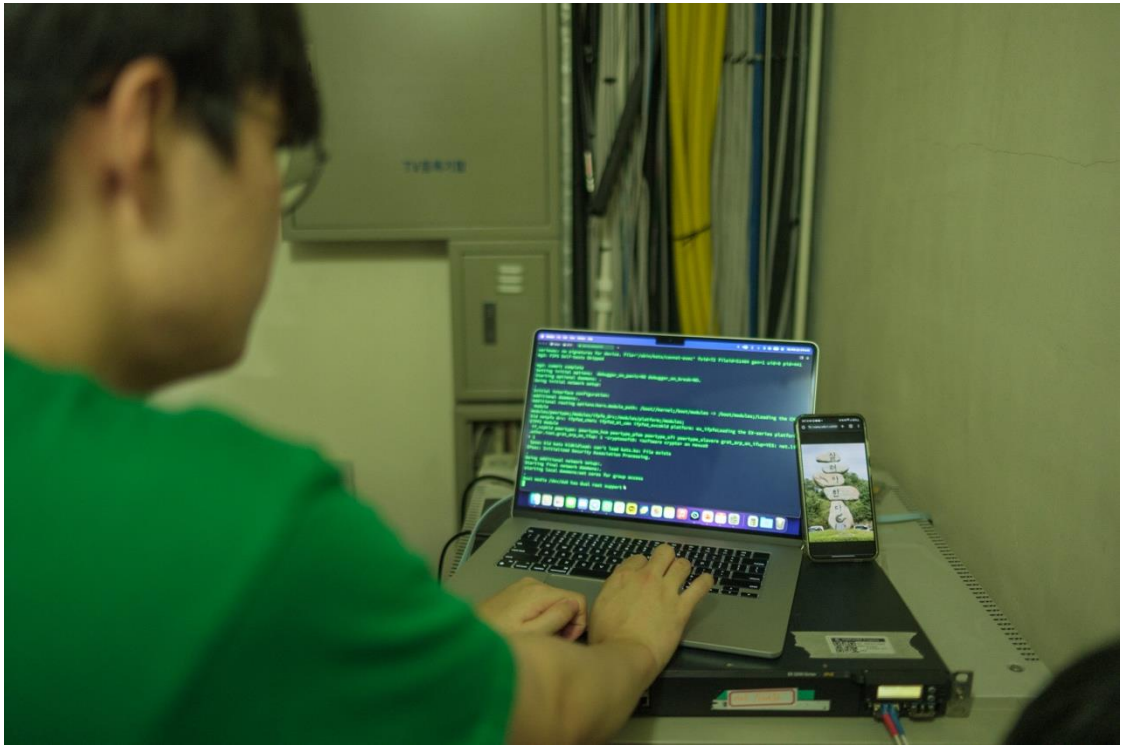


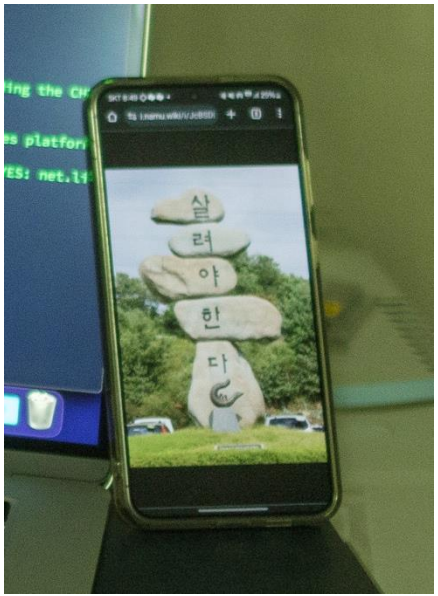


사고 1



사고 2





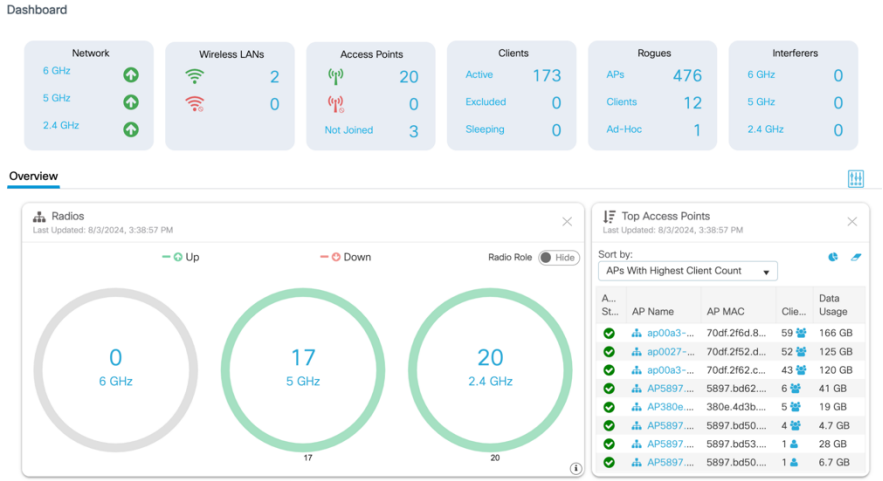
사고 3

Brokens:

- Broken Fibre: 1
- Broken Wireless Microphone: 1
- Univ. PCs that now run Debian: 1 (was Windows)
- Uplinks eagerly torn down: 1

사고 4

changwoo
label.pdf?
id=%EA%B0%801&model=%EA%B3%A0%EB%A0%A4%EC%B2%AD%EC%9E%90&remark=%EC%98%A4%EC%9E%89 와 한글넣으니 500이닷
%EA … %89 = 고려청자
ldmsys
저게 latex에서 한글 지원 패키지를 집어넣어줘야 지원이 되는데 지원을 넣을생각 조차 안했군요
changwoo
장난이예요. 불필요하면 넣지 마시고..
Giyeon bang
ㅋㅋㅋㅋㅋㅋㅋㅋㅋ
ldmsys
고려청자만 안들고오시면 어지간한 장비는 영어로 집어넣을 수 있을 것 같습니다
ldmsys
label.pdf?id=INFRA-A023&model=PoE%20%EC%9D%B8%EC%A0%9D%ED%84%B0&remark=
PoE … %B0 = PoE 인젝터
changwoo: 고려청자 말고 재물관리대장에 모델명 한글이 있어서 고쳤습니다
DebConf24 Property
ID A
MD 고려청자
RM 오잉
사실 ID가 QR코드 만들때 쓰여서 ID에 한글 집어넣으시면 렌더링 안됩니다

Access Point

- Cisco CAPs isn't Configurable Standalone