

“Video Conferencing over IPv6 in YBU and YUST”

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1. Experiment Steps

- a. IPv6 Router Setup
 - a.1 with PC
 - a.2 with Cisco or other router
(when procured in 2006/2007)
- b. Testing at YBU and/or YUST
- c. Testing between YBU and YUST
- d. Testing between YBU/YUST and CERNET/Korea

2. Key items for video conferencing over IPv6

- H.323 (IPv4) - done
- MPEG2 SDTV/HDTV - done
- SDTV with DV - done

- IPv6 Testbed Setup and Test
 - IPv6 Host Setup - done
 - IPv6 PC Router Setup - will do
 - SDTV with DV Test - will do
 - MPEG2 SDTV/HDTV Test - will do

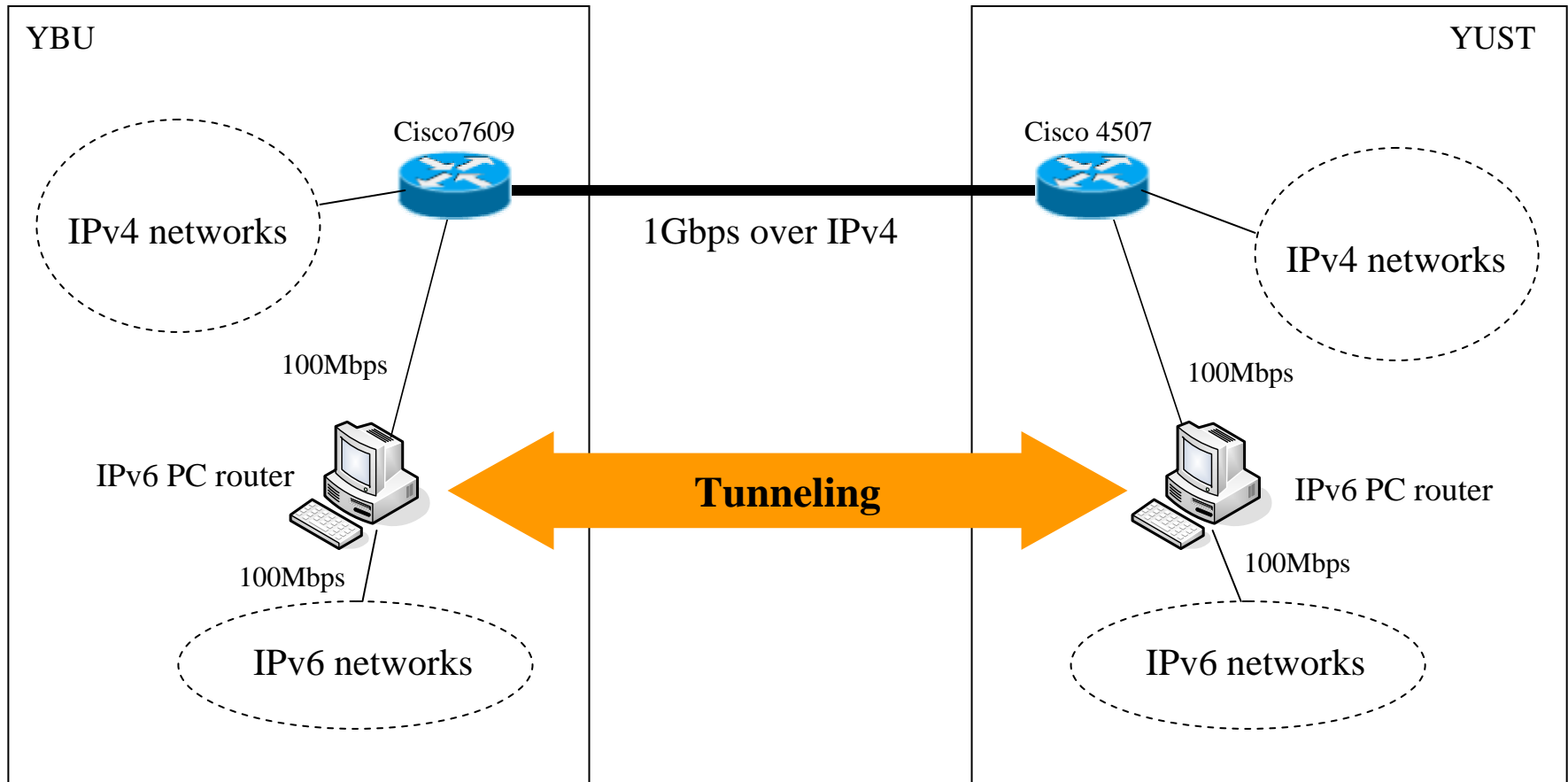
- YBU-KAIST Test
 - H.323 (IPv4) - done
 - 2.5 Mbps video without CoS - on going
 - 2.5 Mbps video with CoS (?) - will do

- IPv6 Network Investigation
 - IPv6 Router Upgrade Budget - on going
 - IPv6 Router Price Investigation - on going

3. Upgrade Charge of Cisco Routers to Support IPv6

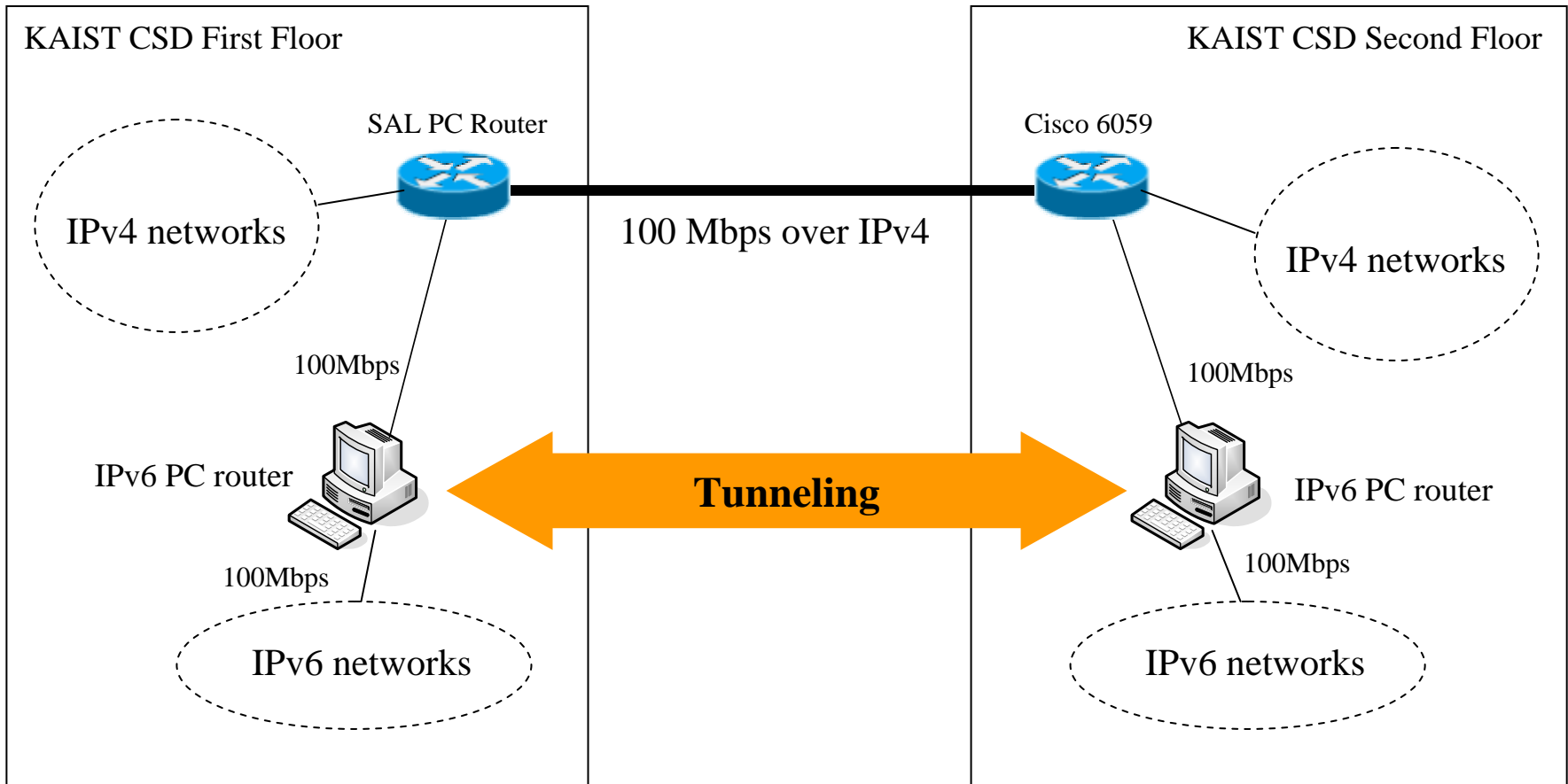
- To upgrade IOS (Operating System)
=> \$ 24,000 (?)
- To exchange Supervisor Module
=> \$ 68,000 (?)
- To purchase the lowest price of IPv6 edge router
=> \$ 15,000 ~ 20,000

4. YBU – YUST Experiment with IPv6 PC routers



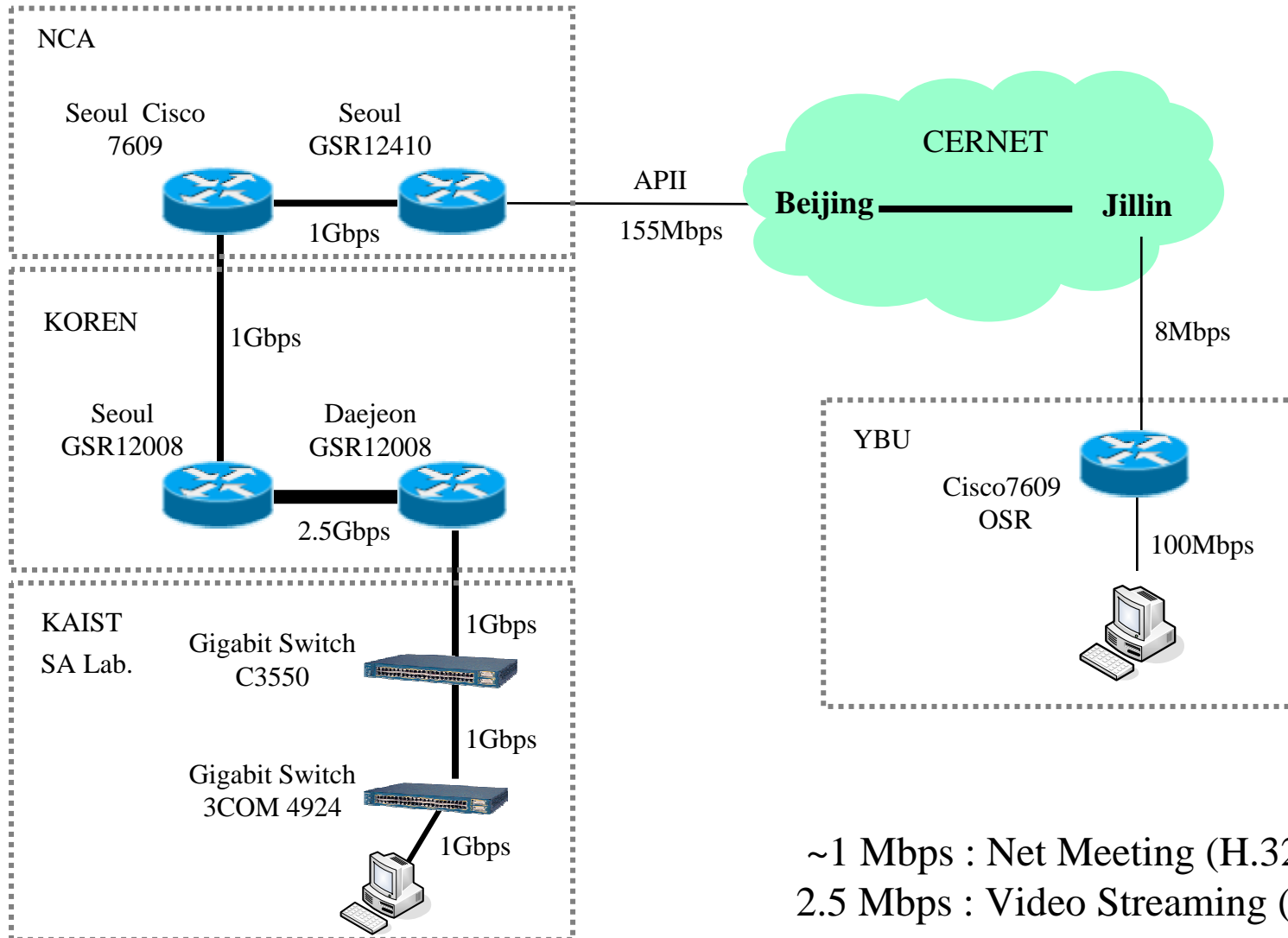
- MPEG2 SDTV / HDTV (20 Mbps)
- SDTV with DV (30Mbps)

5. Testbed : SAL – KAIST CS Department



- MPEG2 SDTV / HDTV (20 Mbps)
- SDTV with DV (30Mbps)

6. Network Diagram between YBU and KAIST over IPv4



~1 Mbps : Net Meeting (H.323)
2.5 Mbps : Video Streaming (DVD)

Appendix: Development Plan at YUST and YBU – Initial Thought

A.1 Development in Yanbian

a. Campus

Polycom

Skype with Fxxxx

SDTV/MPEG(with Skype)

HDTV(with Skype) - option

b. YUST - YBU

Polycom

Skype with Fxxx

SDTV/MPEG(with Skype)

A.2 YUST-YBU - Jilin

(option)

A.3 YUST/YBU - (CERNET/CSTNET/Beijing) - KAIST/Korea

Polycom

Skype with Fxxxx

SDTV/MPEG(with Skype); CoS option

HDTV - option(in 2006-7 after YBU-CERNET upgrade)

B. Funding

B.1 YBU

YBU - CERNET Link Upgrade(8 -> 45/155 Mbps)

B.2 CERNET2/CNGI for Network Infrastructure (Router,..)

B.3 Project Funding

Korea: KOSEF, MOE

China: NSFC, Others

B.4 Others

Industry