

# “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

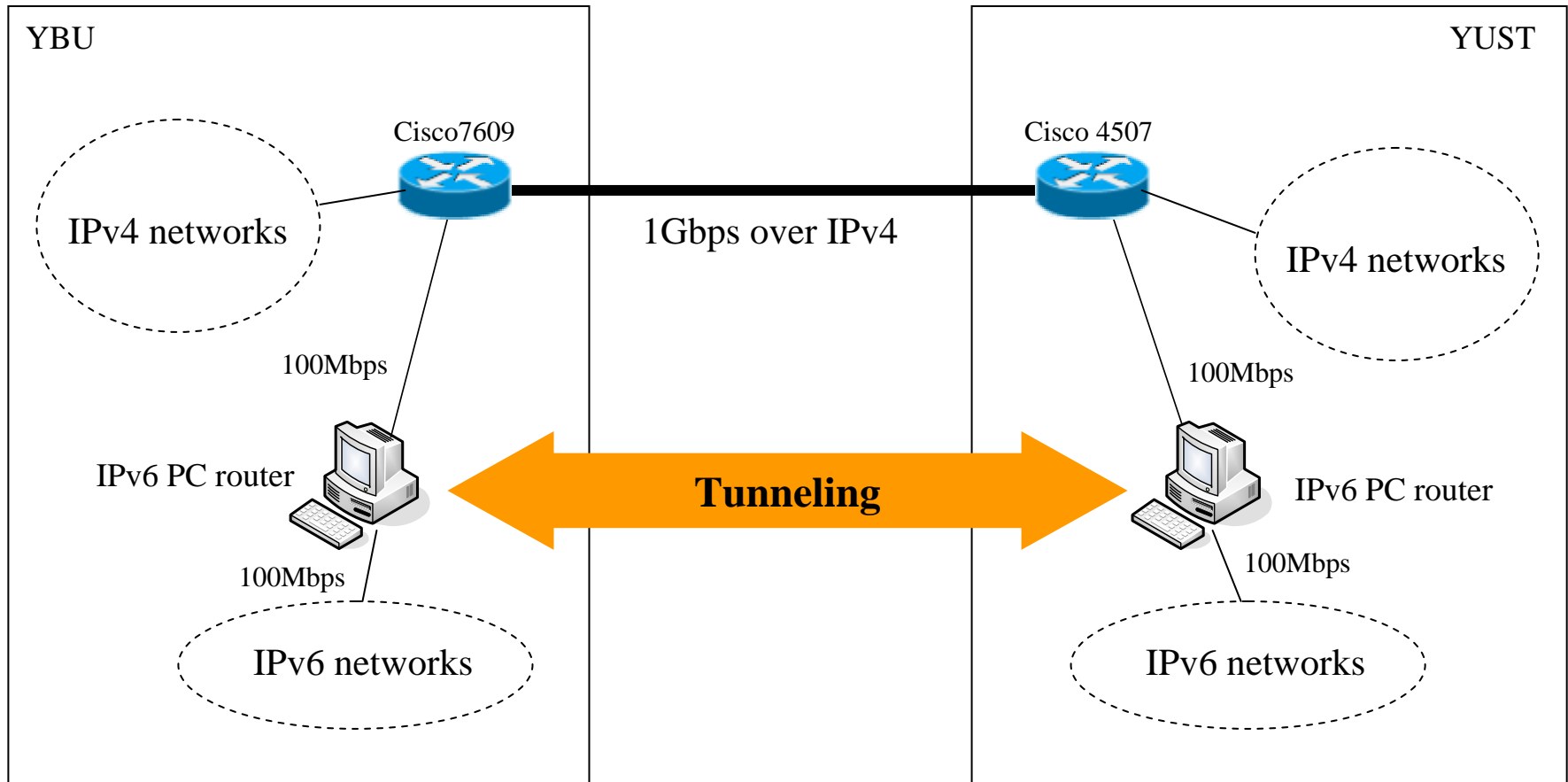
## 2. Key items for video conferencing over IPv6

- 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

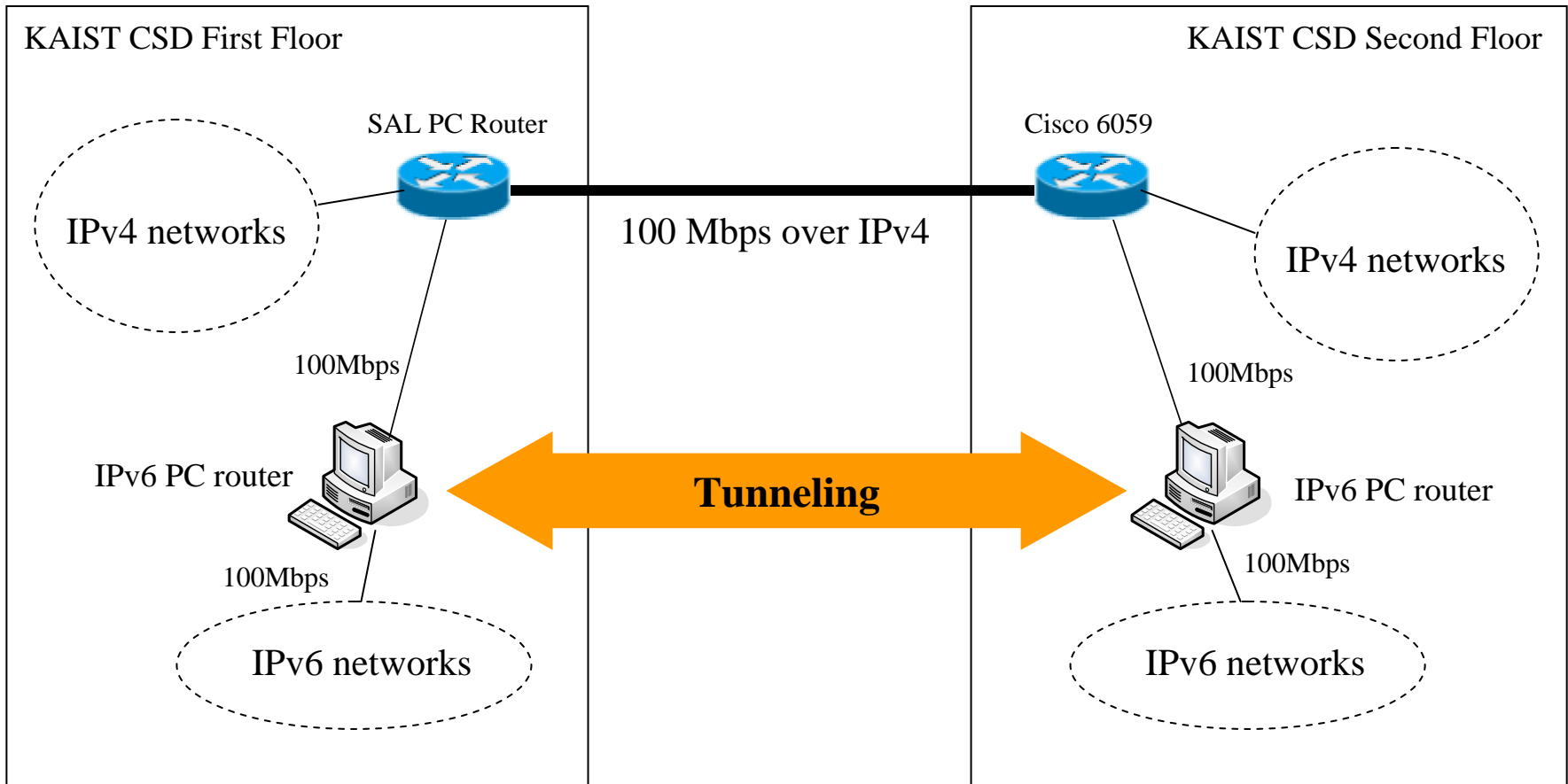
- To upgrade IOS (Operating System)  
=> \$ 24,000 (?)
- To exchange Supervisor Module  
=> \$ 68,000 (?)
- To purchase the lowest price of IPv6 edge router  
=> \$ 15,000 ~ 20,000

# 4. YBU – YUST Experiment with IPv6 PC routers



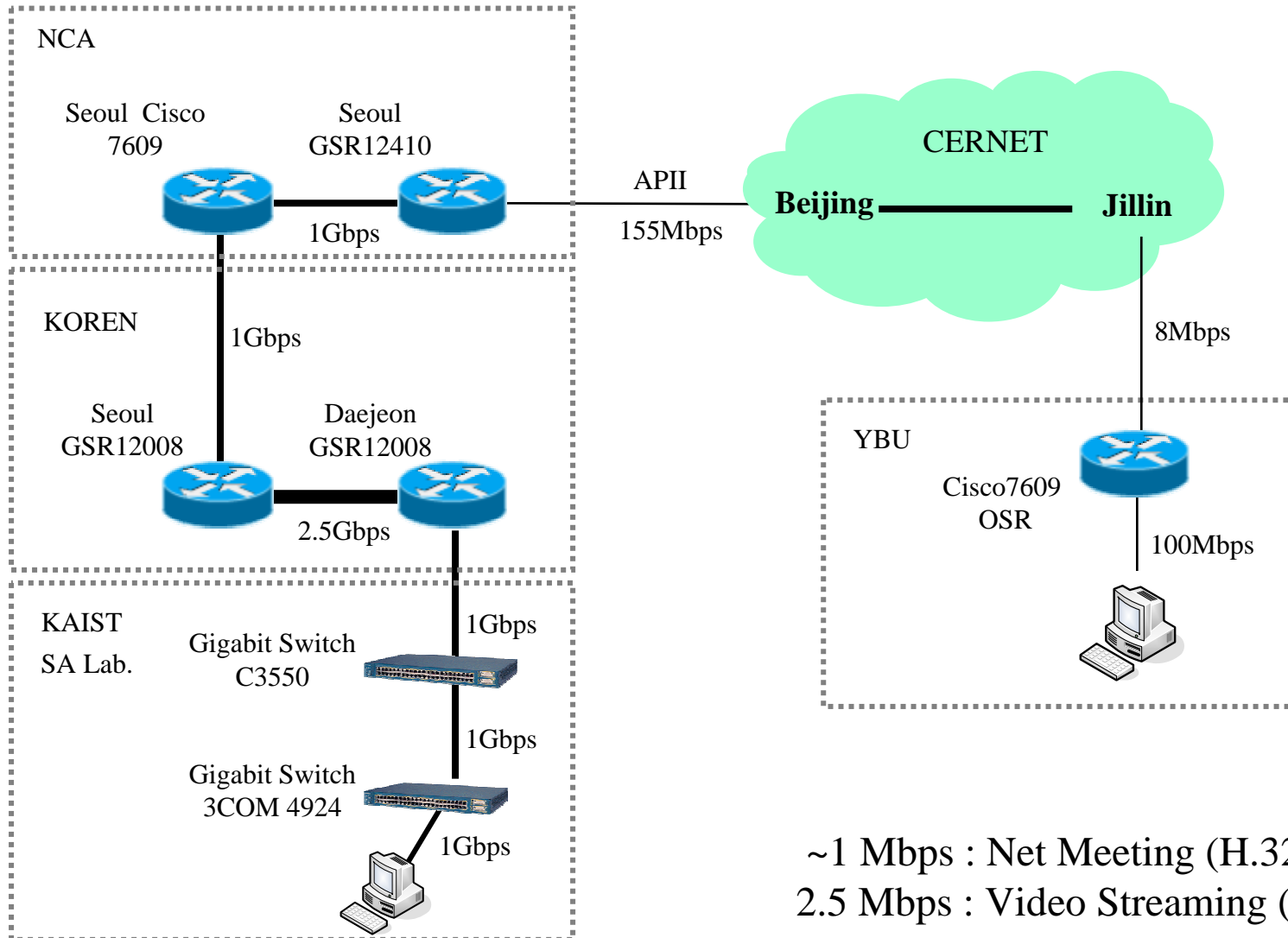
- MPEG2 SDTV / HDTV (20 Mbps)
- SDTV with DV (30Mbps)

# 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