

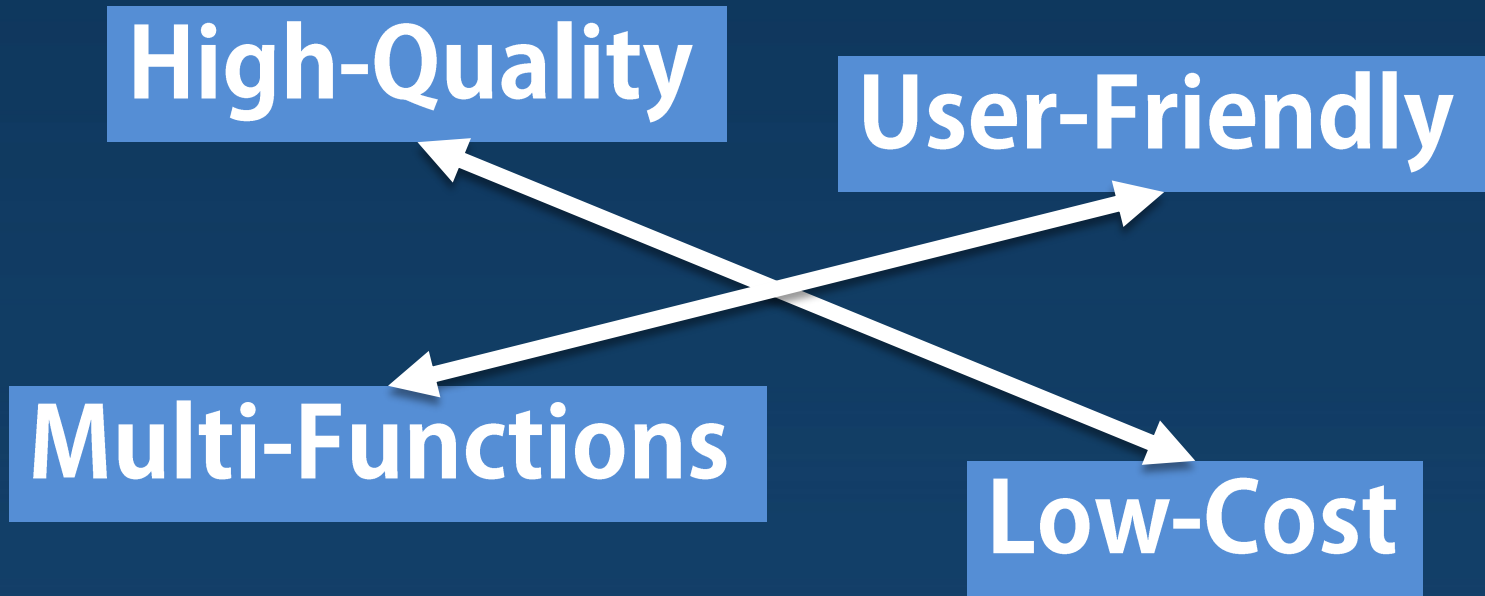
Updates of Teleconference Systems

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Which System is the Best for Medical Conference?



There's no Perfect System

The Best System Depends on the Case

Contents

Only Discussion



Presentation



Live Surgery



Environment in All Hospitals

Hospital A

Academic NW
Exclusive Hardware
Big Conference Room



Hospital B

Low-Bandwidth
No Static IP
Laptop Only



Teleconference Systems in TEMDEC

Manufactured by Polycom, Lifesize, Sony, etc



H.323

DVTS



Free software developed by WIDE project since 1998

Multipoint teleconference system conformable to H.264

Vidyo



Teleconference Systems in TEMDEC

Manufactured by Polycom, Lifesize, Sony, etc



H.323

H.323

- **Network**

Connection with Static IP

- **Bandwidth**

10Mbps or less

- **Equipment**

- **Exclusive Hardware**

Manufactured by Polycom, Sony, Lifesize, etc...

There's compatibility between manufacturers

- **Software**

for PC, Mobile or Tablet



H.323 Connection (1)

Point to Point

Point A



IP: xxx.xxx.xxx.xxx

LAN

Inter
net

LAN

Point B



IP: xxx.xxx.xxx.xxx

H.323 Connection (2)

Multipoint Connection

Point B

IP: xxx.xxx.xxx.xxx



Point C

IP: xxx.xxx.xxx.xxx



Point A

IP: xxx.xxx.xxx.xxx



Inter
net

Inter
net

Inter
net

LAN

LAN

LAN

Multipoint Control Unit

IP: xxx.xxx.xxx.xxx



133.5.??.???

Teleconference Systems in TEMDEC

DVTS



Free software developed by WIDE project since 1998

DVTS

- **Network**

Connection with Static IP

- **Bandwidth**

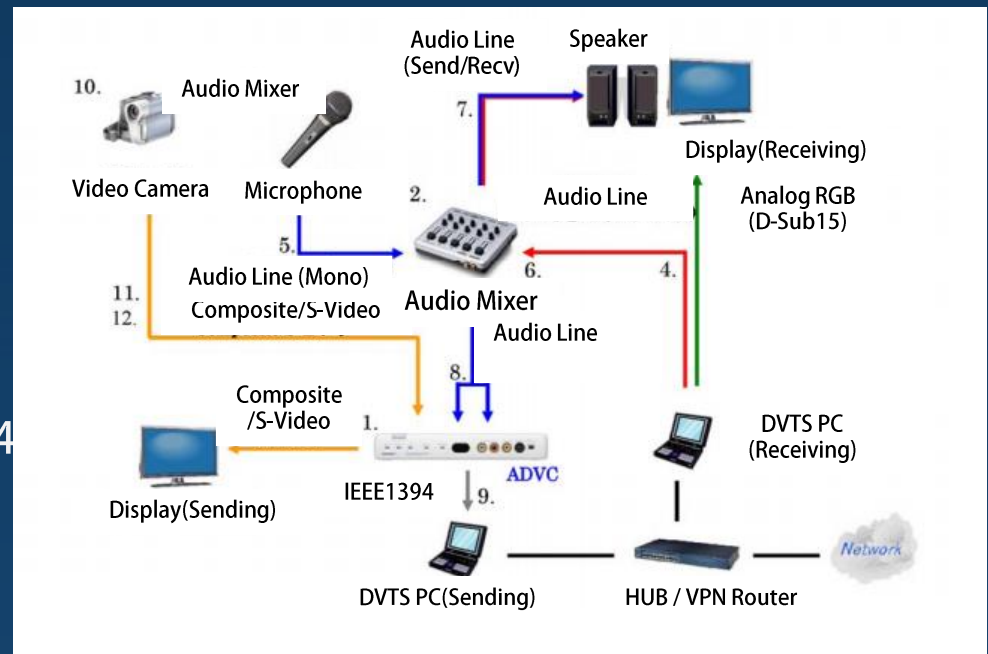
30Mbps

- **Equipment**

- Commercial Products

- PC equipped with IEEE1394
- AV devices

- Software



Teleconference Systems in TEMDEC

Multipoint teleconference system conformable to H.264



Vidyo

- **Network**

DHCP or Global IP

- **Bandwidth**

Few Mbps

- **Equipment**

- Exclusive Hardware

- **Software**

for PC, Mobile or Tablet



Vidyo®

Vidyo Endpoint

- **VidyoDesktop (PC Application)**
Requires PC and AV devices
(Webcam, Mic, Speaker)
User can have Content Sharing
(Only still pictures)
- **Vidyo Mobile (Mobile Application)**
for iPhone and Android
- **Vidyo Room (Exclusive Hardware)**
\$10,000 or higher
User can have Content Sharing
(including Movie clip)

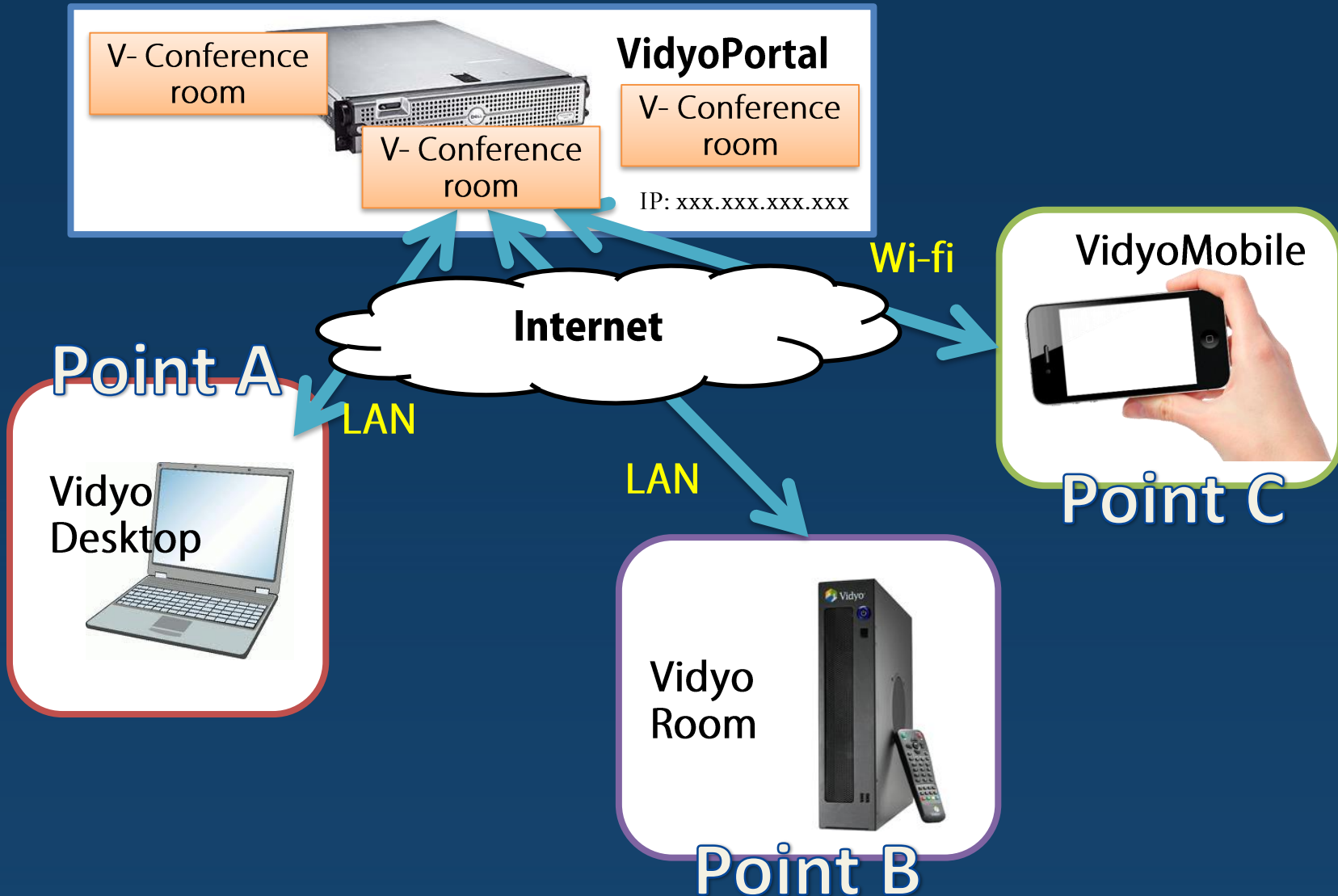


Vidyo Desktop



Vidyo Room

Vidyo Connection



Vidyo Streaming

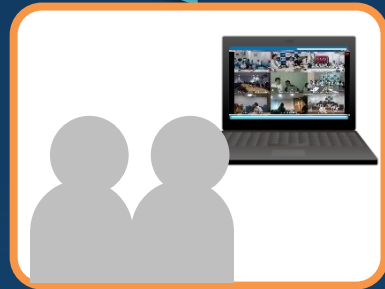


VidyoPortal

V- Conference room



Vidyo replay



Comparison of 3 Systems

In case of Kyushu University Hospital

System	H.323		DVTS	Vidyo	
Type	Hardware	Software	Software	Hardware	Software
Resolution	SD or HD	SD or HD	SD	HD	HD
Bandwidth	Less than 10 Mbps	Less than 10 Mbps	30Mbps	Few Mbps	Few Mbps
Camera	Video camera	Web camera	Video camera	Video camera	Web camera
Content-Sharing	OK	Partial	OK	OK	Partial
Static IP	Required	Required	Required	Not Required	Not Required
Price	\$2000~\$30000	\$200	\$0	\$10,000	\$0
Multipoint connection	20	20	16	40	40
Difficulties	Easy	Easy	Difficult	Easy	Easy

Which system is popular in TEMDEC activity?

