One Month Training Program

(for Engineer)

TEMDEC - Kyushu University Hospital

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by:

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Advanced Science and Technology Institute - Philippines

TEMDEC Telemedicine Development Center of Asia (TEMDEC)

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DOST-ASTI

Objective of the Program

- Understand how the telemedicine event is realized
- Check the quality level of telemedicine
- How the different teleconferencing system works
- Technical preparation and how to handle problems during the session
- Organize a telemedicine session with home institution or hospital

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TEMDEC Conference Room

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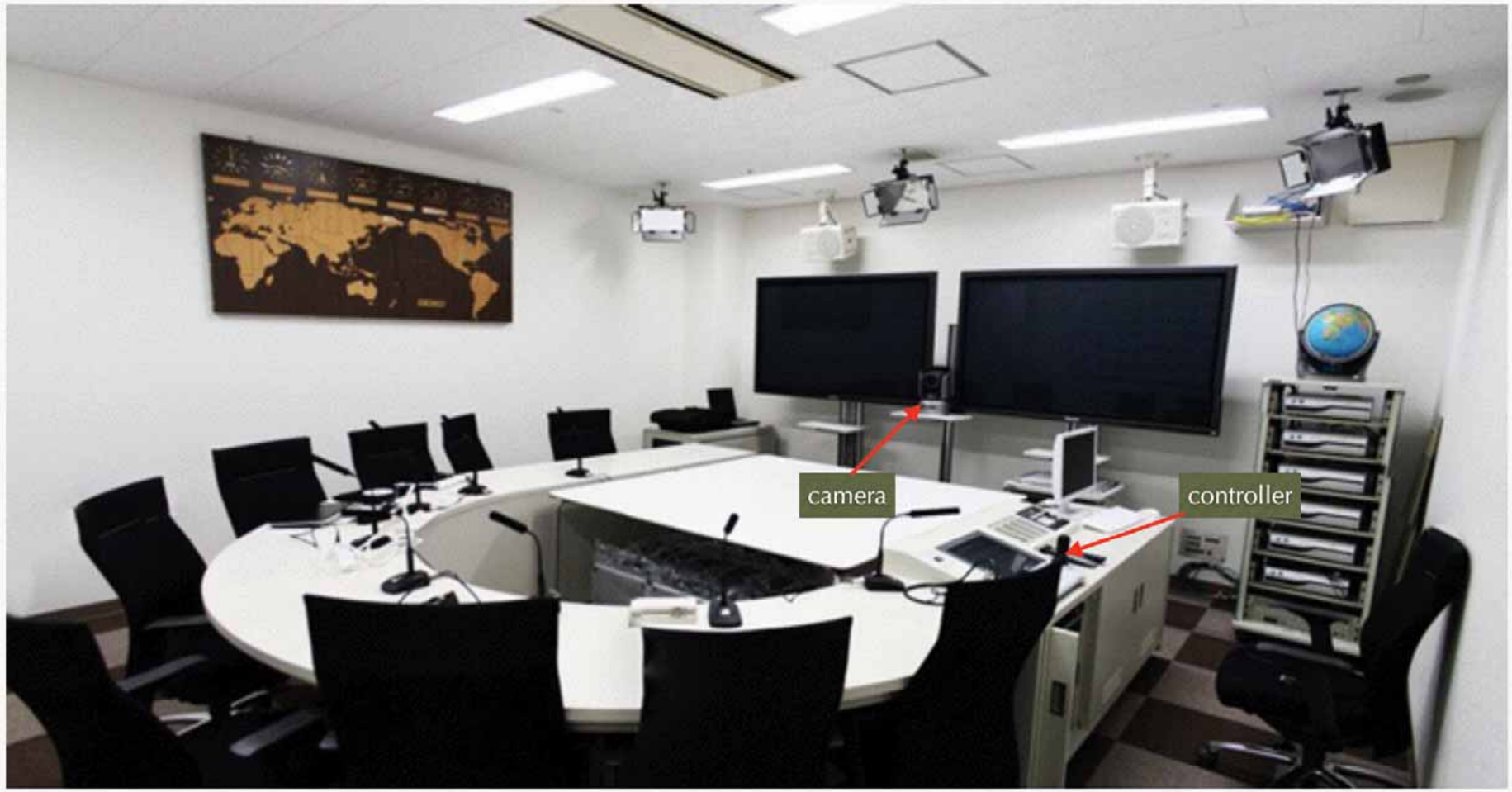

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TEMDEC Conference Room

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Sony PTZ camera

PTZ camera controller

Video Mixer

Audio Mixer

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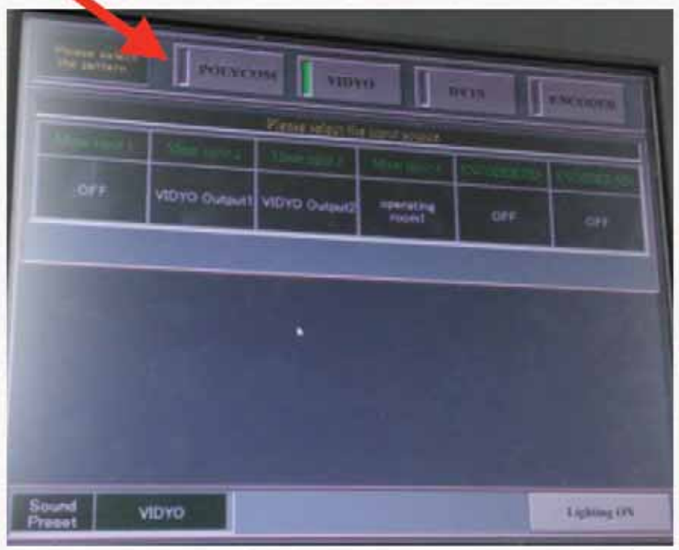
TEMDEC Video Conferencing Equipment

Polycom HDX 9000 (h323)

Control Panel



VidyoRoom HD-230

TEMDEC Video Conferencing System

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- VidyoPortal
- VidyoRouter
- VidyoGateway
- VidyoReplay
- H323 MCU (Polycom RMX)
- DVTS

Roles of the Personnel

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Organizer

1. The main task is to make a program for teleconference.
2. Decide the following items.
    1) Topic of the conference and the brief introduction of the session.
    2) Date and time for the session, keeping the time differences in mind.
    3) Chairperson(s) and co-chair(s)
    4) Presenters and their presentation titles.
3. Ask doctors in each site to find engineers for technical support and put their names on the program.
4. Collect bio and abstract of each presenter and presentation, when necessary.
5. Arrange whole program into the final form.
6. Cooperate in making reports after the session.

Chief engineer

1. Contact with the organizer to start the collaboration.
2. Contact with other local engineers to decide the system to be used.
3. Send technical annoucement (How to connect, Schedule for test) to the mailing list.
4. Organize connection tests for the session. Help solve the problems in all participating sites.
5. Prepare for the accident during the session, controling the MCU, communicate by chat with engineers in each sites.

Local engineers in each site

1. When asked for technical support, contact with the doctors in each site to start the collaboration.
2. Check Internet and equipment, necessary for the teleconference.
3. Join the test connections before the conference, checking images and sounds.
4. Trouble shootings.
5. Prepare Skype for backup communications.
6. Technical support during the session.
7. Take local pictures during the session for the report later.

- http://www.temdec.med.kyushu-u.ac.jp/eng/conference_role.html

Important Reminders

- Always MUTE your microphone when not speaking
- Do not forget to STOP sharing after you present.
- Use a back channel for communication for engineers (AdobeConnect)
- Conduct test connection for audio and video quality prior the event
- Always have a back-up plan for contingency

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AdobeConnect

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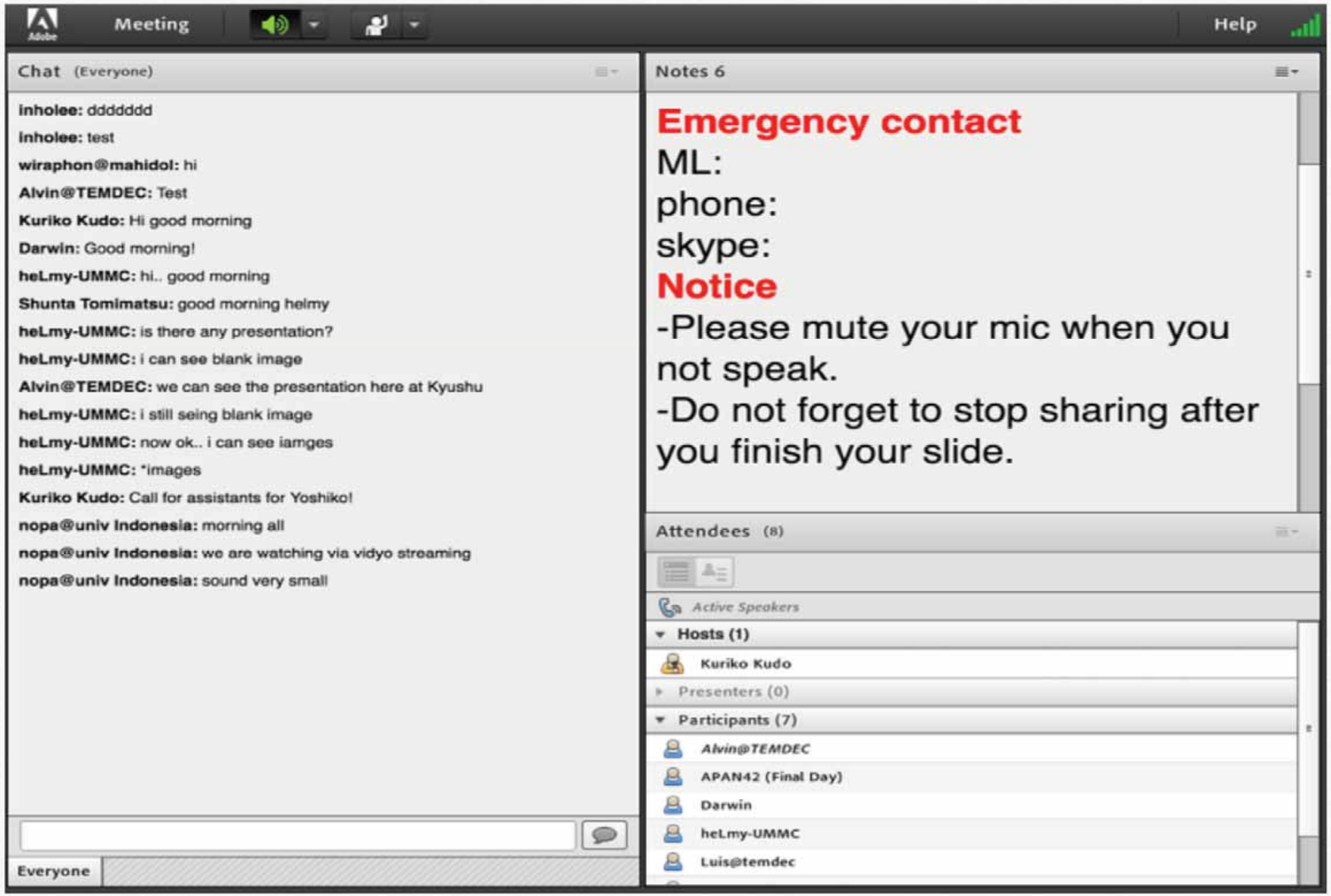

Activities During Training

- Child cancer telemedicine session (15 sites)
- Vidyo tutorial and check their video conferencing equipments
- Setup vidyoroom HD-40 (experience problem with speakerphone)
- Test network connection and Vidyoroom at Hotel Nikko
- APAN42 Hongkong preparation and connection testing
- Participate in technology session of APAN42
- Support SLMC and ADMU for their APAN session

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APAN42 Session

MWG Session	Institution	Medical Staff Engineer
HPB	St. Lukes Medical Center	Dr. Katherine Panganiban Dr. Caroline Malimas
Endoscopy	East Avenue Medical Center	Dr. Milben Abril Malbog
Fetus	University of the Philippines Manila	Dr. Valerie Guinto Dr. Pauline Lim-Reyes
MIS	St. Lukes Medical Center	Dr. Jeffrey Domino
Rural Healthcare	UP Manila Ateneo de Manila University	Dr. Alvin Marcelo Dr. Dennis Batangan
Engineering	Advanced Science and Technology Institute UP Manila	Alvin de Gracia Darwin Laurencio

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APAN42 Session

Dr. Dennis Batangan ADMU joins Rural Healthcare Session

Dr. Milben Malbog of EAMC joins ECE session

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APAN42 Session

St. Lukes Medical Center joins HPB session

Dr. Alvin Marcelo, moderator for Rural Healthcare session

Telemedicine Network of the Philippines

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TNP Local Meeting during APAN41 Manila

TNP Members

- Aborlan Medicare Hospital
- Baguio General Hospital
- Davao Doctors Hospital
- National Kidney and Transplant Institute
- St. Lukes Medical Center
- University of Cebu Medical Center
- UP Manila / Philippine General Hospital
- Veterans Memorial Medical Center
- Advanced Science and Technology Institute

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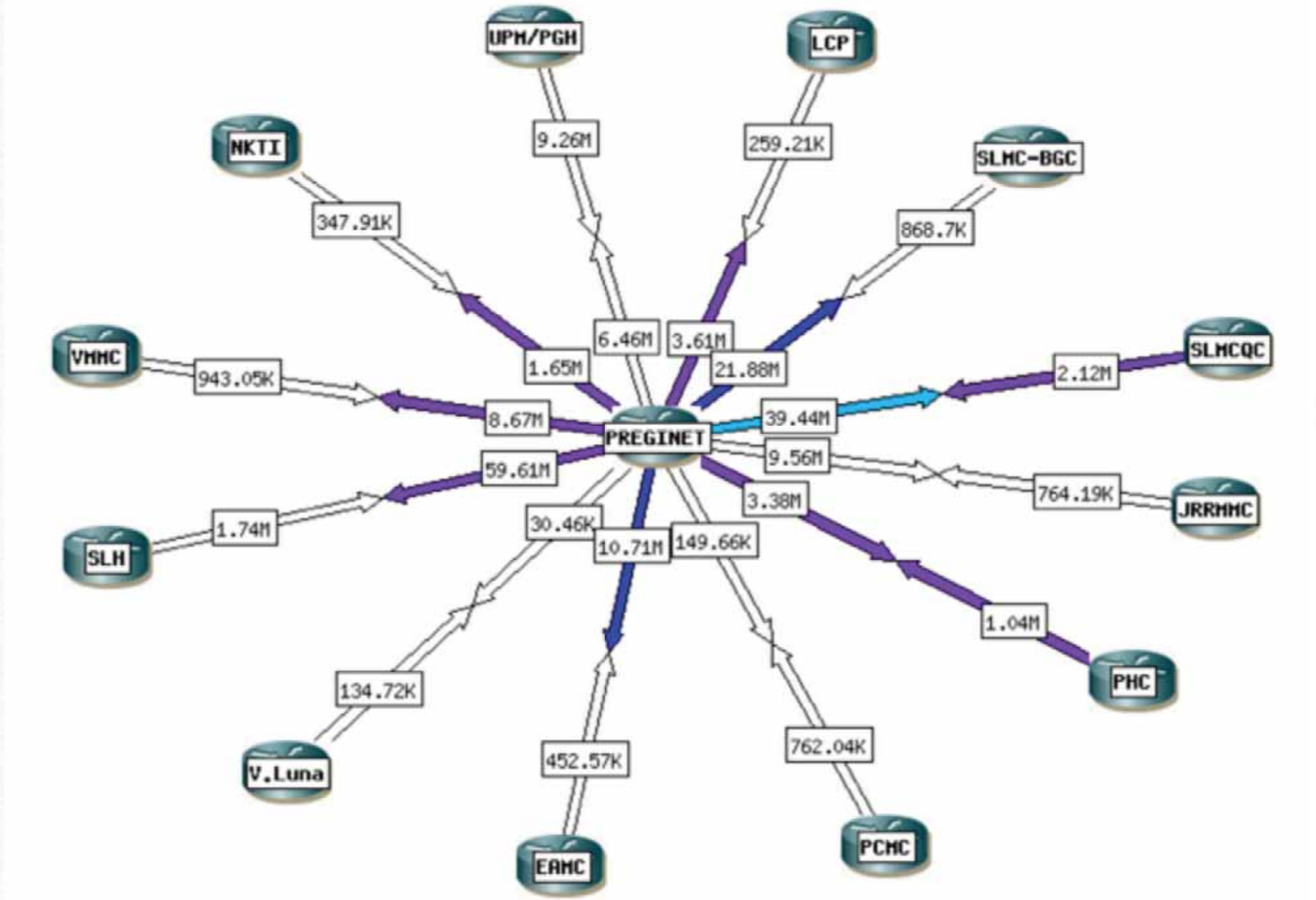
Hospitals Connected



- currently 12 hospitals connected

Network Test from TEMDEC

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```
opss-MacBook-Pro:dev alvin$ ping vidyoportal.i.gov.ph
PING vidyoportal.i.gov.ph (202.90.153.201): 56 data bytes
64 bytes from 202.90.153.201: icmp_seq=0 ttl=50 time=71.614 ms
64 bytes from 202.90.153.201: icmp_seq=1 ttl=50 time=71.713 ms
64 bytes from 202.90.153.201: icmp_seq=2 ttl=50 time=84.521 ms
64 bytes from 202.90.153.201: icmp_seq=3 ttl=50 time=71.987 ms
64 bytes from 202.90.153.201: icmp_seq=4 ttl=50 time=72.911 ms
64 bytes from 202.90.153.201: icmp_seq=5 ttl=50 time=89.990 ms
64 bytes from 202.90.153.201: icmp_seq=6 ttl=50 time=71.594 ms
64 bytes from 202.90.153.201: icmp_seq=7 ttl=50 time=73.533 ms
64 bytes from 202.90.153.201: icmp_seq=8 ttl=50 time=71.879 ms
64 bytes from 202.90.153.201: icmp_seq=9 ttl=50 time=71.698 ms
^C
--- vidyoportal.i.gov.ph ping statistics ---
10 packets transmitted, 10 packets received, 0.0% packet loss
round-trip min/avg/max/stddev = 71.594/75.144/89.990/6.207 ms
opss-MacBook-Pro:dev alvin$
```

```
opss-MacBook-Pro:dev alvin$ traceroute vidyoportal.i.gov.ph
traceroute to vidyoportal.i.gov.ph (202.90.153.201), 64 hops max, 52 byte packets
 1  192.168.11.1 (192.168.11.1)  1.377 ms  0.969 ms  0.894 ms
 2  192.168.230.1 (192.168.230.1)  1.402 ms  1.381 ms  1.350 ms
 3  fddi230.med.kyushu-u.ac.jp (133.5.230.254)  3.113 ms  2.087 ms  2.277 ms
 4  133.5.9.33 (133.5.9.33)  2.281 ms  2.173 ms  2.097 ms
 5  133.5.9.236 (133.5.9.236)  3.500 ms  2.689 ms  3.023 ms
 6  133.5.9.230 (133.5.9.230)  3.929 ms  3.385 ms  4.902 ms
 7  fukuoka2-rm-xe-4-0-6-924.s5.sinet.ad.jp (150.99.191.41)  2.629 ms  3.609 ms  2.571 ms
 8  tokyo1-gm-et-7-1-0-143.s5.sinet.ad.jp (150.99.85.231)  18.147 ms
    tokyo1-gm-et-8-1-0-1143.s5.sinet.ad.jp (150.99.89.215)  18.144 ms
    tokyo1-gm-et-7-1-0-143.s5.sinet.ad.jp (150.99.85.231)  18.235 ms
 9  kote-gm-et-4-1-0-100.s5.sinet.ad.jp (150.99.89.249)  18.178 ms  18.114 ms  18.348 ms
10  tpr5-xe2-0-0-v8.jp.apan.net (203.181.249.82)  18.601 ms  18.450 ms  18.206 ms
11  tyo-mx480-irb-6.jp.apan.net (203.181.249.97)  18.434 ms  18.398 ms  18.370 ms
12  asti-router.jp.apan.net (203.181.248.177)  72.063 ms  71.854 ms  74.591 ms
13  vl-4094.border-asti.pregi.net (202.90.132.230)  71.857 ms  71.679 ms  71.636 ms
14  xe-1-4.core-6504.pregi.net (202.90.132.166)  71.523 ms  71.388 ms  71.495 ms
15  202.90.153.201 (202.90.153.201)  73.094 ms  73.344 ms  71.105 ms
opss-MacBook-Pro:dev alvin$
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ASTI Video Conferencing System

- Vidyo Portal
  - 1000 client install
- Vidyo Router
  - 25 VidyoLines
- Vidyo Gateway XL
  - connect SIP and H323 system
- Vidyo Replay
  - for recording and webcast
- Polycom MCU
  - 5HD quality

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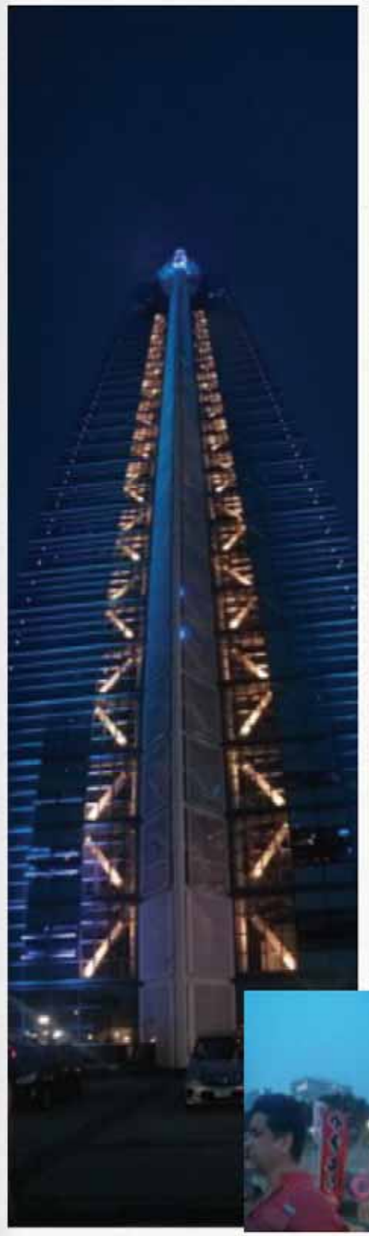

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ありがとうございました

Arigatōgozaimashita

Thank You!!!