



TELEMEDICINE

Engineer's Training Report

Darwin Laurencio
University of the Philippines Manila





Outline



- ❖ UP Manila
- ❖ Current Network Status / Bandwidth
- ❖ Network Upgrades
- ❖ Arrival in Fukuoka
- ❖ Kyushu University Hospital
- ❖ TEMDEC / Activities
- ❖ Fukuoka Beautiful Places
- ❖ Valuable Lessons





UP Manila



- ❖ 1908 - first UP campus
- ❖ 14 hectares
- ❖ Premier institution for Health Sciences
- ❖ Medical Courses/Professions
- ❖ Chancellor Carmencita D. Padilla
- ❖ 9 degree granting units
- ❖ www.upm.edu.ph





Network Status



- ❖ Cisco 7201
- ❖ Cisco Catalyst 4503
- ❖ Palo Alto 2050 firewall
- ❖ HP A6602 router as DHCP
- ❖ Edge switches (Cisco and HP)
- ❖ Polycom HDX 8000 and 7000
- ❖ Polycom RPD
- ❖ Other free softwares for conferencing

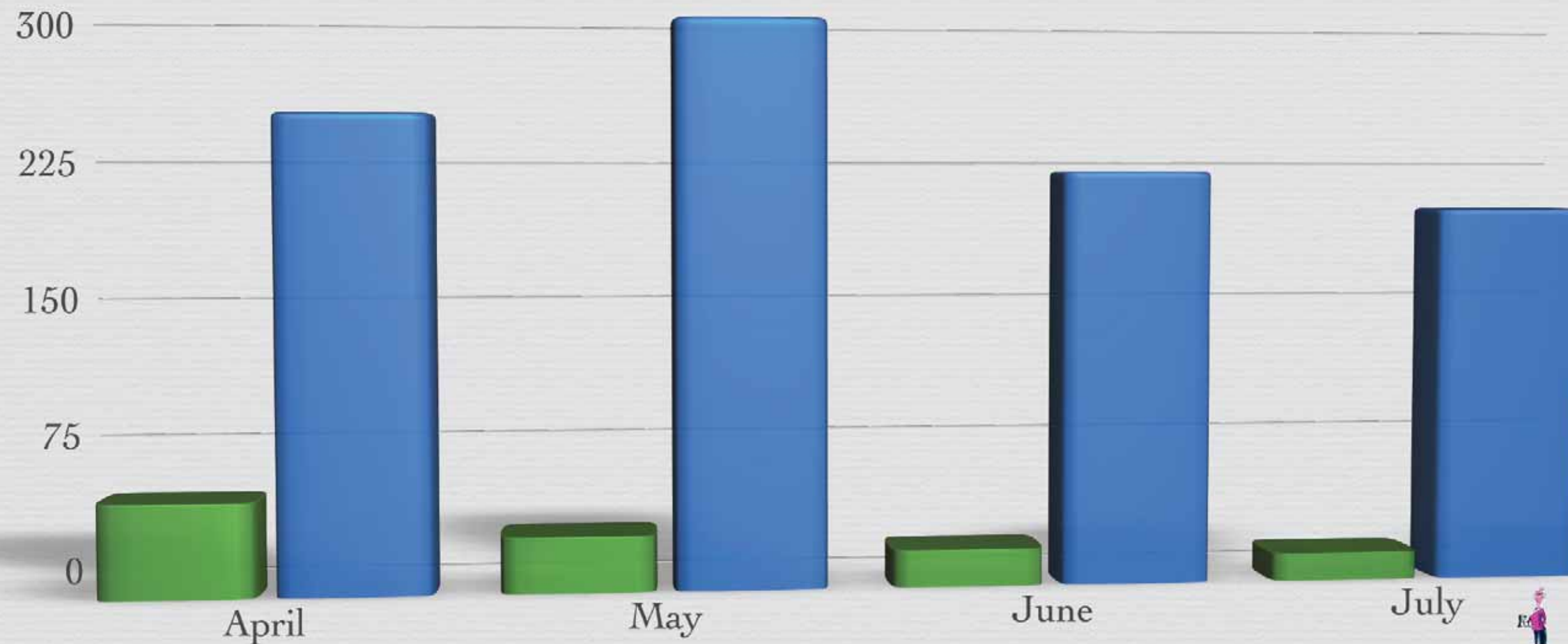




Bandwidth



- ❖ Converge - 1.2 Gbps
- ❖ Preginet - 150 Mbps





Network Upgrades



- ❖ Cisco ASR 1001X border router
- ❖ Cisco Catalyst 4500X as core
- ❖ Palo Alto 5050 firewall
- ❖ Campus wide fiber upgrade (10G)
- ❖ Edge switches
 - ◆ Cisco catalyst 2960X
 - ◆ 10G SFP+ modules





Arrival in Fukuoka!





Kyushu University Hospital





Kyushu University Hospital





TEMDEC!



- ❖ Chiharu-san
- ❖ Yui-san
- ❖ Shunta-san
- ❖ Kuriko-san
- ❖ Yoshiko-san
- ❖ Akiko-san
- ❖ Kitamura-san
- ❖ Ryoko-san
- ❖ Dr. Shimizu-sensei





TEMDEC!



- ❖ Start of training on the first day
- ❖ Sensei/s for the training:
 - ▶ Kuriko-san
 - ▶ Yoshiko-san
 - ▶ Shunta-san
 - ▶ Kitamura-san





TEMDEC!



- ❖ Three major conferencing system
 - ▶ DVTS - digital video transport system
 - ▶ H.323
 - ▶ Vidyo System
- ❖ Telepointer
- ❖ Adobe connect





TEMDEC!



- ❖ 2 Filipino Doctors
 - ▶ From East Avenue Medical Center
 - ▶ From Makati Medical Center
- ❖ Telemedicine Network of the Philippines (TNP)





TEMDEC!





TEMDEC!





Activities



- ❖ Tests for APAN sessions
- ❖ APAN events
 - ▶ HPB
 - ▶ Dental
 - ▶ Rural Health
 - ▶ Fetus
 - ▶ Engineer Workshop





Fukuoka Places



Ohori Park

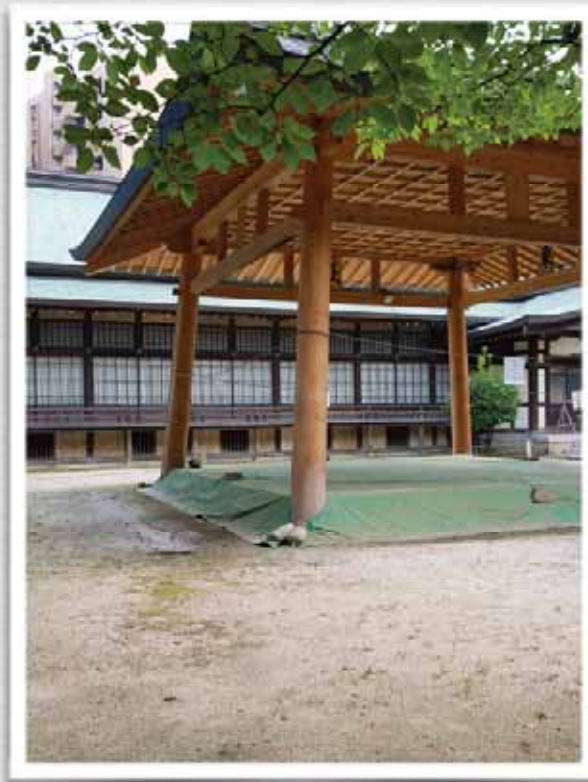




Fukuoka Places



Saruyoshi and Atago Shrine





Fukuoka Places



Canal City & Fukuoka Tower





Oishi Food





Knowledge Learned



❖ Vidyo system

- ▶ Room management
- ▶ Different views / desktop features
- ▶ Different accounts/privileges
- ▶ Sharing of screen/video
- ▶ Vidyo gateway to H.323
- ▶ Low Bandwidth requirement





Knowledge Learned



- ❖ Polycom RMX
 - ▶ Room management
 - ▶ Different accounts/privilege
 - ▶ Change layout
 - ▶ Works with Vidyio
 - ▶ Push content/sharing





Knowledge Learned



❖ DVTS

- ▶ Not easy to setup/equipment
- ▶ No encryption
- ▶ High bandwidth requirement
- ▶ Not easy to use
- ▶ Outdated





Knowledge Learned



- ❖ Be sensitive on sounds/feedbacks
- ❖ Video quality is a must
- ❖ Mute microphones
- ❖ Confirm attendance ASAP
- ❖ Submit presentation ahead
- ❖ Coordinate and cooperate
- ❖ Use Adobe connect
- ❖ Be prepared always
- ❖ Work as a team!





THANKS!



- ❖ Dr. Shuji Shimizu - sensei
- ❖ TEMDEC people
- ❖ Sponsors
- ❖ Boss Ariel Betan / IMS
- ❖ UP Manila Administration
- ❖ Doctors and Engineers
- ❖ Alvin and Luis



“There is no limit to how good you can get in pursuit of perfection.”

- Sachin Kumar Puli