

41th APAN Manila

Network in Faculty of Medicine
Brawijaya University

KUSWINDARTO – KUSWINDARTO@UB.AC.ID
NETWORK ENGINEER

Brawijaya University Location

Place on Mountain area at Malang City – East Java Indonesia



Faculty of Medicine Brawijaya University

Have 5 Major Bachelor Degree

- Medical
- Nursing
- Dietitian
- Obstetrics
- Pharmacy

16 Medical Specialist
4 Magister Program
1 Doctoral Program



Network condition FMBU

Already connected with Brawijaya University Network

- Connect with fiber Optic Multimode 1 Gbps
- Connect with Backup Data Center optic Single Mode 1 Gbps
- Connect with Indosat Service Provider 30 Mbps

Brawijaya University Already Connected to ID-REN

Totally we have 123 AP in all Area. In Faculty we have 60 AP distribute around the faculty

Daily internet usage consume about 200Mbps

ID-REN


Host by Institute of Technology Bandung

Dedicated connected to TIEN-SG

Already Connected with 5 Big University in Indonesia

Average connection 100Mbps each University

Real Time Network Monitoring



Unifi Controller

The screenshot shows the Unifi Controller web interface. It features a sidebar with navigation options like 'Overview', 'Devices', 'Settings', and 'Users'. The main area displays a table of devices with columns for 'Device Name', 'IP Address', 'Model', 'Firmware', and 'Status'. The status column shows various icons representing different device types and their operational states.

FMBU vs Saiful Anwar Hospital (Geographic Location)

The image is a satellite map from Google Earth. A yellow line is drawn across the map, indicating the geographic relationship or distance between the two locations mentioned in the title. The map shows a dense urban area with buildings and roads.

Main Academic Hospital

Saiful Anwar Hospital connected via Wireless Link 35Mbps using Mikrotik OmniTIK vs RB-SXT-5HPnD 3km Distance

We have 57AP distribute in Saiful Anwar Hospital

Internet in saiful anwar distribute wirelessly

But right now we are installed new equipment to increase the bandwidth using wireless AC technology, and now connected via Wireless Link 50-60Mbps using Power Beam SAC 500 3km Distance

Inside Saiful Anwar Hospital (Network Connection)

The image is an aerial photograph of the Saiful Anwar Hospital complex. Red lines are overlaid on the buildings, representing the network connections between different parts of the hospital, showing a complex mesh of links.

RS. Wlingi and RS. Tulungagung

The image is a map from Google Earth showing the locations of two hospitals in Indonesia: RS. Wlingi and RS. Tulungagung. The map highlights the specific geographic locations of these facilities.

FMBU Video Conference System

- 3 Polycom QDX-6000 system
- 1 Polycom HDX-7000 with 1080i resolution license and also with Mini MCU License (4 Site)
- 1 Huawei ViewPoint 9030
- Dell core i5 Laptop + Logitech C920 (VidyoDesktop)
- Audio Mixer Behringer

The image shows several pieces of equipment used in the video conference system. From left to right, there is a Polycom QDX-6000 camera, a Polycom HDX-7000 MCU, a Huawei ViewPoint 9030, a Dell laptop, a Logitech C920 webcam, and a Behringer audio mixer.

This year network development

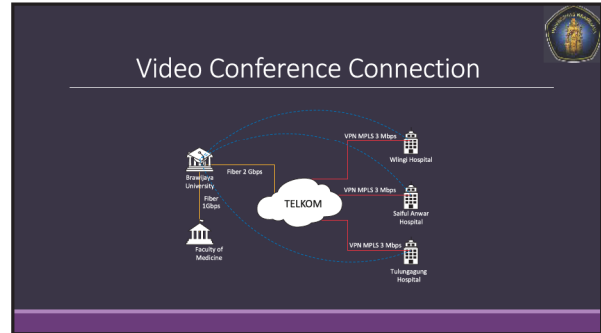
For the remote academic hospital develop new connection directly from hospital to Brawijaya University

Using Telkom VPN MPLS 3 Mbps / Hospital (Private Link special for Video Conference)

- Wilingi Hospital
- Tulungagung Hospital
- Saiful Anwar Hospital

This link directly connected with ID-REN

And also Broadband internet 20Mbps for internet access Only



This year VC Device development

Each hospital will be equipt with

- LED Screen 42
- Core i3 PC
- HD Webcam Logitech C920
- Desktop Microphone

And Polycom QDX-6000

We like to test many VC system and will choose the most suitable for FMBU

- Vidyo Desktop, Skype, Google Hangout, etc

APAN-41

So Many Testing with other Country during the Event

TEMDEC Organize Medical WorkGroup during APAN41

Help testing for Vicon Indonesia session with FMBU

My Sugesstion because is so many things and so many difference device across the country need some customized configuration each site and we need training session about video conference for every engineer who is use video conference

We also use adobeconnect to chat with another engineer. That is very helpfull

Matur Nuwun

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The logo for APAN 41 features the text 'APAN' in large white letters above the number '41' in a smaller font. To the right is a stylized graphic of a medical cart or trolley, rendered in white and orange tones, set against a background of orange and red brushstrokes.