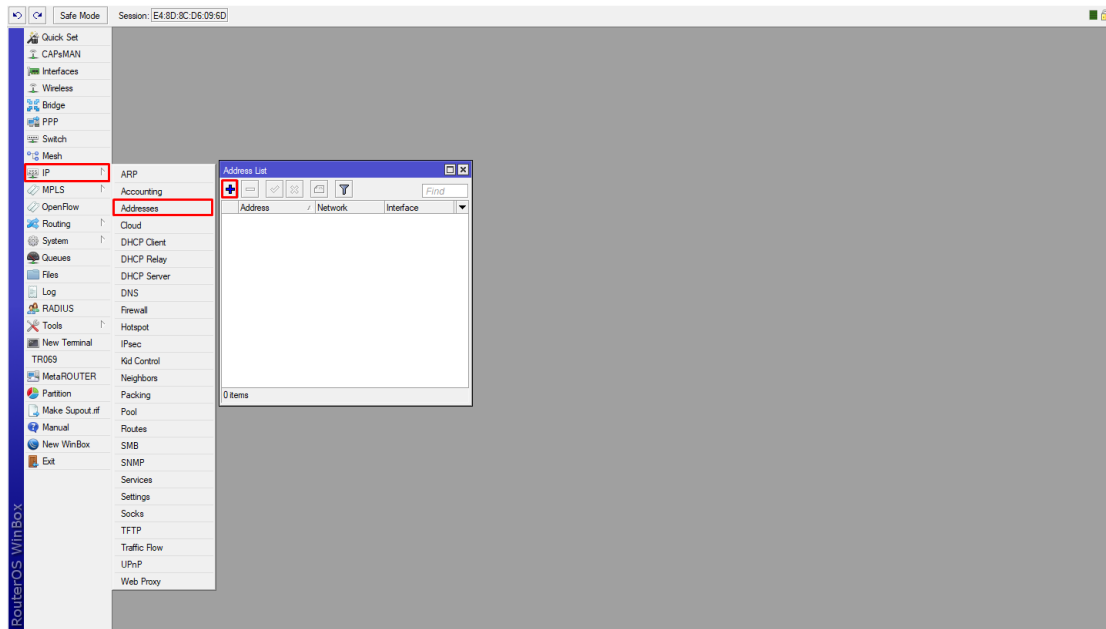
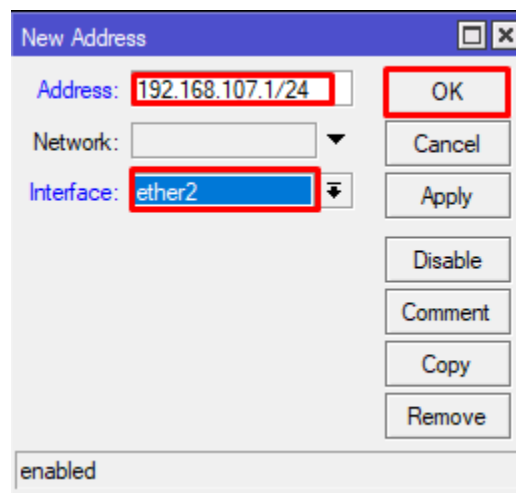


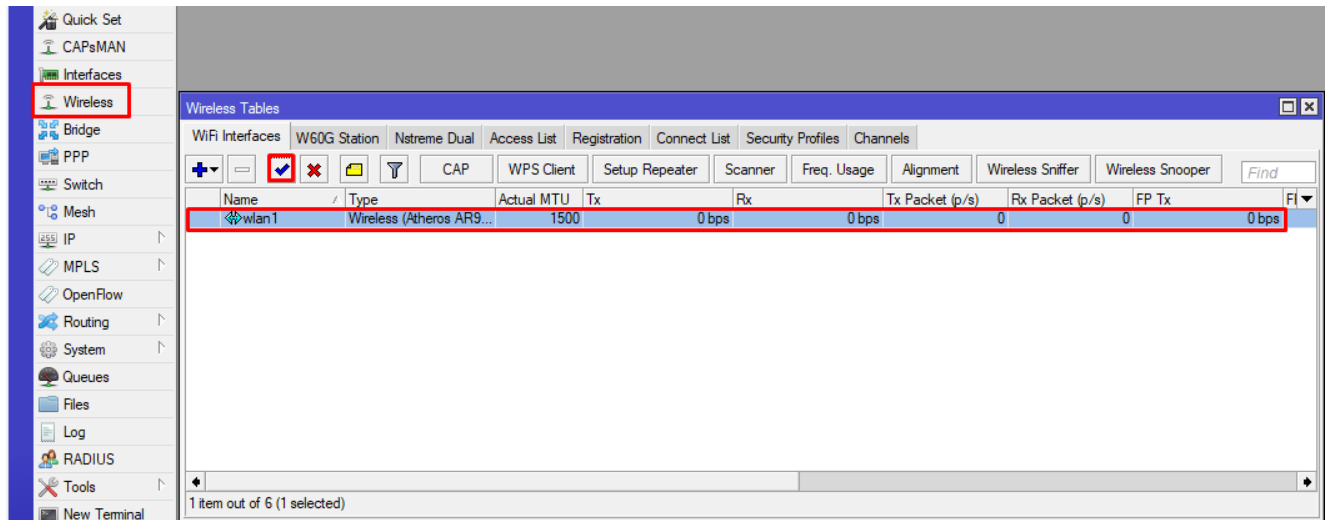
1. Login MikroTIK dengan Winbox, lalu tambahkan IP Address, Klik **IP >> Address**.



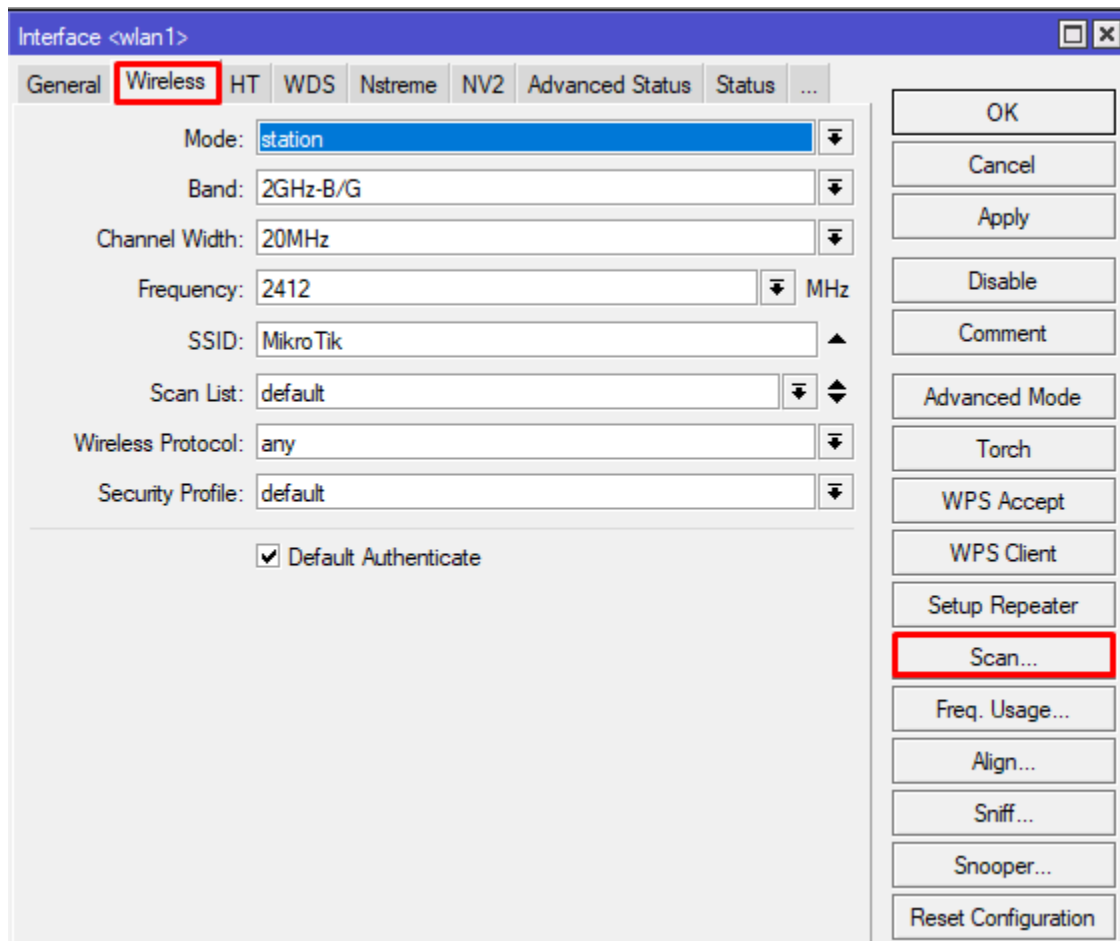
2. Tambahkan IP Address, lalu arahkan interface ke ether yang aktif lalu klik **OK**.



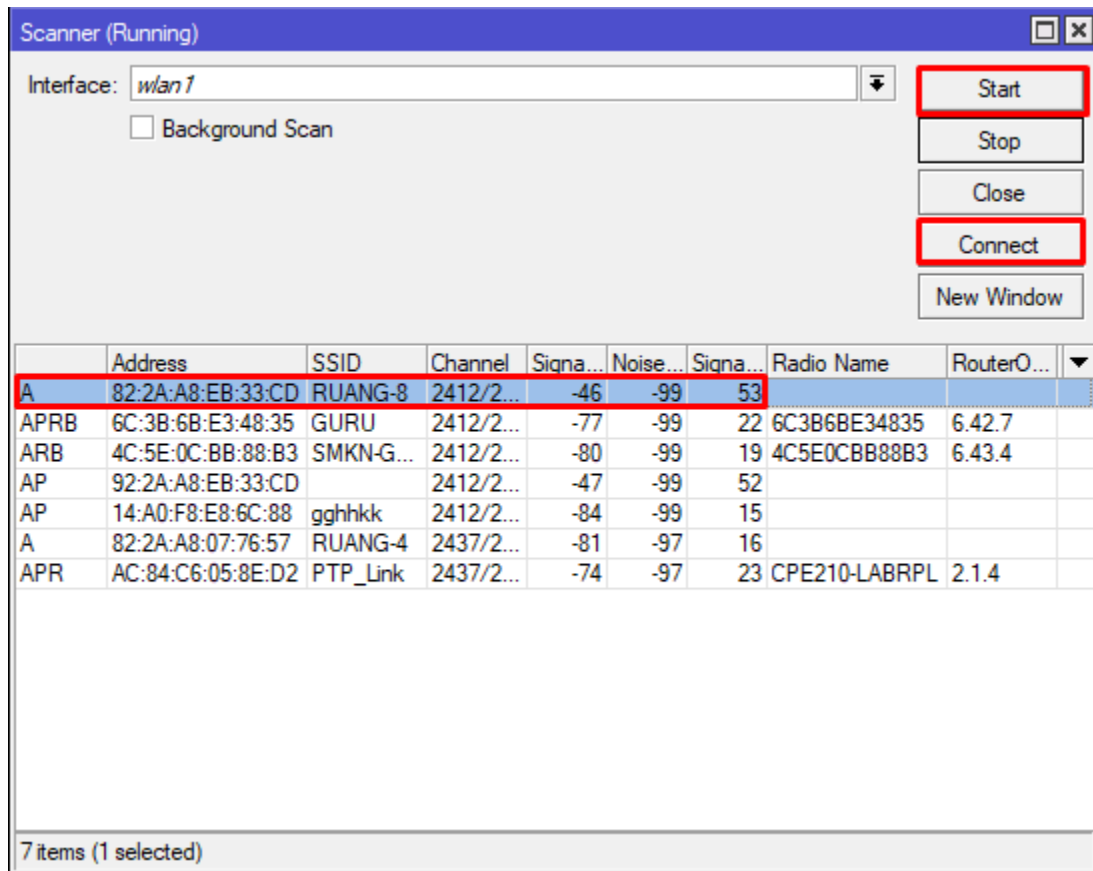
3. Pastikan MikroTIK dpt mengakses internet terlebih dahulu, klik **Wireless**, kemudian klik **Wlan 1** lalu kita klik **ceklist**.



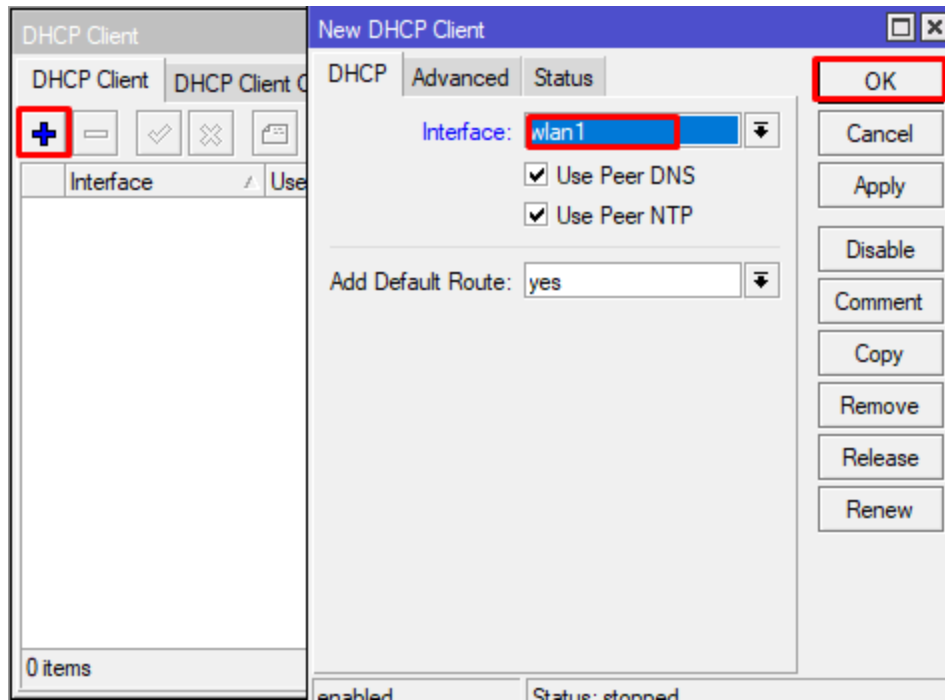
4. Kalau sudah kita double klik di wlan 1, kemudian kita masuk ke tab wireless kemudian kita klik scan.



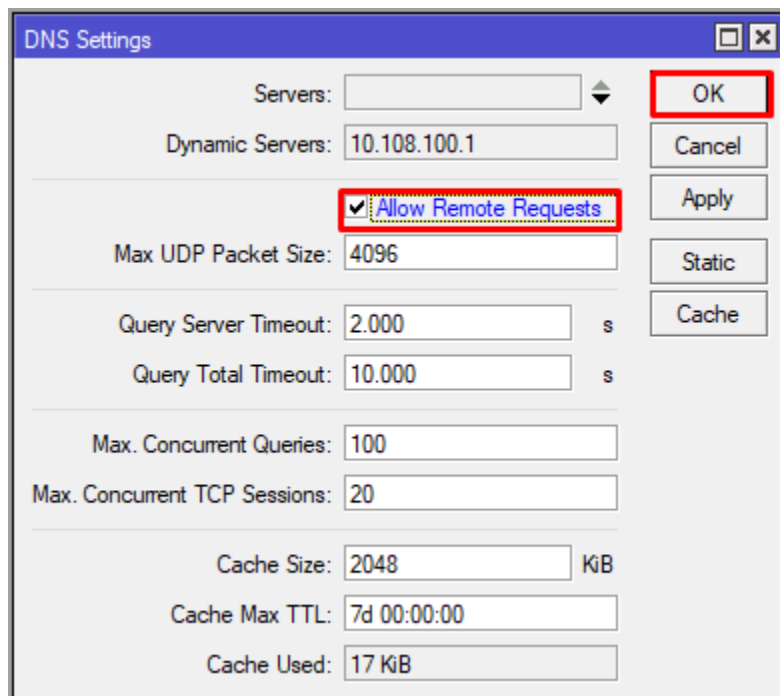
5. Kemudian klik **Start** untuk mencari wifi yang akan kita koneksikan, kalau sudah kita klik **Address** atau **SSID** nya kemudian klik **Connect**. Disini saya akan memakai wifi yang tidak menggunakan password, jika kita menggunakan yang ada passwordnya kita tambahkan dulu di security profiles. Lalu kalau sudah klik **OK**.



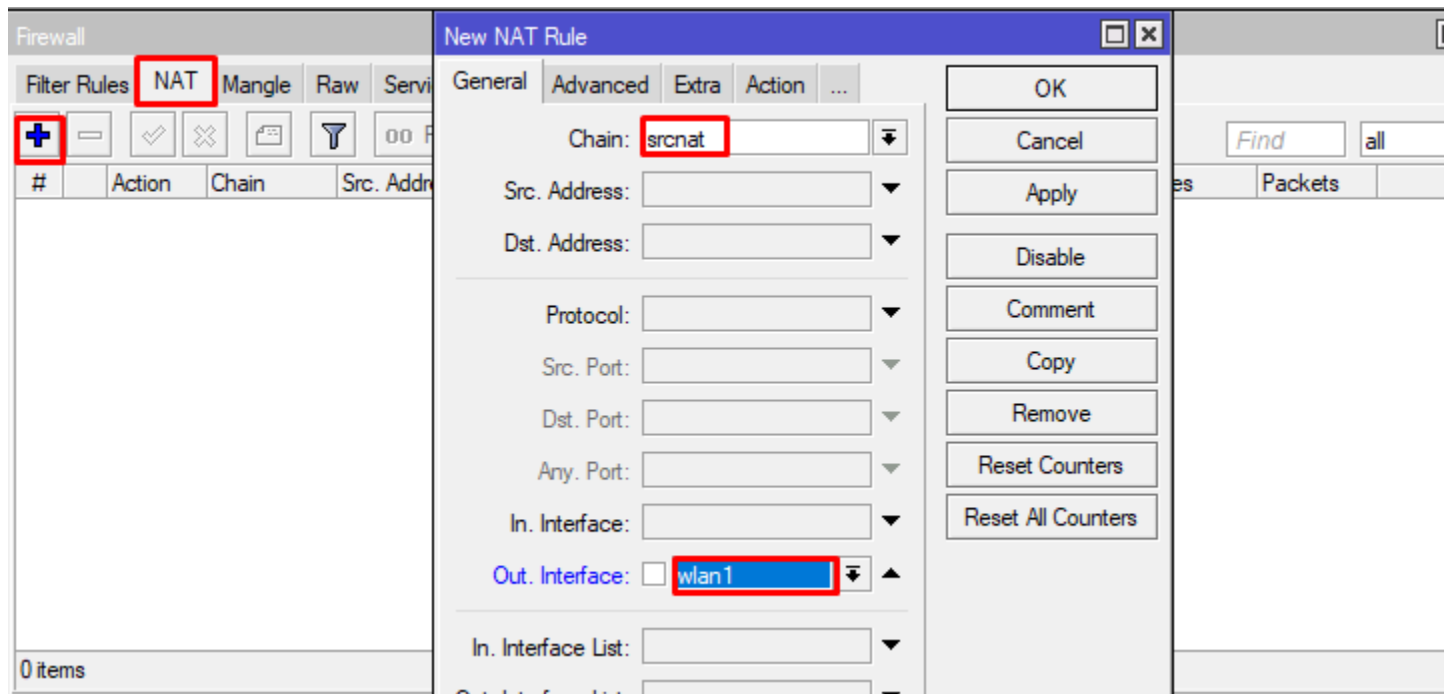
6. Selanjutnya kita akan meminta IP DHCP Client. Kita klik **Add** >> Interface **Wlan1** >> Klik **OK**.



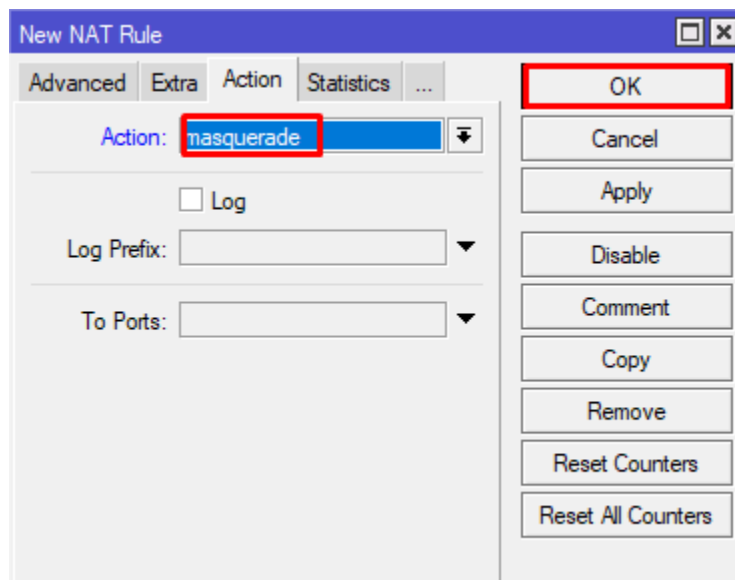
7. Kemudian ke **IP > DNS** lalu ceklist **Allow Remote Requests** kemudian klik **OK**.



8. Kemudian kita setting juga di Firewall klik **IP > Firewall**, Kemudian klik tab **NAT > Add**.
Lalu chainnya **srcnat**, dan Out interface **wlan1**.



9. Kemudian klik tab action, pilih **Masquerade** kemudian klik **OK**.



10. Setelah mikrotik sudah terkoneksi ke internet, selanjutnya setting network di server trixboxnya, masukkan perintah **system-config-network tui**, kemudian klik **ENTER**.

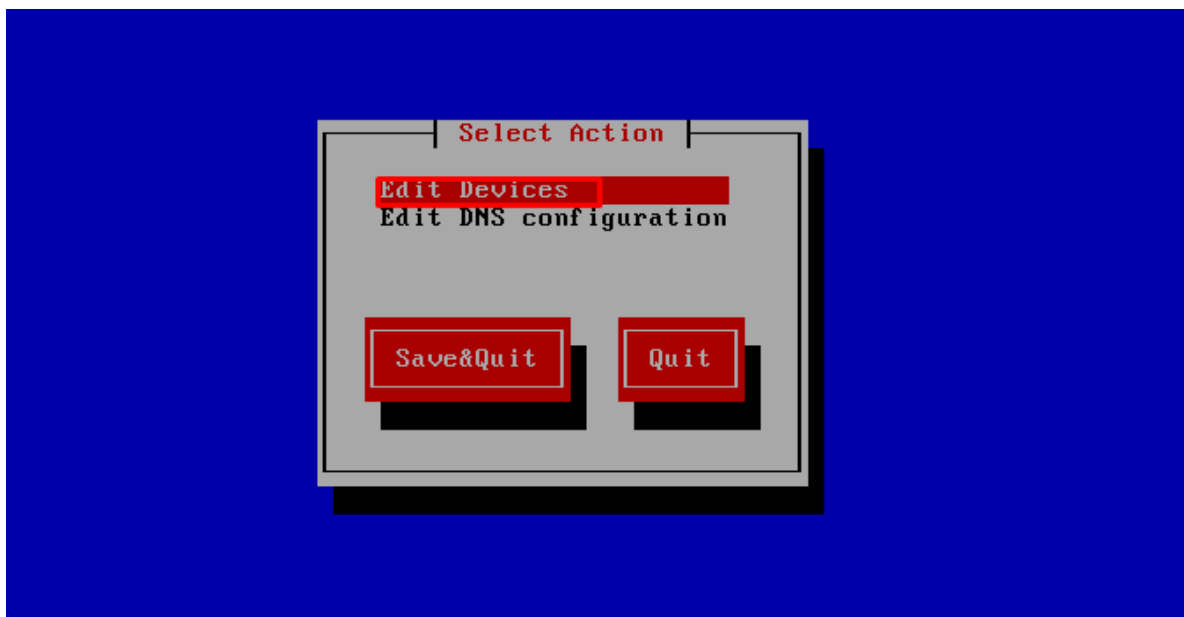
```
Welcome to trixbox CE
-----

For access to the trixbox web GUI use this URL
eth0 http://10.108.100.142

For help on trixbox commands you can use from this
command shell type help-trixbox.

trixbox1 login: root
Password:
[trixbox1.localdomain ~]# system-config-network tui_
```

11. Pilih **Edit Devices**, kemudian tekan **ENTER**.



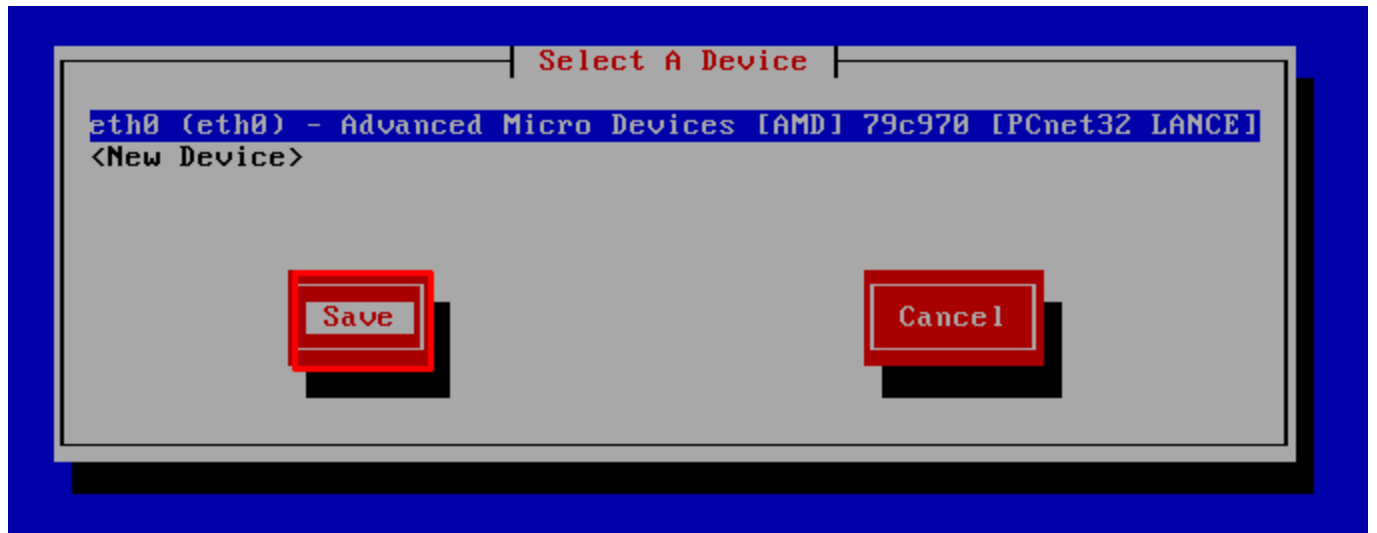
12. Pilih **eth0**, kemudian tekan **ENTER**.



13. Hapus tanda bintang di **use DHCP**, dengan tombol spasi. Kemudian buat IP Address untuk server trixbox dalam satu jaringan yang sama dengan IP Address di router, kalau sudah tekan **ENTER**, atau **OK**.



14. Pilih **Save**, kemudian tekan **ENTER**.



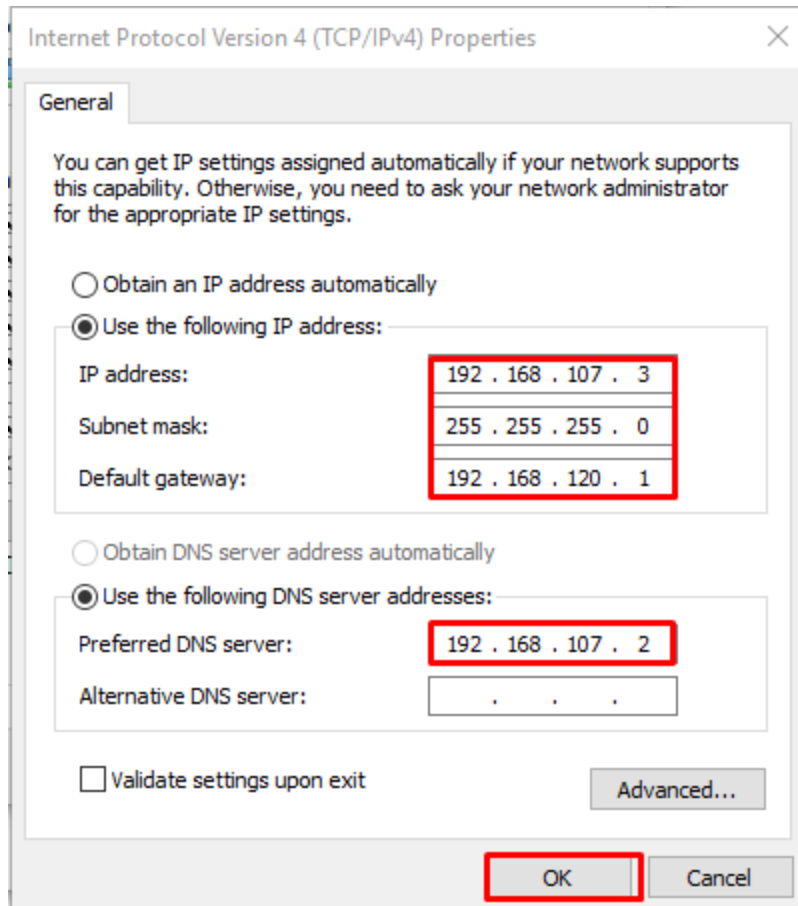
15. Kemudian pilih **Save & Quit**, untuk keluar



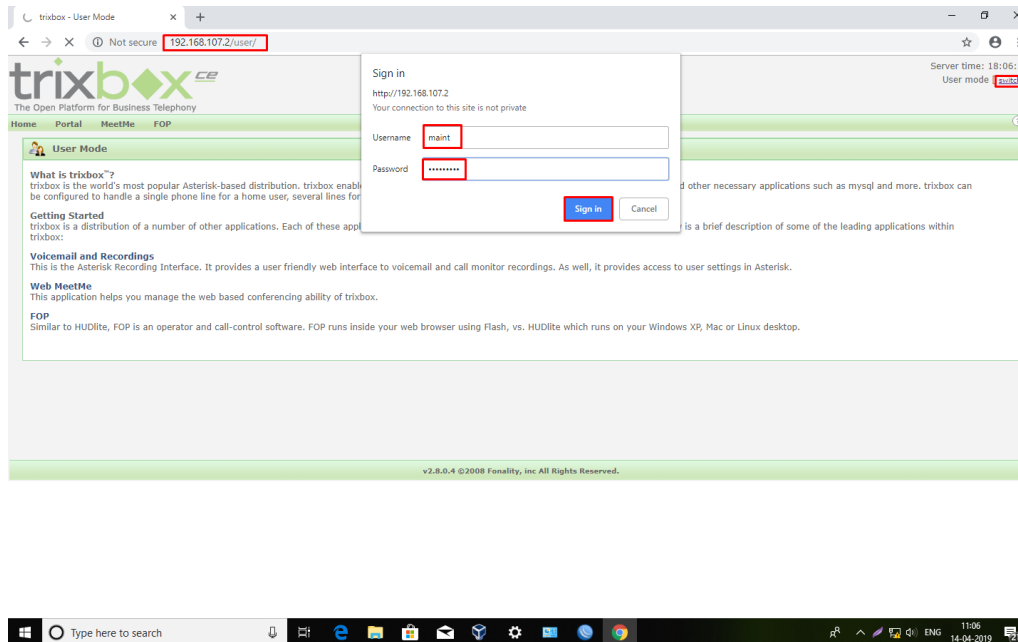
16. Setelah itu, restart server dengan perintah **service network restart**.

```
[trixbox1.localdomain ~]# service network restart
Shutting down interface eth0: [ OK ]
Shutting down loopback interface: [ OK ]
Bringing up loopback interface: [ OK ]
Bringing up interface eth0: [ OK ]
[trixbox1.localdomain ~]#
```

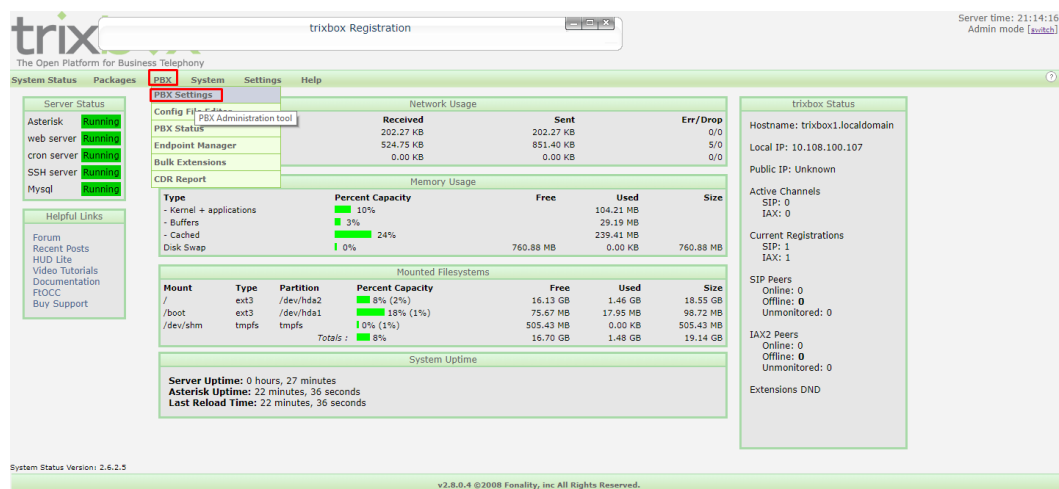
17. Kemudian kita setting network adapternya.



18. Sekarang buka browser kemudian search IP Address si server, dan secara otomatis akan diarahkan ke server trixbox kemudian login dengan **maint**, dan passwordnya yaitu **password**. Lalu klik **Switch** yang terletak di pojok kanan atas.



19. Kalau sudah masuk ke trixbox kita klik **PBX** kemudian klik **PBX Settings**.



20. Kemudian klik **Eextensions**.

trixbox CE
The Open Platform for Business Telephony

Server time: 21:16:07
Admin mode [switch]

System Status Packages PBX System Settings Help

Admin Reports Panel Recordings Help Apply Configuration Changes

Setup Tools

Admin

System Status

Module Admin

Basic

Extensions

Feature Codes

General Settings

Outbound Routes

Support

Trunks

Administrators

Inbound Call Control

Inbound Routes

Zap Channel DIDs

Announcements

Blacklist

CallerID Lookup Sources

Day/Night Control

Follow Me

IVR

Queues

Ring Groups

Time Conditions

Time Groups

Internal Options & Configuration

Conferences

DISA

Languages

System Status

Notices

- 53 New modules are available
- No email address for online update checks

show all

Statistics

Total active calls	0
Internal calls	0
External calls	0
Total active channels	0

Connections

Uptime

System Uptime: 30 minutes
Asterisk Uptime: 25 minutes
Last Reload: 25 minutes

System Statistics

Processor

Load Average	0.00
CPU	0%

Memory

Memory	11%
Swap	0%

Disks

/dev/sda	8%
/dev/sdb	20%
/dev/shm	0%

Networks

eth0 receive	0.00 KB/s
eth0 transmit	0.00 KB/s

Server Status

Asterisk	OK
Op Panel	OK
MySQL	OK
Web Server	OK
SSH Server	OK

English

21. Lalu klik **submit** untuk membuat user VoIP.

trixbox CE
The Open Platform for Business Telephony

Server time: 21:16:23
Admin mode [switch]

System Status Packages PBX System Settings Help

Admin Reports Panel Recordings Help Apply Configuration Changes

Setup Tools

Admin

System Status

Module Admin

Basic

Extensions

Feature Codes

General Settings

Outbound Routes

Support

Trunks

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Queues

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Time Conditions

Time Groups

Internal Options & Configuration

Conferences

DISA

Languages

Music on Hold

Add an Extension

Please select your Device below then click Submit

Device

Device Generic SIP Device

Submit

Add Extension

English

Type here to search

14:16
12-04-2019

22. Sekarang coba kita buat 2 user.

User 1 :

User Extensions : 7 (merupakan nomor sebagai telepon yang nantinya akan digunakan).

Display Name : annisa (adalah nama si user yang kita buat)

Secret : 7 (password untuk user Extensions).

Basic

- Extensions
- Feature Codes
- General Settings
- Outbound Routes
- Support
- Trunks
- Administrators
- Inbound Call Control**
- Inbound Routes
- Zap Channel DIDs
- Announcements
- Blacklist
- CallerID Lookup Sources
- Day/Night Control
- Follow Me
- IVR
- Queues
- Ring Groups
- Time Conditions
- Time Groups
- Internal Options & Configuration**
- Conferences
- DISA
- Languages
- Music on Hold
- PIN Sets
- Paging and Intercom
- Parking Lot
- System Recordings
- VoiceMail Blasting

Add Extension

User Extension: 7

Display Name: annisa

CID Num Alias:

SIP Alias:

Extension Options

Outbound CID:

Ring Time: Default

Call Waiting: Enable

Call Screening: Disable

Emergency CID:

Assigned DID/CID

DID Description:

Add Inbound DID:

Add Inbound CID:

Device Options

This device uses sip technology.

secret: 7

dtmfmode: rfc2833

Language

Language Code:

23. Kalau sudah kita scroll ke bawah lalu klik **Submit**.

Status

Disabled

Voicemail Password

Email Address

Pager Email Address

Email Attachment

Play CID

Play Envelope

Delete Voicemail

VM Options

VM Context

default

VmX Locator

VmX Locator™

Disabled

Use When:

unavailable

busy

Voicemail Instructions:

Standard voicemail prompts.

Press 0:

Press 1:

Press 2:

Go To Operator

Submit

v2.8.0.4 ©2008 Fonality, inc All Rights Reserved.

24. User 2 :
User Extensions : 20
Display Name : Najla
Secret : 20

SetupTools

Admin

System Status

Module Admin

Basic

Extensions

Feature Codes

General Settings

Outbound Routes

Support

Trunks

Administrators

Inbound Call Control

Inbound Routes

Zap Channel DIDs

Announcements

Blacklist

CallerID Lookup Sources

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Time Conditions

Time Groups

Internal Options & Configuration

Conferences

DISA

Languages

Music on Hold

PIN Sets

Paging and Intercom

Parking Lot

System Recordings

Admin

Reports

Panel

Recordings

Help

Apply Configuration Changes

English

Add Extension

annisa <7>

Add Extension

User Extension20

Display Nameitalia

CID Num Alias

SIP Alias

Extension Options

Outbound CID

Ring TimeDefault

Call WaitingEnable

Call ScreeningDisable

Emergency CID

Assigned DID/CID

DID Description

Add Inbound DID

Add Inbound CID

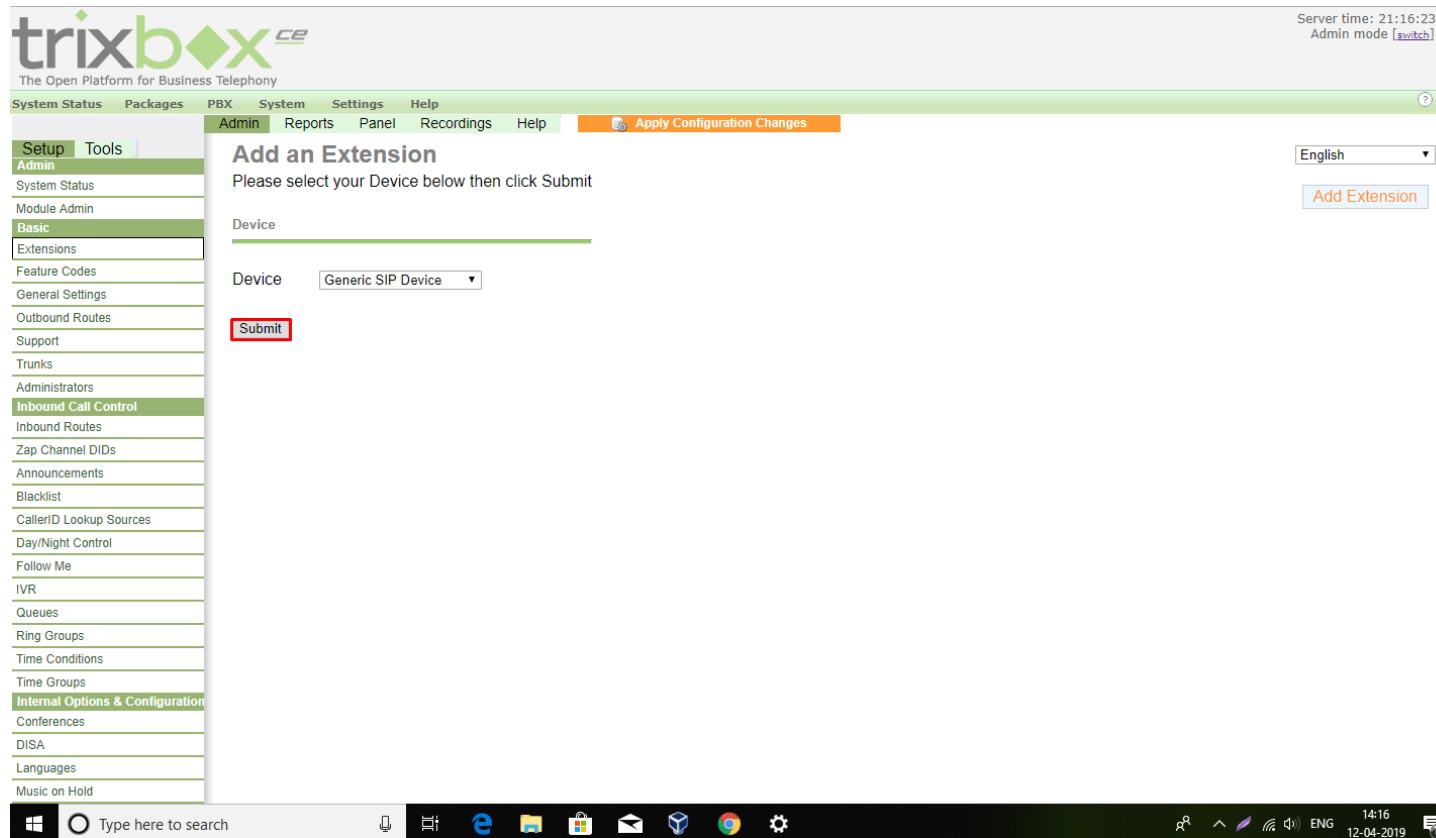
Device Options

This device uses sip technology.

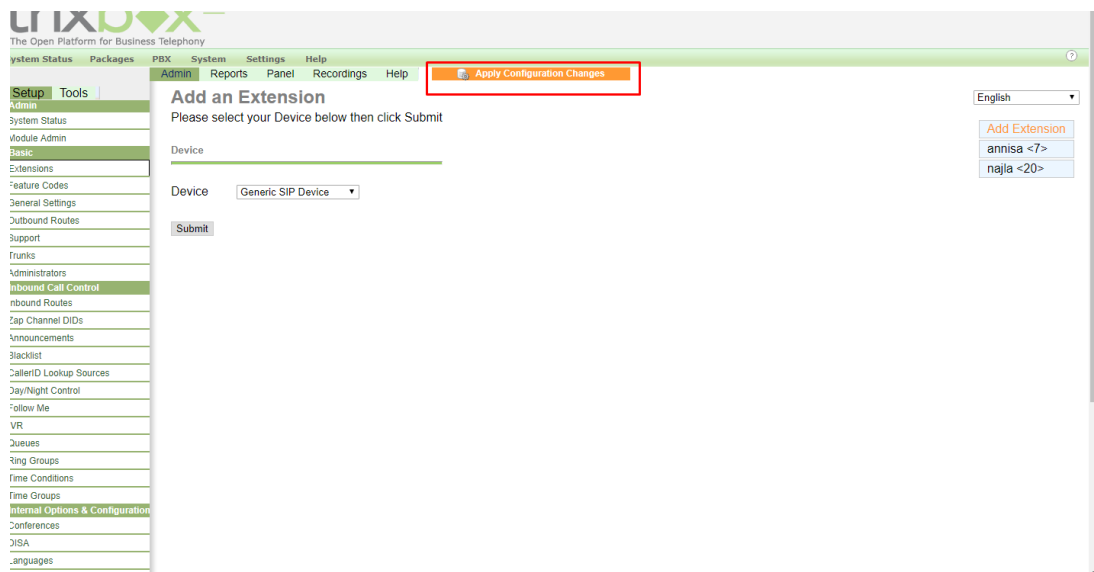
secret20

dtmfmoderfc2833

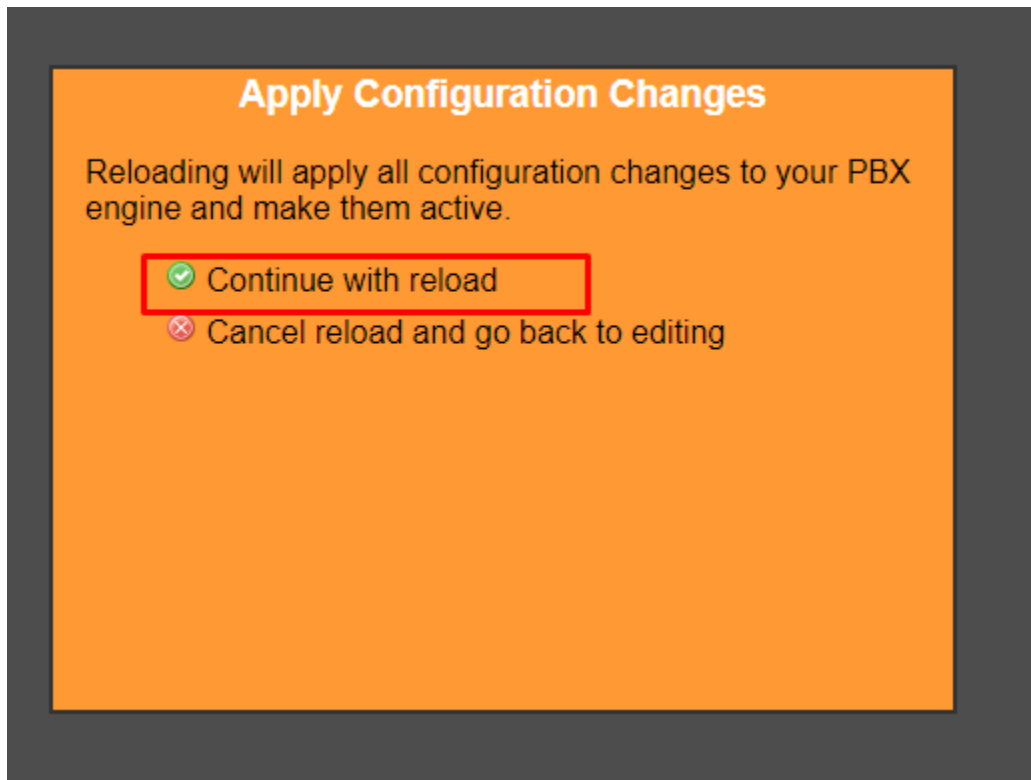
25. Kalau sudah kita scroll ke bawah lalu klik **Submit**.



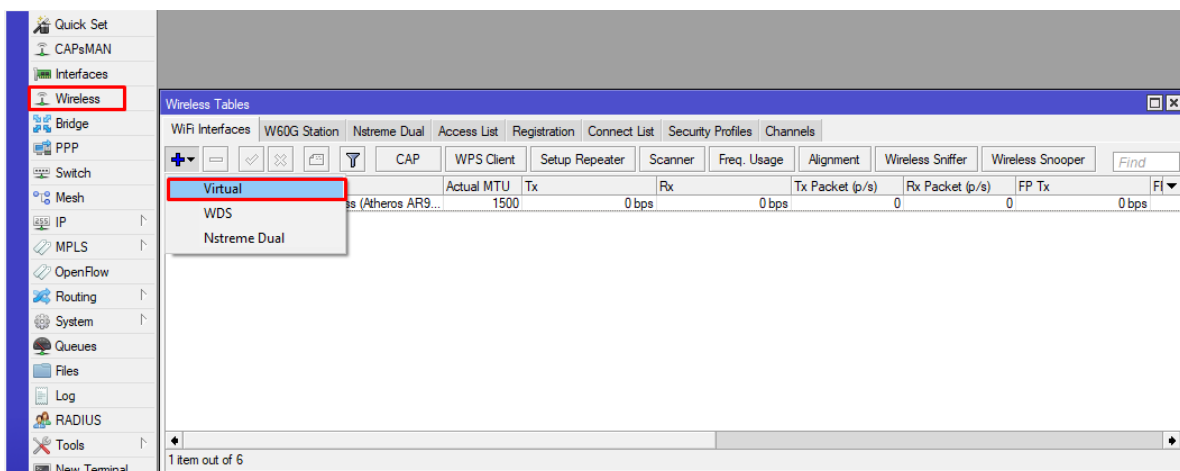
26. Selanjutnya klik **Apply** yang sudah ditandai seperti pada gambar di bawah ini.



27. Klik **Continue with reload**.



28. Selanjutnya kita ke winbox, kemudian kita akan membuat Virtual Wlan, caranya klik **Wireless > Add** kemudian klik **Virtual**.



29. Disini saya akan menamai nama wifi saya dengan nama **Annisa**, arahkan master interface ke wlan 1 kalau sudah kita klik **OK**.

New Interface

General Wireless WDS Status Traffic

Mode: ap bridge

Secondary Channel:

SSID: Annisa

Master Interface: wlan1

Security Profile: default

WPS Mode: disabled

VLAN Mode: no tag

VLAN ID: 1

Default AP Tx Rate: bps

Default Client Tx Rate: bps

☒ Default Authenticate

☒ Default Forward

☐ Hide SSID

OK

Cancel

Apply

Disable

Comment

Copy

Remove

Advanced Mode

Torch

enabled running slave

30. Kemudian kita buat IP Address untuk Wlan 2, arahkan interface ya ke wlan 2, kemudian klik **OK**.

New Address

Address: 192.168.100.1/24

Network:

Interface: wlan2

OK

Cancel

Apply

Disable

Comment

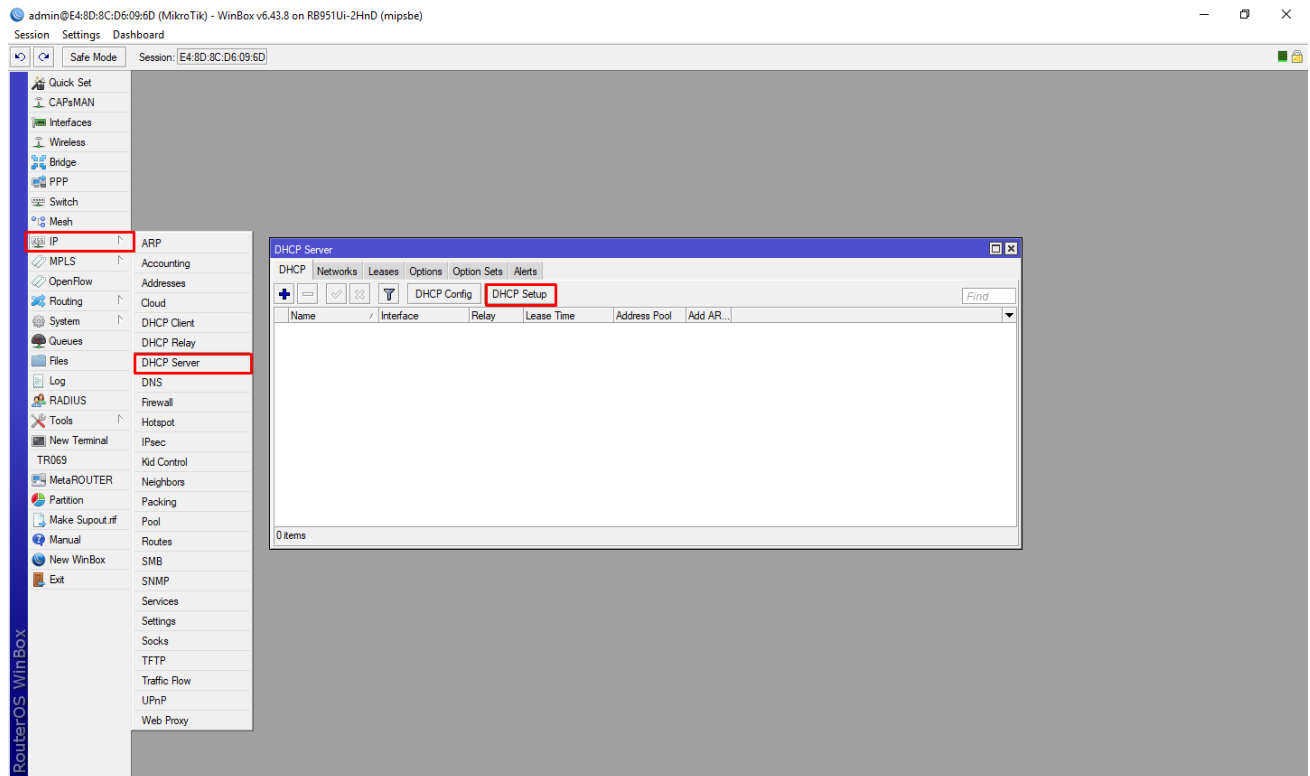
Copy

Remove

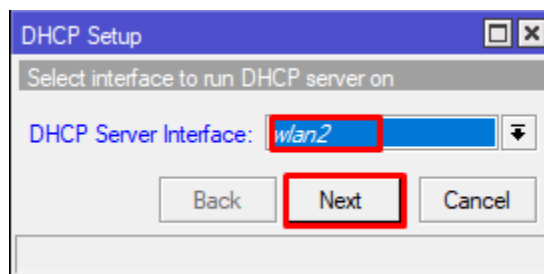
enabled

31. Selanjutnya kita buat IP DHCP Server, fungsinya adalah untuk menyebarkan IP Address yang akan terkoneksi dengan wlan 2 nantinya.

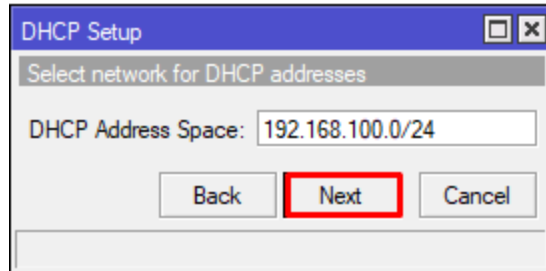
Klik **IP >> DHCP Server >> DHCP Set up**



32. DHCP Server interface wlan 2 kemudian klik **Next**.



33. Selanjutnya langsung saja klik **Next**.

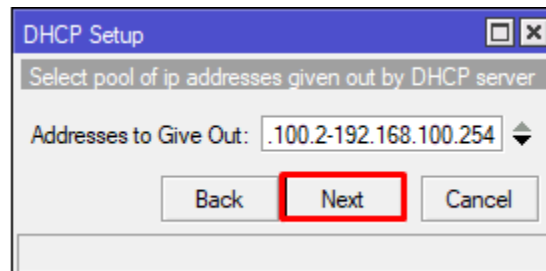


DHCP Setup

Select network for DHCP addresses

DHCP Address Space: 192.168.100.0/24

Back Next Cancel

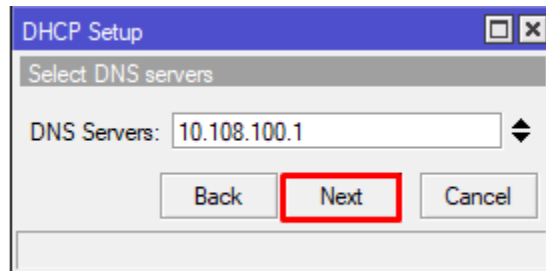


DHCP Setup

Select pool of ip addresses given out by DHCP server

Addresses to Give Out: .100.2-192.168.100.254

Back Next Cancel

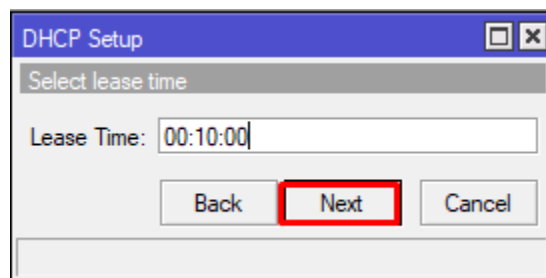


DHCP Setup

Select DNS servers

DNS Servers: 10.108.100.1

Back Next Cancel



DHCP Setup

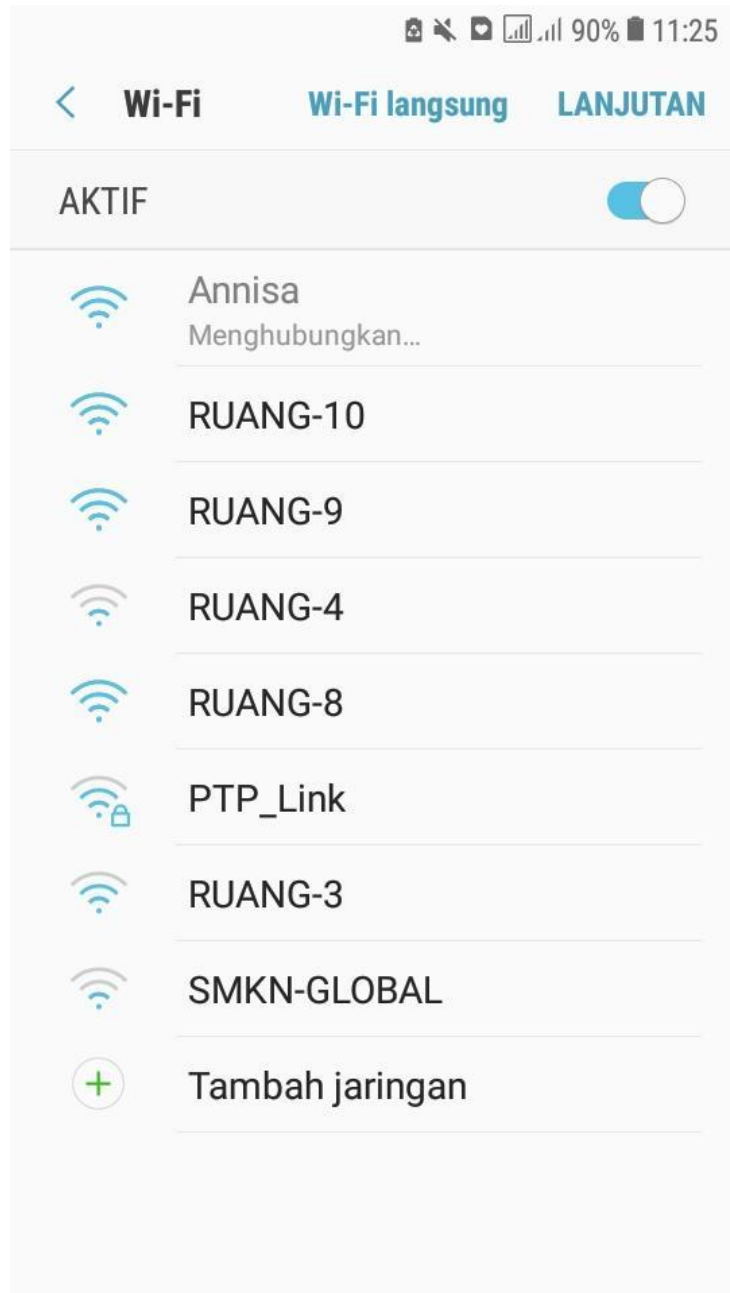
Select lease time

Lease Time: 00:10:00

Back Next Cancel

PENGUJIAN

1. Buka smartphone kalian, lalu hubungkan ke wifi yang tadi telah dibuat.



2. Kemudian kita masuk ke aplikasi Zoiper, untuk memasukkan user yang tadi kita buat sebelumnya di trixbox, aplikasi ini dapat di download di Play Store. Klik **Create an account**.

Account setup

 **ZoiPer**
Voip • Chat • Video

Username @ PBX/VoIP provid...

Password 

Create an account

Providers list

 Login with a QR

3. Selanjutnya masukkan IP Address server.

Account setup

Fill in your hostname and select your provider from the list

hostname or provider

192.168.107.2

This could be called 'Domain', 'SIP Server', 'Registrar' or 'SIP Proxy'. For example 'sip.example.com' or '123.21.123.32:5060'.

Or you can just search for the name of your provider. May be we know the settings.

Next

4. Pilih SIP UDP, lalu klik **Finish**.

77%14:22

Account setup

Please choose between the following configurations

☐

SIP TLS

Not found

☐

SIP TCP

Not found

☒

SIP UDP

Not found

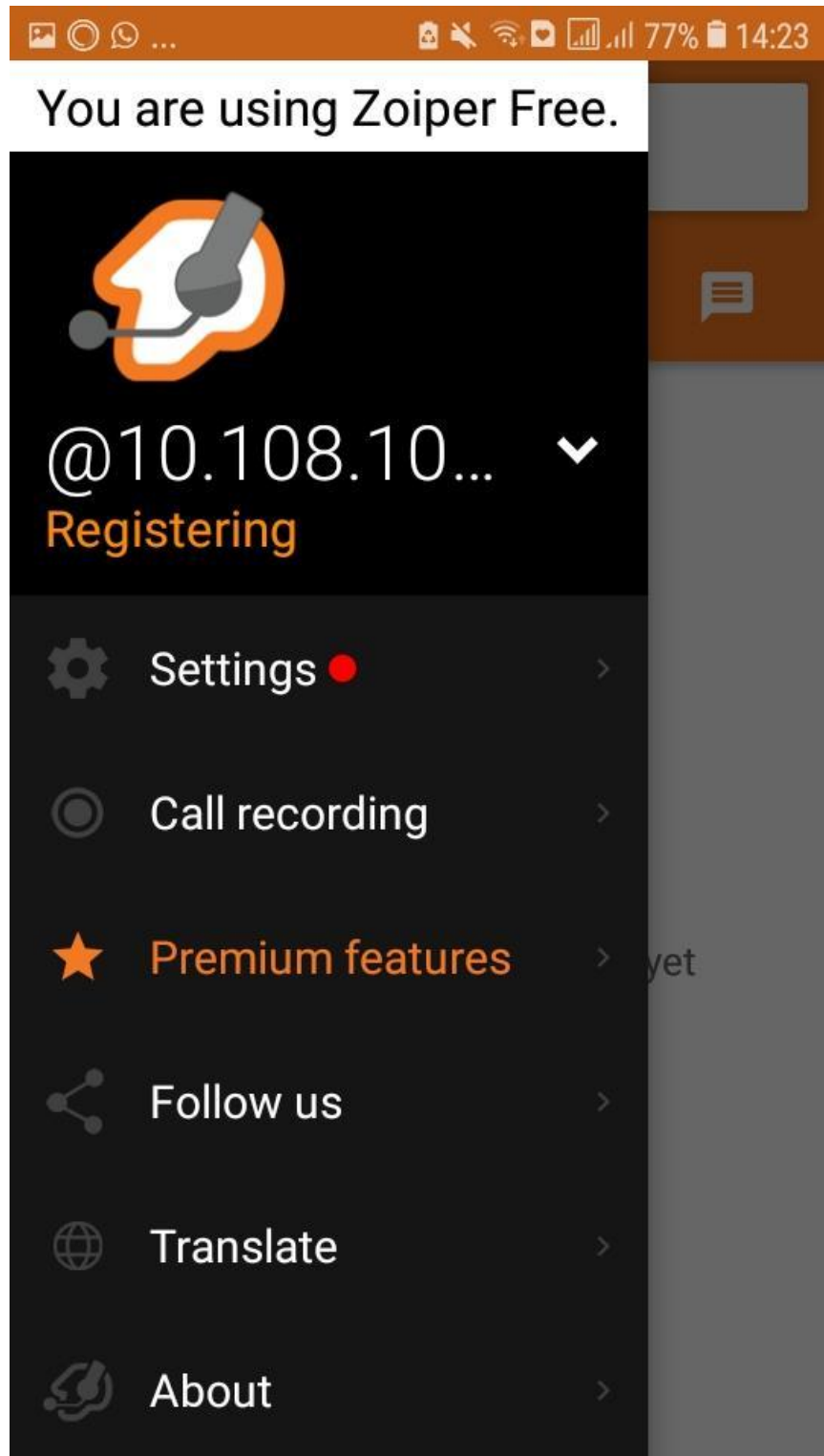
☐

IAX UDP

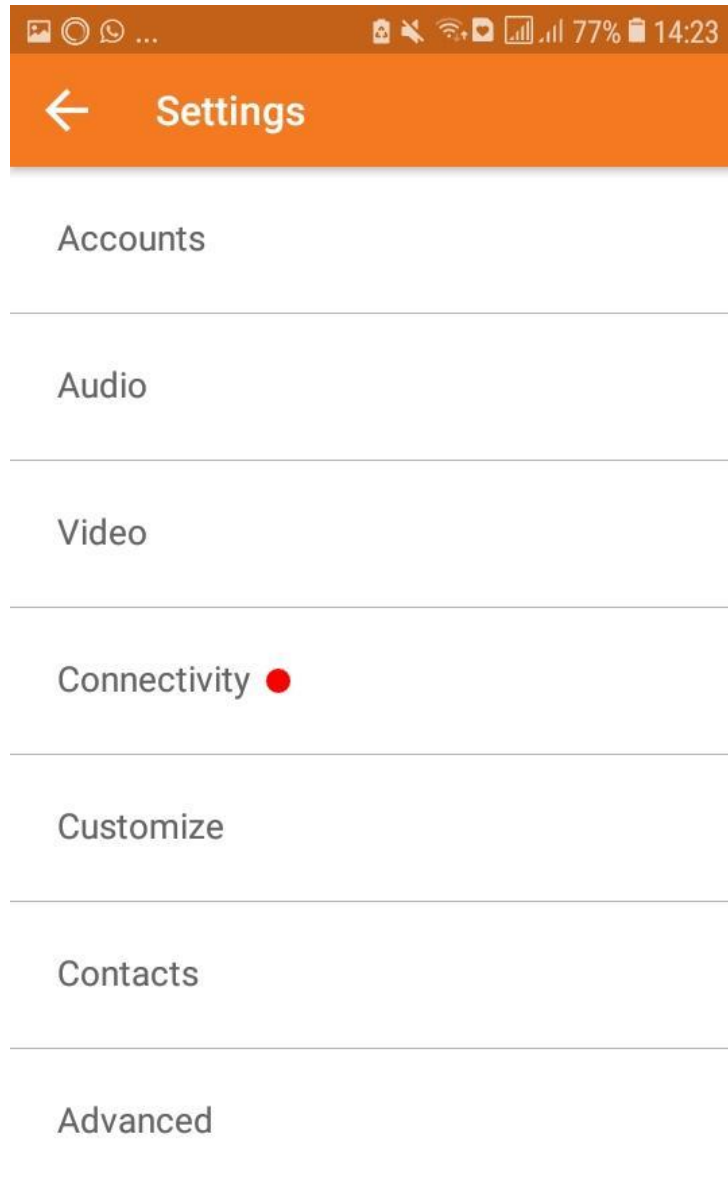
Not found

Finish

5. Kemudian pilih Settings.



6. Kalau sudah kita klik **Accounts**.



7. Account Name sesuaikan dengan nama yang telah kita buat

- Host **192.168.100.2** = Merupakan IP Address si server trixbox
- Username **7** = Adalah user extensions yang tadi telah kita buat
- Password **7** = Yang tadi kita buat di kolom **Secret** sebelumnya

Kalau sudah kita back.

☑ 📷 ▶ ... 🔒 🔊 📶 🔍 63% 🔋 17:04

← SIP Account

Account Name
annisa

Authentication

Host
192.168.107.2

Username
7

Password
*

Optional

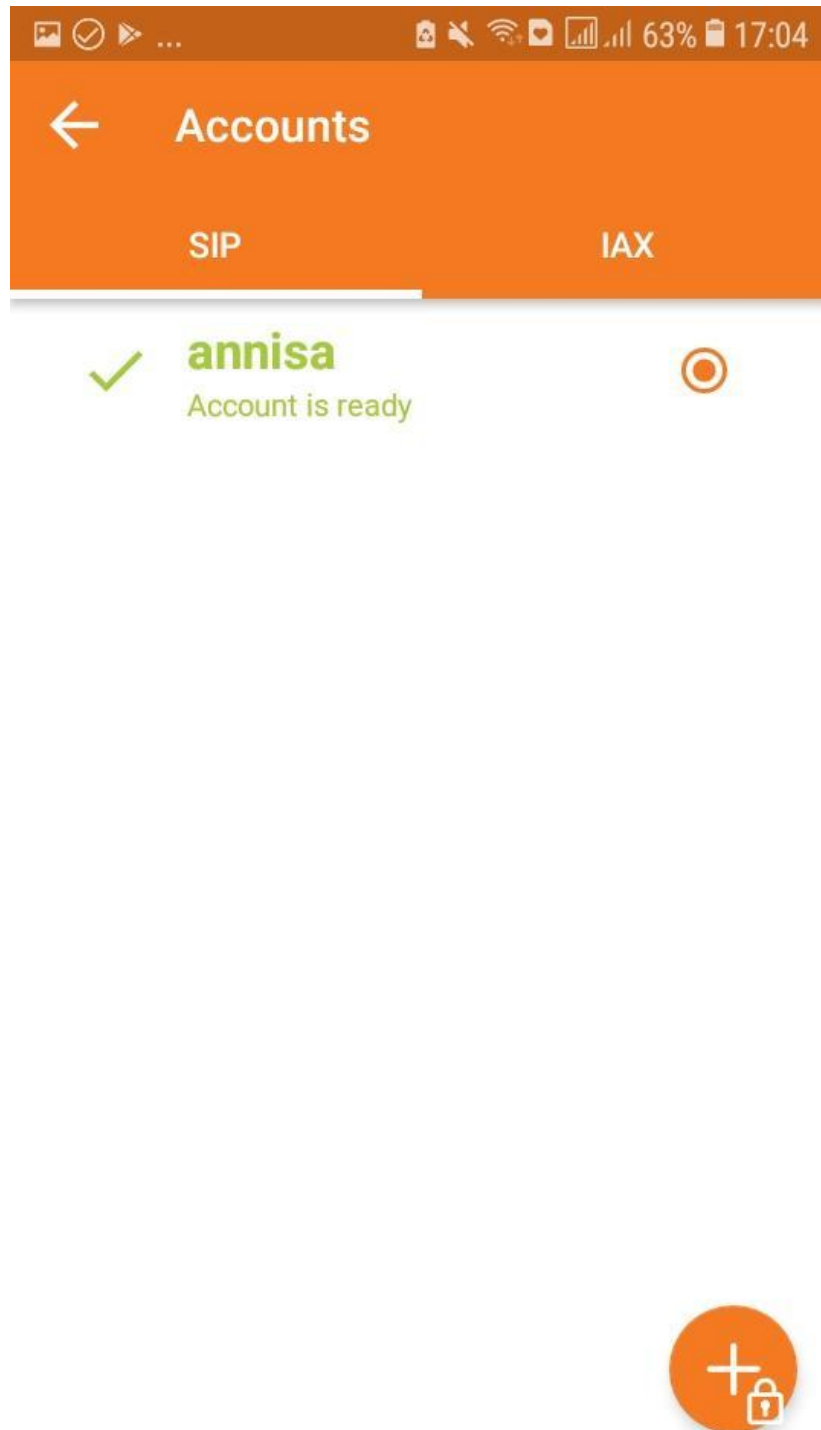
Authentication User

Outbound Proxy

Caller ID

VoiceMail Extension

8. Jika berhasil, maka tampilannya akan seperti ini.



9. Selanjutnya kita koneksikan juga di smartphone yang lain dengan terhubung ke wifi yang telah dibuat sebelumnya. Lalu lakukan cara yang sama untuk memasukkan user ke dua seperti cara di atas.

17.04      77

← SIP Account

Account Name
najla

Authentication

Host
192.168.107.2

Username
20

Password
**

Optional

Authentication User

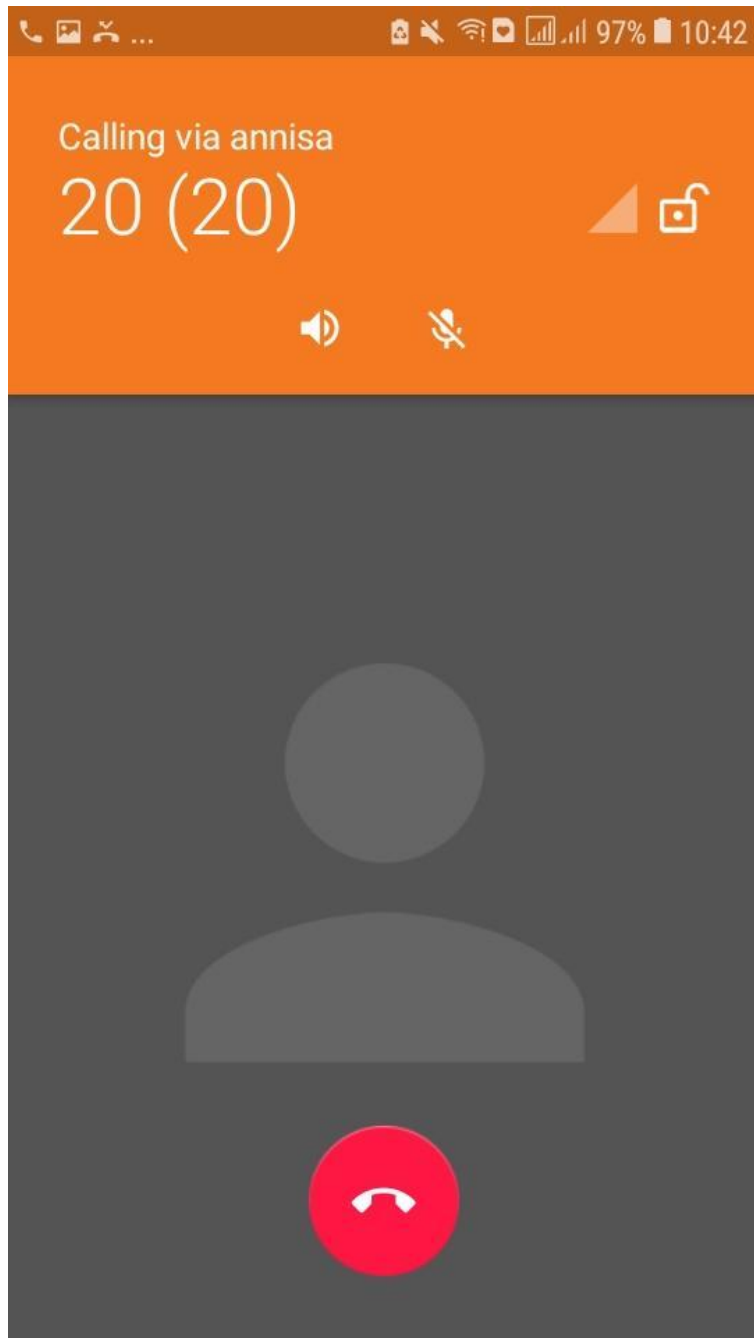
Outbound Proxy

Caller ID

Voicemail Extension

Ringtone

10.Sekarang saya akan menelpon user 20 yaitu Najla.



11. Lalu akan tersambung ke user yang dituju.

17.05



Incoming via najla

annisa (7)

