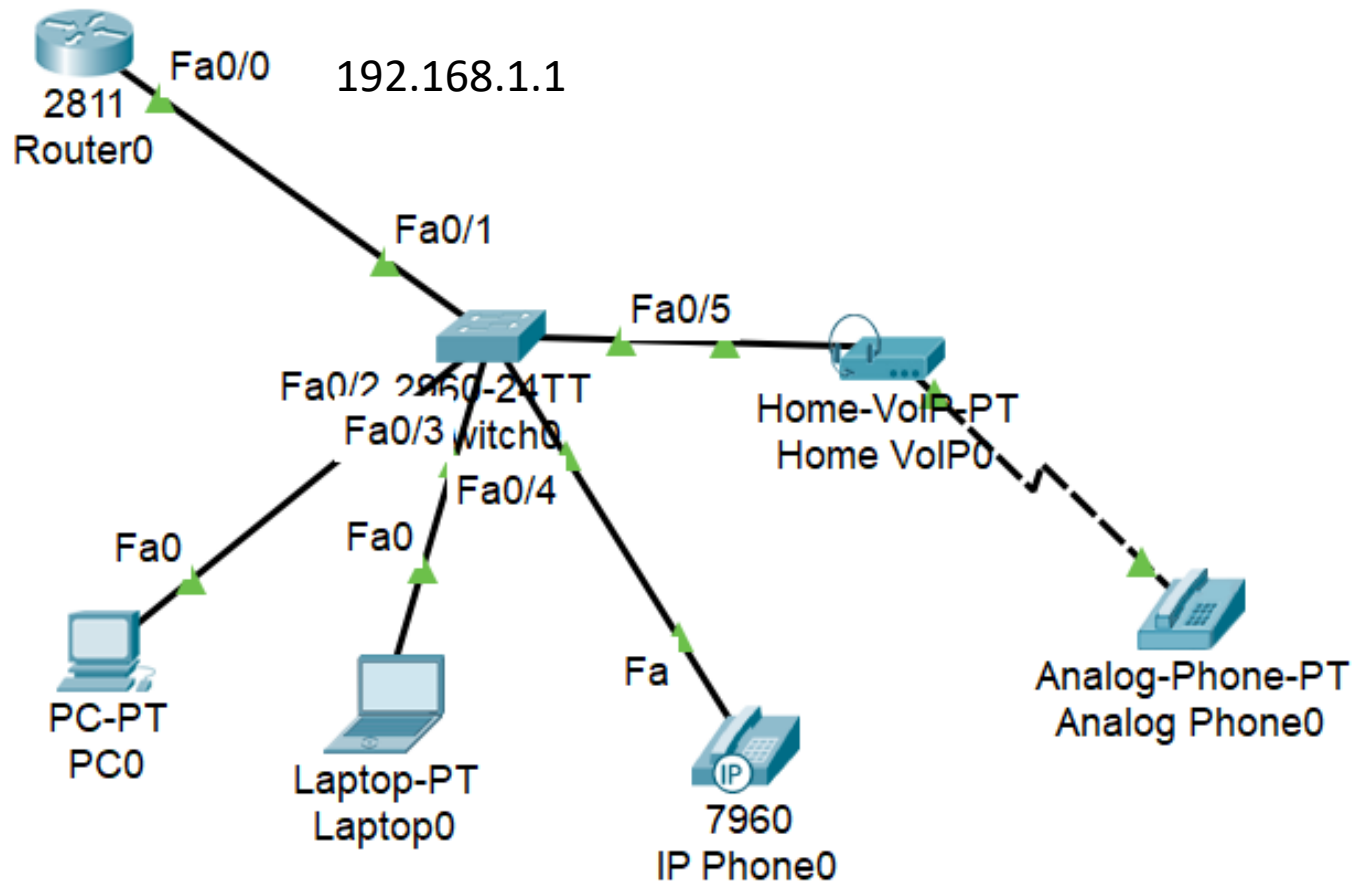




Modul Praktikum Jaringan Komunikasi Cisco VOIP (H.323) dengan Analog Phone

Mochammad Zen Samsono Hadi, ST. MSc. Ph.D.

Topologi VoIP



Konfigurasi Router

IP address

```
Router>enable
Router#config terminal
Router(config)#interface fastethernet 0/0
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#exit
```

```
Router(config)#ip dhcp pool voip
Router(dhcp-config)#network 192.168.1.0 255.255.255.0
Router(dhcp-config)#default-router 192.168.1.1
Router(dhcp-config)#option 150 ip 192.168.1.1
Router(dhcp-config)#exit
```

DHCP server

TFTP server

```
Router(config)#telephony-service
Router(config-telephony)#ip source-address 192.168.1.1 port 2001
Router(config-telephony)#max-ephones 5
Router(config-telephony)#max-dn 5
Router(config-telephony)#auto assign 1 to 5
Router(config-telephony)#exit
```

sumber VoIP
maks ip_phone
maks no telp
dial otomatis

Konfigurasi Router

```
Router(config)#telephony-service
Router(config-telephony)#ephone-dn 1
Router(config-telephony)#number 111
Router(config-telephony)#ephone-dn 2
Router(config-telephony)#number 222
Router(config-telephony)#ephone-dn 3
Router(config-telephony)#number 333
Router(config-telephony)#ephone-dn 4
Router(config-telephony)#number 444
Router(config-telephony)#ephone-dn 5
Router(config-telephony)#number 555
Router(config-telephony)#exit
```

PC

Laptop

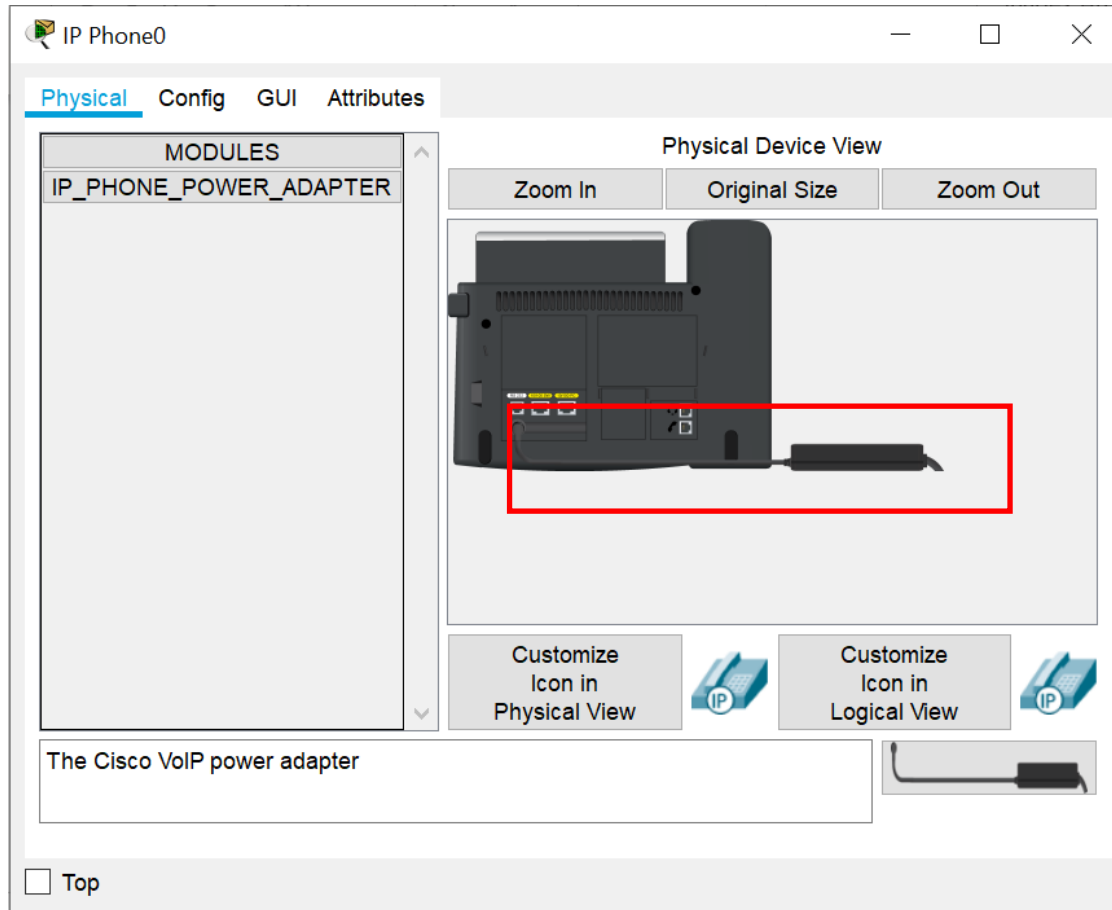
IP Phone

Analog phone

Konfigurasi Switch (VLAN)

```
Switch>enable  
Switch#conf t  
Switch(config)#interface range f0/1-24  
Switch(config-if-range)#switchport mode access  
Switch(config-if-range)#switchport voice vlan 1  
Switch(config-if-range)#exit  
Switch(config)#
```

Konfigurasi IP Phone (Power On)



Konfigurasi PC & Laptop

PC0

Physical Config Desktop Programming Attributes

GLOBAL

- Settings
- Algorithm Settings

INTERFACE

- FastEthernet0
- Bluetooth

Global Settings

Display Name: PC0

Interfaces: FastEthernet0

Gateway/DNS IPv4

- DHCP
- Static

Gateway: 192.168.1.1

DNS Server

Gateway/DNS IPv6

- DHCP
- Auto Config
- Static

IPv6 Gateway


IPv6 DNS Server

Physical Config Desktop Programming Attributes

- IP Configuration
- Dial-up
- Terminal
- Command Prompt
- Web Browser
- PC Wireless
- VPN
- Traffic Generator
- MIB Browser
- Cisco IP Communicator

Physical Config Desktop Programming Attributes

IP Communicator



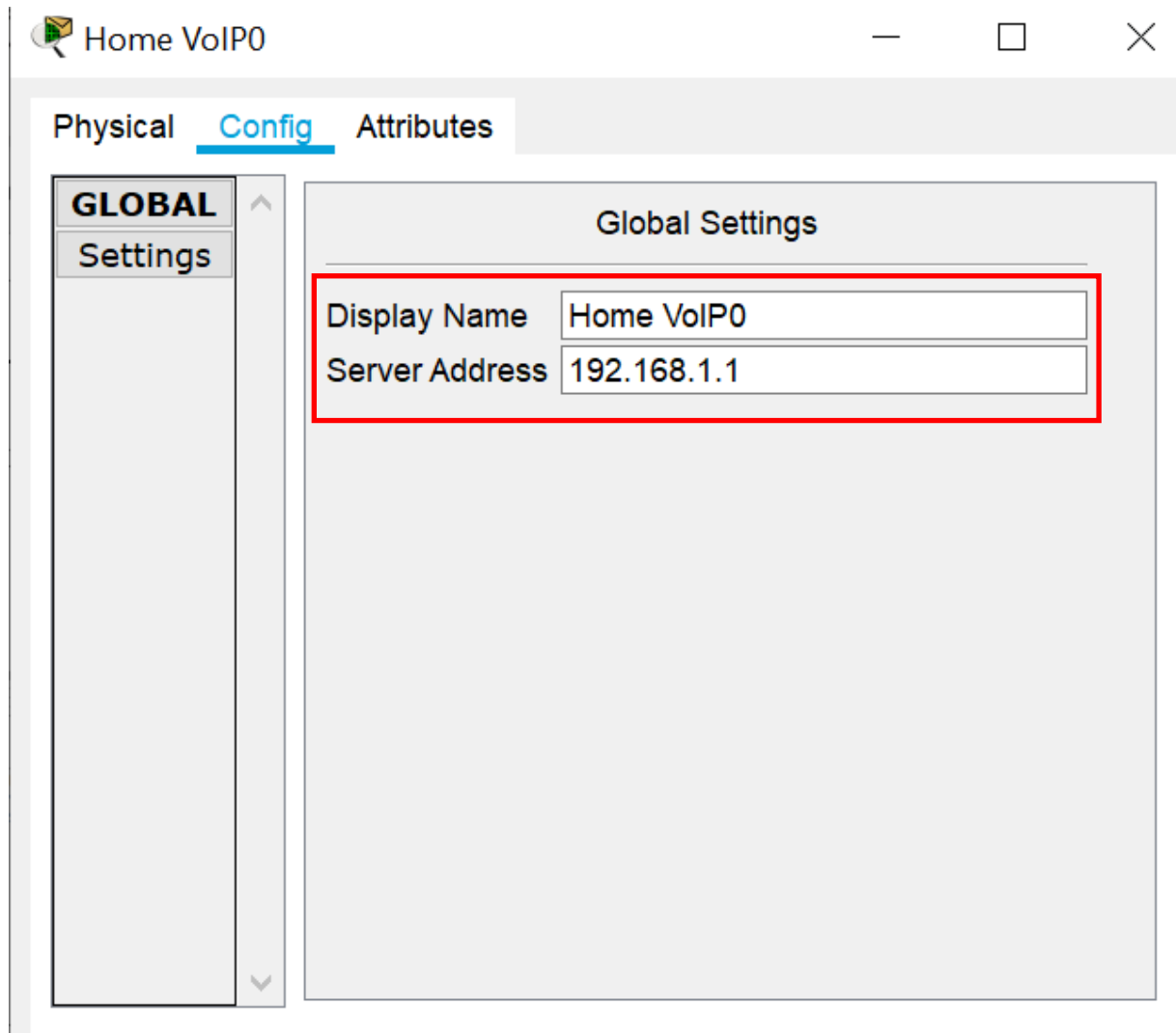
03:0003.01.93

444

444

Redial NewCall CFwdAR PickUp more

Konfigurasi Home VoIP



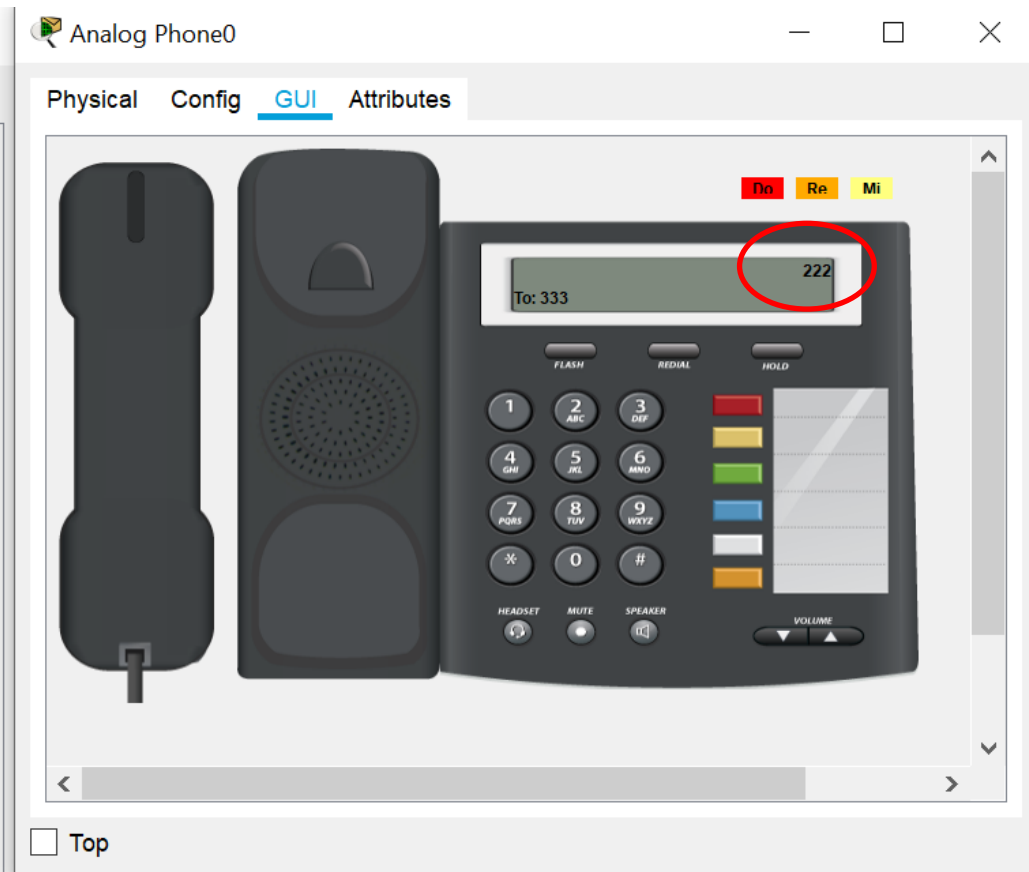
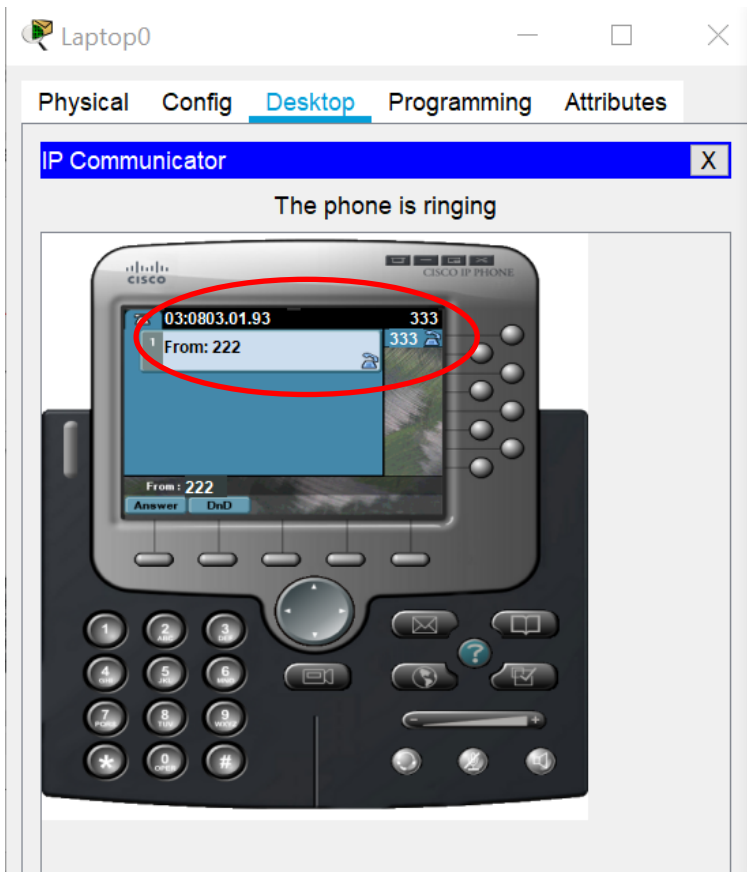
The screenshot shows a window titled "Home VoIP0" with standard window controls (minimize, maximize, close). The window has three tabs: "Physical", "Config" (which is selected and underlined), and "Attributes". On the left side, there is a vertical sidebar with a "GLOBAL" header and a "Settings" button. The main content area is titled "Global Settings" and contains two input fields. The first field is labeled "Display Name" and contains the text "Home VoIP0". The second field is labeled "Server Address" and contains the IP address "192.168.1.1". A red rectangular box highlights both of these input fields.

Global Settings	
Display Name	Home VoIP0
Server Address	192.168.1.1

Konfigurasi End User (Ring On)

Laptop

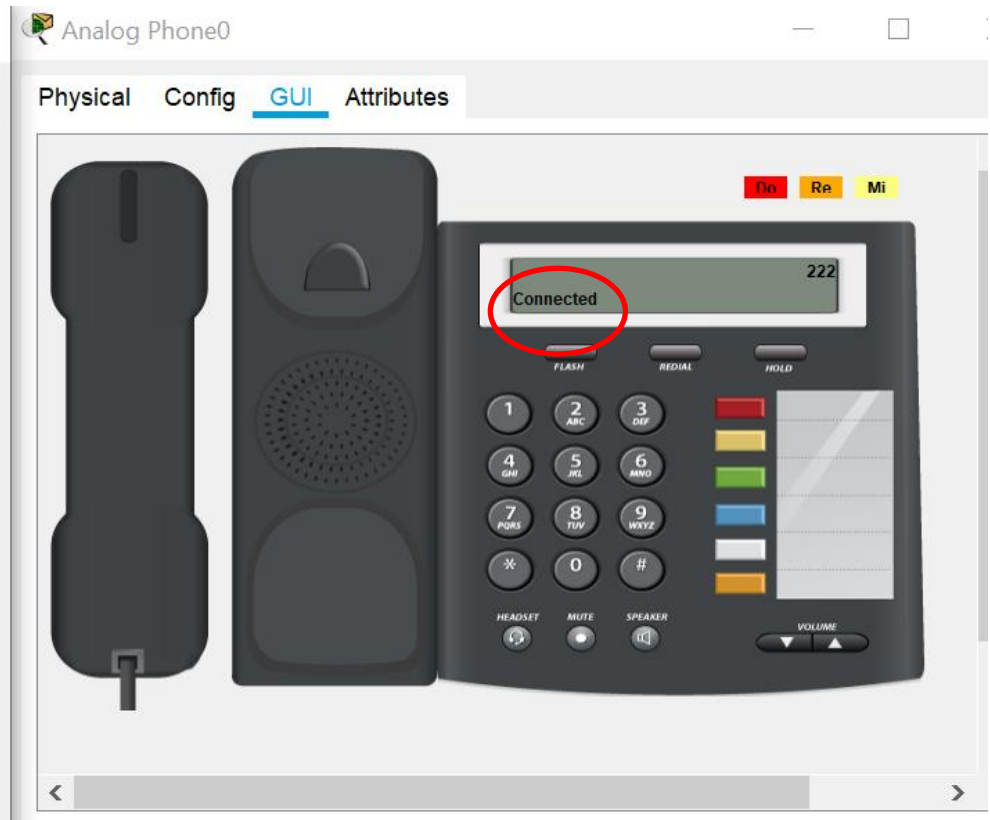
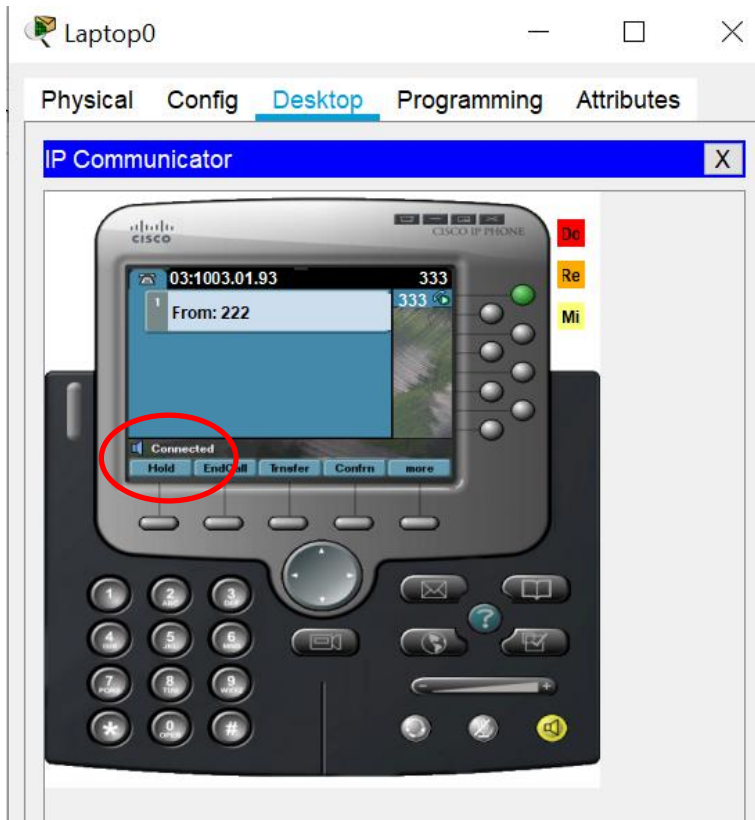
Analog Phone



Konfigurasi End User (Connected)

Laptop

Analog Phone



Pastikan semua user bisa saling interkoneksi

Tugas

- Lakukan percobaan pada topologi di contoh
- Tambahkan Access Point dgn SSID: VoIP dan 3 user: Smartphone, Tablet dan Laptop
- Lakukan interkoneksi semuanya, dan buatlah laporan resminya (topologi, konfigurasi, hasil, analisa dan kesimpulan)

