

VOIP Server

Wisdom Orji

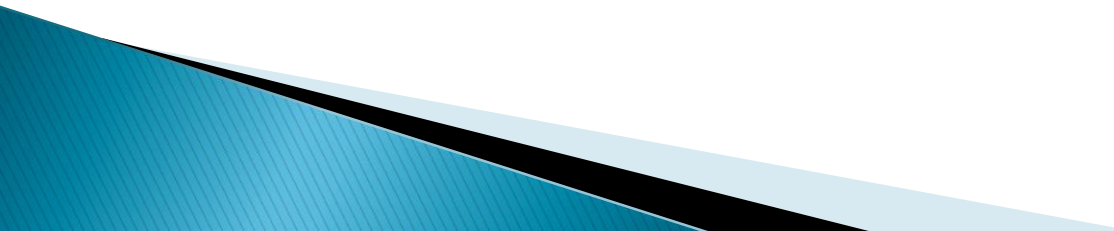
Goal

- ▶ The purpose of this assignment was to be able to turn the Raspberry Pi into a router that would manage incoming and outgoing calls from two computers.

What is VOIP

- ▶ Skype, Google Talk
- ▶ Allows communication between devices over the internet

Asterisk

- ▶ Open source PBX (Private Branch Exchange)
 - ▶ Used to manage calls, enable features, and connect callers to the outside world over IP (Internet Protocol)
 - ▶ Extremely vast and powerful
 - ▶ Extremely confusing
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Setting up Asterisk

- ▶ `$: cd ..`
- ▶ `$: sudo tar xvfz asterisk-11-current.tar.gz`
- ▶ `$: cd asterisk-11.0.1`
- ▶ `$: sudo ./configure --libdir=/usr/lib64 && make menuselect && make && make install && make config && make samples`
`$: sudo /etc/init.d/asterisk start`

```
sudo tar xzvf asterisk-addons--1.6.2.4.tar.gz
$: cd asterisk-addons-*
$: sudo ./configure
$: sudo make
$: sudo make install
$: sudo make samples
```

manager.conf

```
$: sudo nano /etc/asterisk/manager.conf
```

```
[general]
```

```
enabled=yes
```

```
webenabled=yes
```

```
[admin]
```

```
secret= saltshaka
```

```
read=system,call,log,verbose,command,agent,user,config,originate,read,write
```

```
write=system,call,log,verbose,command,agent,user,config,originate,read,write
```

http.conf

sudo nano /etc/asterisk/http.conf

Given:

[general]

enabled=yes

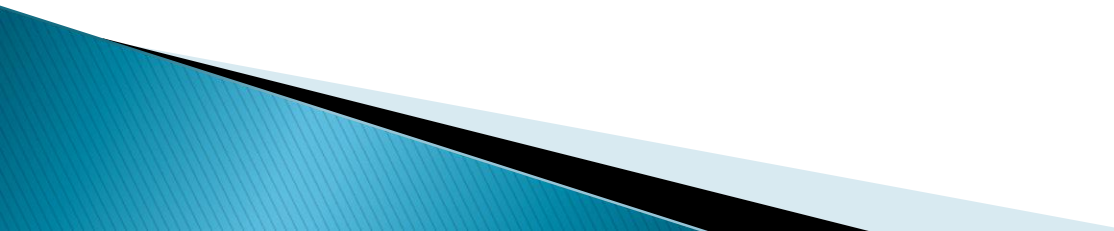
bindaddr=0.0.0.0 (CHANGE IP, Depends on where your pi is hooked up)

bindport=8088

prefix=asterisk

enablestatic=yes

Problems Faced

- ▶ Finding missing files and packages that were missing from some of the documentation
 - ▶ Sifting through all the documentation from various people
 - ▶ Setting up the sip.conf and extensions.conf files in order to tell asterisk which phone calls to accept.
 - ▶ Getting the Asterisk GUI to work.
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Conclusion/What I learned

- ▶ The task was not as simple as I was led to believe, at least not for me.
 - ▶ I am less of a novice with the command line
 - ▶ Thorough documentation is a blessing and is surprisingly scarce.
 - ▶ Solving errors is the best feeling in the world.
 - ▶ For the future I would like for my to try and figure out where I went wrong and hopefully set it up in my house and have my house phones using it.
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