

An Example of a Home Asterisk System

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What is Asterisk?

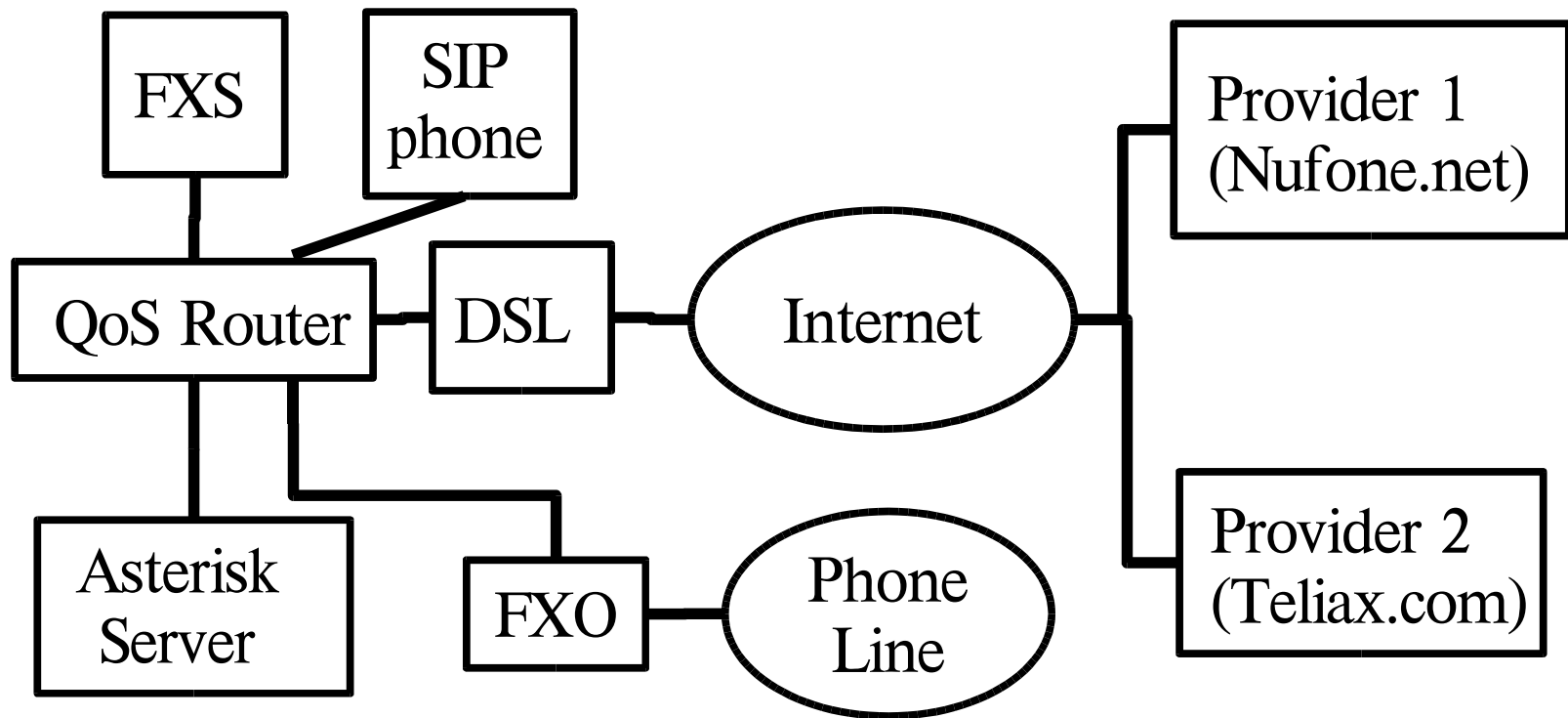
Open source telephone PBX for Linux

Mostly it's hardware glue - connecting different hardware devices and channels

Hardware: "FXS", SIP phones, "FXO"

Channels: IAX, SIP

Basic Home Use



Asterisk Config Files

- `iax.conf` – define IAX providers and devices
- `sip.conf` – define SIP providers and devices
- `extensions.conf` – the dialplan

Dialplan Example

```
exten = 8777779322,1,Answer
```

```
exten = 8777779322,2,Goto(greet,1)
```

```
exten = greet,1,Ringing
```

```
exten = greet,2,Wait(1)
```

```
exten = greet,3,Background(ex_greet)
```

```
exten = 6,1,VoicemailMain(6)
```

```
exten = 6,2,Hangup
```

```
exten = 7,1,Dial(SIP/sipura1,17)
```

Advantages of Asterisk/VoIP

- Ability to add features to your phone
- Nearly every feature is standard (voicemail, call forwarding, caller ID, etc)
- Cheap, cheap, cheap (toll-free too)
- Adding new extensions is as easy and cheap as adding a new FXS and phone, limited only by bandwidth
- Adding a new incoming line is as easy as a short section in the config file

Disadvantages

- If DSL/server/router/FXS/asterisk goes down, phone goes down
- If DSL has line problems, phone sounds terrible or doesn't work
- 911
- A QoS router is a necessity

Some Advanced Features

- Calling card feature (requires authentication, of course)
- Call recording
- Call forwarding
- Do Not Disturb
- Any CallerID you want
- Wakeup Calls

Home Automation

Cheap X10 controller + lamp
modules



```
exten = s,1,System(/usr/bin/ssh  
-xn ${HEYU_USER}@${HEYU_SERVER}  
heyu-on_off on ${ARG1} ${ARG2}&)
```

Connect to music jukebox?

Use as MythTV remote?

Improvements

- Integration with voice recognition engine (CMU sphinx?)
- Ability to respond to DTMF during a call

My Configuration

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