

This folder contains various snippets of code used in the CIS 218 Introduction to VoIP class that Harry McGregor and I team teach at Pima Community College in Tucson AZ.

The class is based on Debian Linux and the Asterisk open source pbx application from <http://www.digium.com>.

For the purpose of the class, each student installs Debian Linux and Asterisk in a virtual environment on VMWare Workstation.

Each student has the use of a Polycom 330 SIP phone to configure for their server. The phones are connected to a Dell 3548P POE switch which provides power to the phones and access to our classroom vlan.

We set up the servers so students can call each other and by going through the instructor server, they have access to an IAX2 based incoming and outgoing trunk.

Many of the examples here were used as class projects and assigned to the students to figure out how to implement them. I posted these samples as one way to accomplish the task but not necessarily the best or most elegant way.

Use them as you wish but they are posted with no guarantees that they will work in your environment and you assume all risk for their use.

The suggested reading reference is "Asterisk-The definitive Guide" by O'Reilly books.

Because VMWare workstation does not support physical hardware like a T1 or Analog card, I also have one machine running Debian Linux and Asterisk at the "bare metal" level.

This machine has one Digium TDM400 analog card with two FXS and two FXO daughter boards. It also has a Digium TDM110 T1 card which is connected to an Adit 600 channel bank with three eight port FXS cards. This is used to demonstrate how Asterisk can support legacy telephone hardware to provide dial tone for 24 analog telephone sets.

I have a number of traditional 2500 DTMF (touchtone®) sets as well as a legacy rotary dial type 500 set. This demonstrates how Asterisk can support just about any type of telephone set from your grandmother's old candlestick phone to the latest digital SIP protocol set with the right hardware.

Channel banks such as these are often available on eBay for pennies on the original dollar. I paid a whopping \$18.95 plus \$12.00 shipping for the one we use in class.

Asterisk compatible cards are also often found on eBay at reasonable prices.

George Cohn
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