Asterisk Step-by-step Installation

Introduction

This how-to guide outlines the process for a fresh installation of Redhat Linux (Fedora Core 2 Final) and Asterisk. The purpose of this document is to get you up and running (making and receiving phone calls) in about an hour. Experimenting with Asterisk, enabling more features and unlocking its potential is left up to you!

This configuration was created and tested on:

```
DELL PowerEdge 400SC ($350)
--------------------------
Intel Pentium 4 2.40Ghz
256MB RAM
Standard configuration, no extra hardware
```

Installing Redhat Fedora Core 2 Final

- Download Redhat Fedora Core 2 FINAL from http://fedora.redhat.com/download and burn the CD ISO images (you only need CDs 1 and 2)
- Insert the CD and reboot into setup
- Hit enter to start graphical setup
- Skip the media test
- After the graphical setup starts, click Next to continue
- Select a language and click Next
- Select a keyboard configuratoin and click Next
- If asked, select "Install Fedora Core" and click Next
- Select an installation type of Custom and click Next
- Select Automatically Partition and click Next
- If asked, select "Remove all partitions on this system". WARNING: This will erase ALL data on your computer!
- Select Yes to confirm removing all data on your computer.
- Click Next to accept default Disk Setup
- Click Next to accept default Boot Loader Configuration
- Click Next to accept default Network Configuration
- Select No Firewall for the Firewall Configuration and click Next. WARNING: We do not recommend connecting this test server directly to the Internet! This server is configured without a firewall for simplicity. You can enable the firewall later and make the necessary changes to keep Asterisk working.
- Click Next to accept default Additional Language Support
- Select a time zone and click Next
- Enter a root password and click Next
- For Package Group Selection, select ONLY the following and de-select the other options:

```
* X Window System
* GNOME Desktop
* Editors
* Graphical Internet
* Text-based Internet
* Development Tools
```

- Click Next to accept Package Group Selection
- Click Next to begin installation
- Click Continue
- Insert Disc 2 when prompted and click OK
- When CD installation is complete, click Reboot
- After rebooting, the post-installation process will begin
- Click Next to continue
- Accept the License Agreement and click Next
- Set the date and time and click Next
- Click Next to accept the default Display settings
- Create a User Account with a different username and password than the "root" user created earlier and click Next
- If asked, confirm your sound card and click Next
- Click Next to skip the Additional CDs section
- Click Next to Finish setup

Installing Asterisk

- Login to your server as the user you created during install
- Right-click on the background and select Open Terminal
- Type "su -" on the command line, then enter the "root" user password when prompted
- Run the following commands to download Asterisk:

```
cd /usr/src
export CVSROOT=:pserver:anoncvs@cvs.digium.com:/usr/cvsroot
cvs login <--- This command will prompt for a password, use anoncvs
cvs checkout asterisk
```

- This will download the latest version of Asterisk to your server. WARNING: This will download the very latest DEVELOPMENT version of Asterisk. It is NOT suitable for production use, just for testing!
- Run the following commands to compile Asterisk:

```
cd /usr/src/asterisk
make clean
make
make install
make samples
```

- Note: You may need to "make install" several times before it really works.

Configuring Asterisk

- Login to your server as user "root"
- Right-click on the background and select Open Terminal

- Run the following commands to backup your current/sample configurations:

```
cd /etc/asterisk
mv iax.conf iax.backup
mv extensions.conf extensions.backup
```

- Run the following commands to download VoicePulse sample configurations:

```
cd /etc/asterisk
wget http://connect.voicepulse.com/samples/iax.sample
wget http://connect.voicepulse.com/samples/extensions.sample
```

- Run the following commands to rename the sample configurations:

```
cd /etc/asterisk
mv iax.sample iax.conf
mv extensions.sample extensions.conf
```

- Run the following commands to read and edit the VoicePulse Asterisk configurations:

```
cd /etc/asterisk
gedit iax.conf &
gedit extensions.conf &
```

- Run the following command to open a web browser to visit VoicePulse Connect! (http://connect.voicepulse.com/) while reading the configuration files:

```
mozilla &
```

- In iax.conf, make the changes outlined in the QUICKSTART section of the sample file, save the file and close it.
- In extensions.conf make the changes outlined in the QUICKSTART section of the sample file, save the file and close it.

Test incoming & outgoing calls

- Start Asterisk on your test server by running:

```
/usr/sbin/asterisk -vvvgc
```

- Run the following command to get the IP address of your Asterisk server:

```
    ifconfig
```

- Look for the value after "inet addr:" to determine the IP address
- Download "[Dante's DIAX Software Phone](#)   " to your Windows PC
- Start DIAX
- Click on Config > Registration
- Enter the following information (this "user" is already created in the sample iax.conf you downloaded from VoicePulse):

```
    Alias: VoicePulse
    Server: the IP address of your server that you determined above
    Username: diax
    Password: diaxpassword
    Password: diaxpassword
    Register: checked
```

- Click Save
- Click OK
- Dial a non-VoicePulse phone number to test outgoing calls like 1-888-225-5322
- You should see something similar to the following scroll across your Asterisk terminal window:

```
    — Accepting AUTHENTICATED call from 192.168.1.100, requested format = 2, actual format = 2
    — Executing Dial
("IAX2/diax@diax/3", "IAX2/MY_DEVICE_LOGIN:MY_DEVICE_PASSWORD@gwiaxt01.voicepulse.com/18882255322") in new stack
    — Call accepted by 66.234.228.160 (format GSM)
```

- Add a phone number to your VoicePulse Connect! account from the Phone Numbers menu in your Account Center.
- Dial the incoming VoicePulse Connect! phone number on your account from a non-VoicePulse phone.
- You should see something similar to the following scroll across your Asterisk terminal window:

```
    — Accepting AUTHENTICATED call from 66.234.228.170, requested format = 4, actual format = 4
    — Executing Playback("IAX2/voicepulse-in-01@66.234.228.170:4569/4", "beep") in new stack
```

- Dialing into your Asterisk server should read back your phone number to you and then read back any digits you dial.
- If incoming and outgoing calls work, your Asterisk setup is complete! See www.asterisk.org or www.voip-info.org for more details on customizing your Asterisk setup.