

Asterisk & Zaptel Quick Installation Guide

DMLink



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Overview

DMLink Asterisk Telephony cards are designed specially for Asterisk project. At least, The installation of Asterisk and Zaptel have to be finished before the card can be installed.

For introduction and characteristics of Asterisk, please refer to the following:

- (1) Asterisk: The future of telephony
- (2) www.asteriskdocs.org
- (3) www.asterisk.org

Asterisk is an open source project developed on Linux. Zaptel is the drivers supporting telephony interface hardware.

In order to build Asterisk and Zaptel code, the following packages will be needed:

- (1) GCC Compiler (Version 3.x or later)
- (2) bison 1.857
- (3) ncurses
- (4) OpenSSL (and headers)
- (5) Kernel code (Kernel-devel) .

Source Code Download

If there is no special notice, all driver modules have been included in zaptel.

The zaptel source code can be downloaded by the following ways:

- (1) FTP: [ftp.digium.com](ftp://ftp.digium.com)
- (2) SVN: svn.digium.com

To download the latest release from Digium's FTP server:

```
# cd /usr/src
#wget http://ftp.digium.com/pub/zaptel/zaptel-1.2-current.tar.gz
#wget http://ftp.digium.com/pub/libpri/libpri-1.2-current.tar.gz
#wget http://ftp.digium.com/pub/asterisk/asterisk-1.2-current.tar.gz
# tar zxvf *current.tar.gz
```

To check out from Digium's SVN server:

```
# cd /usr/src
```

```
#svn co http://svn.digium.com/svn/zaptel/branches/1.2 zaptel-1.2
# svn co http://svn.digium.com/svn/zaptel/branches/1.2 libpri-1.2
# svn co http://svn.digium.com/svn/asterisk/branches/1.2 asterisk-1.2
```

Build and Install

To build and install zaptel:

```
# ./configure
# Make linux26 (2.6 内核)
# make install
```

To build and install Asterisk:

```
# ./configure
# make
# make install
# make samples
```

If you need sample asterisk configuration files, please do as follows:

```
# make samples
```

/etc/zaptel.conf has to be modified to reflect hardware configuration. Refer to hardware install and user's manual of different telephony cards for configuration details.

To load the proper driver for your card by command: modprobe:

```
DM110D => wcte11xp
DM410D => wct4xvp
DM400A => wctdm
DM2400A,DM1200A => wctdm24xvp
```

Configuration

Asterisk mainly includes the following configuration files:

- Zaptel.conf: For low level interface card configuration. Refer to Hardware install and user's manual for details.
- zapata.conf: Asterisk abstract hardware interface configurations.
- extensions.conf: Dialplan script file.
- sip.conf: configuration file for SIP protocol.
- iax.conf: incoming and calling out channel configuration file for IAX2 protocol.

If zaptel.conf has been modified, it will be effective immediately after execute "/sbin/ztcfg

-vv”.

If zapata.conf has been modified, it will be effective after execute “reload”. If signal configurations have been modified, you should restart Asterisk.

If iax.conf and sip.conf has been modified, module chan_iax2.so and chan_sip.so has to be reload respectively.

Running

The zttool program is a diagnostic tool used to determine the state of your hardware. After running it, you will be presented with a menu of all installed hardware. You can then select the hardware and view the current state. A state of “OK” means the hardware is successfully loaded:

```
Alarms Span
OK Wildcard TDM400P REV E/F Board 1
```

Ztcfg can be used to check the channel states:

```
# ztcfg -vv
```

The following information may be viewed:

Zaptel Configuration

Channel map:

```
Channel 01: FXS Kewlstart (Default) (Slaves: 01)
Channel 02: FXS Kewlstart (Default) (Slaves: 02)
Channel 03: FXO Kewlstart (Default) (Slaves: 03)
Channel 04: FXO Kewlstart (Default) (Slaves: 04)
4 channels configured.
```