

? OpenVZ ????? Asterisk ? Ubuntu ???

?????

- ?????????? FreePBX????????? Asterisk ?????? amportal start????????? asterisk ???
- ?????????? amportal stop ???

????

- openvz kernel?2.6.18-274.3.1.el5.028stab094.3, HN: CentOS 5
- Container Linux OS?Ubuntu 11
- Asterisk 1.6.2.20
- Dahdi 2.5.0.2

????

????????

```
apt-get install build-essential libncurses-dev libxml2-dev
```

?? Asterisk & Dahdi ??

?????

- <http://downloads.asterisk.org/pub/telephony/asterisk/>
- <http://downloads.asterisk.org/pub/te...inux-complete/>

```
cd /usr/src
```

```
wget http://downloads.asterisk.org/pub/telephony/dahdi-linux-complete/  
dahdi-linux-complete-current.tar.gz
```

```
wget http://downloads.asterisk.org/pub/telephony/asterisk/asterisk-1.6.2.20.tar.gz
```

```
wget http://downloads.asterisk.org/pub/telephony/asterisk/releases/asterisk-addons-1.6.2.4.tar.gz
```

??? meetme ???

1. [HN]? HN ????? Dahdi ??

```
yum install ovzkernel-devel
```

```
cd /usr/src
```

```
wget http://downloads.asterisk.org/pub/telephony/dahdi-linux-complete/  
dahdi-linux-complete-current.tar.gz
```

```
tar xzf dahdi-linux-complete-current.tar.gz
```

```
cd dahdi-linux-*
```

```
make
```

```
make install
```

```
make config
```

```
?? /etc/dahdi/modules.conf????????????
```

```
?? dahdi ?????? /dev/dahdi/pseudo ????
```

```
service dahdi start
ls -l /dev/dahdi
```

```
[root@openvz dahdi-linux-complete-2.5.0.2+2.5.0.2]# ls -l /dev/dahdi/
total 0
crw-rw---- 1 root root 196, 254 Nov  2 04:23 channel
crw-rw---- 1 root root 196,  0 Nov  2 04:23 ctl
crw-rw---- 1 root root 196, 255 Nov  2 04:23 pseudo
crw-rw---- 1 root root 196, 253 Nov  2 04:23 timer
```

2. ? Container????? dahdi????? dahdi ???? user.h ? dahdi_config.h ?????? /usr/include/dahdi?

```
cd /usr/src
tar xzf dahdi-linux-complete-current.tar.gz
mkdir /usr/include/dahdi
cd dahdi-linux-complete-2.5.0.2+2.5.0.2
cp linux/include/dahdi/user.h /usr/include/dahdi/
cp linux/include/dahdi/dahdi_config.h /usr/include/dahdi/
```

? Container ?? Asterisk

```
cd /usr/src
tar xzf asterisk-1.6.2.20.tar.gz
cd asterisk-1.6.2.20
```

[??]????? iLBC codec ??????????????????

?????

???????

```
./configure
make menuselect
```

```
MeetMe??(??)?
Applications > app_meemt (????????????? meemt ??)
```

```
iLBC ??(??)?
Codec Translators -> codec_ilbc
```

```
??????
Extras Sound Packages -> EXTRA-SOUNDS-EN-GSM
```

?? x ??????

????

make
make install
make samples

Asterisk ?????

???? asterisk-addons

cd /usr/src
tar xzf asterisk-addons-1.6.2.4.tar.gz
cd asterisk-addons-1.6.2.4
./configure
make menuselect

[?] ????? mysql ??????????????
????????????? mysql ????????

apt-get install mysql-server mysql-client mysql-admin libmysqlclient15-dev

Applications

-> app_addon_sql_mysql ;?? MySQL
-> app_saycountpl

Call Detail Recording

-> cdr_addon_mysql ;CDR ?? MySQL

Channel Drivers

-> chan_mobile ;?????(optional)
-> chan_ooh323 ;H.323 protocol ??(optional)

Format Interpreters

-> format_mp3 ;MP3 ??????(optional)

Resource Modules

-> res_config_mysql ; Asterisk Realtime Mode

Save & Exit

????

```
make
make install
make samples
```

```
?????
```

```
?? Asterisk ???
```

```
addgroup --system asterisk
adduser --system --ingroup asterisk --home /var/lib/asterisk --no-create-home asterisk
```

```
?? /etc/init.d/asterisk
```

```
# ????
```

```
AST_USER="asterisk"
AST_GROUP="asterisk"
```

```
?Asterisk 1.8.x ???
```

```
?? /etc/default/asterisk ?
```

```
??????
```

```
chown -R asterisk:asterisk /var/run/asterisk
chown -R asterisk:asterisk /etc/asterisk
chown -R asterisk:asterisk /var/log/asterisk
chown -R asterisk:asterisk /var/spool/asterisk
chown -R asterisk:asterisk /var/lib/asterisk
chown -R asterisk:asterisk /dev/dahdi
adduser asterisk audio (?? asterisk ? group audio)
```

```
??? meetme ???
```

```
1. ?? vi /usr/sbin/safe_asterisk?????
```

```
#TTY=9
```

```
???
```

```
- ????? FreePBX ?????????????? amportal start ?????? asterisk?
```

```
- ???????? Asterisk ???asterisk ?????????? console ????
```

```
2. [HN]???? OpenVZ Hardware Node??????????
```

```
vzctl set 102 --devnodes dahdi/pseudo:rw --save
```

???

- 102 ? container ID
- ??? container ????? /dev/dahdi/pseudo, /lib/udev/devices/dahdi/pseudo?
- ?????? Incorrect device name?
- 1. ??? dahdi ???
- 2. ??? /dec/dahdi/pseudo ?????

3. [HN]?? container ??????

```
vzctl exec 102 chown -R asterisk /dev/dahdi/pseudo /lib/udev/devices/dahdi/pseudo
vzctl exec 102 chgrp -R asterisk /dev/dahdi/pseudo /lib/udev/devices/dahdi/pseudo
```

???

- ?????? FreePBX???????? asterisk ?????????????? /dev/dahdi ??? asterisk????? meetme ???
- ???
- ??? /dev/dahdi ?? HN ?????????? root ???

?? Asterisk ????

```
/etc/init.d/asterisk start
?
service asterisk start
```

FAQ

Q???? asterisk ? amportal ????????????

A????????? safe_asterisk ????