

????? Voicemail????????????????????

1. ??????? Voicemail ?????????????????????????????
2. ??????? Voicemail ?????? BLOB ????????????

????

- PIAF 1.7.5.5
- Asterisk 1.6.2.17

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???????

root@pbx:/usr/src/asterisk \$ asterisk -rx "module show like odbc"

Module	Description	Use Count
res_odbc.so	ODBC resource	0
func_odbc.so	ODBC lookups	0
cdr_odbc.so	ODBC CDR Backend	0
res_config_odbc.so	Realtime ODBC configuration	0
cdr_adaptive_odbc.so	Adaptive ODBC CDR backend	0

5 modules loaded

???????????????? Asterisk?

?? Asterisk

```
cd /usr/src
cd asterisk
./configure
make menuselect
```

Voicemail Build Options > [?] ODBC_STORAGE

Notes:

```
? ?????? XXXX???? Linux ?????? unixODBC-devel, libtool?
? ??? FILE_STORAGE????????????????
```

```
make clean
make
amportal stop
make install
amportal start
```

?? Voicemail ??????????

?? Linux ODBC for MySQL

?? ODBC driver for MySQL

```
root@pbx:/usr/src/asterisk $ rpm -q mysql-connector-odbc
mysql-connector-odbc-3.51.26r1127-1.el5
```

?? /etc/odbcinst.ini

Example driver definitinions

#

#

#

Included in the unixODBC package

#[PostgreSQL]

#Description = ODBC for PostgreSQL

#Driver = /usr/lib/libodbcpsql.so

#Setup = /usr/lib/libodbcpsqlS.so

#FileUsage = 1

#

#

Driver from the MyODBC package

Setup from the unixODBC package

[MySQL]

Description = ODBC for MySQL

Driver = /usr/lib/libmyodbc.so

Setup = /usr/lib/libodbcmyS.so

FileUsage = 1

???? CentOS 5.5?????? /usr/lib/libmyodbc.so??? /usr/lib/libmyodbc3.so???????????

Driver from the MyODBC package

Setup from the unixODBC package

[MySQL]

Description = ODBC for MySQL

Driver = /usr/lib/libmyodbc3.so <----- ???

Setup = /usr/lib/libodbcmyS.so

FileUsage = 1

???????????? MS-SQL??????

[ms-sql]

Description = TDS connection

Driver = /usr/lib/libtdsodbc.so

Setup = /usr/lib/libtdsS.so

UsageCount = 1

FileUsage = 1

?? /etc/odbc.ini

```
[asterisk-connector]
Driver = MySQL
Database = asterisk_vm_recording
Server = localhost
Socket = /var/lib/mysql/mysql.sock
User = db_user
Password = db_pass
```

Notes:

```
? Driver ??? odbcinst.ini ?????
? Database ??????????????
```

????

isql -v asterisk-connector

```
+-----+
| Connected!          |
|                    |
| sql-statement      |
| help [tablename]   |
| quit               |
|                    |
+-----+
SQL> show databases;
+-----+
| Database            |
+-----+
| information_schema  |
| Hotel               |
| asterisk            |
| asterisk_vm_recording |
| asteriskcdrdb      |
| mya2billing         |
| mysql               |
| test                |
| vtigercrm520        |
| vtigercrm_ev       |
+-----+
SQLRowCount returns 10
10 rows fetched
SQL> quit
```

?? Asterisk for ODBC

?? /etc/asterisk/res_odbc.conf

[asterisk]

enabled => yes

dsn => asterisk-connector

pre-connect => yes

Notes:

dsn ??? odbc.ini ????

????

amportal stop

amportal start

asterisk -rx "odbc show"

ODBC DSN Settings

Name: asterisk

DSN: asterisk-connector

Pooled: No

Connected: Yes

?? /etc/asterisk/vm_general.inc???? vanilla asterisk??? voicemail.conf?

format=wav49

odbcstorage=asterisk

odbctable=voicemessages

Notes:

odbcstorage ??? res_odbc.conf ?????

????????? Dialplan ??? SQL statement?????

SELECT ext from extensions WHERE extensionsID =3

?? /etc/asterisk/func_odbc.conf?????

[MY-EXT-ID]

dsn=asterisk-connector

```
readsql=SELECT ext from extensions WHERE extensionsID =3
```

```
??? Dialplan ????? ${ODBC_MY-EXT-ID()} ??????????????????
```

```
[ODBC-test]
```

```
exten => s,1,wait(5)
```

```
exten => s,n,saydigits(${ODBC_MY-EXT-ID()})
```

```
exten => s,n,Dial(SIP/${ODBC_MY-EXT-ID()})
```

```
exten => s,n,VoiceMail(${ODBC_MY-EXT-ID()})
```

```
exten => s,n,hangup
```

Tips:

```
? ODBC ?????? dialplan ???? ${ODBC_YOUR-STRING()}?
```

```
????? asterisk_vm_recording
```

```
mysql>create database asterisk_vm_recording;
```

```
mysql>exit
```

```
????????? db-schema.sql?
```

```
CREATE TABLE `voicemessages` (
  `id` int(11) NOT NULL auto_increment,
  `msgnum` int(11) NOT NULL default '0',
  `dir` varchar(80) default '',
  `context` varchar(80) default '',
  `macrocontext` varchar(80) default '',
  `callerid` varchar(40) default '',
  `origtime` varchar(40) default '',
  `duration` varchar(20) default '',
  `mailboxuser` varchar(80) default '',
  `mailboxcontext` varchar(80) default '',
  `recording` longblob,
  `flag` varchar(128) default '',
  PRIMARY KEY (`id`),
  KEY `dir` (`dir`)
) ENGINE=InnoDB;
```

```
CREATE INDEX idx_voicemsgs ON voicemessages(dir,msgnum);
```

```
?????
```

```
mysql -uroot -p asterisk_vm_recording < db-schema.sql
```



```

`callback` varchar(10) NOT NULL,
`review` varchar(4) NOT NULL default 'no',
`operator` varchar(4) NOT NULL default 'no',
`envelope` varchar(4) NOT NULL default 'no',
`sayduration` varchar(4) NOT NULL default 'no',
`saydurationm` tinyint(4) NOT NULL default '1',
`sendvoicemail` varchar(4) NOT NULL default 'no',
`delete` varchar(4) NOT NULL default 'no',
`nextaftercmd` varchar(4) NOT NULL default 'yes',
`forcename` varchar(4) NOT NULL default 'no',
`forcegreetings` varchar(4) NOT NULL default 'no',
`hidefromdir` varchar(4) NOT NULL default 'yes',
`stamp` timestamp NOT NULL default CURRENT_TIMESTAMP on update CURRENT_TIMESTAMP,
PRIMARY KEY (`uniqueid`),
KEY `mailbox_context` (`mailbox`,`context`)
) ENGINE=MyISAM AUTO_INCREMENT=16 DEFAULT CHARSET=latin1;

```

????????

```

mysql -uroot -p
mysql> create database asterisk_vm;
mysql> exit

```

```
mysql -uroot -p asterisk_vm < asterisk_vm-schema.sql
```

????

```

amportal stop
amportal start
asterisk -rx "voicemail show users"

```

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- [How to Query a Database from MySQL with Asterisk 1.6 ODBC](#)
- [ODBC Voicemail - PostgreSQL](#)
- [Asterisk RealTime Voicemail](#)
- [Asterisk Voicemail ODBC storage](#)
- [Asterisk Voicemail](#)
- [Asterisk voicemail database](#)
- [Asterisk config voicemail.conf](#)
- [Asterisk VoiceMail RealTime](#)