

asterisk 自动录音（AMI 接口实现）

版本: 1.0.0

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一、实现 Asterisk 来电自动录音

原理: 通过监控 asterisk 的事件, 检测 Dial 事件, 然后进行录音。

1、录音代码

核心功能代码:

```
def strMonitor(strChannel, fileName):
    msg = "Action: Command\r\n"
    # mixmonitor start SIP/1005-00000006 1005006.gsm
    msg += "Command: mixmonitor start "+strChannel+" "+fileName+"\r\n"
    msg += "\r\n"
    return msg
```

2、监控所有号码

python 实现代码:

```
'''
    File       : astMonitor_all.py
    Author      : Mike
    E-Mail      : Mike_Zhang@live.com
'''
import socket
import time

bufLen = 1024 * 10
def strLogin(userName, passwd):
    msg = 'Action: login\r\n'
    msg += 'UserName: '+userName+'\r\n'
    msg += 'Secret: '+passwd+'\r\n'
    msg += '\r\n'
    return msg

def strMonitor(strChannel, fileName):
    msg = "Action: Command\r\n"
    # mixmonitor start SIP/1005-00000006 1005006.gsm
    msg += "Command: mixmonitor start "+strChannel+" "+fileName+"\r\n"
    msg += "\r\n"
    #print msg
    return msg

def splitEvent(strContent):
    eventMap = {}
    tmpArr = strContent.split("\r\n")
    lable = ": "
    for cnt in tmpArr:
        #print "line => ", cnt
        pos = cnt.find(lable)
        if pos > -1 :
            tmpKey = cnt[pos+len(lable):]
            #print 'tmp key : ', tmpKey
            eventMap[cnt[0:pos]] = tmpKey
```

```

        return eventMap

def main():
    s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
    #s.connect((raw_input("Input ip : "), 5038))
    s.connect(("192.168.18.178", 5038))

    if not s :
        print "Connect fail!"
        return

    #s.send(strLogin(raw_input("Input user name :"),raw_input("Input password
:"))))

    s.send(strLogin("admin9","123456"))
    strContent = ""

    print 'Asterisk Monitor all ... '

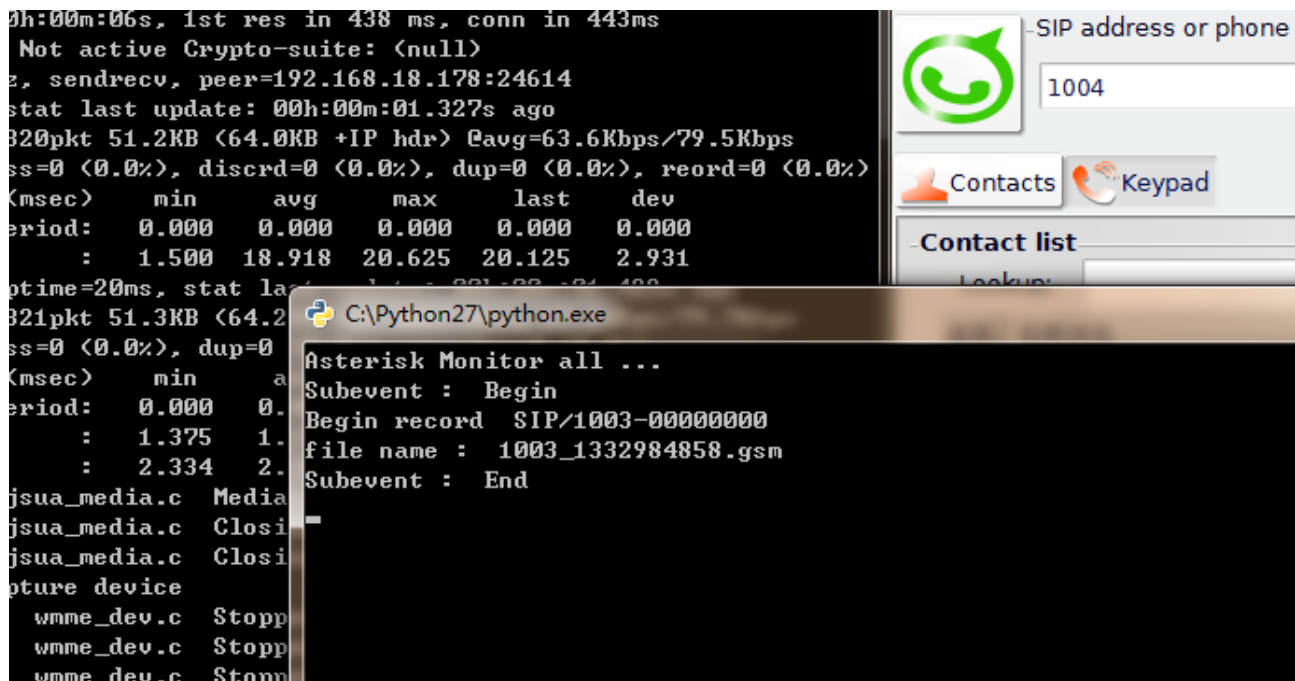
    lable = "Event: "
    while True:
        data = s.recv(bufLen)
        if len(data) > 0 : strContent += data
        tmpArr = strContent.split("\r\n\r\n")
        for cnt in tmpArr:
            pos = cnt.find(lable)
            if pos > -1 :
                tmpKey = cnt[pos+len(lable):cnt.find('\r\n')]
                #print tmpKey
                if 'Dial' == tmpKey :
                    #print cnt
                    eventMap = splitEvent(cnt)
                    print "Subevent : ",eventMap['SubEvent']
                    if 'Begin' == eventMap['SubEvent']:
                        chnl = splitEvent(cnt)['Channel']
                        fileName = chnl[chnl.find('/')]
+1:chnl.find('-')+ '_' +str(int(time.time()))+'.gsm'
                        print 'Begin record ',chnl
                        print 'file name : ',fileName
                        s.send(strMonitor(chnl,fileName))

            strContent = ""

if __name__ == '__main__':
    ret = main()

```

运行效果:



3、监控指定号码

监控指定号码，并主动实现主被叫情况下的自动录音。

python 实现代码：

```

'''
    File       : astMonitor_single.py
    Author     : Mike
    E-Mail    : Mike_Zhang@live.com
'''
import socket
import time

bufLen = 1024 * 10

def strLogin(userName,passwd):
    msg = 'Action: login\r\n'
    msg += 'UserName: '+userName+'\r\n'
    msg += 'Secret: '+passwd+'\r\n'
    msg += '\r\n'
    return msg

def strMonitor(strChannel,fileName):
    msg = "Action: Command\r\n"
    # mixmonitor start SIP/1005-00000006 1005006.gsm
    msg += "Command: mixmonitor start "+strChannel+" "+fileName+"\r\n"
    msg += "\r\n"
    #print msg
    return msg

def splitEvent(strContent):
    eventMap = {}
    tmpArr = strContent.split("\r\n")
    lable = ": "
    for cnt in tmpArr:
        #print "line => ",cnt
        pos = cnt.find(lable)

```

```

        if pos > -1 :
            tmpKey = cnt[pos+len(lable):]
            #print 'tmp key : ',tmpKey
            eventMap[cnt[0:pos]] = tmpKey
    return eventMap

def chkDialAndMonitor(pNum,pos,cnt,lable,s):
    tmpKey = cnt[pos+len(lable):cnt.find('\r\n')]
    #print tmpKey
    if 'Dial' == tmpKey :
        #print cnt
        eventMap = splitEvent(cnt)
        print "Subevent : ",eventMap['SubEvent']
        if 'Begin' == eventMap['SubEvent']:
            srcChnl = eventMap['Channel']
            srcNum = srcChnl[srcChnl.find('/')+1:srcChnl.find('-')]
            dstChnl = eventMap['Destination']
            dstNum = dstChnl[dstChnl.find('/')+1:dstChnl.find('-')]

            fileName = srcNum + "_" + dstNum + '_' +str(int(time.time()))
+'.gsm'

            if pNum == srcNum or pNum == dstNum :
                #fileName = phoneNumber1+'_'+str(int(time.time()))
+'.gsm'

                #fileName = pNum+'_'+str(int(time.time()))+'.gsm'
                print 'Begin record ',srcChnl
                print 'file name : ',fileName
                s.send(strMonitor(srcChnl,fileName))

def main():
    s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
    #s.connect((raw_input("Input ip : "), 5038))
    s.connect(("192.168.18.178", 5038))

    if not s :
        print "Connect fail!"
        return
    #s.send(strLogin(raw_input("Input user name :"),raw_input("Input password
:"))))
    s.send(strLogin("admin9","123456"))
    strContent = ""
    pNum = raw_input("Input phone number : ")

    print 'Asterisk Monitor all ... '

    lable = "Event: "
    while True:
        data = s.recv(bufLen)
        if len(data) > 0 : strContent += data
        tmpArr = strContent.split("\r\n\r\n")
        for cnt in tmpArr:
            pos = cnt.find(lable)
            if pos > -1 :
                chkDialAndMonitor(pNum,pos,cnt,lable,s)

```

```

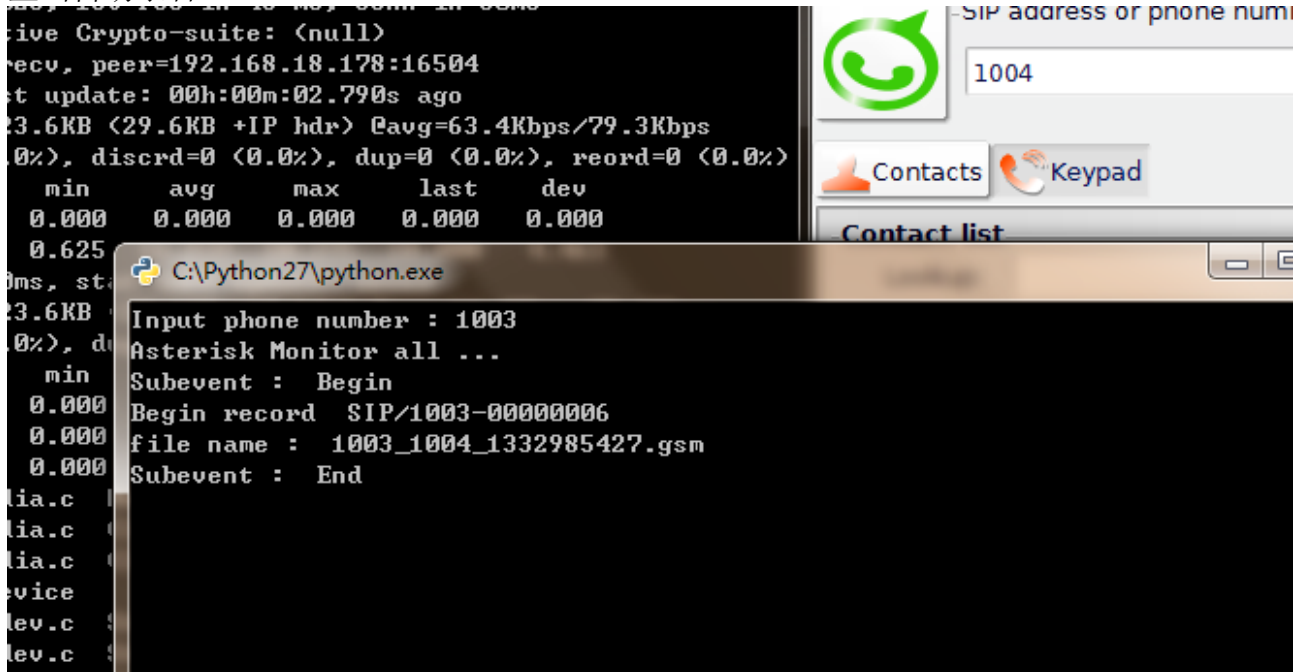
        strContent = ""

if __name__ == '__main__':
    ret = main()

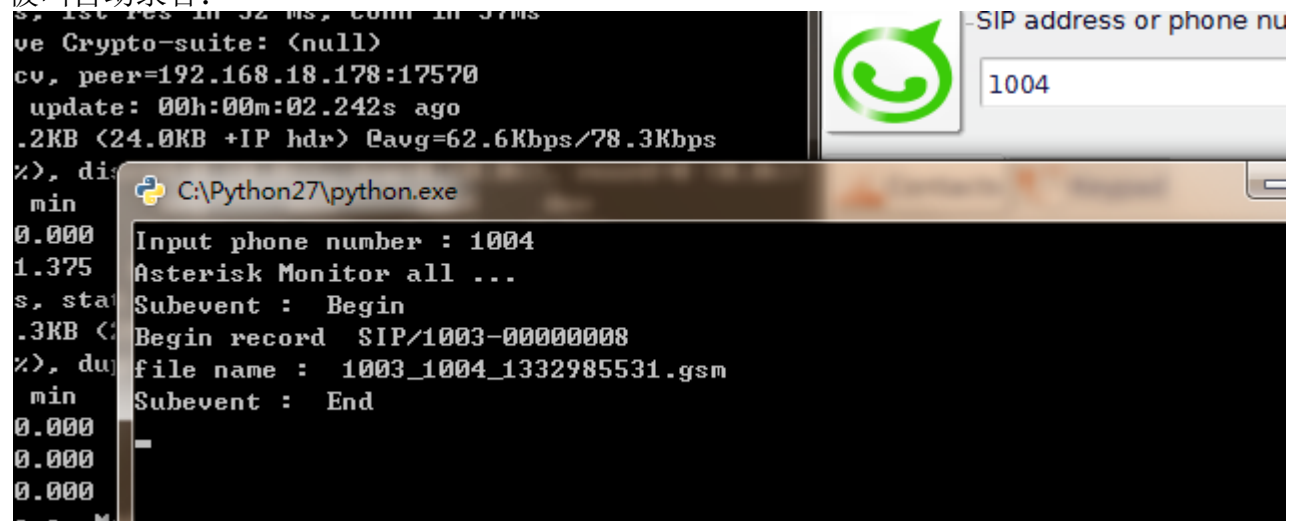
```

运行效果

主叫自动录音:



被叫自动录音:



二、配置服务端自动运行

1、配置 asterisk 开机启动:

- (1) 进入 asterisk 的源码文件所在的目录，运行：make config //配置自动启动
- (2) chkconfig --list 检查 asterisk 的启动状态。
- (3) 重启系统，进行测试

2、配置监控程序开机自启动

以配置监控所有号码为例:

执行 vi /etc/rc.d/rc.local

```
[root@voip monitor]# vi /etc/rc.d/rc.local
```

添加:

```
python /root/astMonitor_all.py &
```

```
# This script will be executed *after* all the other init
# You can put your own initialization stuff in here if you
# want to do the full Sys V style init stuff.

touch /var/lock/subsys/local
python /root/astMonitor_all.py &

~
~
~
```

三、其它问题处理

1、服务器配置成功，如果遇到电话无法注册问题，尝试关闭防火墙（或配置防火墙）：

setup --> Firewall configuration --> 去掉 Enable

2、asterisk 开机启动配置成功，但无法执行 cli 命令，具体表现为执行 “asterisk -rvvvvvvv” 会报 “Unable to connect to remote asterisk” 的错误：

```
[root@host250 ~]# asterisk -rvvvvvvvvv
Asterisk 1.8.7.0, Copyright (C) 1999 - 2011 Digium, Inc. and others.
Created by Mark Spencer <markster@digium.com>
Asterisk comes with ABSOLUTELY NO WARRANTY; type 'core show warranty' for details.
This is free software, with components licensed under the GNU General Public
License version 2 and other licenses; you are welcome to redistribute it under
certain conditions. Type 'core show license' for details.
=====
== Parsing '/etc/asterisk/asterisk.conf': == Found
== Parsing '/etc/asterisk/extconfig.conf': == Found
Unable to connect to remote asterisk (does /var/run/asterisk/asterisk.ctl exist?)
```

尝试关闭 SELinux（或配置 SELinux）：

```
vi /etc/selinux/config
```

设置 SELINUX=disabled 并重启