?????

CentOS 5.4
dahdi-linux-current
Asterisk-1.6.1-20
Linux domU-12-31-39-14-69-89 2.6.18-xenU-ec2-v1.0 (uname -a)

?? kernel source, dahdi

??????? [Install Elastix on Amazon EC2](#)

?? Asterisk
// ?????????????

rpm -q gcc-c++ zlib-devel openssl-devel ncurses-devel gtk2-devel iksemel-devel libogg-devel libvorbis-devel curl-devel unixODBC-devel libtool-ltdl-devel net-snmp-devel bzip2-devel newt-devel lm_sensors-devel openldap-devel postgresql-devel gtk+-devel mysql-server mysql-devel
yum install gcc-c++ zlib-devel openssl-devel ncurses-devel gtk2-devel iksemel-devel libogg-devel libvorbis-devel curl-devel unixODBC-devel libtool-ltdl-devel net-snmp-devel bzip2-devel newt-devel lm_sensors-devel openldap-devel postgresql-devel gtk+-devel mysql-server mysql-devel
wget http://www.lfarkas.org/linux/packages/centos/5/i386/gstreamer/speex-1.2-0.10.rc1.i386.rpm
wget http://www.lfarkas.org/linux/packages/centos/5/i386/gstreamer/
speex-devel-1.2-0.10.rc1.i386.rpm
wget http://www.lfarkas.org/linux/packages/centos/5/i386/gstreamer/
speex-tools-1.2-0.10.rc1.i386.rpm
rpm -ivh speex-*.rpm

NOTES:

    speex ??????? yum ???

// Install asterisk

cd /usr/src
wget http://downloads.asterisk.org/pub/telephony/asterisk/releases/asterisk-1.6.1.20.tar.gz
tar xzf asterisk-1.6.1-20.tar.gz
cd asterisk-1.6.1.20/
contrib/scripts/get_ilbc_source.sh ;?? iLBC codec
./configure
make menuselect

NOTES:

    ? ???????????????? XXXX????????????????????

    ??????????? *Core Sound Packages*???????(? Enter)??? *Music On Hold File Packages*?*Extras Sound Packages* ?????????

```
# make
# make install
# make samples
# make config
```

// ?? asterisk ?????


```
# asterisk -vvvvvvvvvvc
CLI> stop now
```

// ?? asterisk-addons


```
# cd /usr/src
# wget http://downloads.asterisk.org/pub/telephony/asterisk/releases/asterisk-addons-1.6.1.4.tar.gz
# tar asterisk-addons-1.6.1.4.tar.gz
# cd asterisk-addons-1.6.1.4/
# make clean
# ./configure
# make menuselect
```

?????????? MySQL ??????????????


```
# make
# make install
# make samples
```

?? Asterisk
// ???? asterisk ?????????? root ???
// ???? asterisk??? asterisk


```
# groupadd asterisk
# useradd -r -d /var/lib/asterisk -g asterisk -c "Asterisk IP-PBX" asterisk
```

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


```
# cd /etc/asterisk
# vi asterisk.conf
```

```
[directories] ;??(!)
astrundir => /var/run/asterisk
```

```
# mkdir /var/run/asterisk
```

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


```
# vi /etc/init.d/asterisk
```

```
# pidfile: /var/run/asterisk/asterisk.pid <-- ????
AST_USER="asterisk" <-- ????
AST_GROUP="asterisk" <-- ????
```

// ??????????


```
# chown -R -L asterisk:asterisk /var/lib/asterisk
# chown -R -L asterisk:asterisk /var/log/asterisk
# chown -R -L asterisk:asterisk /var/run/asterisk
# chown -R -L asterisk:asterisk /var/spool/asterisk
# chown -R -L asterisk:asterisk /etc/asterisk
```

```
# chmod -R 0755 /var/lib/asterisk
# chmod -R 0755 /var/log/asterisk
# chmod -R 0755 /var/run/asterisk
# chmod -R 0755 /var/spool/asterisk
# chmod 0775 /etc/asterisk
# chmod -R 0664 /etc/asterisk/*
# chmod +x /etc/init.d/asterisk
```

// ?? asterisk ??


```
# chkconfig asterisk on
# service asterisk start
```

?? Amazon Elastic Block Store (EBS) ???? - optional

?? Amazon EC2 Instance ?????? shutdown????????????????????????? Instance ??????????????? asterisk ?????? ???????????????????????????????

?????Amazon EC2 ???????????????????EBS ? S3?????????????????????EBS ??????????? S3 ??????????EBS ??? ????? S3 ?????????????????????? asterisk ????????(??????)???? EBS?? S3 ????????(Voicemail)?

// ?? Amazon ???? EBS (1GB) ??

??? Amazon ????

// ?? Elasticfox UI ?? EBS volume

Elasticfox UI > Instances > Select your instance > Attach an EBS volume

    VOL ID = <???? EBS volume>
    Device = /dev/sdb

//?? EBS volume


```
# fdisk -l
```

```
 Disk /dev/sdb: 1073 MB, 1073741824 bytes
```

255 heads, 63 sectors/track, 130 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes

// ???????


```
# yum install xfsprogs
# mkfs.xfs -f /dev/sdb

meta-data=/dev/sdb            isize=256   agcount=8, agsize=32768 blks
         =                    sectsz=512   attr=0
data     =                    bsize=4096   blocks=262144, imaxpct=25
         =                    sunit=0     swidth=0 blks, unwritten=1
naming   =version 2           bsize=4096
log      =internal log        bsize=4096   blocks=2560, version=1
         =                    sectsz=512   sunit=0 blks, lazy-count=0
realtime =none                extsz=4096   blocks=0, rtextents=0
```

// ?? mount point ?????


```
# mkdir /mnt/sdb-ast
# echo "/dev/sdb /mnt/sdb-ast xfs noatime 0 0" >> /etc/fstab
# mount /mnt/sdb-ast
```

// ?? Asterisk ????? EBS volume(/mnt/sdb-ast)


```
# service asterisk stop
# cd /mnt/sdb-ast
# mkdir etc
# cp -a /etc/asterisk/ etc/
# mkdir -p var/lib
# cp -a /var/lib/asterisk/ var/lib/
# mkdir -p var/spool
# cp -a /var/spool/asterisk/ var/spool/
# mkdir -p var/log
# cp -a /var/log/asterisk/ var/log/
# mkdir -p usr/lib
# cp -a /usr/lib/asterisk/ usr/lib/
```

// ??????


```
# cd /etc/
# mv asterisk/ asterisk_orig/
# ln -s /mnt/sdb-ast/etc/asterisk asterisk
# cd /var/lib
# mv asterisk/ asterisk_orig/
# ln -s /mnt/sdb-ast/var/lib/asterisk asterisk
# cd /var/spool
```

```
# mv asterisk/ asterisk_orig/
# ln -s /mnt/sdb-ast/var/spool/asterisk asterisk
# cd /var/log
# mv asterisk/ asterisk_orig/
# ln -s /mnt/sdb-ast/var/log/asterisk asterisk
# cd /usr/lib
# mv asterisk/ asterisk_orig/
# ln -s /mnt/sdb-ast/usr/lib/asterisk asterisk
```

// ?????


```
# rm -rf /etc/asterisk_orig/
# rm -rf /var/lib/asterisk_orig/
# rm -rf /var/spool/asterisk_orig/
# rm -rf /var/log/asterisk_orig/
# rm -rf /usr/lib/asterisk_orig/
```

?? S3 ????-optional
// ?? firefox plugin 'S3 Organizer' ?? S3 ?????

// ?? s3fs ??


```
# yum install libxml2-devel fuse fuse-devel
# yum groupinstall "Development Tools"
# cd /usr/src
# wget http://s3fs.googlecode.com/files/s3fs-r191-source.tar.gz
# tar xzf s3fs-r191-source.tar.gz
# cd s3fs
# make
# make install
```

// ?? Linux ??


```
# vi /usr/local/sbin/s3fs-mount.sh

#!/bin/bash

BUCKET="bucket-name"
KEY="your-access-key"
SECRET="your-access-secret"

/usr/bin/s3fs $BUCKET -o accessKeyId=$KEY -o secretAccessKey=$SECRET -o default_acl=public-read
/mnt/record

# mkdir /mnt/record
# chmod 0744 /usr/local/sbin/s3fs-mount.sh
```

// ??????

vi /etc/rc.local ;?????

Mount the S3 storage
/usr/local/sbin/s3fs-mount.sh