MOSES安装记录

环境：Ubuntu16.04

需要安装的工具：giza++,IRSTLM5.80.08,cmph2.0,xmlrpc1.33.14,boost1.64

0 安装依赖的包

```
sudo apt-get install build-essential git-core pkg-config automake libtool wget zlib1g-dev python-dev libbz2-dev
sudo apt-get install libsoap-lite-perl
```

1 从GitHub上clone moses

```
cd ~
mkdir smt
cd smt
git clone https://github.com/moses-smt/mosesdecoder.git
```

2 安装giza++

```
git clone https://github.com/moses-smt/giza-pp.git
cd giza-pp
make
```

把之后需要用到的giza++文件复制到mosedecoder文件夹中创建的tools文件夹下

```
cd ../mosesdecoer
mkdir tools
cp ../giza-pp/GIZA++-v2/GIZA++ ../giza-pp/GIZA++-v2/snt2cooc.out ../giza-pp/mkcls-v2/mkcls tools
```

3 安装IRSTLM5.80.08

```
cd ..
mkdir irstlm
wget https://jaist.dl.sourceforge.net/project/irstlm/irstlm/irstlm-5.80/irstlm-5.80.08.tgz
tar zxvf irstlm-5.80.08.tgz
cd irstlm-5.80.08
cd trunk
./regenerate-makefiles.sh
./configure --prefix=~/smt/irstlm       #设置irstlm的安装路径
make install
```

4 安装cmph2.0

```
cd ~/smt
wget http://www.achrafothman.net/aslsmt/tools/cmph_2.0.orig.tar.gz
tar zxvf cmph_2.0.orig.tar.gz
cd cmph-2.0/
./configure
make
make install
```

5 安装xmlrpc1.33.14

```
cd ~/smt
wget http://www.achrafothman.net/aslsmt/tools/xmlrpc-c_1.33.14.orig.tar.gz
tar zxvf xmlrpc-c_1.33.14.orig.tar.gz
cd xmlrpc-c-1.33.14/
./configure
make
make install
```

6 安装boost1.64

```
cd ~/smt
wget https://dl.bintray.com/boostorg/release/1.64.0/source/boost_1_64_0.tar.gz
tar zxvf boost_1_64_0.tar.gz
cd boost_1_64_0/
./bootstrap.sh
./b2  --layout=system link=static install || echo FAILURE
```

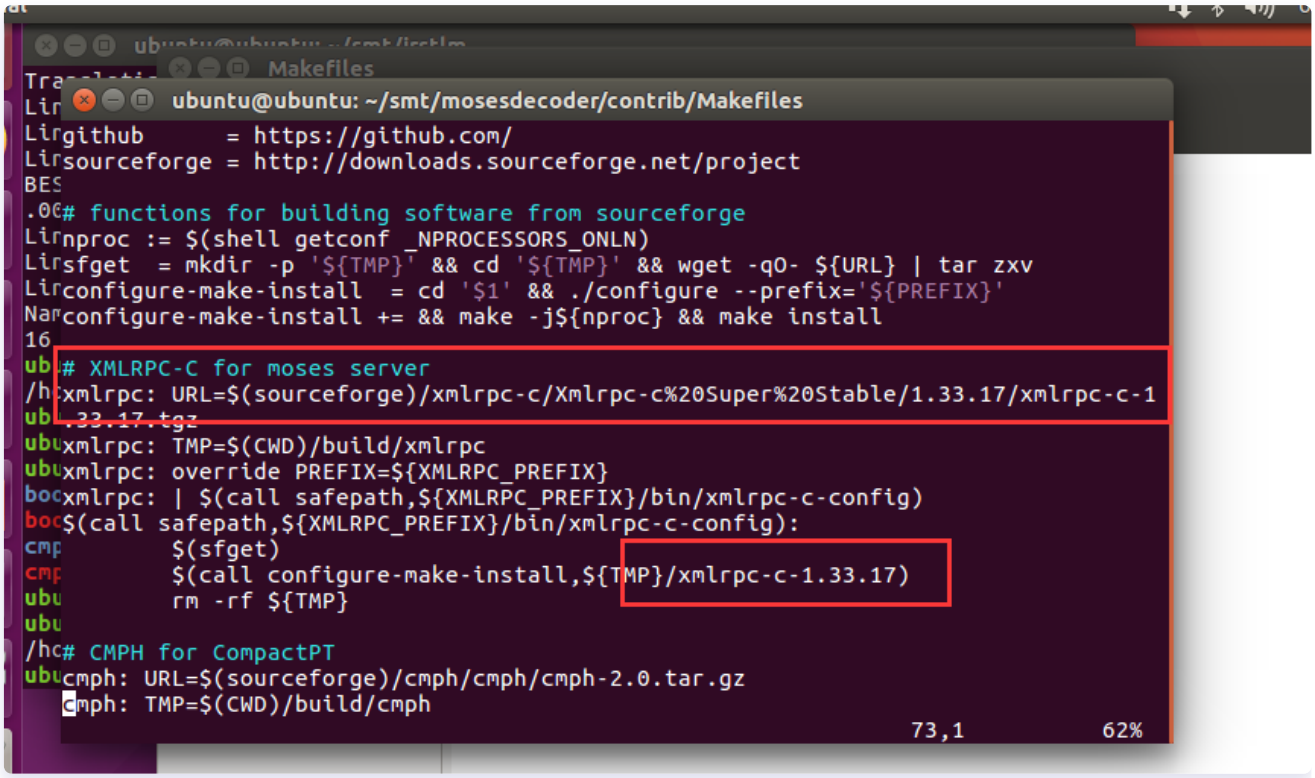
7.1 编译moses

```
cd ~/smt/mosesdecoder
make -f contrib/Makefiles/install-dependencies.gmake
```

在这个过程出现了ERROR

```
sudo vim install-dependencies.gmake
```

通过查看这个gmake文件，找到问题的位置。问题应该是出在在这个文件编译过程中xmlrpc这个包下载不下来，看了一些博客和教程他们的方法都不管用，我自己认为xmlrpc之前已经安装过了，所以我注释了这一段。

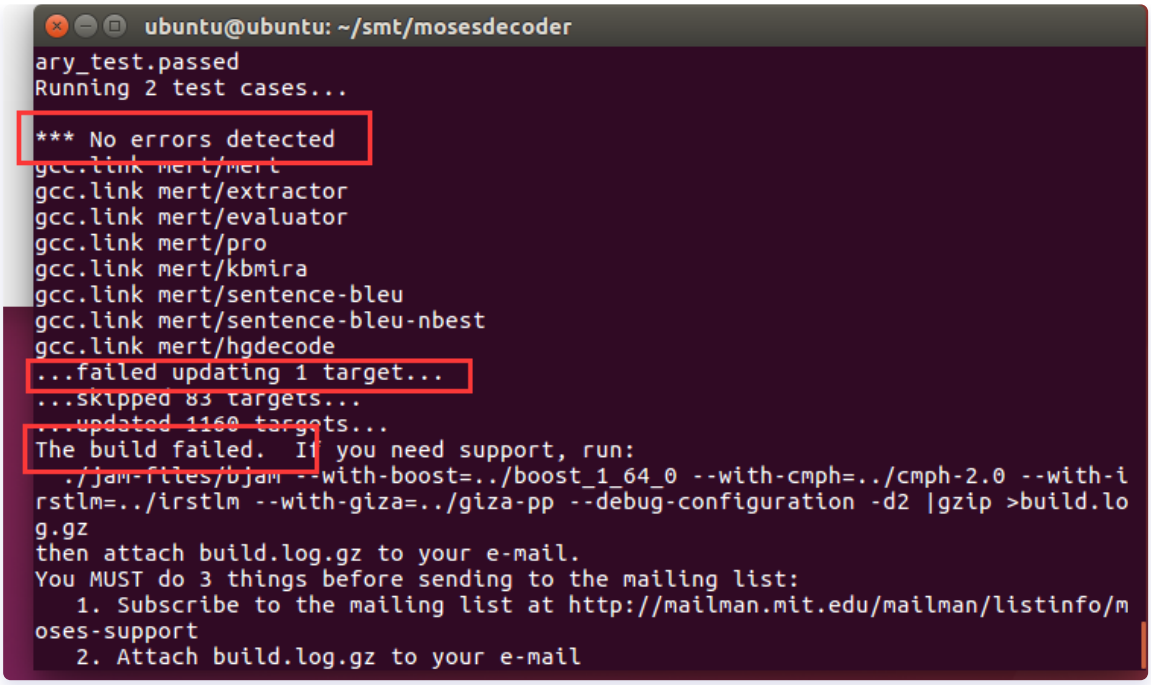


而且在图中可以看到xmlrpc这个包的URL地址，我直接去这个地址上也down不下来，它的版本跟我在前几步中下载安装的版本也不对。

7.2 安装moses

```
cd ~/smt/mosesdecoder
sudo ./bjam --with-boost=../boost_1_64_0 --with-cmph=../cmph-2.0 --with-irstlm=../irstlm  --with-giza=../giza-pp
```

这个过程需要一点时间，我在这一步失败了，提示我built failed

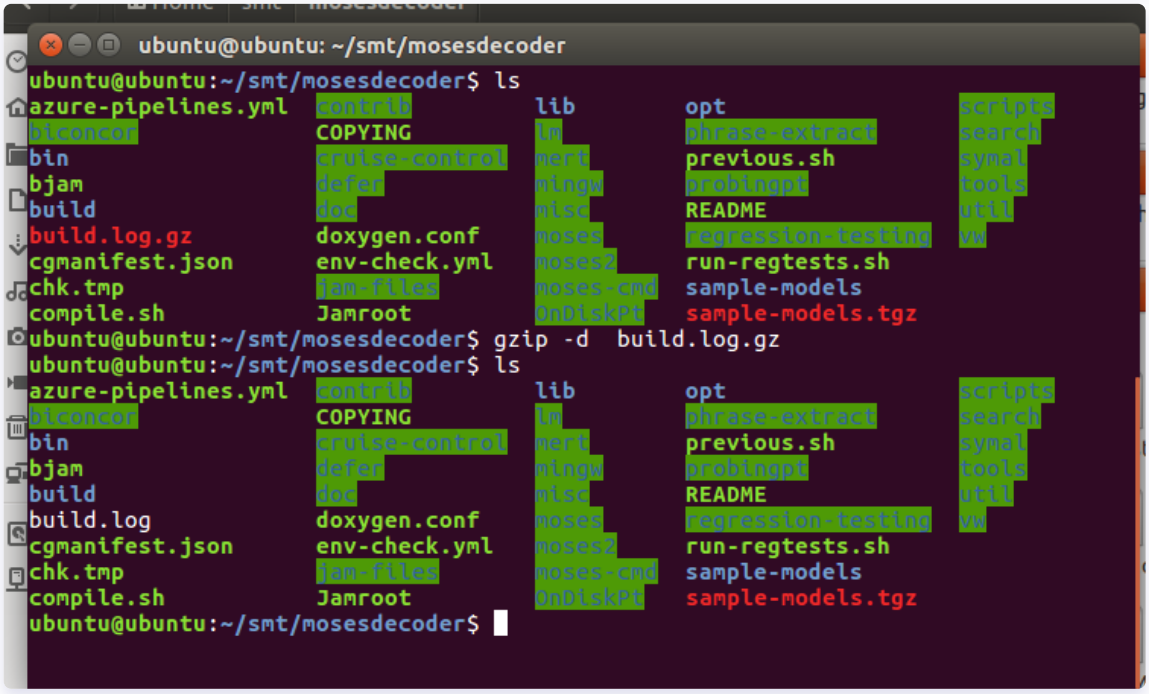


运行如下的命令

```
sudo ./jam-files/bjam --with-boost=../boost_1_64_0 --with-cmph=../cmph-2.0 --with-irstlm=../irstlm --with-giza=../giza-pp --debug-configuration -d1 |gzip >build.log.gz
```

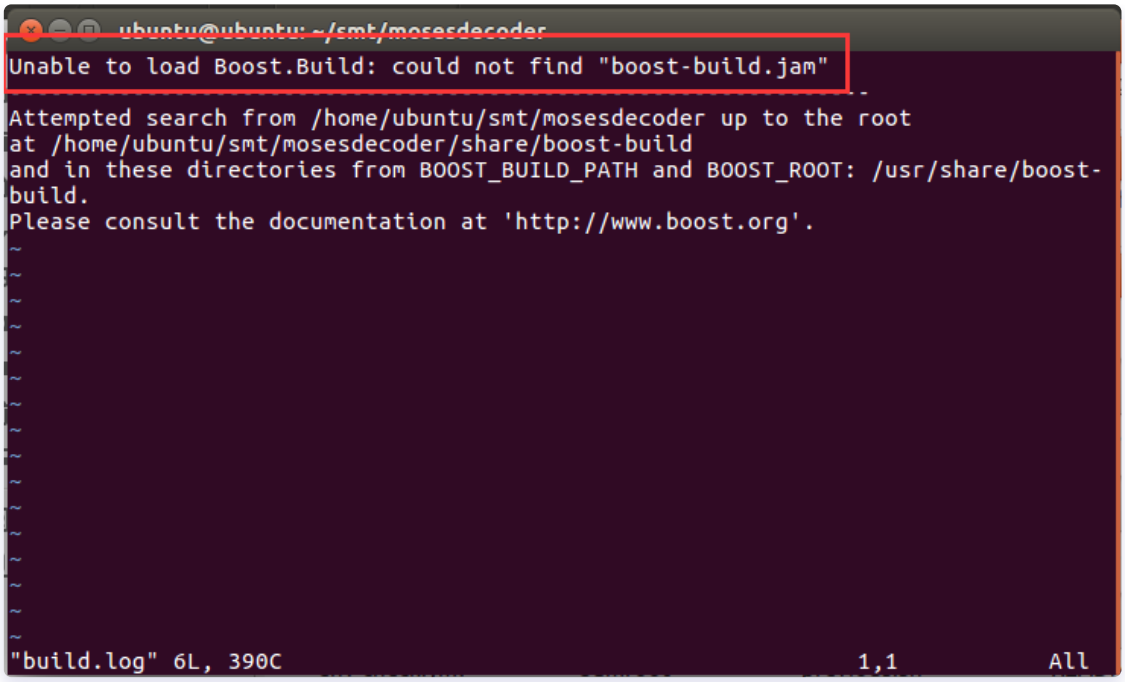
在mosesdecoder文件中找到build.log.gz这个压缩包

```
# 解压缩
gzip -d build.log.gz
```



查看build.log

```
vim build.log
```

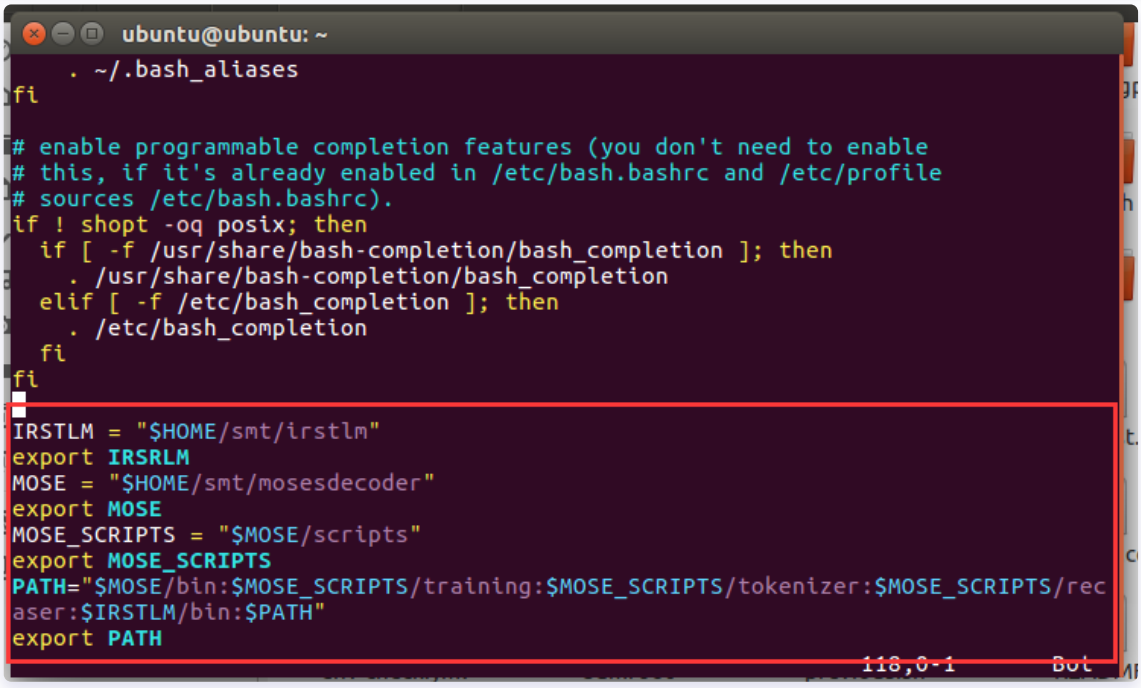


提示找不到boost-build.jam文件，这个问题解释起来比较麻烦，我通过在.bashrc文件中加入路径解决了这个问题。

```
# .bashrc文件在用户目录下
cd ~
vim .bashrc
```

在文件的最后添加上以下几句

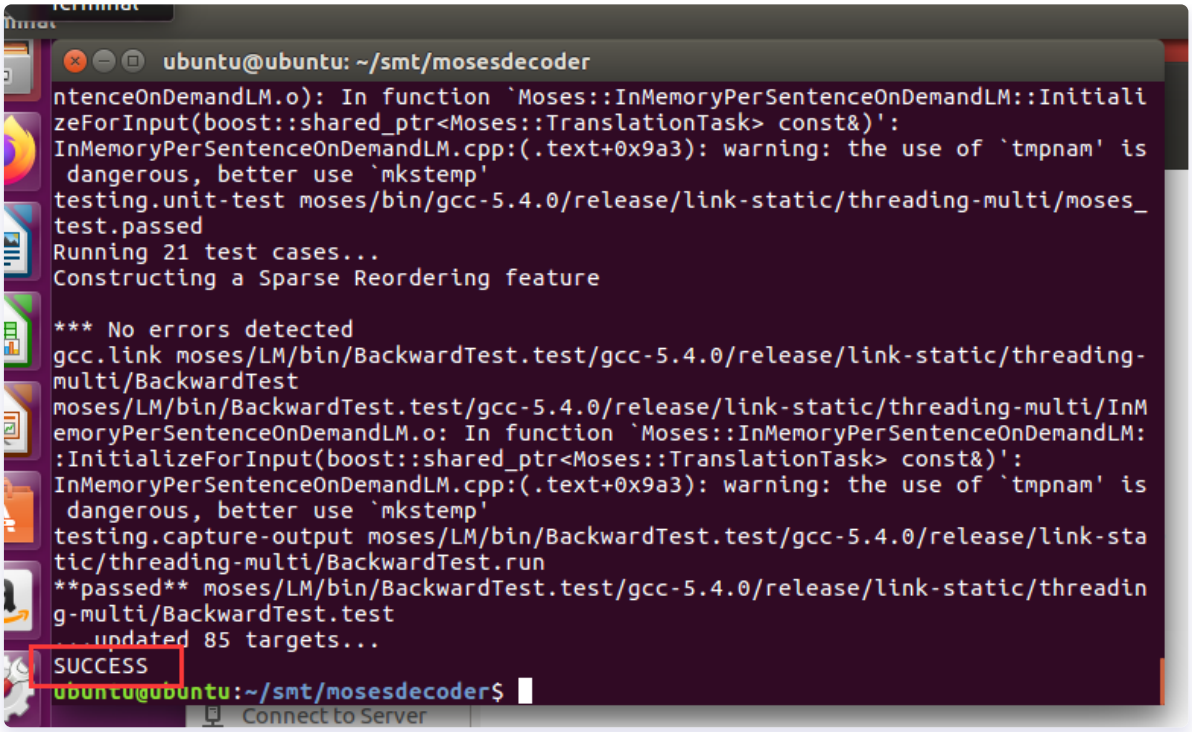
```
IRSTLM = "$HOME/smt/irstlm"
export IRSRLM
MOSE = "$HOME/smt/mosesdecoder"
export MOSE
MOSE_SCRIPTS = "$MOSE/scripts"
export MOSE_SCRIPTS
PATH="$MOSE/bin:$MOSE_SCRIPTS/training:$MOSE_SCRIPTS/tokenizer:$MOSE_SCRIPTS/recaser:$IRSTLM/bin:$PATH"
export PATH
```



保存退出后再次进行安装moses

```
cd ~/smt/mosesdecoder
sudo ./bjam --with-boost=../boost_1_64_0 --with-cmph=../cmph-2.0 --with-irstlm=../irstlm  --with-giza=../giza-pp
```

最后出现SUCCESS提示安装成功

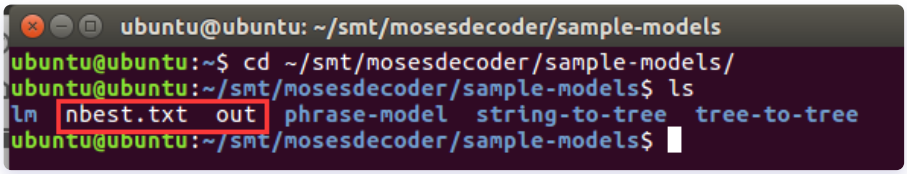


7.3 测试moses

```
cd ~/mosesdecoder
wget http://www.statmt.org/moses/download/sample-models.tgz
tar xzf sample-models.tgz
cd sample-models

# run the decoder
cd ~/mosesdecoder/sample-models
~/mosesdecoder/bin/moses -f phrase-model/moses.ini < phrase-model/in > out
```

在sample-models下面回生成两个文件：nbest.txt和out



可以打开看一下out文件，会显示两行this is a small house，说明安装是成功的

```
vim out
```