**python调用Google Protocol Buffer**

下载地址：   
http://code.google.com/p/protobuf/downloads/list   
  
安装命令   
tar -xzf protobuf-2.5.0.tar.gz    
 cd protobuf-2.5.0    
 ./configure --prefix=$INSTALL\_DIR

 make

 make check

 make install

然后进入python目录,

python setup.py install --prefix=$INSTALL\_DIR

写proto文件   
package lm;   
message Person   
{   
        required int32  id = 1;   
        required string str = 2;   
        optional int32  opt = 3;   
}   
保存为 testp.testpb.proto   
  
编译指令    
protoc -I=/home/workspace/testprob --python\_out=/home/workspace/testprob /home/workspace/testprob/testp.testpb.proto   
  
google   
https://developers.google.com/protocol-buffers/docs/pythontutorial   
  
报错   
package directory 'google/protobuf/compiler' does not exist   
  
解决    
https://groups.google.com/forum/?fromgroups=#!topic/protobuf/YeT5RW4qCxY   
python ./setup.py build   
sudo python ./setup.py install   
  
报错   
 File "/home/workspace/testprob/testp/testpb\_pb2.py", line 6, in <module>   
    from google.protobuf import reflection as \_reflection   
  File "build/bdist.linux-i686/egg/google/protobuf/reflection.py", line 68, in <module>   
  File "build/bdist.linux-i686/egg/google/protobuf/internal/python\_message.py"   
  ImportError: cannot import name enum\_type\_wrapper   
  
解决   
http://code.google.com/p/protobuf/issues/detail?id=438   
Log message   
Fix  issue 438 : add missing 'enum\_type\_wrapper' to setup.py   
是安装包的一个改进文件，copy下来， 重新安装   
  
根据安装目录下的demo  自己改写了个简单的， 觉得它那个还是麻烦   
  
write.py   
import testpb\_pb4   
import sys   
  
p = testpb\_pb2.Person()   
  
try:   
  f = open(sys.argv[1], "rb")   
  p.ParseFromString(f.read())   
  f.close()   
except IOError:   
  print sys.argv[1] + ": File not found.  Creating a new file."   
  
  
p.id = 32   
p.str = "test"   
  
f = open(sys.argv[1], "wb")   
f.write(p.SerializeToString())   
f.close()   
  
print "write success"   
  
  
编译指令 python write.py "test"   
  
read.py    
import sys   
import testpb\_pb2   
  
if len(sys.argv) != 2:   
  print "Usage:", sys.argv[0], "ADDRESS\_BOOK\_FILE"   
  sys.exit(-1)   
  
p = testpb\_pb2.Person()   
  
f = open(sys.argv[1], "rb")   
p.ParseFromString(f.read())   
f.close()   
  
print "p.str = ",  p.str   
print "p.id=", p.id   
  
编译指令 python read.py "test"