

## 解决 SAE 第三方包的安装方案

### 1、安装 virtualenv

```
Microsoft Windows [版本 6.1.7601]
版权所有 (c) 2009 Microsoft Corporation。保留所有权利。

C:\Users\TenYear>cd ..

C:\Users>cd ..

C:\>easy_install virtualenv
Searching for virtualenv
Reading http://pypi.python.org/simple/virtualenv/
Reading http://www.virtualenv.org
Reading http://virtualenv.openplans.org
```

### 2、安装 pip

```
C:\>easy_install pip
Searching for pip
Reading http://pypi.python.org/simple/pip/
Reading http://www.pip-installer.org
Reading http://pip.openplans.org
```

### 3、创建一个 Python 的虚拟环境，不依赖于本机的 Python 原有环境

```
C:\PythonProject>virtualenv --no-site-packages ENV
New python executable in ENV\Scripts\python.exe
Installing setuptools.....done.
Installing pip.....done.
```

### 4、这时会在当前目录生成一个 ENV 目录，进入这个目录中

```
C:\PythonProject\ENV\Scripts 的目录

[.]                [..]                activate
activate.ps1       activate_this.py      deactivate.bat
easy_install-2.7.exe  easy_install-2.7.exe.manifest  easy_install-script.py
easy_install.exe.manifest  pip-2.7-script.py  pip-2.7.exe
pip-script.py       pip.exe                pip.exe.manifest
pythonw.exe

          19 个文件          99,326 字节
          2 个目录 250,047,995,904 可用字节

C:\PythonProject\ENV\Scripts>activate.bat
(ENV) C:\PythonProject\ENV\Scripts>
```

### 5、下载所需要打包的第三方包，并且冻结

```

C:\PythonProject\ENV\Scripts>activate.bat
(ENV) C:\PythonProject\ENV\Scripts>pip install BeautifulSoup
Downloading/unpacking BeautifulSoup
  Downloading BeautifulSoup-3.2.1.tar.gz
  Running setup.py egg_info for package BeautifulSoup

Installing collected packages: BeautifulSoup
  Running setup.py install for BeautifulSoup

Successfully installed BeautifulSoup
Cleaning up...

(ENV) C:\PythonProject\ENV\Scripts>pip freeze > requirements.txt

(ENV) C:\PythonProject\ENV\Scripts>

```

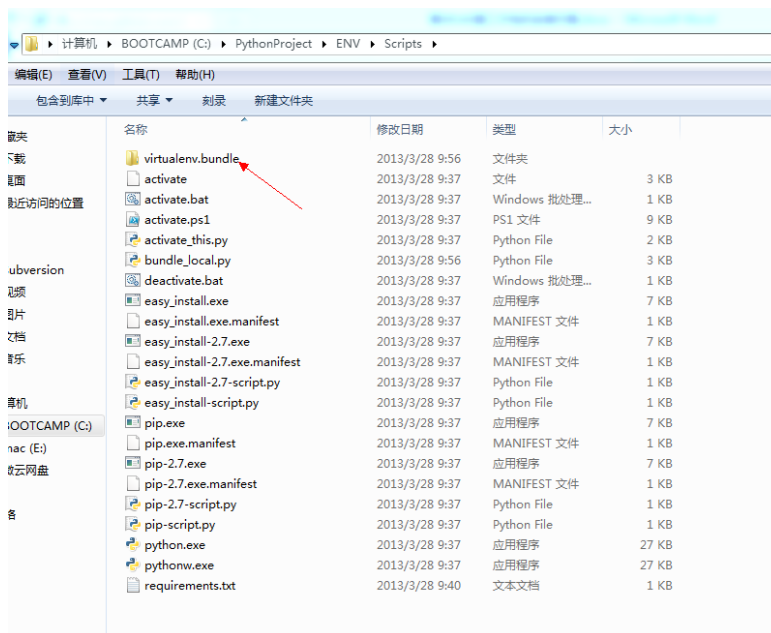
## 6、需要去 Github 下载服务器打包工具。

[https://github.com/SAEPython/saepythondevguide/tree/master/dev\\_server](https://github.com/SAEPython/saepythondevguide/tree/master/dev_server)

saе	a month ago	Add support for tornado to dev_server [chanfung032]
README	11 months ago	Add docs for sae.kvdb [chanfung032]
bundle_local.py	4 months ago	handle .egg package [chanfung032]
dev_server.py	a month ago	Add support for tornado to dev_server [chanfung032]
saecloud	16 days ago	Add -r option for 'saecloud install' [chanfung032]
saecloud.bat	4 months ago	Fix windows compatibility [chanfung032]
setup.py	15 days ago	Update meta info [chanfung032]

## 7、打包

```
python bundle_local.py -r requirements.txt
```



将 virtualenv.bundle 目录到应用的目录下。修改 index.wsgi 文件，在导入

其它模块之前,将 virtualenv.bundle 目录或者 virtualenv.bundle.zip 添加

到 module 的搜索路径中, 示例代码如下:

```
import os
import sys
app_root = os.path.dirname(__file__)
# 两者取其一
sys.path.insert(0,os.path.join(app_root,'virtualenv.bundle'))
```

到此,所有的依赖包已经导出并加入到应用的目录里了。