```
安装pip3
安装pip3遇到的问题
解决:
安装python2.7以及pip
又有问题了
安装虚拟环境包
创建虚拟环境
安装git
```

安装pip3

30 您希望继续执行吗? [Y/n] Y

```
1 root@richardhu-virtual-machine:/etc/apt# python3
2 Python 3.6.8 (default, Oct 7 2019, 12:59:55)
3 [GCC 8.3.0] on linux
4 Type "help", "copyright", "credits" or "license" for more information.
5 >>>
6 [1] + 已停止 python3
7 root@richardhu-virtual-machine:/etc/apt# apt install python3-pip
8 正在读取软件包列表... 完成
9 正在分析软件包的依赖关系树
10 正在读取状态信息... 完成
11 下列软件包是自动安装的并且现在不需要了:
    linux-headers-4.18.0-15 linux-headers-4.18.0-15-generic linux-image-4.18.0-15-gener:
12
    linux-modules-4.18.0-15-generic linux-modules-extra-4.18.0-15-generic
13
14 使用'apt autoremove'来卸载它(它们)。
15 将会同时安装下列软件:
    cpp-5 gcc gcc-5-base libasan2 libatomic1 libcilkrts5 libgcc-5-dev libisl15 lik
16
    libmpfr4 libmpx0 libquadmath0 libtsan0 libubsan0 make python-pip-whl python3-wheel
17
18 建议安装:
19
    gcc-5-locales gcc-multilib manpages-dev autoconf automake libtool flex bison gcc-do
    gcc-5-doc libgcc1-dbg libgomp1-dbg libitm1-dbg libatomic1-dbg libasan2-dbg liblsan0-
20
21
    libubsan0-dbg libcilkrts5-dbg libmpx0-dbg libquadmath0-dbg make-doc python3-setuptor
22 推荐安装:
    libc6-dev | libc-dev libc6-dev build-essential python3-dev python3-setuptools
23
24 下列【新】软件包将被安装:
    cpp-5 gcc gcc-5-base libasan2 libatomic1 libcilkrts5 libgcc-5-dev libisl15 lik
25
    libmpfr4 libmpx0 libquadmath0 libtsan0 libubsan0 make python-pip-whl python3-pip pyt
26
27 升级了 0 个软件包,新安装了 20 个软件包,要卸载 0 个软件包,有 0 个软件包未被升级。
28 需要下载 21.7 MB 的归档。
29 解压缩后会消耗 66.8 MB 的额外空间。
```

```
31 获取:1 http://mirrors.ustc.edu.cn/ubuntu xenial-security/main amd64 gcc-5-base amd64 5
32 正在解包 make (4.1-6) ...
33 正在选中未选择的软件包 python-pip-whl。
34 正准备解包 .../17-python-pip-whl_8.1.1-2ubuntu0.4_all.deb ...
35 正在解包 python-pip-whl (8.1.1-2ubuntu0.4) ...
36 正在选中未选择的软件包 python3-pip。
37 正准备解包 .../18-python3-pip_8.1.1-2ubuntu0.4_all.deb ...
38 正在解包 python3-pip (8.1.1-2ubuntu0.4) ...
39 正在选中未选择的软件包 python3-wheel。
40 正准备解包 .../19-python3-wheel_0.29.0-1_all.deb ...
41 正在解包 python3-wheel (0.29.0-1) ...
42 正在设置 python-pip-whl (8.1.1-2ubuntu0.4) ...
43 正在设置 make (4.1-6) ...
44 正在设置 python3-wheel (0.29.0-1) ...
45 正在设置 libisl15:amd64 (0.16.1-1) ...
46 正在处理用于 libc-bin (2.27-3ubuntu1) 的触发器 ...
47 正在设置 python3-pip (8.1.1-2ubuntu0.4) ...
48 正在设置 libmpfr4:amd64 (3.1.4-1) ...
49 正在处理用于 man-db (2.8.3-2ubuntu0.1) 的触发器 ...
50 正在设置 gcc-5-base:amd64 (5.4.0-6ubuntu1~16.04.12) ...
51 正在设置 libguadmath0:amd64 (5.4.0-6ubuntu1~16.04.12) ...
52 正在设置 libatomic1:amd64 (5.4.0-6ubuntu1~16.04.12) ...
53 正在设置 libmpx0:amd64 (5.4.0-6ubuntu1~16.04.12) ...
54 正在设置 libcilkrts5:amd64 (5.4.0-6ubuntu1~16.04.12) ...
55 正在设置 libubsan0:amd64 (5.4.0-6ubuntu1~16.04.12) ...
56 正在设置 libtsan0:amd64 (5.4.0-6ubuntu1~16.04.12) ...
57 正在设置 libasan2:amd64 (5.4.0-6ubuntu1~16.04.12) ...
58 正在设置 liblsan0:amd64(5.4.0-6ubuntu1~16.04.12)...
59 正在设置 cpp-5 (5.4.0-6ubuntu1~16.04.12) ...
60 正在设置 libitm1:amd64 (5.4.0-6ubuntu1~16.04.12) ...
61 正在设置 libgcc-5-dev:amd64(5.4.0-6ubuntu1~16.04.12)...
62 正在设置 gcc-5 (5.4.0-6ubuntu1~16.04.12) ...
63 正在设置 gcc (4:5.3.1-1ubuntu1) ...
64 正在处理用于 libc-bin (2.27-3ubuntu1) 的触发器 .
65
66
```

安装pip3遇到的问题

```
root@richardhu-virtual-machine:/etc/apt# pip3
Traceback (most recent call last):
   File "/usr/bin/pip3", line 9, in <module>
     from pip import main
   File "/usr/lib/python3/dist-packages/pip/__init__.py", line 14, in <module>
```

```
from pip.utils import get_installed_distributions, get_prog
 6
7
     File "/usr/lib/python3/dist-packages/pip/utils/__init__.py", line 23, in <module>
8
       from pip.locations import (
     File "/usr/lib/python3/dist-packages/pip/locations.py", line 9, in <module>
9
       from distutils import sysconfig
10
11 ImportError: cannot import name 'sysconfig'
12 root@richardhu-virtual-machine:/etc/apt# which pip3
13 /usr/bin/pip3
14 root@richardhu-virtual-machine:/etc/apt# pip3 -v
15 Traceback (most recent call last):
     File "/usr/bin/pip3", line 9, in <module>
16
       from pip import main
17
     File "/usr/lib/python3/dist-packages/pip/__init__.py", line 14, in <module>
18
       from pip.utils import get_installed_distributions, get_prog
19
20
     File "/usr/lib/python3/dist-packages/pip/utils/__init__.py", line 23, in <module>
       from pip.locations import (
21
     File "/usr/lib/python3/dist-packages/pip/locations.py", line 9, in <module>
22
23
       from distutils import sysconfig
24 ImportError: cannot import name 'sysconfig'
```

解决:

https://blog.csdn.net/qq_27366789/article/details/80559074 https://blog.csdn.net/weixin_39394526/article/details/87937645

```
root@richardhu-virtual-machine: /etc/apt (ssh)
deb http://mirrors.ustc.edu.cn/ubuntu/ xenial main restricted universe multiverse
deb http://mirrors.ustc.edu.cn/ubuntu/ xenial-security main restricted universe multiverse
deb http://mirrors.ustc.edu.cn/ubuntu/ xenial-updates main restricted universe multiverse
deb http://mirrors.ustc.edu.cn/ubuntu/ xenial-proposed main restricted universe multiverse
deb http://mirrors.ustc.edu.cn/ubuntu/ xenial-backports main restricted universe multiverse
deb-src http://mirrors.ustc.edu.cn/ubuntu/ xenial main restricted universe multiverse
deb-src http://mirrors.ustc.edu.cn/ubuntu/ xenial-security main restricted universe multiverse
deb-src http://mirrors.ustc.edu.cn/ubuntu/ xenial-updates main restricted universe multiverse
deb-src http://mirrors.ustc.edu.cn/ubuntu/ xenial-proposed main restricted universe multiverse
leb-src http://mirrors.ustc.edu.cn/ubc
deb http://cn.archive.ubuntu.com/ubuntu
leb http://cn.archive.ubuntu.com/ubuntu
                                             mic-security main multiverse restricted universe nic-proposed main multiverse restricted universe
 b http://cn.archive.ubuntu.com/ubuntu
    http://cn.archive.ubuntu.com/ubuntu
```

```
root@richardhu-virtual-machine:/etc/apt# vi sources.list
root@richardhu-virtual-machine:/etc/apt# apt-get update
获取:1 http://cn.archive.ubuntu.com/ubuntu bionic InRelease [242 kB]
获取:2 http://cn.archive.ubuntu.com/ubuntu bionic-updates InRelease [88.7 kB]
获取:3 http://cn.archive.ubuntu.com/ubuntu bionic-security InRelease [88.7 kB]
获取:4 http://cn.archive.ubuntu.com/ubuntu bionic-proposed InRelease [242 kB]
获取:5 http://cn.archive.ubuntu.com/ubuntu bionic/main amd64 Packages [1,019 kB]
获取:6 http://cn.archive.ubuntu.com/ubuntu bionic/main i386 Packages [1,007 kB]
获取:7 http://cn.archive.ubuntu.com/ubuntu bionic/main Translation-en [516 kB]
获取:8 http://cn.archive.ubuntu.com/ubuntu bionic/main Translation-zh_CN [67.7 kB]
获取:9 http://cn.archive.ubuntu.com/ubuntu bionic/main amd64 DEP—11 Metadata [477 kB]
获取:10 http://cn.archive.ubuntu.com/ubuntu bionic/main DEP-11 48x48 Icons [118 kB]
获取:11 http://cn.archive.ubuntu.com/ubuntu bionic/main DEP-11 64x64 Icons [245 kB]
获取:12 http://cn.archive.ubuntu.com/ubuntu bionic/multiverse i386 Packages [144 kB]
获取:13 http://cn.archive.ubuntu.com/ubuntu bionic/multiverse amd64 Packages [151 kB]
获取:14 http://cn.archive.ubuntu.com/ubuntu bionic/multiverse Translation-zh_CN [4,768 B]
获取:15 http://cn.archive.ubuntu.com/ubuntu bionic/multiverse Translation—en [108 kB]
获取:16 http://cn.archive.ubuntu.com/ubuntu bionic/multiverse amd64 DEP-11 Metadata [49.7 ト
```

```
获取:17 http://cn.archive.ubuntu.com/ubuntu bionic/multiverse DEP-11 48x48 Icons [8,931 B]
获取:18 http://cn.archive.ubuntu.com/ubuntu bionic/multiverse DEP-11 64x64 Icons [225 kB]
获取:19 http://cn.archive.ubuntu.com/ubuntu bionic/restricted i386 Packages [9,156 B]
获取:20 http://cn.archive.ubuntu.com/ubuntu bionic/restricted amd64 Packages [9,184 B]
获取:21 http://cn.archive.ubuntu.com/ubuntu bionic/restricted Translation-zh CN [1,188 B]
获取:22 http://cn.archive.ubuntu.com/ubuntu bionic/restricted Translation-en [3,584 B]
获取:23 http://cn.archive.ubuntu.com/ubuntu bionic/universe amd64 Packages [8,570 kB]
命中:24 http://mirrors.ustc.edu.cn/ubuntu xenial InRelease
命中:25 http://mirrors.ustc.edu.cn/ubuntu xenial-security InRelease
命中:26 http://mirrors.ustc.edu.cn/ubuntu xenial-updates InRelease
命中:27 http://mirrors.ustc.edu.cn/ubuntu xenial-proposed InRelease
命中:28 http://mirrors.ustc.edu.cn/ubuntu xenial-backports InRelease
获取:29 http://cn.archive.ubuntu.com/ubuntu bionic/universe i386 Packages [8,531 kB]
获取:30 http://cn.archive.ubuntu.com/ubuntu bionic/universe Translation-zh CN [174 kB]
获取:31 http://cn.archive.ubuntu.com/ubuntu bionic/universe Translation-en [4,941 kB]
获取:32 http://cn.archive.ubuntu.com/ubuntu bionic/universe amd64 DEP-11 Metadata [3,287 kE
获取:33 http://cn.archive.ubuntu.com/ubuntu bionic/universe DEP-11 48x48 Icons [2,151 kB]
获取:34 http://cn.archive.ubuntu.com/ubuntu bionic/universe DEP-11 64x64 Icons [8,420 kB]
获取:35 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main amd64 Packages [817 kB]
获取:36 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main i386 Packages [625 kB]
获取:37 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main Translation-en [288 kB]
获取:37 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main Translation-en [288 kB]
获取:38 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main amd64 DEP-11 Metadata [295
获取:39 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main DEP-11 48x48 Icons [73.8 kE
获取:40 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main DEP-11 64x64 Icons [147 kB]
获取:41 http://cn.archive.ubuntu.com/ubuntu bionic-updates/multiverse i386 Packages [7,484
获取:42 http://cn.archive.ubuntu.com/ubuntu bionic-updates/multiverse amd64 Packages [9,284
获取:43 http://cn.archive.ubuntu.com/ubuntu bionic-updates/multiverse Translation-en [4,508
获取:44 http://cn.archive.ubuntu.com/ubuntu bionic-updates/multiverse amd64 DEP-11 Metadata
获取:45 http://cn.archive.ubuntu.com/ubuntu bionic-updates/multiverse DEP-11 48x48 Icons [2
获取:46 http://cn.archive.ubuntu.com/ubuntu bionic-updates/multiverse DEP-11 64x64 Icons [2
获取:47 http://cn.archive.ubuntu.com/ubuntu bionic-updates/restricted amd64 Packages [24.1
获取:48 http://cn.archive.ubuntu.com/ubuntu bionic-updates/restricted i386 Packages [9,584
获取:49 http://cn.archive.ubuntu.com/ubuntu bionic-updates/restricted Translation-en [6,620
获取:50 http://cn.archive.ubuntu.com/ubuntu bionic-updates/universe amd64 Packages [1,033 ♭
获取:51 http://cn.archive.ubuntu.com/ubuntu bionic-updates/universe i386 Packages [997 kB]
获取:52 http://cn.archive.ubuntu.com/ubuntu bionic-updates/universe Translation-en [319 kB]
获取:53 http://cn.archive.ubuntu.com/ubuntu bionic-updates/universe amd64 DEP-11 Metadata |
获取:54 http://cn.archive.ubuntu.com/ubuntu bionic-updates/universe DEP-11 48x48 Icons [208
获取:55 http://cn.archive.ubuntu.com/ubuntu bionic-updates/universe DEP-11 64x64 Icons [464
获取:56 http://cn.archive.ubuntu.com/ubuntu bionic-security/main amd64 Packages [593 kB]
获取:56 http://cn.archive.ubuntu.com/ubuntu bionic-security/main amd64 Packages [593 kB]
获取:57 http://cn.archive.ubuntu.com/ubuntu bionic-security/main i386 Packages [414 kB]
获取:58 http://cn.archive.ubuntu.com/ubuntu bionic-security/main Translation-en [194 kB]
获取:59 http://cn.archive.ubuntu.com/ubuntu bionic-security/main amd64 DEP-11 Metadata [38.
获取:60 http://cn.archive.ubuntu.com/ubuntu bionic-security/main DEP-11 48x48 Icons [17.6 ト
```

```
获取:61 http://cn.archive.ubuntu.com/ubuntu bionic-security/main DEP-11 64x64 Icons [41.5 ♭
获取:62 http://cn.archive.ubuntu.com/ubuntu bionic-security/multiverse i386 Packages [4,288
获取:63 http://cn.archive.ubuntu.com/ubuntu bionic-security/multiverse amd64 Packages [6,12
获取:64 http://cn.archive.ubuntu.com/ubuntu bionic-security/multiverse Translation-en [2,60
获取:65 http://cn.archive.ubuntu.com/ubuntu bionic-security/multiverse amd64 DEP-11 Metadat
获取:66 http://cn.archive.ubuntu.com/ubuntu bionic-security/multiverse DEP-11 48x48 Icons |
获取:67 http://cn.archive.ubuntu.com/ubuntu bionic-security/multiverse DEP-11 64x64 Icons |
获取:68 http://cn.archive.ubuntu.com/ubuntu bionic-security/restricted i386 Packages [4,280
获取:69 http://cn.archive.ubuntu.com/ubuntu bionic-security/restricted amd64 Packages [15.1
获取:70 http://cn.archive.ubuntu.com/ubuntu bionic-security/restricted Translation-en [4,68
获取:71 http://cn.archive.ubuntu.com/ubuntu bionic-security/universe i386 Packages [602 kB]
获取:72 http://cn.archive.ubuntu.com/ubuntu bionic-security/universe amd64 Packages [627 kF
获取:72 http://cn.archive.ubuntu.com/ubuntu bionic-security/universe amd64 Packages [627 kE
获取:73 http://cn.archive.ubuntu.com/ubuntu bionic-security/universe Translation-en [210 kE
获取:74 http://cn.archive.ubuntu.com/ubuntu bionic-security/universe amd64 DEP-11 Metadata
获取:74 http://cn.archive.ubuntu.com/ubuntu bionic-security/universe amd64 DEP-11 Metadata
获取:75 http://cn.archive.ubuntu.com/ubuntu bionic-security/universe DEP-11 48x48 Icons [16
获取:76 http://cn.archive.ubuntu.com/ubuntu bionic-security/universe DEP-11 64x64 Icons [1]
获取:77 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main amd64 Packages [101 kB]
获取:78 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main i386 Packages [73.2 kB]
获取:79 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main Translation-zh CN [67.7 kE
获取:80 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main Translation-en [40.4 kB]
获取:81 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main amd64 DEP-11 Metadata [102
获取:82 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main DEP-11 48x48 Icons [9,364
获取:83 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main DEP-11 64x64 Icons [17.0 ♭
获取:84 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/multiverse amd64 Packages [1,08
获取:85 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/multiverse Translation-en [532
获取:86 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/multiverse Translation-zh_CN [4
获取:87 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/multiverse amd64 DEP-11 Metadat
获取:88 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/multiverse DEP-11 48x48 Icons |
获取:89 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/multiverse DEP-11 64x64 Icons |
获取:90 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/restricted amd64 Packages [7,63
获取:91 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/restricted Translation-en [2,20
获取:92 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/restricted Translation-zh_CN [1
获取:93 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/universe i386 Packages [43.3 kE
获取:94 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/universe amd64 Packages [47.4 ト
获取:95 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/universe Translation-en [25.8 ♭
获取:96 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/universe Translation-zh_CN [174
获取:97 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/universe amd64 DEP-11 Metadata
获取:98 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/universe DEP-11 48x48 Icons [10
获取:99 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/universe DEP-11 64x64 Icons [16
已下载 50.1 MB, 耗时 6分 0秒 (139 kB/s)
正在读取软件包列表 ... 完成
```

```
正在分析软件包的依赖关系树
正在读取状态信息... 完成
下列软件包是自动安装的并且现在不需要了:
 linux-headers-4.18.0-15 linux-headers-4.18.0-15-generic linux-image-4.18.0-15-generic
 linux-modules-4.18.0-15-generic linux-modules-extra-4.18.0-15-generic python-pip-whl pyt
使用'apt autoremove'来卸载它(它们)。
下列软件包将被【卸载】:
 python3-pip
升级了 0 个软件包, 新安装了 0 个软件包, 要卸载 1 个软件包, 有 339 个软件包未被升级。
解压缩后将会空出 569 kB 的空间。
您希望继续执行吗? [Y/n] Y
(正在读取数据库 ... 系统当前共安装有 204106 个文件和目录。)
正在卸载 python3-pip (8.1.1-2ubuntu0.4) ...
正在处理用于 man-db (2.8.3-2ubuntu0.1) 的触发器 ...
root@richardhu-virtual-machine:/etc/apt# apt-get install python3-pip
正在读取软件包列表 ... 完成
正在分析软件包的依赖关系树
正在读取状态信息... 完成
下列软件包是自动安装的并且现在不需要了:
 linux-headers-4.18.0-15 linux-headers-4.18.0-15-generic linux-image-4.18.0-15-generic
 linux-modules-4.18.0-15-generic linux-modules-extra-4.18.0-15-generic
使用'apt autoremove'来卸载它(它们)。
将会同时安装下列软件:
 build-essential cpp-7 dh-python dpkg-dev fakeroot g++ g++-7 gcc gcc-7 gcc-7-base gcc-8-b
 libalgorithm-diff-perl libalgorithm-diff-xs-perl libalgorithm-merge-perl libasan4 libato
 libc-dev-bin libc6-dev libcc1-0 libcilkrts5 libdpkg-perl libexpat1-dev libfakeroot libgc
 libgcc1 libgomp1 libitm1 liblsan0 libmpx2 libpython3-dev libpython3.6 libpython3.6-dev
 libpython3.6-minimal libpython3.6-stdlib libquadmath0 libstdc++-7-dev libstdc++6 libtsan
 linux-libc-dev manpages-dev python-pip-whl python3-dev python3-distutils python3-lib2to3
 python3-setuptools python3.6 python3.6-dev python3.6-minimal
建议安装:
 gcc-7-locales debian-keyring g++-multilib g++-7-multilib gcc-7-doc libstdc++6-7-dbg gcc-
 autoconf automake libtool flex bison gcc-doc gcc-7-multilib libgcc1-dbg libgomp1-dbg lib
 libatomic1-dbg libasan4-dbg liblsan0-dbg libtsan0-dbg libubsan0-dbg libcilkrts5-dbg libm
 libquadmath0-dbg glibc-doc git bzr libstdc++-7-doc python-setuptools-doc python3.6-venv
 binfmt-support
下列【新】软件包将被安装:
 build-essential dh-python dpkg-dev fakeroot g++ g++-7 gcc-7 libalgorithm-diff-perl
 libalgorithm-diff-xs-perl libalgorithm-merge-perl libasan4 libc-dev-bin libc6-dev libexp
 libfakeroot libgcc-7-dev libmpx2 libpython3-dev libpython3.6-dev libstdc++-7-dev linux-l
 manpages-dev python3-dev python3-distutils python3-lib2to3 python3-pip python3-setuptool
 python3.6-dev
下列软件包将被升级:
```

正在读取软件包列表... 完成

cpp-7 gcc gcc-7-base gcc-8-base libatomic1 libcc1-0 libcilkrts5 libdpkg-perl libgcc1 lib liblsan0 libpython3.6 libpython3.6-minimal libpython3.6-stdlib libquadmath0 libstdc++6 l libubsan0 python-pip-whl python3.6 python3.6-minimal 升级了 22 个软件包,新安装了 28 个软件包,要卸载 0 个软件包,有 317 个软件包未被升级。 需要下载 93.4 MB 的归档。 解压缩后会消耗 203 MB 的额外空间。 您希望继续执行吗? [Y/n] Y 获取:1 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libpython3.6 amd64 3.6 获取:2 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main amd64 python3.6 amd64 3.6.9-获取:3 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libpython3.6-stdlib am 获取:4 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main amd64 python3.6-minimal amd6 获取:5 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libpython3.6-minimal a 获取:6 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main amd64 gcc-8-base amd64 8.3. 获取:7 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main amd64 libstdc++6 amd64 8.3. 获取:8 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main amd64 libgomp1 amd64 8.3.0-获取:9 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main amd64 libcc1-0 amd64 8.3.0-获取:10 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main amd64 libgcc1 amd64 1:8.3. 获取:11 http://cn.archive.ubuntu.com/ubuntu bionic/main amd64 libc-dev-bin amd64 2.27-3ubur 获取:12 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main amd64 linux-libc-dev amd64 获取:13 http://cn.archive.ubuntu.com/ubuntu bionic/main amd64 libc6-dev amd64 2.27-3ubuntu1 获取:14 http://mirrors.ustc.edu.cn/ubuntu xenial/main amd64 libalgorithm-diff-perl all 1.19 获取:15 http://mirrors.ustc.edu.cn/ubuntu xenial/main amd64 libalgorithm—merge—perl all 0.0 获取:16 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main amd64 cpp-7 amd64 7.5.0-3u 获取:17 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main amd64 gcc-7-base amd64 7.5 获取:18 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main amd64 libitm1 amd64 8.3.0-获取:19 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main amd64 libatomic1 amd64 8.3 获取:20 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main amd64 libasan4 amd64 7.5.0 获取:20 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main amd64 libasan4 amd64 7.5.0 获取:21 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main amd64 liblsan0 amd64 8.3.0 获取:22 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main amd64 libtsan0 amd64 8.3.0 获取:23 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main amd64 libubsan0 amd64 7.5. 获取:24 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main amd64 libcilkrts5 amd64 7. 获取:25 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main amd64 libmpx2 amd64 8.3.0-获取:26 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main amd64 libquadmath0 amd64 { 获取:27 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main amd64 libgcc-7-dev amd64 フ 获取:28 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main amd64 gcc-7 amd64 7.5.0-3ι 获取:29 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main amd64 gcc amd64 4:7.4.0-1uk 获取:30 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main amd64 libstdc++-7-dev amd6 获取:31 http://cn.archive.ubuntu.com/ubuntu bionic-proposed/main amd64 g++-7 amd64 7.5.0-3u 获取:32 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main amd64 g++ amd64 4:7.4.0-1uk 获取:33 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libdpkg-perl all 1.19 获取:33 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libdpkg-perl all 1.19 获取:34 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main amd64 dpkg-dev all 1.19.0.5 获取:35 http://cn.archive.ubuntu.com/ubuntu bionic/main amd64 build—essential amd64 12.4ubu 获取:36 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main amd64 python3-lib2to3 all 3 获取:37 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main amd64 python3-distutils all

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获取:38 http://cn.archive.ubuntu.com/ubuntu bionic/main amd64 dh-python all 3.20180325ubunt
获取:39 http://cn.archive.ubuntu.com/ubuntu bionic/main amd64 libfakeroot amd64 1.22—2ubunt
获取:40 http://cn.archive.ubuntu.com/ubuntu bionic/main amd64 fakeroot amd64 1.22-2ubuntul
获取:41 http://cn.archive.ubuntu.com/ubuntu bionic/main amd64 libalgorithm-diff-xs-perl amc
获取:42 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libexpat1-dev amd64 2
获取:43 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libpython3.6-dev amd6
获取:44 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libpython3-dev amd64
获取:45 http://cn.archive.ubuntu.com/ubuntu bionic/main amd64 manpages-dev all 4.15-1 [2,21
获取:46 http://cn.archive.ubuntu.com/ubuntu bionic-updates/universe amd64 python-pip-whl al
获取:47 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main amd64 python3.6-dev amd64 3
获取:48 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main amd64 python3-dev amd64 3.6
获取:49 http://cn.archive.ubuntu.com/ubuntu bionic-updates/universe amd64 python3-pip all 9
获取:50 http://cn.archive.ubuntu.com/ubuntu bionic/main amd64 python3-setuptools all 39.0.1
已下载 93.2 MB, 耗时 19分 0秒 (81.7 kB/s)
正在从软件包中解出模板: 100%
(正在读取数据库 ... 系统当前共安装有 204033 个文件和目录。)
正准备解包 .../0-libpython3.6_3.6.9-1~18.04_amd64.deb ...
正在将 libpython3.6:amd64 (3.6.9-1~18.04) 解包到 (3.6.8-1~18.04.3) 上 ...
正准备解包 .../1-python3.6_3.6.9-1~18.04_amd64.deb ...
正在将 python3.6 (3.6.9-1~18.04) 解包到 (3.6.8-1~18.04.3) 上 ...
正准备解包 .../2-libpython3.6-stdlib 3.6.9-1~18.04 amd64.deb ...
正在将 libpython3.6-stdlib:amd64 (3.6.9-1~18.04) 解包到 (3.6.8-1~18.04.3) 上 ...
正准备解包 .../3-python3.6-minimal_3.6.9-1~18.04_amd64.deb ...
正在将 python3.6-minimal (3.6.9-1~18.04) 解包到 (3.6.8-1~18.04.3) 上 ...
正准备解包 .../4-libpython3.6-minimal_3.6.9-1~18.04_amd64.deb ...
正在将 libpython3.6-minimal:amd64 (3.6.9-1~18.04) 解包到 (3.6.8-1~18.04.3) 上 ...
正准备解包 .../5-gcc-8-base_8.3.0-26ubuntu1~18.04_amd64.deb ...
正在将 gcc-8-base:amd64 (8.3.0-26ubuntu1~18.04) 解包到 (8.3.0-6ubuntu1~18.04.1) 上 ...
正在设置 gcc-8-base:amd64 (8.3.0-26ubuntu1~18.04) ...
(正在读取数据库 ... 系统当前共安装有 204033 个文件和目录。)
正准备解包 .../libstdc++6_8.3.0-26ubuntu1~18.04_amd64.deb ...
正在将 libstdc++6:amd64 (8.3.0-26ubuntu1~18.04) 解包到 (8.3.0-6ubuntu1~18.04.1) 上 ...
正在设置 libstdc++6:amd64 (8.3.0-26ubuntu1~18.04) ...
(正在读取数据库 ... 系统当前共安装有 204033 个文件和目录。)
正准备解包 .../libgomp1_8.3.0-26ubuntu1~18.04_amd64.deb ...
正在将 libgomp1:amd64 (8.3.0-26ubuntu1~18.04) 解包到 (8.3.0-6ubuntu1~18.04.1) 上 ...
正准备解包 .../libcc1-0_8.3.0-26ubuntu1~18.04_amd64.deb ...
正在将 libcc1-0:amd64 (8.3.0-26ubuntu1~18.04) 解包到 (8.3.0-6ubuntu1~18.04.1) 上 ...
正准备解包 .../libgcc1_1%3a8.3.0-26ubuntu1~18.04_amd64.deb ...
正在将 libgcc1:amd64(1:8.3.0-26ubuntu1~18.04)解包到(1:8.3.0-6ubuntu1~18.04.1)上 ...
正在设置 libgcc1:amd64 (1:8.3.0-26ubuntu1~18.04) ...
正在选中未选择的软件包 libc-dev-bin。
(正在读取数据库 ... 系统当前共安装有 204033 个文件和目录。)
正准备解包 .../00-libc-dev-bin_2.27-3ubuntu1_amd64.deb ...
正在解包 libc-dev-bin (2.27-3ubuntu1) ...
正在选中未选择的软件包 linux-libc-dev:amd64。
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正准备解包 .../01-linux-libc-dev 4.15.0-74.84 amd64.deb ...
下在解包 linux-libc-dev:amd64 (4.15.0-74.84) ...
正在选中未选择的软件包 libc6-dev:amd64。
正准备解包 .../02-libc6-dev 2.27-3ubuntu1 amd64.deb ...
正在解包 libc6-dev:amd64 (2.27-3ubuntu1) ...
正准备解包 .../03-cpp-7_7.5.0-3ubuntu1~18.04_amd64.deb ...
正在将 cpp-7 (7.5.0-3ubuntu1~18.04) 解包到 (7.4.0-1ubuntu1~18.04.1) 上 ...
正准备解包 .../04-gcc-7-base 7.5.0-3ubuntu1~18.04 amd64.deb ...
正在将 gcc-7-base:amd64 (7.5.0-3ubuntu1~18.04) 解包到 (7.4.0-1ubuntu1~18.04.1) 上 ...
正准备解包 .../05-libitm1_8.3.0-26ubuntu1~18.04_amd64.deb ...
正在将 libitm1:amd64 (8.3.0-26ubuntu1~18.04) 解包到 (5.4.0-6ubuntu1~16.04.12) 上 ...
正准备解包 .../06-libatomic1 8.3.0-26ubuntu1~18.04 amd64.deb ...
正在将 libatomic1:amd64 (8.3.0-26ubuntu1~18.04) 解包到 (5.4.0-6ubuntu1~16.04.12) 上 ...
正在选中未选择的软件包 libasan4:amd64。
正准备解包 .../07-libasan4 7.5.0-3ubuntu1~18.04 amd64.deb ...
正在解包 libasan4:amd64 (7.5.0-3ubuntu1~18.04) ...
正准备解包 .../08-liblsan0_8.3.0-26ubuntu1~18.04_amd64.deb ...
正在将 liblsan0:amd64 (8.3.0-26ubuntu1~18.04) 解包到 (5.4.0-6ubuntu1~16.04.12) 上 ...
正准备解包 .../09-libtsan0_8.3.0-26ubuntu1~18.04_amd64.deb ...
正在将 libtsan0:amd64 (8.3.0-26ubuntu1~18.04) 解包到 (5.4.0-6ubuntu1~16.04.12) 上 ...
正准备解包 .../10-libubsan0 7.5.0-3ubuntu1~18.04 amd64.deb ...
正在将 libubsan0:amd64 (7.5.0-3ubuntu1~18.04) 解包到 (5.4.0-6ubuntu1~16.04.12) 上 ...
正准备解包 .../11-libcilkrts5 7.5.0-3ubuntu1~18.04 amd64.deb ...
正在将 libcilkrts5:amd64 (7.5.0-3ubuntu1~18.04) 解包到 (5.4.0-6ubuntu1~16.04.12) 上 ...
正在选中未选择的软件包 libmpx2:amd64。
正准备解包 .../12-libmpx2_8.3.0-26ubuntu1~18.04_amd64.deb ...
正在解包 libmpx2:amd64 (8.3.0-26ubuntu1~18.04) ...
正准备解包 .../13-libquadmath0_8.3.0-26ubuntu1~18.04_amd64.deb ...
正在将 libquadmath0:amd64 (8.3.0-26ubuntu1~18.04) 解包到 (5.4.0-6ubuntu1~16.04.12) 上 ...
正在选中未选择的软件包 libgcc-7-dev:amd64。
正准备解包 .../14-libgcc-7-dev_7.5.0-3ubuntu1~18.04_amd64.deb ...
正在解包 libgcc-7-dev:amd64 (7.5.0-3ubuntu1~18.04) ...
正在选中未选择的软件包 gcc-7。
正准备解包 .../15-gcc-7_7.5.0-3ubuntu1~18.04_amd64.deb ...
正在解包 gcc-7 (7.5.0-3ubuntu1~18.04) ...
正准备解包 .../16-gcc_4%3a7.4.0-1ubuntu2.3_amd64.deb ...
正在将 gcc (4:7.4.0-1ubuntu2.3) 解包到 (4:5.3.1-1ubuntu1) 上 ...
正在选中未选择的软件包 libstdc++-7-dev:amd64。
正准备解包 .../17-libstdc++-7-dev_7.5.0-3ubuntu1~18.04_amd64.deb ...
正在解包 libstdc++-7-dev:amd64 (7.5.0-3ubuntu1~18.04) ...
正在选中未选择的软件包 g++-7。
正准备解包 .../18-g++-7_7.5.0-3ubuntu1~18.04_amd64.deb ...
正在解包 g++-7 (7.5.0-3ubuntu1~18.04) ...
正在选中未选择的软件包 g++。
正准备解包 .../19-g++_4%3a7.4.0-1ubuntu2.3_amd64.deb ...
正在解包 g++ (4:7.4.0-1ubuntu2.3) ...
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正准备解包 .../20-libdpkg-perl_1.19.0.5ubuntu2.3_all.deb ...
正在将 libdpkg-perl (1.19.0.5ubuntu2.3) 解包到 (1.19.0.5ubuntu2.1) 上 ...
正在选中未选择的软件包 dpkg-dev。
正准备解包 .../21-dpkg-dev_1.19.0.5ubuntu2.3_all.deb ...
正在解包 dpkg-dev (1.19.0.5ubuntu2.3) ...
正在选中未选择的软件包 build-essential。
正准备解包 .../22-build-essential 12.4ubuntu1 amd64.deb ...
正在解包 build-essential (12.4ubuntu1) ...
正在选中未选择的软件包 python3-lib2to3。
正准备解包 .../23-python3-lib2to3_3.6.9-1~18.04_all.deb ...
正在解包 python3-lib2to3 (3.6.9-1~18.04) ...
正在选中未选择的软件包 python3-distutils。
正准备解包 .../24-python3-distutils_3.6.9-1~18.04_all.deb ...
正在解包 python3-distutils (3.6.9-1~18.04) ...
正在选中未选择的软件包 dh-python。
正准备解包 .../25-dh-python_3.20180325ubuntu2_all.deb ...
正在解包 dh-python (3.20180325ubuntu2) ...
正在选中未选择的软件包 libfakeroot:amd64。
正准备解包 .../26-libfakeroot 1.22-2ubuntu1 amd64.deb ...
正在解包 libfakeroot:amd64 (1.22-2ubuntu1) ...
正在选中未选择的软件包 fakeroot。
正准备解包 .../27-fakeroot_1.22-2ubuntu1_amd64.deb ...
正在解包 fakeroot (1.22-2ubuntu1) ...
正在选中未选择的软件包 libalgorithm-diff-perl。
正准备解包 .../28-libalgorithm-diff-perl_1.19.03-1_all.deb ...
正在解包 libalgorithm-diff-perl (1.19.03-1) ...
正在选中未选择的软件包 libalgorithm-diff-xs-perl。
正准备解包 .../29-libalgorithm-diff-xs-perl_0.04-5_amd64.deb ...
正在解包 libalgorithm-diff-xs-perl (0.04-5) ...
正在选中未选择的软件包 libalgorithm-merge-perl。
正准备解包 .../30-libalgorithm-merge-perl_0.08-3_all.deb ...
正在解包 libalgorithm-merge-perl (0.08-3) ...
正在选中未选择的软件包 libexpat1-dev:amd64。
正准备解包 .../31-libexpat1-dev_2.2.5-3ubuntu0.2_amd64.deb ...
正在解包 libexpat1-dev:amd64 (2.2.5-3ubuntu0.2) ...
正在选中未选择的软件包 libpython3.6-dev:amd64。
正准备解包 .../32-libpython3.6-dev_3.6.9-1~18.04_amd64.deb ...
正在解包 libpython3.6-dev:amd64 (3.6.9-1~18.04) ...
正在选中未选择的软件包 libpython3-dev:amd64。
正准备解包 .../33-libpython3-dev_3.6.7-1~18.04_amd64.deb ...
正在解包 libpython3-dev:amd64 (3.6.7-1~18.04) ...
正在选中未选择的软件包 manpages-dev。
正准备解包 .../34-manpages-dev_4.15-1_all.deb ...
正在解包 manpages-dev (4.15-1) ...
正准备解包 .../35-python-pip-whl_9.0.1-2.3~ubuntu1.18.04.1_all.deb ...
正在将 python-pip-whl (9.0.1-2.3~ubuntu1.18.04.1) 解包到 (8.1.1-2ubuntu0.4) 上 ...
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正在选中未选择的软件包 python3.6-dev。
正准备解包 .../36-python3.6-dev_3.6.9-1~18.04_amd64.deb ...
正在解包 python3.6-dev (3.6.9-1~18.04) ...
正在选中未选择的软件包 python3-dev。
正准备解包 .../37-python3-dev_3.6.7-1~18.04_amd64.deb ...
正在解包 python3-dev (3.6.7-1~18.04) ...
正在选中未选择的软件包 python3-pip。
正准备解包 .../38-python3-pip_9.0.1-2.3~ubuntu1.18.04.1_all.deb ...
正在解包 python3-pip (9.0.1-2.3~ubuntu1.18.04.1) ...
正在选中未选择的软件包 python3-setuptools。
正准备解包 .../39-python3-setuptools 39.0.1-2 all.deb ...
正在解包 python3-setuptools (39.0.1-2) ...
正在设置 libquadmath0:amd64 (8.3.0-26ubuntu1~18.04) ...
正在设置 libgomp1:amd64 (8.3.0-26ubuntu1~18.04) ...
正在设置 libatomic1:amd64 (8.3.0-26ubuntu1~18.04) ...
正在设置 python-pip-whl (9.0.1-2.3~ubuntu1.18.04.1) ...
正在设置 libcc1-0:amd64 (8.3.0-26ubuntu1~18.04) ...
正在处理用于 mime-support (3.60ubuntu1) 的触发器 ...
正在处理用于 desktop-file-utils (0.23-1ubuntu3.18.04.2) 的触发器 ...
正在设置 libtsan0:amd64 (8.3.0-26ubuntu1~18.04) ...
正在设置 linux-libc-dev:amd64 (4.15.0-74.84) ...
正在设置 libdpkg-perl (1.19.0.5ubuntu2.3) ...
正在设置 liblsan0:amd64 (8.3.0-26ubuntu1~18.04) ...
正在设置 gcc-7-base:amd64 (7.5.0-3ubuntu1~18.04) ...
正在设置 libpython3.6-minimal:amd64 (3.6.9-1~18.04) ...
正在设置 libmpx2:amd64 (8.3.0-26ubuntu1~18.04) ...
正在设置 dpkg-dev (1.19.0.5ubuntu2.3) ...
正在处理用于 libc-bin (2.27-3ubuntu1) 的触发器 ...
正在设置 libfakeroot:amd64 (1.22-2ubuntu1) ...
正在设置 libalgorithm-diff-perl (1.19.03-1) ...
正在处理用于 man-db (2.8.3-2ubuntu0.1) 的触发器 ...
正在设置 libc-dev-bin (2.27-3ubuntu1) ...
正在处理用于 gnome-menus (3.13.3-11ubuntu1.1) 的触发器 ...
正在设置 python3-lib2to3 (3.6.9-1~18.04) ...
正在设置 manpages-dev (4.15-1) ...
正在设置 libc6-dev:amd64 (2.27-3ubuntu1) ...
正在设置 python3-distutils (3.6.9-1~18.04) ...
正在设置 libitm1:amd64 (8.3.0-26ubuntu1~18.04) ...
正在设置 libpython3.6-stdlib:amd64 (3.6.9-1~18.04) ...
正在设置 libasan4:amd64(7.5.0-3ubuntu1~18.04)...
正在设置 libcilkrts5:amd64 (7.5.0-3ubuntu1~18.04) ...
正在设置 libubsan0:amd64 (7.5.0-3ubuntu1~18.04) ...
正在设置 python3.6-minimal (3.6.9-1~18.04) ...
正在设置 fakeroot (1.22-2ubuntu1) ...
update-alternatives: 使用 /usr/bin/fakeroot-sysv 来在自动模式中提供 /usr/bin/fakeroot (fakeroc
正在设置 libgcc-7-dev:amd64 (7.5.0-3ubuntu1~18.04) ...
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正在设置 cpp-7 (7.5.0-3ubuntu1~18.04) ...
正在设置 libstdc++-7-dev:amd64 (7.5.0-3ubuntu1~18.04) ...
正在设置 libalgorithm-merge-perl (0.08-3) ...
正在设置 libalgorithm-diff-xs-perl (0.04-5) ...
正在设置 python3-pip (9.0.1-2.3~ubuntu1.18.04.1) ...
正在设置 libexpat1-dev:amd64 (2.2.5-3ubuntu0.2) ...
正在设置 python3-setuptools (39.0.1-2) ...
正在设置 dh-python (3.20180325ubuntu2) ...
正在设置 libpython3.6:amd64 (3.6.9-1~18.04) ...
正在设置 python3.6 (3.6.9-1~18.04) ...
正在设置 gcc-7 (7.5.0-3ubuntu1~18.04) ...
正在设置 g++-7 (7.5.0-3ubuntu1~18.04) ...
正在设置 gcc(4:7.4.0-1ubuntu2.3)...
正在设置 libpython3.6-dev:amd64 (3.6.9-1~18.04) ...
正在设置 g++ (4:7.4.0-1ubuntu2.3) ...
update-alternatives: 使用 /usr/bin/g++ 来在自动模式中提供 /usr/bin/c++ (c++)
正在设置 python3.6-dev (3.6.9-1~18.04) ...
正在设置 libpython3-dev:amd64 (3.6.7-1~18.04) ...
正在设置 build-essential (12.4ubuntu1) ...
正在设置 python3-dev (3.6.7-1~18.04) ...
正在处理用于 libc-bin (2.27-3ubuntu1) 的触发器 ...
root@richardhu-virtual-machine:/etc/apt# pip3 -v
Usage:
 pip <command> [options]
root@richardhu-virtual-machine:/etc/apt# pip3 install --upgrade pip
Collecting pip
 Downloading https://files.pythonhosted.org/packages/00/b6/9cfa56b4081ad13874b0c6f96af8ce
                                       1.4MB 323kB/s
Installing collected packages: pip
 Found existing installation: pip 9.0.1
   Not uninstalling pip at /usr/lib/python3/dist-packages, outside environment /usr
Successfully installed pip-19.3.1
```

安装python2.7以及pip

```
apt install python2.7

获取:2 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libpython2.7-stdl 获取:3 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libpython2.7-mini 获取:4 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main amd64 python2.7-minimal 获取:5 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main amd64 python2.7 amd64 2
```

```
6 已下载 4,845 kB, 耗时 1分 49秒 (44.4 kB/s)
 7 (正在读取数据库 ... 系统当前共安装有 209779 个文件和目录。)
8 正准备解包 .../libpython2.7 2.7.17-1~18.04 amd64.deb ...
9 正在将 libpython2.7:amd64 (2.7.17-1~18.04) 解包到 (2.7.15-4ubuntu4~18.04.2) 上 ...
10 正准备解包 .../libpython2.7-stdlib 2.7.17-1~18.04 amd64.deb ...
11 正在将 libpython2.7-stdlib:amd64 (2.7.17-1~18.04) 解包到 (2.7.15-4ubuntu4~18.04.2) 上 。
12 正准备解包 .../libpython2.7-minimal_2.7.17-1~18.04_amd64.deb ...
13 正在将 libpython2.7-minimal:amd64 (2.7.17-1~18.04) 解包到 (2.7.15-4ubuntu4~18.04.2) 上
14 正在选中未选择的软件包 python2.7-minimal。
15 正准备解包 .../python2.7-minimal_2.7.17-1~18.04_amd64.deb ...
16 正在解包 python2.7-minimal (2.7.17-1~18.04) ...
17 正在选中未选择的软件包 python2.7。
18 正准备解包 .../python2.7_2.7.17-1~18.04_amd64.deb ...
19 正在解包 python2.7 (2.7.17-1~18.04) ...
20 正在处理用于 mime-support (3.60ubuntu1) 的触发器 ...
21 正在处理用于 desktop-file-utils (0.23-1ubuntu3.18.04.2) 的触发器 ...
22 正在处理用于 libc-bin (2.27-3ubuntu1) 的触发器 ...
23 正在处理用于 man-db (2.8.3-2ubuntu0.1) 的触发器 ...
24 正在处理用于 gnome-menus (3.13.3-11ubuntu1.1) 的触发器 ...
25 正在设置 libpython2.7-minimal:amd64 (2.7.17-1~18.04) ...
26 正在设置 libpython2.7-stdlib:amd64 (2.7.17-1~18.04) ...
27 正在设置 python2.7-minimal (2.7.17-1~18.04) ...
28 Linking and byte-compiling packages for runtime python2.7...
29 正在设置 python2.7 (2.7.17-1~18.04) ...
30 正在设置 libpython2.7:amd64 (2.7.17-1~18.04) ...
31 正在处理用于 libc-bin (2.27-3ubuntu1) 的触发器 .
32
33
35
36 root@richardhu-virtual-machine:/etc/apt# apt install python-pip
37 正在读取软件包列表... 完成
38 正在分析软件包的依赖关系树
39 正在读取状态信息... 完成
40 下列软件包是自动安装的并且现在不需要了:
    linux-headers-4.18.0-15 linux-headers-4.18.0-15-generic linux-image-4.18.0-15-gener
41
    linux-modules-4.18.0-15-generic linux-modules-extra-4.18.0-15-generic
42
43 使用'apt autoremove'来卸载它(它们)。
  将会同时安装下列软件:
44
45
    libpython-all-dev libpython-dev libpython-stdlib libpython2.7-dev python python-all
    python-asn1crypto python-cffi-backend python-crypto python-cryptography python-dbus
46
    python-enum34 python-gi python-idna python-ipaddress python-keyring python-keyrings
47
    python-pkg-resources python-secretstorage python-setuptools python-six python-wheel
48
    python2.7-dev
49
50 建议安装:
51
    python-doc python-tk python-crypto-doc python-cryptography-doc python-cryptography-
```

```
python-dbus-dbg python-dbus-doc python-enum34-doc python-gi-cairo libkf5wallet-bin
52
53
    gir1.2-gnomekeyring-1.0 python-fs python-gdata python-keyczar python-secretstorage-
54
    python-setuptools-doc
55
  下列【新】软件包将被安装:
    libpython-all-dev libpython-dev libpython-stdlib libpython2.7-dev python python-all
56
    python-asn1crypto python-cffi-backend python-crypto python-cryptography python-dbus
57
58
    python-enum34 python-gi python-idna python-ipaddress python-keyring python-keyrings
59
    python-pip python-pkg-resources python-secretstorage python-setuptools python-six p
60
    python-xdg python2.7-dev
61 升级了 0 个软件包, 新安装了 28 个软件包, 要卸载 0 个软件包, 有 314 个软件包未被升级。
  需要下载 30.4 MB 的归档。
63 解压缩后会消耗 51.4 MB 的额外空间。
64 您希望继续执行吗? [Y/n] Y
65 正在选中未选择的软件包 python-wheel。
66 正准备解包 .../24-python-wheel_0.30.0-0.2_all.deb ...
67 正在解包 python-wheel (0.30.0-0.2) ...
68 正在选中未选择的软件包 python-xdg。
69 正准备解包 .../25-python-xdg 0.25-4ubuntu1 all.deb ...
70 正在解包 python-xdg (0.25-4ubuntu1) ...
71 正在设置 libpython-stdlib:amd64 (2.7.15~rc1-1) ...
72 正在处理用于 man-db (2.8.3-2ubuntu0.1) 的触发器 ...
73 正在设置 libpython2.7-dev:amd64 (2.7.17-1~18.04) ...
74 正在设置 python2.7-dev (2.7.17-1~18.04) ...
75 正在设置 python (2.7.15~rc1-1) ...
76 正在设置 python-xdg(0.25-4ubuntu1)...
77 正在设置 python-idna (2.6-1) ...
78 正在设置 libpython-dev:amd64 (2.7.15~rc1-1) ...
79 正在设置 python-asn1crypto (0.24.0-1) ...
80 正在设置 python-crypto (2.6.1-8ubuntu2) ...
81 正在设置 python-dev (2.7.15~rc1-1) ...
82 正在设置 python-wheel (0.30.0-0.2) ...
83 正在设置 libpython-all-dev:amd64 (2.7.15~rc1-1) ...
84 正在设置 python-pkg-resources (39.0.1-2) ...
85 正在设置 python-cffi-backend(1.11.5-1)...
86 正在设置 python-gi (3.26.1-2ubuntu1) ...
87 正在设置 python-six (1.11.0-2) ...
88 正在设置 python-enum34 (1.1.6-2) ...
89 正在设置 python-dbus (1.2.6-1) ...
90 正在设置 python-ipaddress (1.0.17-1) ...
91 正在设置 python-pip (9.0.1-2.3~ubuntu1.18.04.1) ...
92 正在设置 python-all (2.7.15~rc1-1) ...
93 正在设置 python-setuptools (39.0.1-2) ...
94 正在设置 python-keyrings.alt (3.0-1) ...
95 正在设置 python-all-dev (2.7.15~rc1-1) ...
96 正在设置 python-cryptography (2.1.4-1ubuntu1.3) ...
97 正在设置 python-secretstorage (2.3.1-2) ...
```

```
98 正在设置 python-keyring (10.6.0-1) ...
100
101
    root@richardhu-virtual-machine:/etc/apt# pip install --upgrade pip
102 Requirement already up-to-date: pip in /usr/local/lib/python3.6/dist-packages (19.3.1
103
104 oot@richardhu-virtual-machine:/etc/apt# pip2 install --upgrade pip
105 Cache entry deserialization failed, entry ignored
106 Collecting pip
     Using cached https://files.pythonhosted.org/packages/00/b6/9cfa56b4081ad13874b0c6f9
107
108 Installing collected packages: pip
      Found existing installation: pip 9.0.1
109
        Not uninstalling pip at /usr/lib/python2.7/dist-packages, outside environment /us
110
111 Successfully installed pip-19.3.1
```

又有问题了

```
root@richardhu-virtual-machine:/etc/apt# pip3 -v
Traceback (most recent call last):
   File "/usr/bin/pip3", line 9, in <module>
     from pip import main
ImportError: cannot import name 'main'
```

```
#!/usr/bin/python
# GENERATED BY DEBIAN

import sys

# Run the main entry point, similarly to how setuptools does it,
# we didn't install the actual entry point from setup.py, don't u
# pkg_resources API.
#rom pip import main
if __name__ = '__main__':
    sys.exit(__main__,main())

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```

```
# Run the main entry point, similarly to how setuptools does it, but
# we didn't install the actual entry point from setup.py, don't use t
# pkg_resources API.
from pip import main
if __name__ = '__main__':
    sys.exit(__main__.main())
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```

还是有问题,下面改才对:

```
1 root@richardhu-virtual-machine:/etc/apt# vi /usr/bin/pip3
2
```

```
# [/usr/bin/python3
# GENERATED BY DEBIAN

import Sys

# Run the main entry point, similarly to how setuptools does it, but be;
# we didn't install the actual entry point from setup.py, don't use the
# pkg_resources API.
from pip import __main__;
sys.exit(__main__,_main())
```

一定要注意单下横线和双下横线需要修改的地方是两处,第一行一处,最后一行一处一定要认真修改,亲测有效之后运行pip3 --version就可以正常使用了

```
1 root@richardhu-virtual-machine:/etc/apt# pip2 --version
2 pip 19.3.1 from /usr/local/lib/python2.7/dist-packages/pip (python 2.7)
```

```
root@richardhu-virtual-machine:/etc/apt# pip3 --version
pip 19.3.1 from /usr/local/lib/python3.6/dist-packages/pip (python 3.6)
root@richardhu-virtual-machine:/etc/apt# pip --version
pip 19.3.1 from /usr/local/lib/python2.7/dist-packages/pip (python 2.7)
```

安装虚拟环境包

```
1 root@richardhu-virtual-machine:/etc/apt# pip install virtualenvwrapper
2 DEPRECATION: Python 2.7 will reach the end of its life on January 1st, 2020. Please up
3 Collecting virtualenvwrapper
4
    Downloading https://files.pythonhosted.org/packages/c1/6b/2f05d73b2d2f2410b48b90d378
                            | 337kB 16kB/s
5
  Collecting stevedore
6
7
    Downloading https://files.pythonhosted.org/packages/b1/e1/f5ddbd83f60b03f522f173c03e
8
                                51kB 14kB/s
  Collecting virtualenv
9
    Downloading https://files.pythonhosted.org/packages/05/f1/2e07e8ca50e047b9cc9ad56cf4
10
                         3.4MB 27kB/s
11
  Collecting virtualenv-clone
13
    Downloading https://files.pythonhosted.org/packages/ba/f8/50c2b7dbc99e05fce5e5b9d9a3
  Collecting pbr!=2.1.0,>=2.0.0
14
    Downloading https://files.pythonhosted.org/packages/7a/db/a968fd7beb9fe06901c1841cb2
15
                        | 112kB 14kB/s
16
  Requirement already satisfied: six>=1.10.0 in /usr/lib/python2.7/dist-packages (from s
  Building wheels for collected packages: virtualenvwrapper
18
    Building wheel for virtualenvwrapper (setup.py) ... done
19
    Created wheel for virtualenvwrapper: filename=virtualenvwrapper-4.8.4-py2.py3-none-a
20
    Stored in directory: /root/.cache/pip/wheels/70/d7/39/a522e494b0e145a1bec42f45a6e542
21
22 Successfully built virtualenvwrapper
23 Installing collected packages: pbr, stevedore, virtualenv, virtualenv-clone, virtualen
24 Successfully installed pbr-5.4.4 stevedore-1.31.0 virtualenv-16.7.9 virtualenv-clone-0
```

设置环境变量

```
root@richardhu-virtual-machine:~# vim .bashrc

export WORKON_HOME=$HOME/.virtualenvs
source /usr/local/bin/virtualenvwrapper.sh
```

```
79
```

```
# enable color support of ls and also add handy aliases
   alias ls='ls --color=auto'
   #alias dir='dir --color=auto'
   #alias vdir='vdir --color=auto'
   alias grep='grep --color=auto'
alias fgrep='fgrep --color=auto'
alias egrep='egrep --color=auto'
# some more ls aliases
alias II='ls -alF'
alias la='ls -A'
alias la'ls -CF'
# Alias definitions.
# You may want to put all your additions into a separate file like
# ~/.bash_aliases, instead of adding them here directly
# See /usr/share/doc/bash-doc/examples in the bash-doc package.
# enable programmable completion features (you don't need to enable
# this, if it's already enabled in /etc/bash.bashrc and /etc/profile
 sources /etc/bash.bashrc).
#if [ -f /etc/bash_completion ] && ! shopt -oq posix; then
    . /etc/bash_completion
```

```
root@richardhu-virtual-machine:~# vim .bashrc
root@richardhu-virtual-machine:~# vim .bashrc
root@richardhu-virtual-machine:~# source ~/.bashrc
virtualenvwrapper.user_scripts creating /root/.virtualenvs/premkproject
virtualenvwrapper.user_scripts creating /root/.virtualenvs/postmkproject
virtualenvwrapper.user_scripts creating /root/.virtualenvs/premkvirtualenv
virtualenvwrapper.user_scripts creating /root/.virtualenvs/premkvirtualenv
virtualenvwrapper.user_scripts creating /root/.virtualenvs/postmkvirtualenv
virtualenvwrapper.user_scripts creating /root/.virtualenvs/premvirtualenv
virtualenvwrapper.user_scripts creating /root/.virtualenvs/postrmvirtualenv
virtualenvwrapper.user_scripts creating /root/.virtualenvs/postdeactivate
virtualenvwrapper.user_scripts creating /root/.virtualenvs/preactivate
virtualenvwrapper.user_scripts creating /root/.virtualenvs/postactivate
virtualenvwrapper.user_scripts creating /root/.virtualenvs/postactivate
virtualenvwrapper.user_scripts creating /root/.virtualenvs/postactivate
virtualenvwrapper.user_scripts creating /root/.virtualenvs/postactivate
virtualenvwrapper.user_scripts creating /root/.virtualenvs/get_env_details
```

```
root@richardhu-virtual-machine:~# which python3
2 /usr/bin/python3
3 root@richardhu-virtual-machine:~# mkvirtualenv --python=/usr/bin/python3 bbs-env
4 Running virtualenv with interpreter /usr/bin/python3
5 Already using interpreter /usr/bin/python3
6 Using base prefix '/usr'
7 New python executable in /root/.virtualenvs/bbs-env/bin/python3
8 Also creating executable in /root/.virtualenvs/bbs-env/bin/python
9 Installing setuptools, pip, wheel...
10 done.
11 virtualenvwrapper.user_scripts creating /root/.virtualenvs/bbs-env/bin/predeactivate
12 virtualenvwrapper.user_scripts creating /root/.virtualenvs/bbs-env/bin/postdeactivate
13 virtualenvwrapper.user scripts creating /root/.virtualenvs/bbs-env/bin/preactivate
14 virtualenvwrapper.user_scripts creating /root/.virtualenvs/bbs-env/bin/postactivate
15 virtualenvwrapper.user_scripts creating /root/.virtualenvs/bbs-env/bin/get_env_details
16
```

安装git

```
1 (bbs-env) root@richardhu-virtual-machine:~# cd /srv
2 mkdir bbs
3 cd bbs
4 apt install git
5 下列【新】软件包将被安装:
    git git-man liberror-perl
7 升级了 0 个软件包, 新安装了 3 个软件包, 要卸载 0 个软件包, 有 314 个软件包未被升级。
8 需要下载 4,738 kB 的归档。
9 解压缩后会消耗 33.9 MB 的额外空间。
10 您希望继续执行吗? [Y/n] Y
11 获取:1 http://cn.archive.ubuntu.com/ubuntu bionic/main amd64 liberror-perl all 0.17025
12 获取:2 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main amd64 git-man all 1:2.1
13 获取:3 http://cn.archive.ubuntu.com/ubuntu bionic-updates/main amd64 git amd64 1:2.17.
14 已下载 4,738 kB, 耗时 6秒 (861 kB/s)
15 正在选中未选择的软件包 liberror-perl。
16 (正在读取数据库 ... 系统当前共安装有 210811 个文件和目录。)
17 正准备解包 .../liberror-perl_0.17025-1_all.deb ...
18 正在解包 liberror-perl (0.17025-1) ...
19 正在选中未选择的软件包 git-man。
20 正准备解包 .../git-man_1%3a2.17.1-1ubuntu0.5_all.deb ...
21 正在解包 git-man (1:2.17.1-1ubuntu0.5) ...
22 正在选中未选择的软件包 git。
23 正准备解包 .../git_1%3a2.17.1-1ubuntu0.5_amd64.deb ...
24 正在解包 git (1:2.17.1-1ubuntu0.5) ...
```

```
      25
      正在设置 git-man (1:2.17.1-1ubuntu0.5) ...

      26
      正在设置 liberror-perl (0.17025-1) ...

      27
      正在处理用于 man-db (2.8.3-2ubuntu0.1) 的触发器 ...

      28
      正在设置 git (1:2.17.1-1ubuntu0.5) ...
```

下载代码

```
1 (bbs-env) root@richardhu-virtual-machine:/srv/bbs# git init
2 已初始化空的 Git 仓库于 /srv/bbs/.git/
3 #注意这里面由于没有在服务器上面设置ssh,故这里没有用git协议!
4 (bbs-env) root@richardhu-virtual-machine:/srv/bbs# git remote add origin https://gite
5 (bbs-env) root@richardhu-virtual-machine:/srv/bbs# git pull origin master
6 Username for 'https://gitee.com': richard1230
7 Password for 'https://richard1230@gitee.com':
8 remote: Counting objects: 516, done.
9 remote: Compressing objects: 100% (441/441), done.
10 remote: Total 516 (delta 58), reused 512 (delta 58)
11 接收对象中: 100% (516/516), 3.09 MiB | 779.00 KiB/s, 完成.
12 处理 delta 中: 100% (58/58), 完成.
13 来自 https://gitee.com/richard1230/learning_forum_source_code
   * branch master -> FETCH_HEAD
14
   * [新分支] master -> origin/master
15
16
```