# Ubuntu18.04 安装 ROS melodic

注：此过程为学习 ROS 理论与实践时个人安装过程记录即问题解决，所参考的安装教程为古月居博客 https://www.guyuehome.com/19962

1.添加 ROS 软件源
```
sudo sh -c 'echo "deb http://packages.ros.org/ros/ubuntu $(lsb_release -sc)
main" > /etc/apt/sources.list.d/ros-latest.list'
```

2.添加密钥
```
sudo apt-key adv --keyserver 'hkp://keyserver.ubuntu.com:80' --recv-key
C1CF6E31E6BADE8868B172B4F42ED6FBAB17C654
```



```
Executing: /tmp/apt-key-gpghome.LbxweiyIEy/gpg.1.sh --keyserver hkp://keyserver.
ubuntu.com:80 --recv-key C1CF6E31E6BADE8868B172B4F42ED6FBAB17C654
gpg: 密钥 F42ED6FBAB17C654：公钥"Open Robotics <info@osrfoundation.org>"已导入
gpg: 合计被处理的数量：1
gpg:                        已导入：1
```

3.更新，确保之前的软件源的修改获得更新
```
sudo apt-get update && sudo apt-get upgrade
```

4.正式安装
```
sudo apt-get install ros-medolic-desktop-full
```



查看安装情况：
cd /opt
ls

5.初始化 rosdep



sudo apt-get install python-rosdep
再次初始化：
ERROR: Rosdep experienced an error: ('The read operation timed out',)
Please go to the rosdep page [1] and file a bug report with the stack trace below.
[1] : http://www.ros.org/wiki/rosdep

rosdep version: 0.21.0

Traceback (most recent call last):
  File "/usr/lib/python2.7/dist-packages/rosdep2/main.py", line 146, in rosdep_main
    exit_code = _rosdep_main(args)
  File "/usr/lib/python2.7/dist-packages/rosdep2/main.py", line 441, in _rosdep_main
    return _no_args_handler(command, parser, options, args)
  File "/usr/lib/python2.7/dist-packages/rosdep2/main.py", line 450, in _no_args_handler
    return command_handlers[command](options)
  File "/usr/lib/python2.7/dist-packages/rosdep2/main.py", line 594, in command_init
    data = download_default_sources_list()
  File "/usr/lib/python2.7/dist-packages/rosdep2/sources_list.py", line 340, in
download_default_sources_list
    f = urlopen(url, timeout=DOWNLOAD_TIMEOUT)
  File "/usr/lib/python2.7/urllib2.py", line 154, in urlopen
    return opener.open(url, data, timeout)
  File "/usr/lib/python2.7/urllib2.py", line 429, in open
    response = self._open(req, data)
  File "/usr/lib/python2.7/urllib2.py", line 447, in _open
    '_open', req)
  File "/usr/lib/python2.7/urllib2.py", line 407, in _call_chain
    result = func(*args)
  File "/usr/lib/python2.7/urllib2.py", line 1248, in https_open
    context=self._context)
  File "/usr/lib/python2.7/urllib2.py", line 1208, in do_open
    r = h.getresponse(buffering=True)
  File "/usr/lib/python2.7/httplib.py", line 1178, in getresponse
    response.begin()
  File "/usr/lib/python2.7/httplib.py", line 452, in begin
    version, status, reason = self._read_status()
  File "/usr/lib/python2.7/httplib.py", line 408, in _read_status
    line = self.fp.readline(_MAXLINE + 1)
  File "/usr/lib/python2.7/socket.py", line 480, in readline
    data = self._sock.recv(self._rbufsize)
  File "/usr/lib/python2.7/ssl.py", line 754, in recv
    return self.read(buflen)
  File "/usr/lib/python2.7/ssl.py", line 641, in read
    v = self._sslobj.read(len)
SSLError: ('The read operation timed out',)

执行命令：
sudo apt install rospack-tools
仍然报错（同上）

```
ERROR: Rosdep experienced an error: ('The read operation timed out',)
Please go to the rosdep page [1] and file a bug report with the stack trace belo
w.
[1] : http://www.ros.org/wiki/rosdep

rosdep version: 0.21.0

Traceback (most recent call last):
  File "/usr/lib/python2.7/dist-packages/rosdep2/main.py", line 146, in rosdep_m
ain
    exit_code = _rosdep_main(args)
  File "/usr/lib/python2.7/dist-packages/rosdep2/main.py", line 441, in _rosdep_
main
    return _no_args_handler(command, parser, options, args)
  File "/usr/lib/python2.7/dist-packages/rosdep2/main.py", line 450, in _no_args
_handler
    return command_handlers[command](options)
  File "/usr/lib/python2.7/dist-packages/rosdep2/main.py", line 594, in command_
init
    data = download_default_sources_list()
```

参考：https://blog.csdn.net/weixin_53660567/article/details/120607176#comments_18709733

rosdep 初始化及更新成功