**安装ubuntu22.04.3**

[ubuntu vm安装下载（自用）-CSDN博客](https://blog.csdn.net/weixin_45634390/article/details/135116336?spm=1001.2014.3001.5501)

**安装vmwaretools**

<https://blog.csdn.net/dengjin20104042056/article/details/130545759>

**安装vim**

**安装git**

安装**Terminator 终端优化**

[**Ubuntu用Terminator+ZSH打造好用的终端开发环境 - 知乎 (zhihu.com)**](https://zhuanlan.zhihu.com/p/346665734)

如果报错显示：

Linux下不能连接ppa.launchpad.net的问题

[**Linux下不能连接ppa.launchpad.net的问题（中科大软件源）-CSDN博客**](https://blog.csdn.net/qq_31375855/article/details/131807344)

**Ubuntu 22.04换国内源（建议先别换 找不到再换）**

换源建议别改文件—自己在software or update那里选择（其实纯看运气）

[Ubuntu 22.04换国内源 清华源 阿里源 中科大源 163源\_ubuntu22阿里源-CSDN博客](https://blog.csdn.net/xiangxianghehe/article/details/122856771)

换源还原回默认源

[Ubuntu 还原回默认源\_ubu系统npm复原源-CSDN博客](https://blog.csdn.net/qq_27854685/article/details/84339414#:~:text=%E5%A6%82%E6%9E%9C%E6%83%B3%E8%BF%98%E5%8E%9F%E7%9A%84%E8%AF%9D%EF%BC%8Csudo%20rm%20%2Fetc%2Fapt%2Fsources.listsudo,-i%20software-properties-gtk%E7%84%B6%E5%90%8E%E5%9C%A8%E5%BC%B9%E6%A1%86%E9%87%8C%EF%BC%8C%E5%85%A8%E9%83%A8%E5%8B%BE%E9%80%89%2F%E9%83%A8%E5%88%86%E5%8B%BE%E9%80%89%20%E5%B0%B1OK%E4%BA%86..._ubantu%E4%B8%ADoritation%E6%94%B9%E4%B8%8D%E5%9B%9E%E6%9D%A5%E4%BA%86)

**0、ROS2安装（换源后装的快点 不然太慢了 这东西还是看运气）**

[ROS2安装方法 - ROS2入门教程 (guyuehome.com)](https://book.guyuehome.com/ROS2/1.%E7%B3%BB%E7%BB%9F%E6%9E%B6%E6%9E%84/1.3_ROS2%E5%AE%89%E8%A3%85%E6%96%B9%E6%B3%95/)

如果以下命令

sudo curl -sSL [https://raw.githubusercontent.com/ros/rosdistro/master/ros.key -o /usr/share/keyrings/ros-archive-keyring.gpg](https://raw.githubusercontent.com/ros/rosdistro/master/ros.key%20-o%20/usr/share/keyrings/ros-archive-keyring.gpg)  
出错的话

[彻底解决【“curl: (7) Failed to connect to raw.githubusercontent.com port 443: Connection refused”】错误\_curl: (7) failed to connect to nodejs.org port 443-CSDN博客](https://blog.csdn.net/donaldsy/article/details/107482368)

Gitclone老是失败

[解决Linux系统git clone失败或超时问题-CSDN博客](https://blog.csdn.net/weixin_42771853/article/details/133135301#:~:text=%E6%96%87%E7%AB%A0%E6%B5%8F%E8%A7%88%E9%98%85%E8%AF%BB1k%E6%AC%A1%E3%80%82%20%E9%A6%96%E5%85%88%E4%BD%BF%E7%94%A8%20sudo%20vim%20%2Fetc%2Fhosts%20%E8%BF%9B%E5%85%A5hosts%EF%BC%8C%E6%AD%A4%E6%97%B6%E6%98%AF%E6%9F%A5%E7%9C%8B%E6%A8%A1%E5%BC%8F%E3%80%82,%E4%BD%BF%E7%94%A8git%20clone%E5%B8%B8%E5%B8%B8%E4%B8%8D%E6%88%90%E5%8A%9F%EF%BC%8C%E4%BB%A5%E4%B8%8B%E6%98%AF%E8%A7%A3%E5%86%B3%E5%8A%9E%E6%B3%95%EF%BC%8C%E4%BA%B2%E6%B5%8B%E6%9C%89%E6%95%88%E3%80%82%20%E6%8C%89%E4%B8%8B%20i%20%E8%BF%9B%E5%85%A5%E7%BC%96%E8%BE%91%E6%A8%A1%E5%BC%8F%EF%BC%8C%E6%AD%A4%E6%97%B6%E9%9C%80%E8%A6%81%E6%8F%92%E5%85%A5%E4%B8%A4%E4%B8%AAIP%E5%9C%B0%E5%9D%80%E3%80%82%202.%20%E9%87%8D%E5%90%AF%E7%BD%91%E7%BB%9C%E5%92%8C%E6%9C%8D%E5%8A%A1%E5%99%A8%E3%80%82)**（这个测试过后有用！）用这个就行了 非常有用！！！**

法二：看运气 一般般有用

sudo vim /etc/hosts

添加

192.30.253.113 github.com

192.30.252.131 github.com

185.31.16.185 github.global.ssl.fastly.net

74.125.237.1 dl-ssl.google.com

173.194.127.200 groups.google.com

74.125.128.95 ajax.googleapis.com

1、安装pangolin

https://github.com/stevenlovegrove/Pangolin

安装pangolin git clone --recursive https://github.com/stevenlovegrove/Pangolin.git

计算机生成了可选文字:
cdPangolin-e.5/
mkdirbuild&&cdbuild
sudomakeinstall

计算机生成了可选文字:
4然0就完成了，可以下面代码进行验证
1Pangolin/bui1d/examp1es/He110Pang01in
2．/He110Pangolin

2、安装Eigen3

**Eigen3**

测试下来，直接apt-get也可以

sudo apt-get install libeigen3-dev

3、安装boost

[Index of main/release/1.77.0/source (jfrog.io)](https://boostorg.jfrog.io/artifactory/main/release/1.77.0/source/)

解压

sudo ./bootstrap.sh

**4、安装libssl-dev**

执行

sudo apt-get install libssl-dev

5、安装opencv3.4.3（**ubuntu22.04.3自带 好像不需要再装**）

[从零开始Ubuntu22.04跑ORB-SLAM3代码\_ubuntu22.04配置orb-slam3-CSDN博客](https://blog.csdn.net/m0_58173801/article/details/127068794)

[【ROS】RTABMAP+ORBSLAM3环境搭建步骤 - 知乎 (zhihu.com)](https://zhuanlan.zhihu.com/p/528557998)

安装依赖库

sudo apt-get install build-essential libgtk2.0-dev libavcodec-dev libavformat-dev libjpeg.dev libtiff4.dev libswscale-dev libjasper-dev

sudo add-apt-repository "deb http://security.ubuntu.com/ubuntu xenial-security main"

sudo apt update

sudo apt install libjasper1 libjasper-dev

sudo apt-get install build-essential libgtk2.0-dev libavcodec-dev libavformat-dev libjpeg.dev libtiff4.dev libswscale-dev libjasper-dev

完成后进行编译安装（巨慢）

cd opencv-3.4.3

mkdir build

cd build

cmake -D CMAKE\_BUILD\_TYPE**=**Release -D CMAKE\_INSTALL\_PREFIX**=**/usr/local ..

make

sudo make install

接下来对opencv的环境进行配置

*# 添加库路径*

sudo /bin/bash -c 'echo "/usr/local/lib" > /etc/ld.so.conf.d/opencv.conf'

*# 更新系统库*

sudo ldconfig

*# 配置bash*

sudo gedit /etc/bash.bashrc

*# 在bash.bashrc文件中添加以下两行*

PKG\_CONFIG\_PATH**=**$PKG\_CONFIG\_PATH:/usr/local/lib/pkgconfig

export PKG\_CONFIG\_PATH

*# 保存退出,记得source*

source /etc/bash.bashrc

sudo updatedb

Gtsam

镜像版本（<https://gitee.com/ruinco/gtsam.git>）

可以使用以下命令来切换到4.1.0版本的标签：

Copy Code

cd gtsam # 切换到 gtsam 目录下

git checkout tags/4.1.0 # 切换到 4.1.0 标签