

ROS 配置实验

• 写在前面:刚开始配置的时候忘记截图, 后面截图是第二次输入指令截得, 因而与第一次配置有一些不同

一. 配置过程

1.setup sources list

输入指令: `sudo sh -c 'echo "deb http://packages.ros.org/ros/ubuntu $(lsb_release -sc) main" > /etc/apt/sources.list.d/ros-latest.list'`

2.Set up my keys

输入指令: `sudo apt-key adv --keyserver hkp://ha.pool.sks-keyservers.net:80 --recv-key 0xB01FA116`

运行结果:

```
guanzhuoqun@ubuntu:~$ sudo sh -c 'echo "deb http://packages.ros.org/ros/ubuntu $(lsb_release -sc) main" > /etc/apt/sources.list.d/ros-latest.list'
guanzhuoqun@ubuntu:~$ sudo apt-key adv --keyserver hkp://ha.pool.sks-keyservers.net:80 --recv-key 0xB01FA116
Executing: gpg --ignore-time-conflict --no-options --no-default-keyring --homedir /tmp/tmp.GQjVilc4rq --no-auto-check-trustdb --trust-model always --keyring /etc/apt/trusted.gpg --primary-keyring /etc/apt/trusted.gpg --keyserver hkp://ha.pool.sks-keyservers.net:80 --recv-key 0xB01FA116
gpg: requesting key B01FA116 from hkp server ha.pool.sks-keyservers.net
gpg: key B01FA116: "ROS Builder <rosbuild@ros.org>" not changed
gpg: Total number processed: 1
gpg:      unchanged: 1
```

3.Installation

输入指令: `sudo apt-get update`

运行结果:

```
guanzhuoqun@ubuntu:~$ sudo apt-get update
Ign http://ubuntu.mirrors.tds.net trusty InRelease
Hit http://packages.ros.org trusty InRelease
Ign http://archive.canonical.com trusty InRelease
Ign http://extras.ubuntu.com trusty InRelease
Get:1 http://ubuntu.mirrors.tds.net trusty-updates InRelease [65.9 kB]
```

4.Desktop-Full install

输入指令: `sudo apt-get install ros-jade-desktop-full`

运行结果:

```
guanzhuoqun@ubuntu:~$ sudo apt-get install ros-jade-desktop-full
Reading package lists... Done
Building dependency tree
Reading state information... Done
ros-jade-desktop-full is already the newest version.
0 upgraded, 0 newly installed, 0 to remove and 88 not upgraded.
```

```
ros-jade-wireless-msgs - Messages for describing aspects of a wireless network,
connection, etc.
ros-jade-wireless-watcher - The wireless_watcher package
ros-jade-world-item-observer - Persistent Observer of Items in the World for the
Spatial World Database
ros-jade-world-item-search - World Object Search via Persistence Models
ros-jade-worldlib - C++ Library for World State Learning Methods
ros-jade-wts-driver - The wts_driver package
ros-jade-wu-ros-tools - A collection of tools for making a variety of generic RO
S-related tasks easier.
ros-jade-xacro - Xacro (XML Macros) Xacro is an XML macro language.
ros-jade-xmlrpcpp - XmlRpc++ is a C++ implementation of the XML-RPC protocol.
ros-jade-xsens-driver - ROS Driver for XSens MT/MTi/MTi-G devices.
ros-jade-yason - 3rd party library: YASON
ros-jade-youbot-driver - driver for the KUKA youBot robot
```

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ros-jade-worldlib - C++ Library for World State Learning Methods
ros-jade-wts-driver - The wts_driver package
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```

5.find available packages

输入指令: apt-cache search ros-jade

运行结果:

```

guanzhualun@ubuntu:~$ sudo rosdep init
ERROR: default sources list file already exists:
      /etc/ros/rosdep/sources.list.d/20-default.list
Please delete if you wish to re-initialize
guanzhualun@ubuntu:~$ rosdep update
reading in sources list data from /etc/ros/rosdep/sources.list.d
Hit https://raw.githubusercontent.com/ros/rosdistro/master/rosdep/osx-homebrew.y
aml
Hit https://raw.githubusercontent.com/ros/rosdistro/master/rosdep/base.yaml
Hit https://raw.githubusercontent.com/ros/rosdistro/master/rosdep/python.yaml
Hit https://raw.githubusercontent.com/ros/rosdistro/master/rosdep/ruby.yaml
Hit https://raw.githubusercontent.com/ros/rosdistro/master/releases/fuerte.yaml
Query rosdistro index https://raw.githubusercontent.com/ros/rosdistro/master/ind
ex.yaml
Add distro "groovy"
Add distro "hydro"
Add distro "indigo"
Add distro "jade"
Add distro "kinetic"
updated cache in /home/guanzhualun/.ros/rosdep/sources.cache

```

6.initialize rosdep

输入指令: `echo "source /opt/ros/jade/setup.bash" >> ~/.bashrc`source ~/.bashrc

7.change the environment of my current shell

输入指令: `sudo apt-get install python-rosinstall`

8.getting rosinstall

输入指令: `sudo apt-get install python-rosinstall`

运行结果:

```

guanzhualun@ubuntu:~$ echo "source /opt/ros/jade/setup.bash" >> ~/.bashrc
guanzhualun@ubuntu:~$ source ~/.bashrc
guanzhualun@ubuntu:~$ source /opt/ros/jade/setup.bash
guanzhualun@ubuntu:~$ sudo apt-get install python-rosinstall
Reading package lists... Done
Building dependency tree
Reading state information... Done
python-rosinstall is already the newest version.
0 upgraded, 0 newly installed, 0 to remove and 88 not upgraded.

```

二.配置完成后，重启虚拟机，运行指令

1. 运行指令 `roscore` 跑出结果，截图如下:

```

guanzhualun@ubuntu:~$ roscore
... logging to /home/guanzhualun/.ros/log/a3c71662-a764-11e6-b45f-000c295b25de/r
oslaunch-ubuntu-3180.log
Checking log directory for disk usage. This may take awhile.
Press Ctrl-C to interrupt
Done checking log file disk usage. Usage is <1GB.

started roslaunch server http://ubuntu:45332/
ros_comm version 1.11.20

```

```
SUMMARY
=====

PARAMETERS
* /roscdistro: jade
* /rosversion: 1.11.20

NODES

auto-starting new master
process[master]: started with pid [3192]
ROS_MASTER_URI=http://ubuntu:11311/

setting /run_id to a3c71662-a764-11e6-b45f-000c295b25de
process[rosout-1]: started with pid [3205]
started core service [/rosout]
```

三. 实验感想

虽然是比较成功地配置好了 ROS，一步一步按照教程，真的是复制粘贴，但是不明白的是输入完测试指令，测试出来的结果代表什么意思。