Mininet安装

参考资料是田仁慧同学发的

https://www.cnblogs.com/JCpeng/p/14993506.html

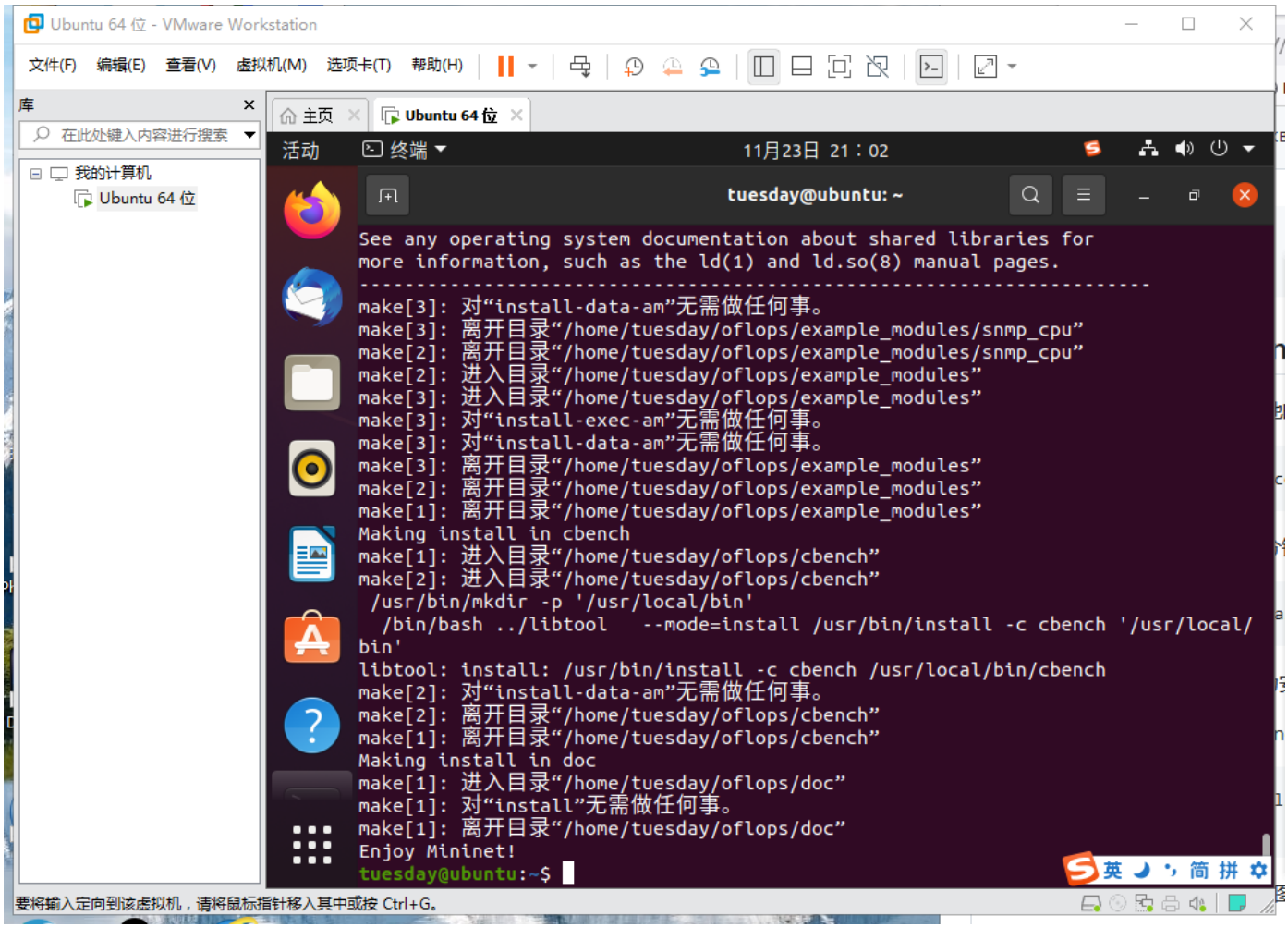
1、安装mininet

1.2获取源代码

```
sudo apt-get update
sudo apt-get install git
sudo git clone git://github.com/mininet/mininet
```

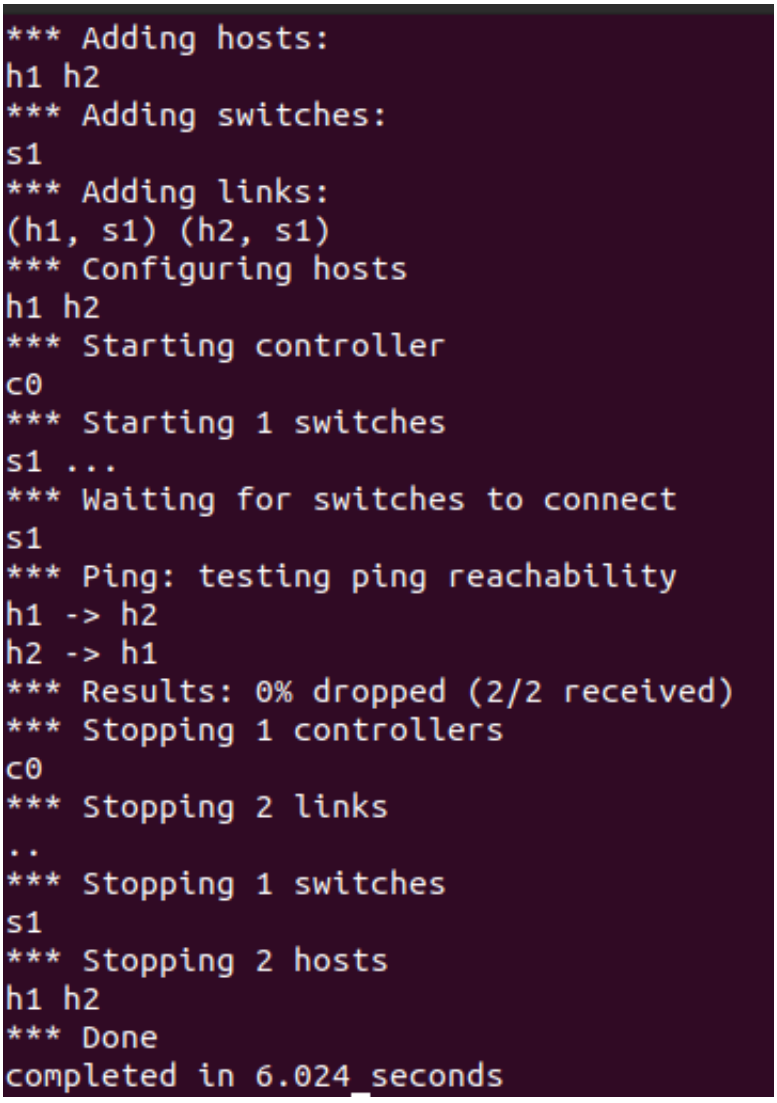
1.2安装mininet

```
sudo ./mininet/util/install.sh -a
```



1.3测试基本功能

```
sudo apt install net-tools
sudo mn --test pingall
```



2.安装ryu

2.1使用pip命令安装

```
sudo apt install python-pip
pip install ryu
```

这里报错 了

Command “python setup.py egg_info" failed with error code 1 in /tmp/pip-build-A1Th4c/ovs/

修改命令

```
sudo python -m pip install --upgrade --force pip
```

2.2获取Open vSwitch源代码

```
sudo git clone https://github.com/openvswitch/ovs.git
```

3、搭建网络环境

3.1启动ryu控制器

```
ryu-manager --verbose ryu.app.simple_switch_13
```

这里报错了

Command “ryu-manager' not found, but can be installed with: sudo apt install python3-ryu

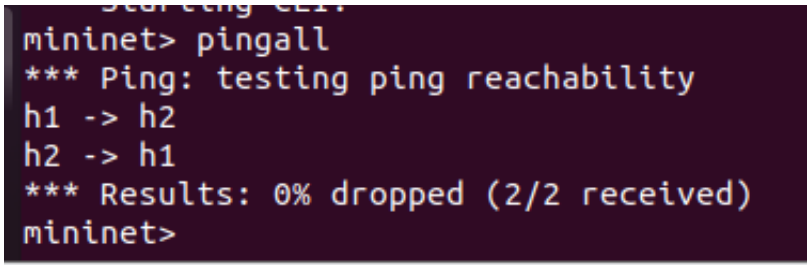
修改命令

```
sudo apt install python3-ryu
```

3.2启动mininet搭建网络拓扑

```
mn --topo linear,2 --mac --switch ovsk --controller remote
```

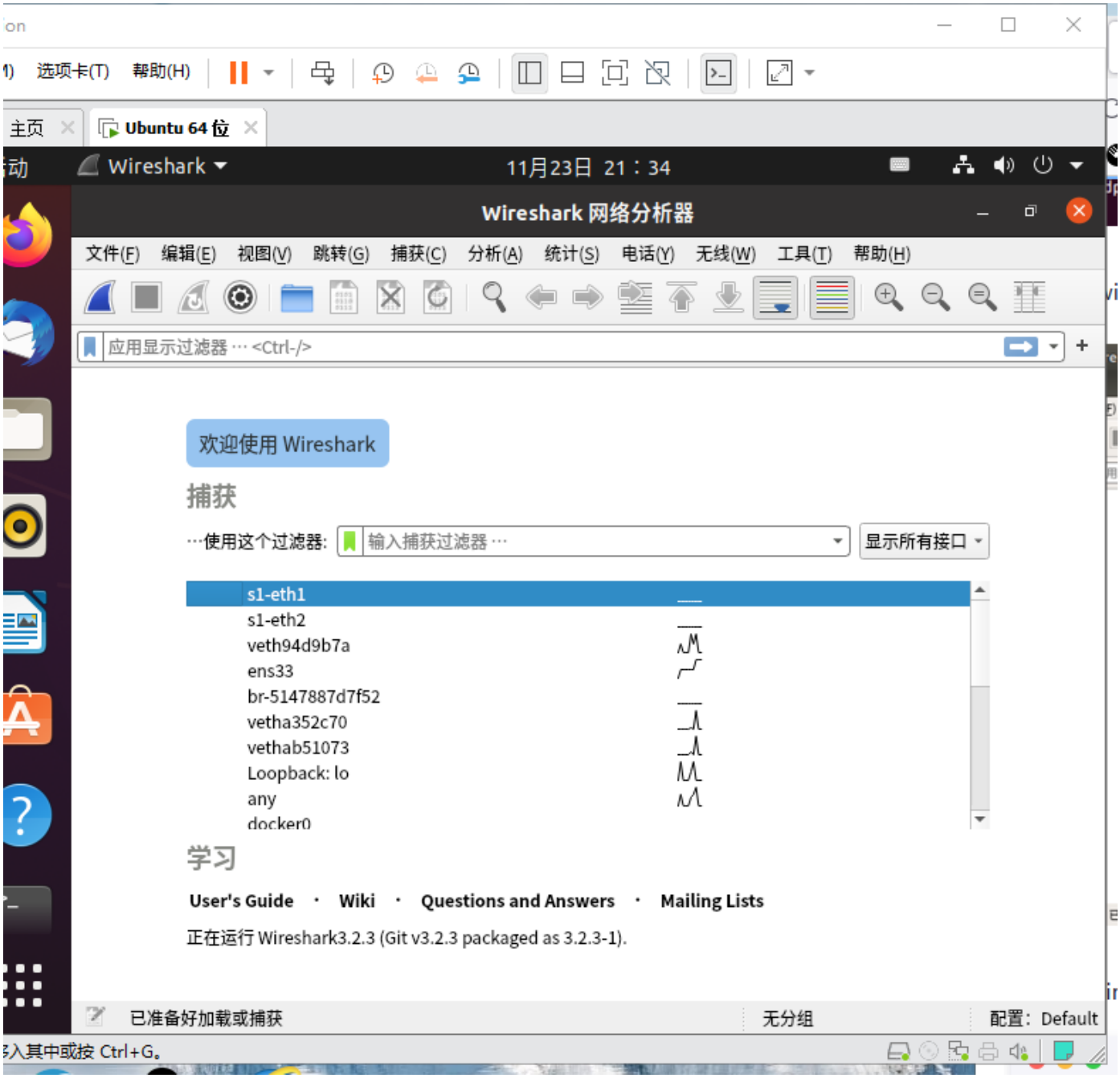
网络环境搭建完成。进行简单测试，在mininet的控制命令行里执行pingall：



4、使用wireshark抓取OpenFlow消息

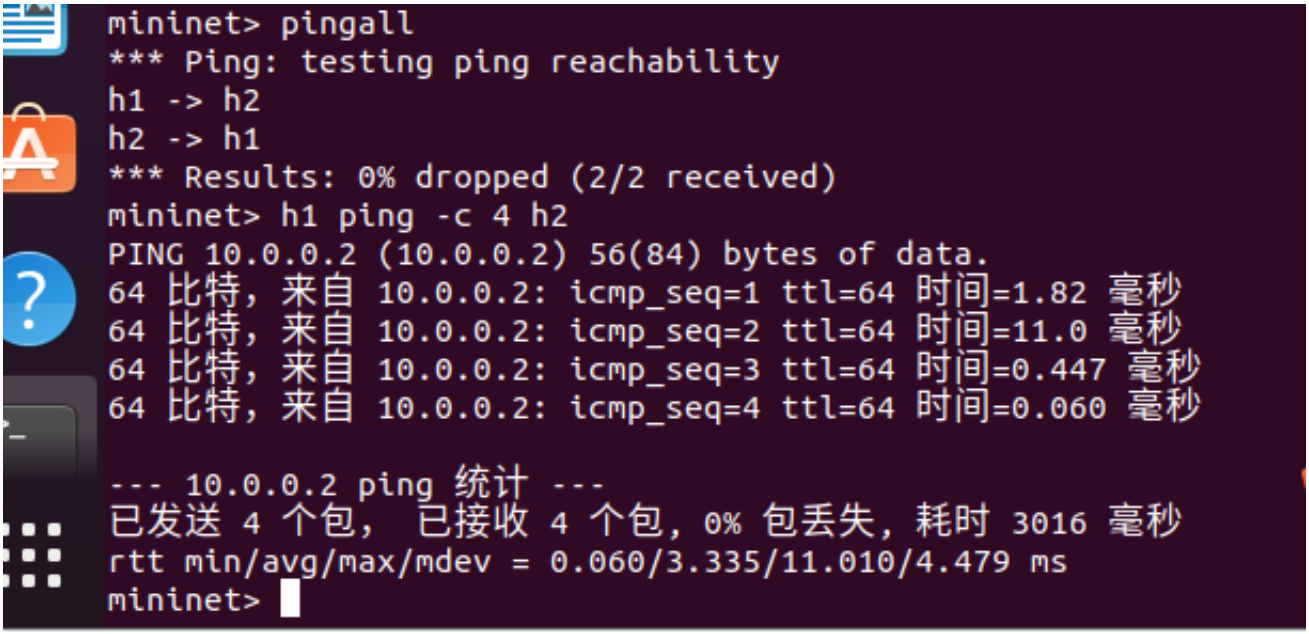
4.1启动wireshark

```
sudo wireshark
```



4.2在mininet的控制命令行中执行

```
h1 ping -c 4 h2
```



wireshark中选择监听any，过滤器filter中输入openflow_v4即可抓取交换机s1与控制器c0之间的openflow消息。