Ubuntu(WSL)安装 RabbitMQ

1.安装erlang

2.假如出现没权限情况

3.注意检查RabbitMQ 与erlang 的版本对应:

4.安装RabbitMQ

5.启动插件，允许web访问

6.添加用户方便访问并配置

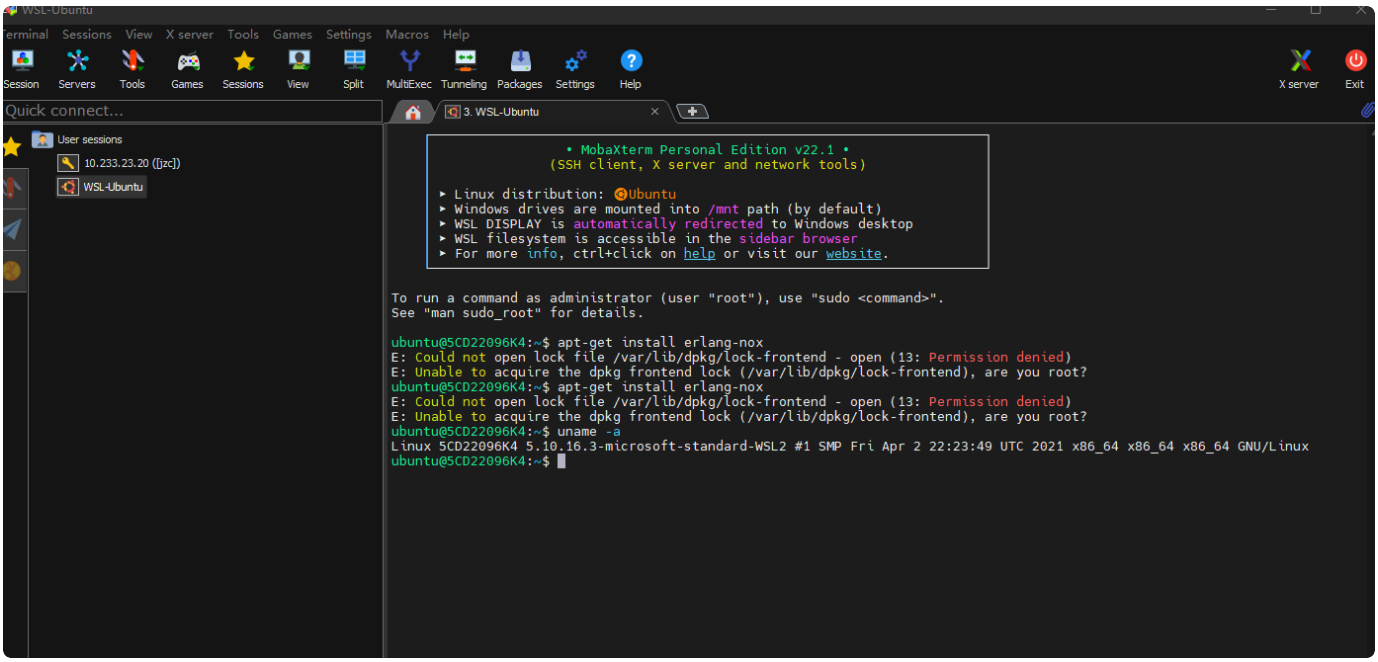
7.查询服务器端口,在浏览器打开网页

8.配置虚拟主机及用户

此处为语雀内容卡片，点击链接查看：https://www.yuque.com/knightjzc/vk0a70/nvd5v6?view=doc_embed

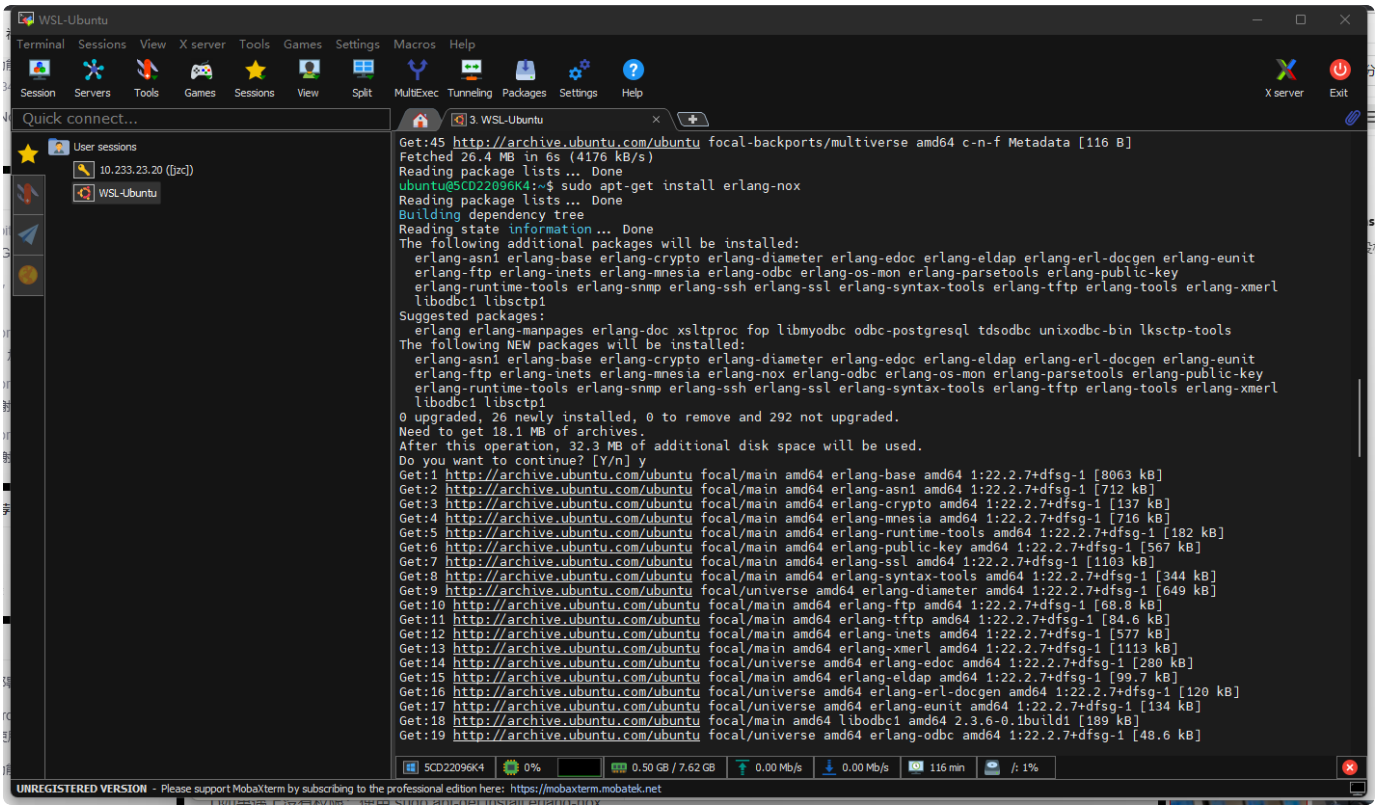
1.安装erlang

- apt-get install erlang-nox



2.假如出现没权限情况

- sudo apt-getinstall erlang-nox
- 更新下载源：sudo apt-get -y update

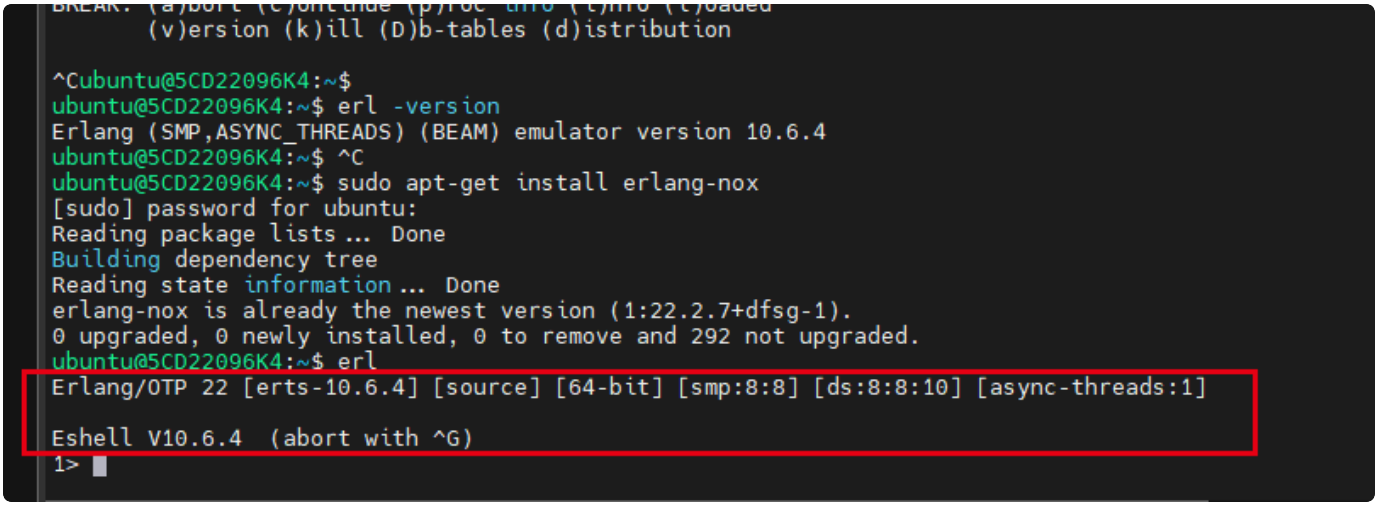


3.注意检查RabbitMQ 与erlang 的版本对应:

RabbitMQ Changelog — RabbitMQ

RabbitMQ

- erl 命令
- 可以查看对应erlang版本



4.安装RabbitMQ

如果安装最新版本的RabbitMQ 执行：sudo apt-get install rabbitmq-server

我是要安装指定版本的RabbitMQ 执行两句:

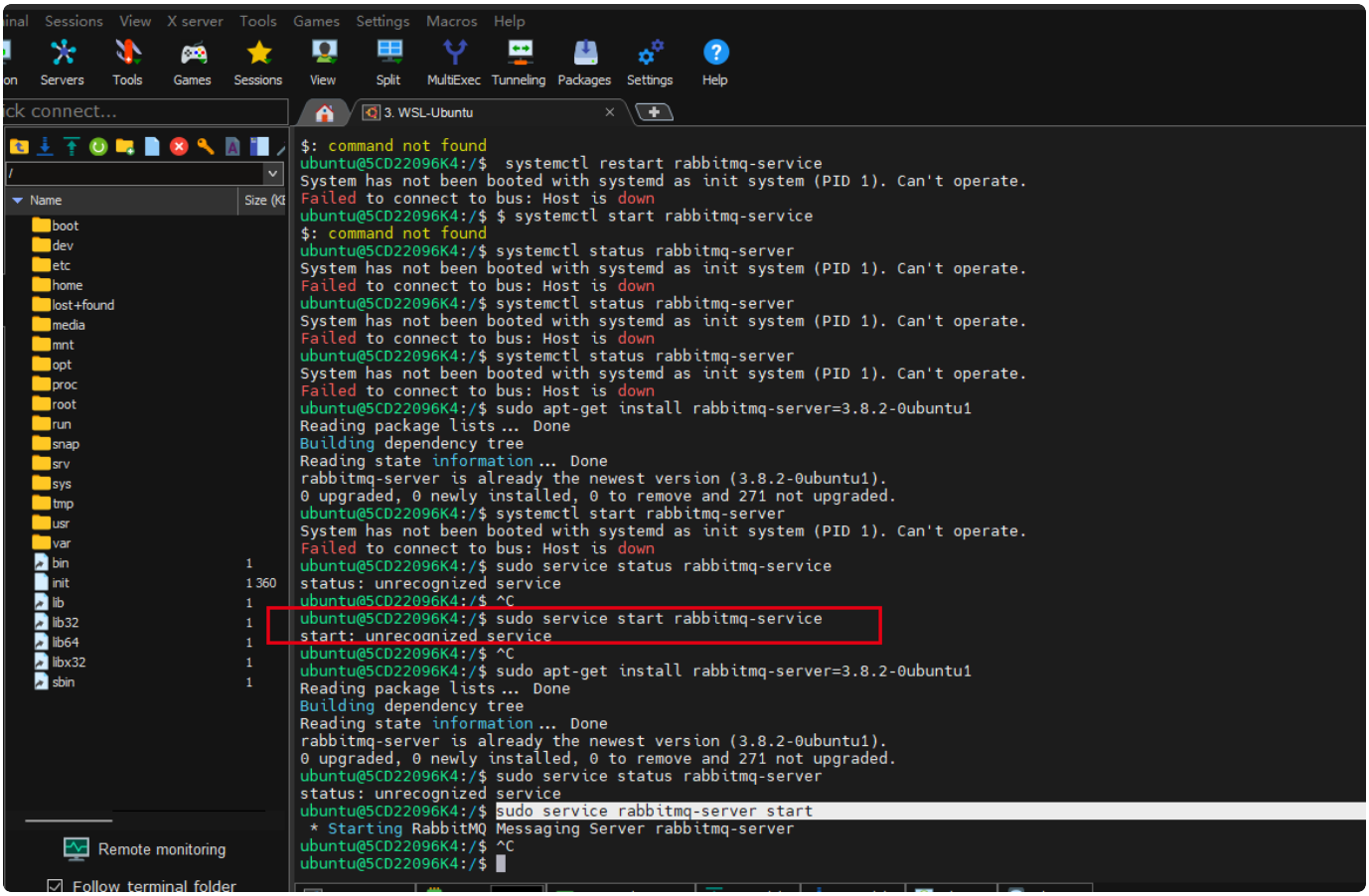
- 准备环境：

curl -s https://packagecloud.io/install/repositories/rabbitmq/rabbitmq-server/script.deb.sh | sudo bash

- 查询目前可以安装的版本：apt-cache madison rabbitmq-server

```
rabbitmq-server |    3.9.12-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.9.11-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.9.10-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |     3.9.9-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |     3.9.8-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |     3.9.7-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |     3.9.6-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |     3.9.5-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |     3.9.4-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |     3.9.3-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |     3.9.2-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |     3.9.1-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |     3.9.0-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.8.35-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.8.34-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.8.33-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.8.32-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.8.31-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.8.30-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.8.29-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.8.28-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.8.27-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.8.26-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.8.25-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.8.24-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.8.23-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.8.22-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.8.21-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.8.20-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.8.19-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.8.18-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.8.17-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.8.16-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.8.15-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.8.14-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.8.13-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.8.12-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server |    3.8.11-1 | https://packagecloud.io/rabbitmq/rabbitmq-server/ubuntu focal/main amd64 Packages
rabbitmq-server | 3.8.2-0ubuntu1.3 | http://archive.ubuntu.com/ubuntu focal-updates/main amd64 Packages
rabbitmq-server | 3.8.2-0ubuntu1.3 | http://security.ubuntu.com/ubuntu focal-security/main amd64 Packages
rabbitmq-server | 3.8.2-0ubuntu1 | http://archive.ubuntu.com/ubuntu focal/main amd64 Packages
ubuntu@5CD22096K4:~$ sudo apt-get install rabbitmq-server=3.8.2-0ubuntu1
```

- 指定下载版本：sudo apt-get install rabbitmq-server=3.8.2-0ubuntu1
- 查看MQ开启状态：sudo service rabbitmq-server status

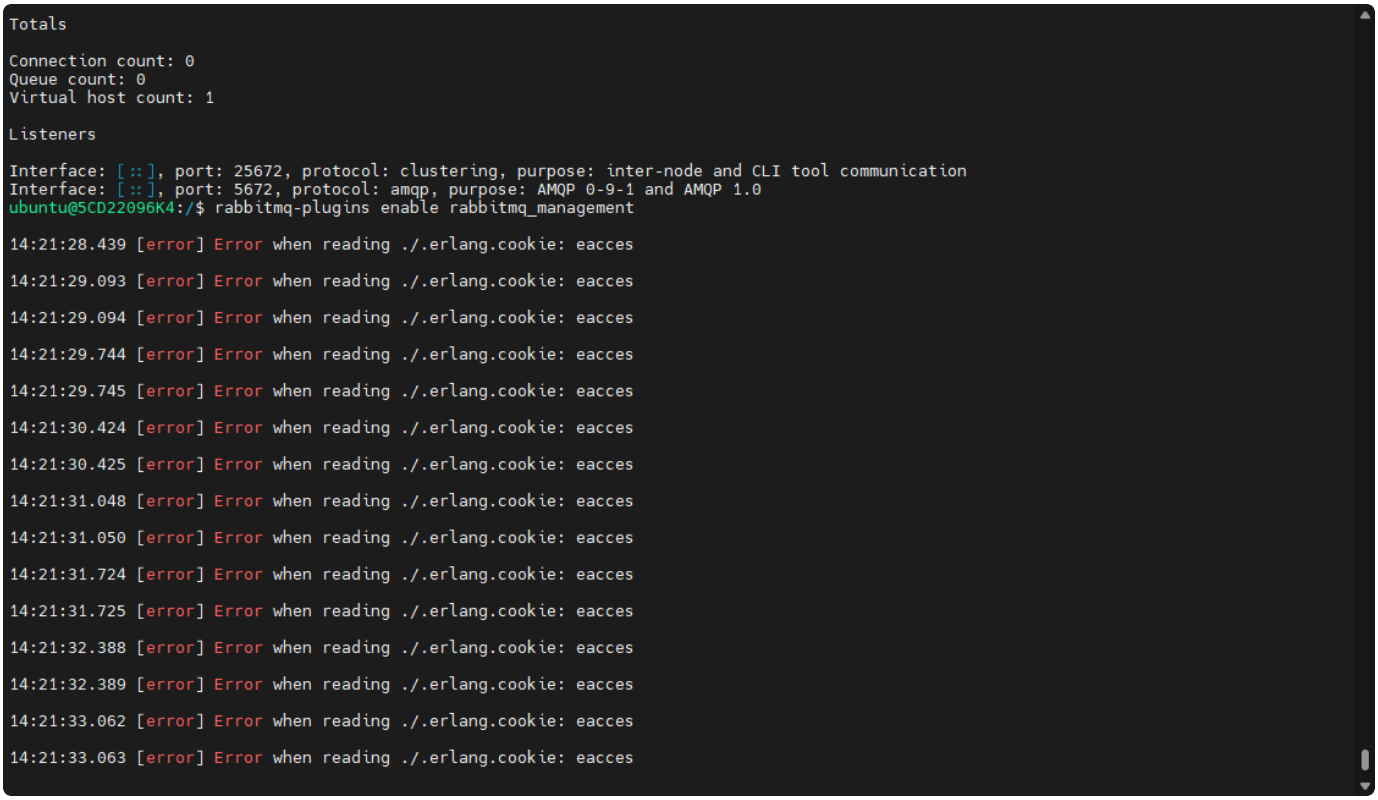


- 开启MQ：sudo service rabbitmq-server start

```
$: command not found
ubuntu@5CD22096K4:/$  systemctl restart rabbitmq-service
System has not been booted with systemd as init system (PID 1). Can't operate.
Failed to connect to bus: Host is down
ubuntu@5CD22096K4:/$ $ systemctl start rabbitmq-service
$: command not found
ubuntu@5CD22096K4:/$ systemctl status rabbitmq-server
System has not been booted with systemd as init system (PID 1). Can't operate.
Failed to connect to bus: Host is down
ubuntu@5CD22096K4:/$ systemctl status rabbitmq-server
System has not been booted with systemd as init system (PID 1). Can't operate.
Failed to connect to bus: Host is down
ubuntu@5CD22096K4:/$ systemctl status rabbitmq-server
System has not been booted with systemd as init system (PID 1). Can't operate.
Failed to connect to bus: Host is down
ubuntu@5CD22096K4:/$ sudo apt-get install rabbitmq-server=3.8.2-0ubuntu1
Reading package lists ... Done
Building dependency tree
Reading state information ... Done
rabbitmq-server is already the newest version (3.8.2-0ubuntu1).
0 upgraded, 0 newly installed, 0 to remove and 271 not upgraded.
ubuntu@5CD22096K4:/$ systemctl start rabbitmq-server
System has not been booted with systemd as init system (PID 1). Can't operate.
Failed to connect to bus: Host is down
ubuntu@5CD22096K4:/$ sudo service status rabbitmq-service
status: unrecognized service
ubuntu@5CD22096K4:/$ ^C
ubuntu@5CD22096K4:/$ sudo service start rabbitmq-service
start: unrecognized service
ubuntu@5CD22096K4:/$ ^C
ubuntu@5CD22096K4:/$ sudo apt-get install rabbitmq-server=3.8.2-0ubuntu1
Reading package lists ... Done
Building dependency tree
Reading state information ... Done
rabbitmq-server is already the newest version (3.8.2-0ubuntu1).
0 upgraded, 0 newly installed, 0 to remove and 271 not upgraded.
ubuntu@5CD22096K4:/$ sudo service status rabbitmq-server
status: unrecognized service
ubuntu@5CD22096K4:/$ sudo service rabbitmq-server start
 * Starting RabbitMQ Messaging Server rabbitmq-server                    [ OK ]
ubuntu@5CD22096K4:/$ ^C
ubuntu@5CD22096K4:/$
```

5.启动插件，允许web访问

- rabbitmq-plugins enable rabbitmq_management



- 如果报错：

sudo chown rabbitmq:rabbitmq /var/lib/rabbitmq/.erlang.cookie

sudo chmod 600 /var/lib/rabbitmq/.erlang.cookie

- 引起缘由：

cookie的权限问题，也就是它的属组属组，白话说就是不认这个cookie

- 加上sudo　sudo rabbitmq-plugins enable rabbitmq_management

6.添加用户方便访问并配置

- 增加普通用户：sudo rabbitmqctl add_user admin admin
- 给普通用户添加管理员权限：sudo rabbitmqctl set_user_tags admin administrator

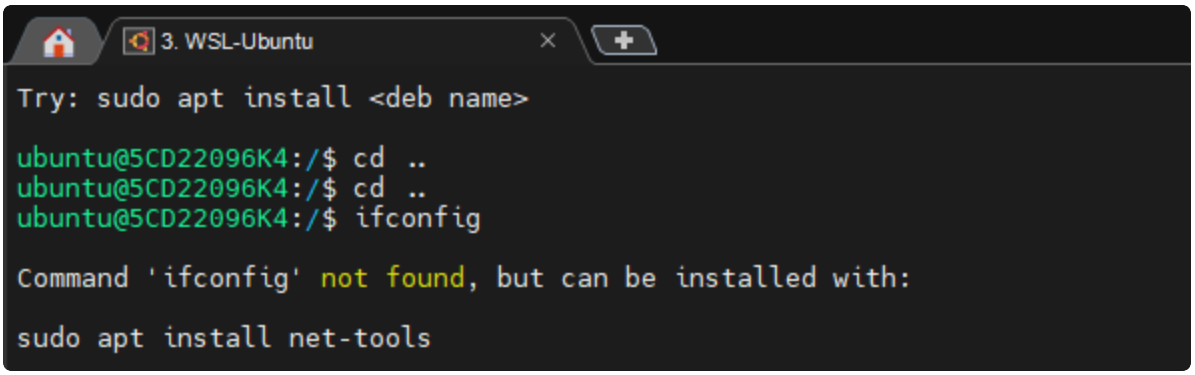
```
   close_all_connections         Instructs the broker to close all connections for the specified vhost or entire RabbitMQ node
   close_connection              Instructs the broker to close the connection associated with the Erlang process id
   eval                          Evaluates a snippet of Erlang code on the target node
   exec                          Evaluates a snippet of Elixir code on the CLI node
   force_gc                      Makes all Erlang processes on the target node perform/schedule a full sweep garbage collection
   hipe_compile                  Only exists for backwards compatibility. HiPE support has been dropped starting with Erlang 22. Do not u
se

Queues:

   delete_queue                  Deletes a queue
   purge_queue                   Purges a queue (removes all messages in it)
   quorum_status                 Displays quorum status of a quorum queue

Use 'rabbitmqctl help <command>' to learn more about a specific command


Only root or rabbitmq should run rabbitmqctl

ubuntu@5CD22096K4:/$ sudo rabbitmqctl add_user admin admin
Adding user "admin" ...
ubuntu@5CD22096K4:/$ ^C
ubuntu@5CD22096K4:/$ sudo rabbitmqctl set_user_tags admin administrator
Setting tags for user "admin" to [administrator] ...
ubuntu@5CD22096K4:/$ ^C
ubuntu@5CD22096K4:/$ sudo service rabbitmq-server status
Status of node rabbit@5CD22096K4 ...
Runtime

OS PID: 31970
OS: Linux
Uptime (seconds): 411
RabbitMQ version: 3.8.2
Node name: rabbit@5CD22096K4
Erlang configuration: Erlang/OTP 22 [erts-10.6.4] [source] [64-bit] [smp:8:8] [ds:8:8:10] [async-threads:128]
Erlang processes: 429 used, 1048576 limit
Scheduler run queue: 1
Cluster heartbeat timeout (net_ticktime): 60

Plugins

Enabled plugin file: /etc/rabbitmq/enabled_plugins
```

- 修改默认配置信息：sudo vim /usr/lib/rabbitmq/lib/rabbitmq_server-3.6.5/ebin/rabbit.app
- 比如修改密码、配置等等，例如：loopback_users 中的 <<"guest">>,只保留guest
- 重启服务： sudo service rabbitmq-server restart

```
Fetched 196 kB in 2s (122 kB/s)
Selecting previously unselected package net-tools.
(Reading database ... 69697 files and directories currently installed.)
Preparing to unpack .../net-tools_1.60+git20180626.aebd88e-1ubuntu1_amd64.deb ...
Unpacking net-tools (1.60+git20180626.aebd88e-1ubuntu1) ...
Setting up net-tools (1.60+git20180626.aebd88e-1ubuntu1) ...
Processing triggers for man-db (2.9.1-1) ...
ubuntu@5CD22096K4:/$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 172.26.37.37  netmask 255.255.240.0  broadcast 172.26.47.255
        inet6 fe80::215:5dff:fec2:104b  prefixlen 64  scopeid 0x20<link>
        ether 00:15:5d:c2:10:4b  txqueuelen 1000  (Ethernet)
        RX packets 230762  bytes 316395708 (316.3 MB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 17803  bytes 1301970 (1.3 MB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
        inet 127.0.0.1  netmask 255.0.0.0
        inet6 ::1  prefixlen 128  scopeid 0x10<host>
        loop  txqueuelen 1000  (Local Loopback)
        RX packets 214343  bytes 55239425 (55.2 MB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 214343  bytes 55239425 (55.2 MB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

ubuntu@5CD22096K4:/$ ^C
ubuntu@5CD22096K4:/$ ^C
ubuntu@5CD22096K4:/$ vim /usr/lib/rabbitmq/lib/rabbitmq_server-3.6.5/ebin/rabbit.app
ubuntu@5CD22096K4:/$ cd /usr/lib/rabbitmq/lib/rabbitmq_server-3.8.2/ebin/rabbit.app
-bash: cd: /usr/lib/rabbitmq/lib/rabbitmq_server-3.8.2/ebin/rabbit.app: Not a directory
ubuntu@5CD22096K4:/$ vim /usr/lib/rabbitmq/lib/rabbitmq_server-3.8.2/ebin/rabbit.app

[1]+  Stopped                 vim /usr/lib/rabbitmq/lib/rabbitmq_server-3.8.2/ebin/rabbit.app
ubuntu@5CD22096K4:/$ vim /usr/lib/rabbitmq/lib/rabbitmq_server-3.8.2/ebin/rabbit.app

[2]+  Stopped                 vim /usr/lib/rabbitmq/lib/rabbitmq_server-3.8.2/ebin/rabbit.app
ubuntu@5CD22096K4:/$ sudo vim /usr/lib/rabbitmq/lib/rabbitmq_server-3.8.2/ebin/rabbit.app
[sudo] password for ubuntu:
ubuntu@5CD22096K4:/$ sudo service rabbitmq-server restart
 * Restarting RabbitMQ Messaging Server rabbitmq-server                                                                    [ O
ubuntu@5CD22096K4:/$
```

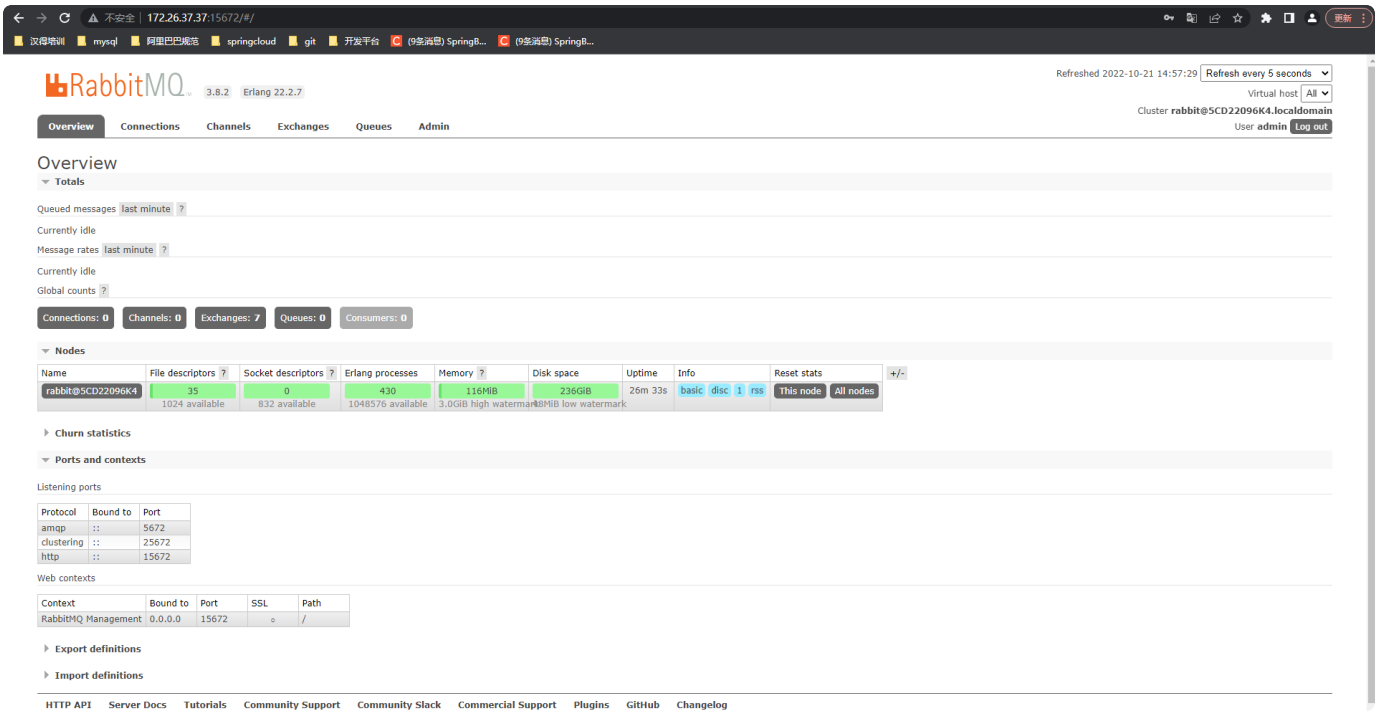
7.查询服务器端口,在浏览器打开网页

- ifconfig
- 如果没有显示，则需要下载网络插件：sudo apt install net-tools




```
sudo apt install net-tools

ubuntu@5CD22096K4:/$ sudo apt install net-tools
Reading package lists ... Done
Building dependency tree
Reading state information ... Done
The following NEW packages will be installed:
  net-tools
0 upgraded, 1 newly installed, 0 to remove and 272 not upgraded.
Need to get 196 kB of archives.
After this operation, 864 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu focal/main amd64 net-tools amd64 1.60+git20180626.aebd88e-1ubuntu1 [196 kB]
Fetched 196 kB in 2s (122 kB/s)
Selecting previously unselected package net-tools.
(Reading database ... 69697 files and directories currently installed.)
Preparing to unpack .../net-tools_1.60+git20180626.aebd88e-1ubuntu1_amd64.deb ...
Unpacking net-tools (1.60+git20180626.aebd88e-1ubuntu1) ...
Setting up net-tools (1.60+git20180626.aebd88e-1ubuntu1) ...
Processing triggers for man-db (2.9.1-1) ...
ubuntu@5CD22096K4:/$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 172.26.37.37  netmask 255.255.240.0  broadcast 172.26.47.255
        inet6 fe80::215:5dff:fec2:104b  prefixlen 64  scopeid 0x20<link>
        ether 00:15:5d:c2:10:4b  txqueuelen 1000  (Ethernet)
        RX packets 230762  bytes 316395708 (316.3 MB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 17803  bytes 1301970 (1.3 MB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
        inet 127.0.0.1  netmask 255.0.0.0
        inet6 ::1  prefixlen 128  scopeid 0x10<host>
        loop  txqueuelen 1000  (Local Loopback)
        RX packets 214343  bytes 55239425 (55.2 MB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 214343  bytes 55239425 (55.2 MB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

ubuntu@5CD22096K4:/$ ^C
ubuntu@5CD22096K4:/$ ^C
ubuntu@5CD22096K4:/$
```

- rabbitMQ默认端口是15672，则在本地拼接上ip即可访问页面



8.配置虚拟主机及用户

RabbitMQ在安装好后，可以访问 `http://ip地址:15672` ；其自带了guest/guest的用户名和密码；如果需要创建自定义用户；那么也可以登录管理界面后，操作。

- **角色说明**：

1、 超级管理员(administrator)

可登陆管理控制台，可查看所有的信息，并且可以对用户，策略(policy)进行操作。

2、 监控者(monitoring)

可登陆管理控制台，同时可以查看rabbitmq节点的相关信息(进程数，内存使用情况，磁盘使用情况等)

3、 策略制定者(policymaker)

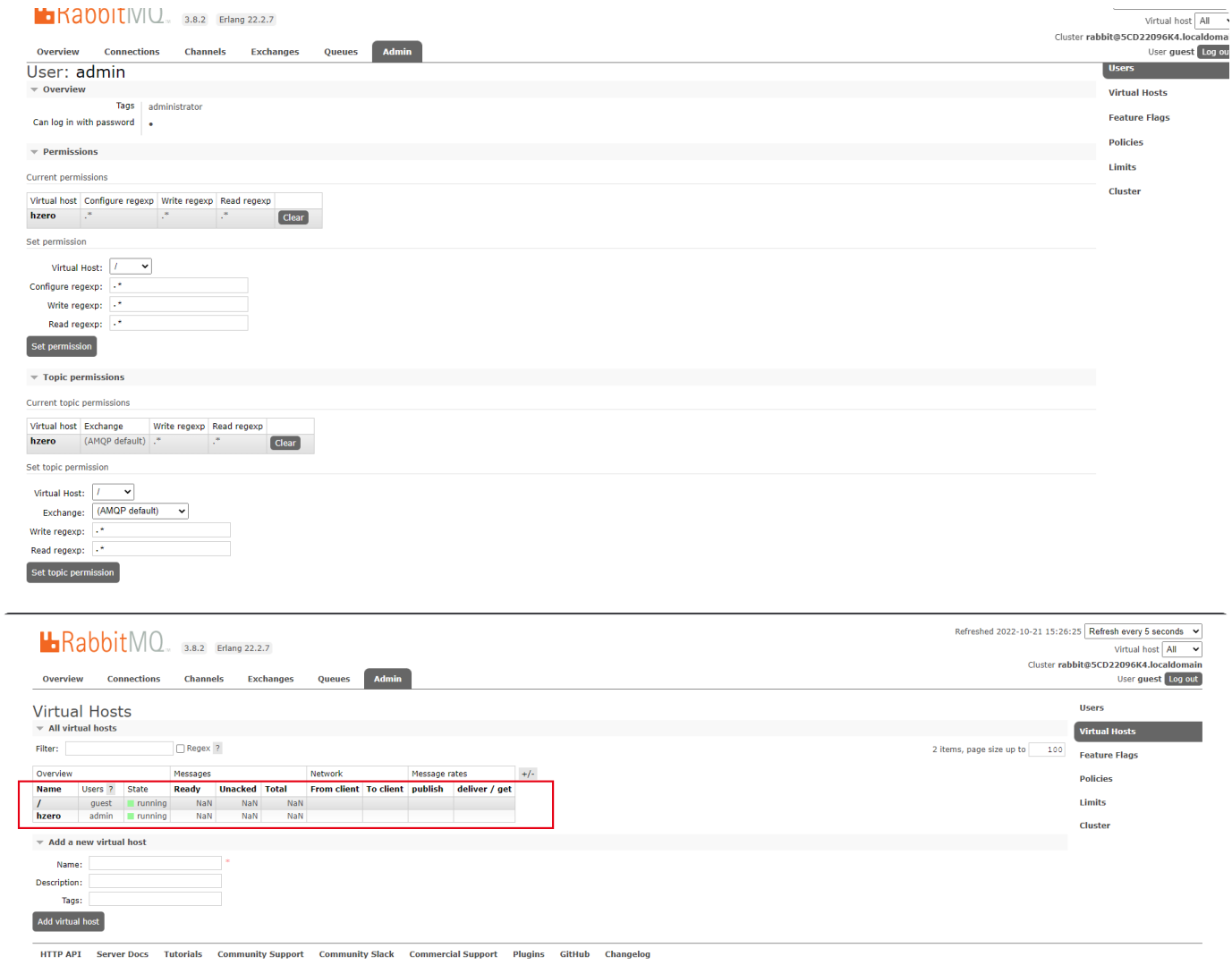
可登陆管理控制台, 同时可以对policy进行管理。但无法查看节点的相关信息(上图红框标识的部分)。

4、 普通管理者(management)

仅可登陆管理控制台，无法看到节点信息，也无法对策略进行管理。

5、 其他

无法登陆管理控制台，通常就是普通的生产者和消费者。

- Virtual Hosts配置

像mysql拥有数据库的概念并且可以指定用户对库和表等操作的权限。RabbitMQ也有类似的权限管理；在RabbitMQ中可以虚拟消息服务器Virtual Host，每个Virtual Hosts相当于一个相对独立的RabbitMQ服务器，每个VirtualHost之间是相互隔离的。exchange、queue、message不能互通。 相当于mysql的db。Virtual Name一般以/开头。