1. Trot gait

Quick use

1. DOGZILLA POWER UP

First of all, we switch on the switch power of the robot dog and start the robot dog

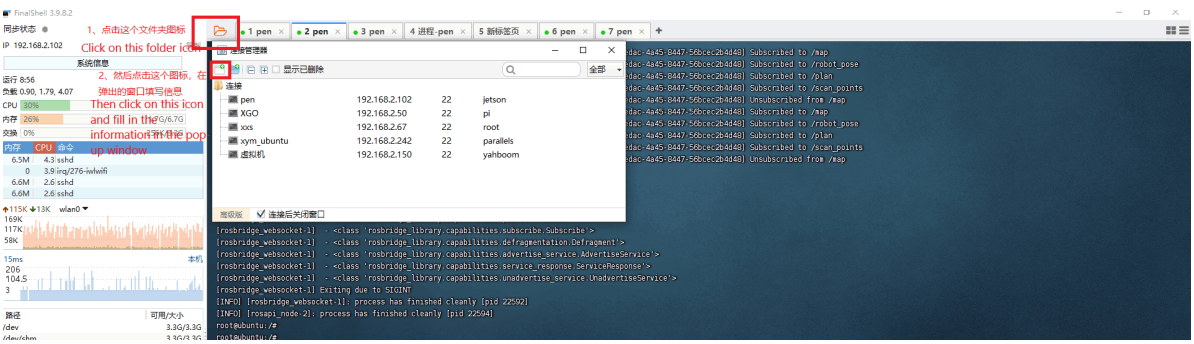
After startup, we can view the IP address on the robot dog's small screen.

2. Open shell to connect to DOGZILLA

Then use the ssh terminal to connect to robot dog.

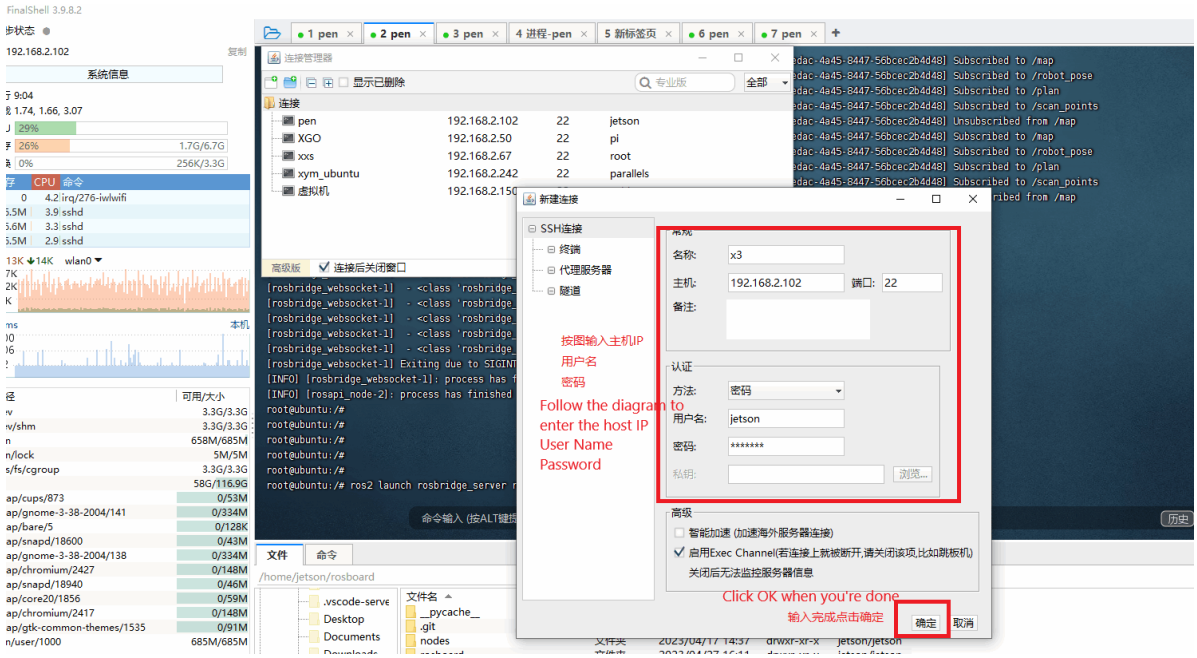
Note: At the time of writing this tutorial, the IP address used is 192.168.2.102 and the username is pi and the password is yahboom, so the actual IP address will prevail.

Open the shell utility, here I use FinalShell, enter the username, password, port, connection name and other information.

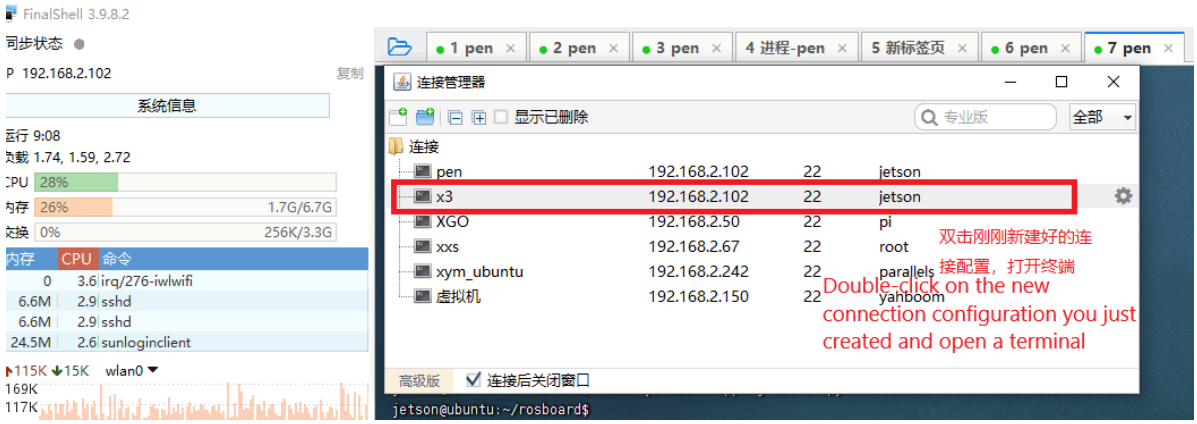


Select ssh connection to create a new ssh connection

Here username fill in pi, password fill in yahboom, ip address fill in the real robot dog's IP address.



Here select the new ssh connection you just created.



3. Starting the DOGZILLA chassis

Start the chassis task by entering the command in the terminal.

```
sudo systemctl restart YahboomStart.service
```

```
pi@yahboom:~$
pi@yahboom:~$
pi@yahboom:~$
pi@yahboom:~$
pi@yahboom:~$ sudo systemctl restart YahboomStart.service
```

4. Start the robot dog Gait Adjustment Node

Enter the following command in the terminal

```
cd cartographer_ws2/
```

```
source install/setup.bash
```

```
pi@yahboom:~$ cd cartographer_ws2/
pi@yahboom:~/cartographer_ws2$
pi@yahboom:~/cartographer_ws2$
pi@yahboom:~/cartographer_ws2$ source install/setup.bash
pi@yahboom:~/cartographer_ws2$
```

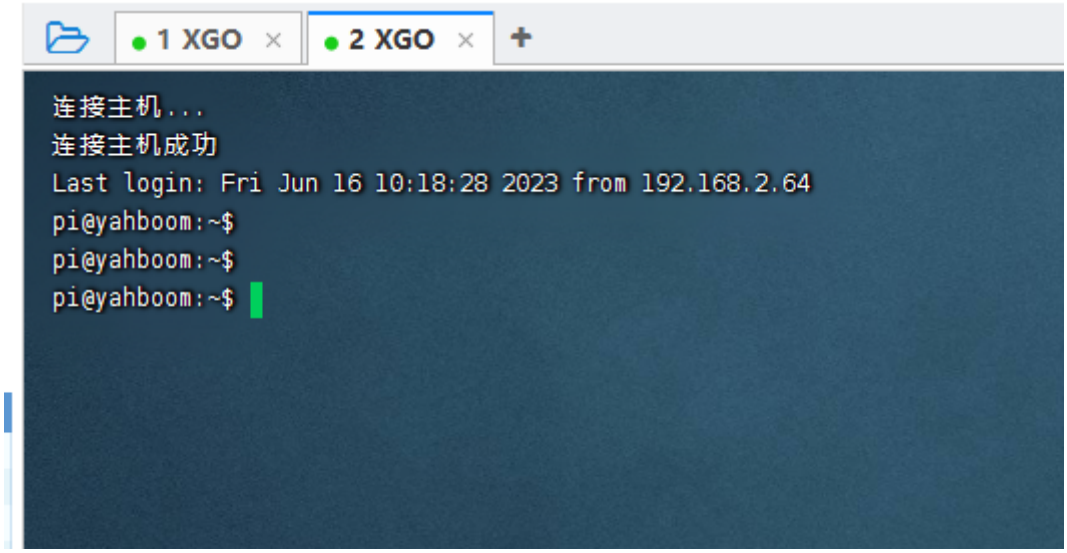
Then enter the following command

```
ros2 launch yahboom_gait yahboomGaitLaunch.launch.py gait:=trot mark:=0
```

Note: The parameter gait sets the robot dog gait type.

```
pi@yahboom:~/cartographer_ws2$
pi@yahboom:~/cartographer_ws2$  ros2 launch yahboom_gait yahboomGaitLaunch.launch.py gait:=trot mark:=0
[INFO] [launch]: All log files can be found below /home/pi/.ros/log/2023-08-03-20-31-28-503567-yahboom-26007
[INFO] [launch]: Default logging verbosity is set to INFO
[INFO] [yahboom_gait-1]: process started with pid [26177]
[yahboom_gait-1] [INFO] [1691065893.744902722] [yahboom_gait]: gait_type: trot!
[yahboom_gait-1] [INFO] [1691065893.753442211] [yahboom_gait]: mark_type: 0!
```

Restart a terminal that starts the same way as item 2.

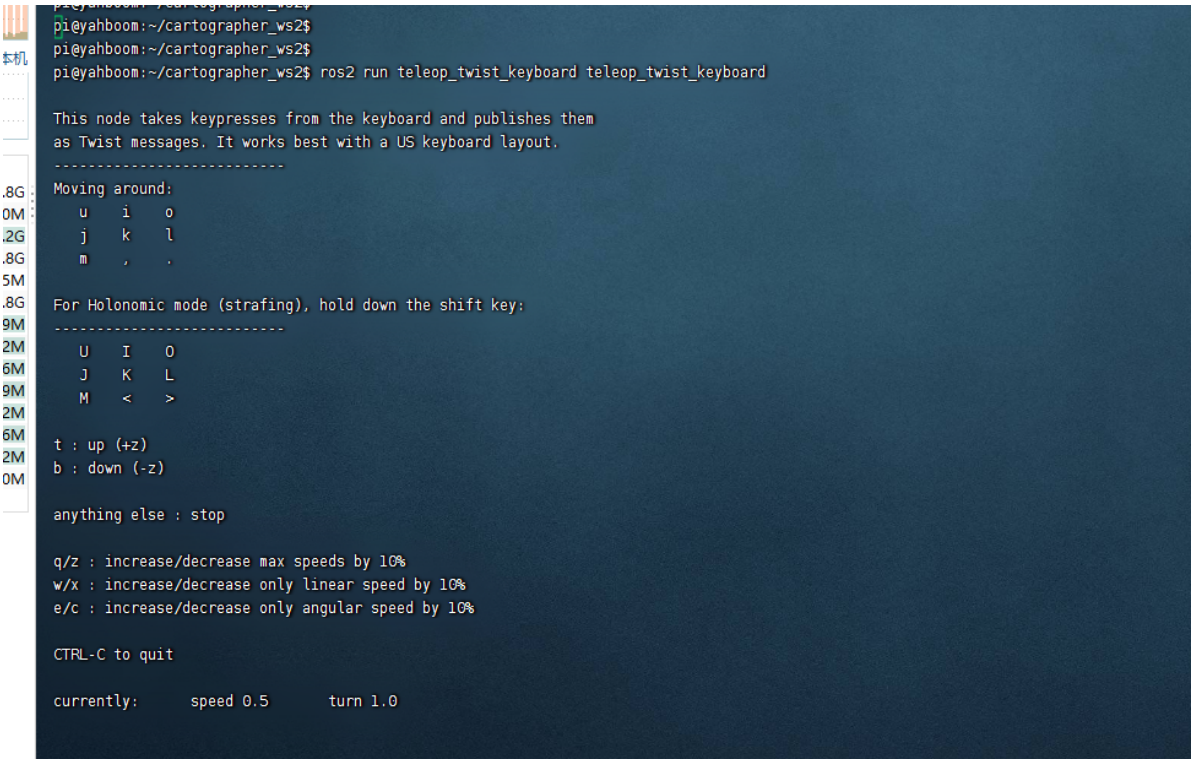


Enter the following command in a new terminal

```
cd cartographer_ws2/
```

```
source install/setup.bash
```

```
ros2 run teleop_twist_keyboard teleop_twist_keyboard
```



You can control the robot dog walking through the keyboard. The key i is forward, k is stop,, is backward, j is turn left in place, l is turn right in place.

Now this state is trot gait, and at the same time this gait is also the commonly used gait of the robot dog.