

4. Keyboard control

Quick use

1. DOGZILLA POWER UP

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



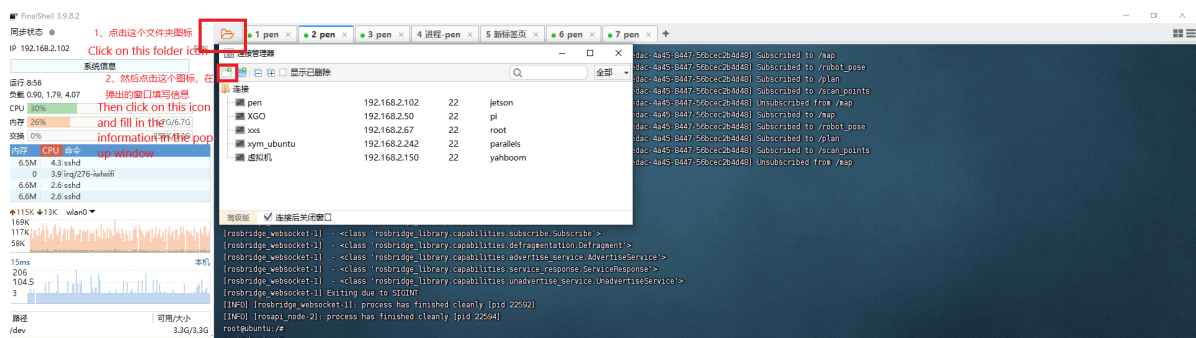
After startup, we can view the IP address on the robot dog's small screen.

2. Open shell to connect to DOGZILLA

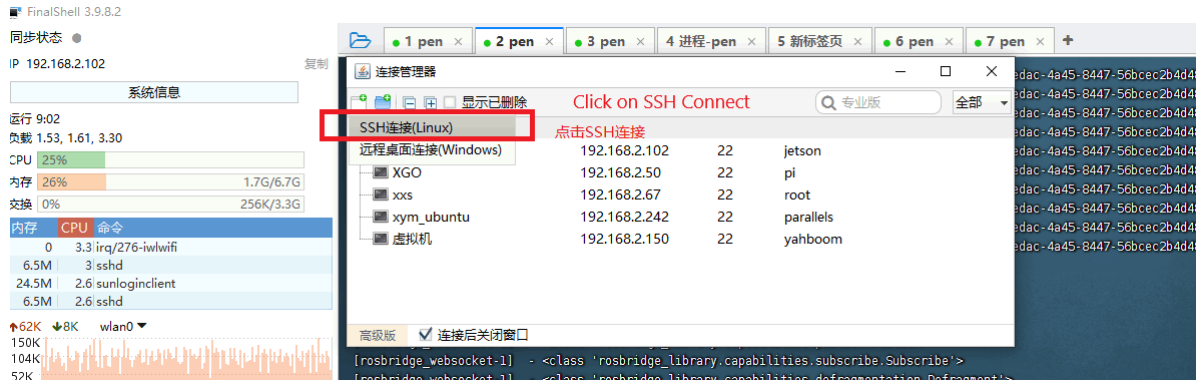
Then use the ssh terminal to connect to robot dog.

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.

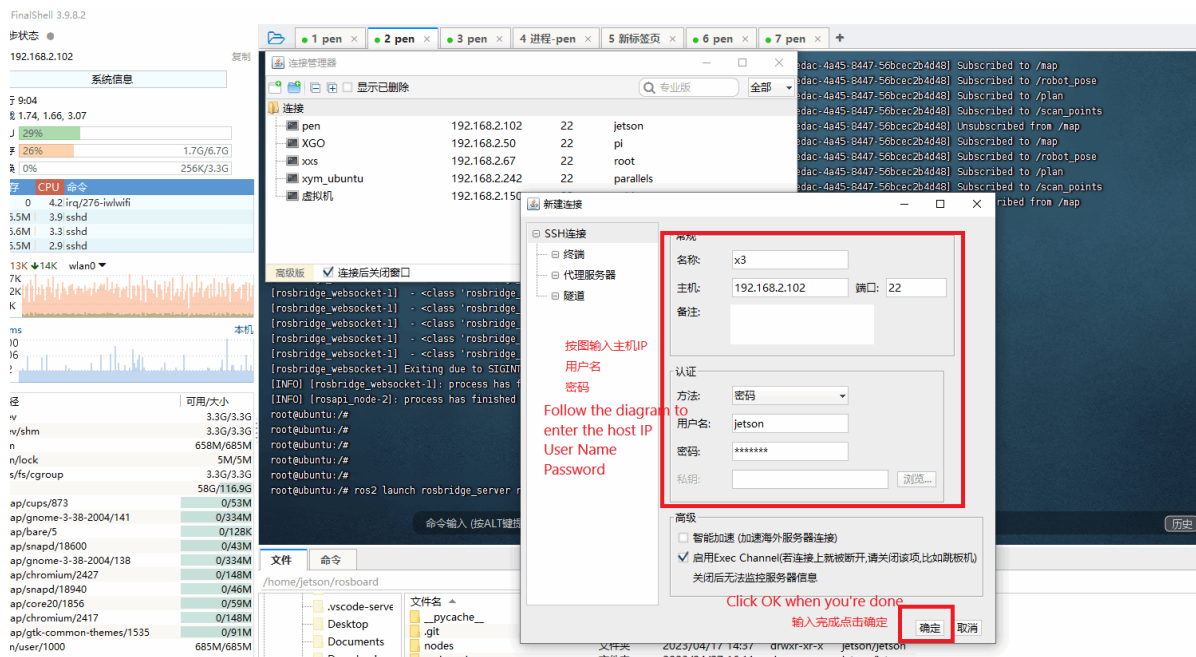
Open the shell utility, here I use FinalShell, enter the username, password, port, connection name and other information.



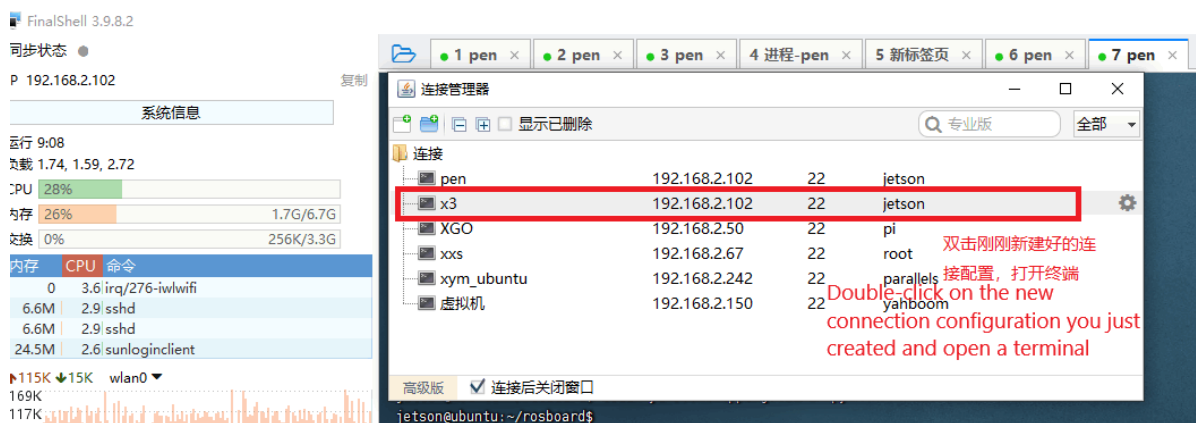
Select ssh connection to create a new ssh connection



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 XgoStart.service
```

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

4. Start the robot dog Keyboard Control 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 run teleop_twist_keyboard teleop_twist_keyboard
```

```
pi@yahboom:~/cartographer_ws2$ ros2 run teleop_twist_keyboard teleop_twist_keyboard
pi@yahboom:~/cartographer_ws2$
pi@yahboom:~/cartographer_ws2$
pi@yahboom:~/cartographer_ws2$ ros2 run teleop_twist_keyboard teleop_twist_keyboard

This node takes keypresses from the keyboard and publishes them
as Twist messages. It works best with a US keyboard layout.
-----
Moving around:
    u    i    o
    j    k    l
    .    ,    _

For Holonomic mode (strafing), hold down the shift key:
-----
    U    I    O
    J    K    L
    M    <    >

t : up (+z)
b : down (-z)

anything else : stop

q/z : increase/decrease max speeds by 10%
w/x : increase/decrease only linear speed by 10%
e/c : increase/decrease only angular speed by 10%

CTRL-C to quit

currently:      speed 0.5      turn 1.0
```

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

