## Enter the robot's docker container

Note: The virtual machine needs to be in the same LAN as the car, and the ROS\_DOMAIN\_ID needs to be consistent. You can check [Must read before use] to set the IP and ROS\_DOMAIN\_ID on the board.

Taking the supporting virtual machine as an example, enter the following command to enter the docker container:

```
sudo docker run -it --rm -v /dev:/dev -v /dev/shm:/dev/shm --privileged --net=host
microros/micro-ros-agent:humble udp4 --port 8888 -v4
```

After starting the container, the agent will be turned on, turn on the car switch, and wait for the car to connect to the agent. The connection is successful, as shown in the figure below.

```
create participant
                                                                                                       | client key: 0x0B62A009,
icipant_id: 0x000(1)
                                                  | create_topic
                                                                                                       | client_key: 0x0B62A009, topi
 _id: 0x000(2), participant_id: 0x000(1)
                                                                                                      | client_key: 0x0B62A009, publ
isher_id: 0x000(3), participant_id: 0x000(1)
                                                  | create_datawriter
                                                                                                      | client_key: 0x0B62A009, data
writer_id: 0x000(5), publisher_id: 0x000(3)
                                                                                                      | client key: 0x0862A009, top
 _id: 0x001(2), participant_id: 0x000(1)
                                                                                                      | client_key: 0x0B62A009, publ
isher_id: 0x001(3), participant_id: 0x000(1)
                                                                                                      | client_key: 0x0B62A009, data
                                                  | create_datawriter
writer_id: 0x001(5), publisher_id: 0x001(3)
                                                                                                      | client key: 0x0862A009, top1
                                                  | create_topic
 _id: 0x002(2), participant_id: 0x000(1)
                                                                                                      | client_key: 0x0862A009, publ
isher_id: 0x002(3), participant_id: 0x000(1)
                                                                                                      | client_key: 0x0B62A009, data
                                                  | create_datawriter
writer_id: 0x002(5), publisher_id: 0x002(3)
                                                                                                      | client key: 0x0862A009, topi
                                                  | create_topic
 _id: 0x003(2), participant_id: 0x000(1)
                                                                                                      | client_key: 0x0B62A009, sub:
criber_id: 0x000(4), participant_id: 0x000(1)
                                                  | create datareader
                                                                                                      | client_key: 0x0B62A009, data
reader_id: 0x000(6), subscriber_id: 0x000(4)
                                                                                                      | client_key: 0x0862A009, topi
 id: 0x004(2), participant_id: 0x000(1)
                                                                                                      | client_key: 0x0B62A009, subs
criber_id: 0x001(4), participant_id: 0x000(1)
                                                                                                      | client_key: 0x0B62A009, data
                                                  | create_datareader
reader_id: 0x001(6), subscriber_id: 0x001(4)
                                                  | create_topic
                                                                                                      | client_key: 0x0B62A009, topi
 _id: 0x005(2), participant_id: 0x000(1)
                                                                                                      | client_key: 0x0B62A009, subs
criber id: 0x002(4), participant id: 0x000(1)
                                                                                                      | client_key: 0x0B62A009, data
```

After waiting for the car to connect, a node named /YB\_Car\_Node will be started. In the terminal of the supporting virtual machine, enter the following command to query:

ros2 node list

```
yahboom@yahboom-VM:~$ ros2 node list
/YB_Car_Node
```