ROS2 autostart

To make ros2 autostart follow these instructions

Note, always paste the code into a text editor and copy from there after copy from confluence.

Increase message queue

Edit /etc/sysctl.conf and add the lines:

```
# Increase message queue
fs.mqueue.msg_max = 300
```

To make ROS2 node autostart systemd is used as in: https://www.shubhamdipt.com/blog/how-to-create-a-systemd-service-in-linux/

Create a service file

sudo nano /etc/systemd/system/hrp2-service.service

Insert the following text and then save it:

```
[Unit]
Description=startup ros2 and hrp

[Service]
User=ubuntu
WorkingDirectory=/home/ubuntu
ExecStart=/home/ubuntu/hrp2-autostart.sh

[Install]
WantedBy=multi-user.target
```

Create a startup script

nano /home/ubuntu/hrp2-autostart.sh

Insert the following text and then save it:

```
#!/bin/bash

#enable can
sudo ip link set can0 up type can bitrate 1000000
sudo ifconfig can0 txqueuelen 5000

#activate
source /opt/ros/galactic/setup.bash
source /home/ubuntu/install/local_setup.bash

#the keepalive launch file will make the mower stay awak, it is good when developing, but will drain battery if
mower stops in garden.
ros2 launch hrp_pkg hrp_keepalive.launch.py
#ros2 launch hrp_pkg hrp.launch.py
```

Set permissions on the file

```
chmod u+rx /home/ubuntu/hrp2-autostart.sh
```

Then run the command

```
sudo systemctl enable hrp2-service.service
```

And finally reboot

```
sudo reboot
```