Operator Cheat Sheet

Operator GUI

Launch the Operator GUI from a terminal:

```
export ROS_MASTER_URI=http://anymal-NAME-lpc:11311
hostname -I #Returns your IP address
export ROS_IP=[your IP]
sudo service chrony restart
rosrun anymal_d opc.py
```

Launch the simulation from a terminal:

```
rosrun anymal_d sim.py
```

Open the report:

Navigate to the report folder, then open with

```
/usr/bin/google-chrome --allow-file-access-from-files
--user-data-dir=/tmp report.xml
```

ANYmal Data Sync (ads):

```
ads_local install #Only needed the first time
ads_local start
ads -s ads.local:58050 #List connected robots
```

Robot PCs

Ssh into the Robot computer:

```
ssh integration@anymal-dxxx-lpc
```

Monitor the software:

```
systemctl status anymal-sw-stack@lpc.service
```

Stop the software:

```
systemctl stop anymal-sw-stack@lpc.service
```

Start the software:

```
systemctl start anymal-sw-stack@lpc.service
```

Restart the software:

```
systemctl restart anymal-sw-stack@lpc.service
```

Display the terminal output:

```
journalctl -u anymal-sw-stack@lpc.service --follow -n
1000 -o cat
```

Replace lpc by npc as needed.

Parameters and Configuration

Temporary parameter change:

```
rosparam list
rosparam get /param_name
rosparam set /param [value]
```

Permanent parameter change:

Add the parameter in the `/home/integration/.ros/config.yaml` file and reboot the robot.

Software Upgrade

Release patch:

```
sudo apt update && sudo apt upgrade
```

New release:

Change the release version in the sources list files with

```
sudo nano /etc/apt/sources.list.d/any-ros-release.list
sudo nano /etc/apt/sources.list.d/anybotics-release.list
```

Then update with

```
sudo apt update && sudo apt upgrade
```