### **External Control**

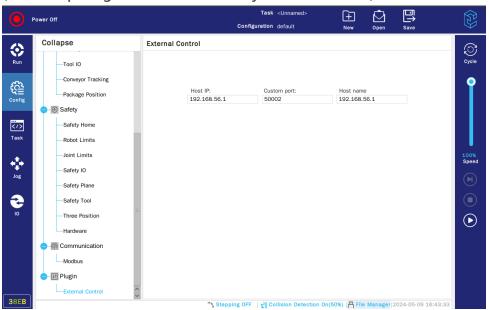
The External Control Plugin is the user interface for the Elite Robots ROS, ROS2, as well as the Elite Robots Client Library used by the drivers.

#### **Prerequisites**

The plugin library in version 1.2.10 or higher is required.

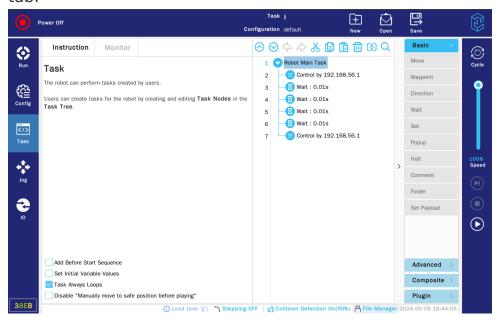
#### **Usage**

- In the *Installation* tab:
  - Adjust the IP address of your robot in the Configuration tab (this step might be unnecessary in simulation).



- In the *Task* tab:
  - Add this plugin to a task by selecting it from the side menu under the tab.

Execute the task by pressing the *play* button in the *Task* tab.



#### Multiple task nodes

To use this plugin node multiple times in a task, the control script is divided into two scripts. After receiving the script, it is divided into a header part and a control loop part. The header part consist of all the function definitions. The header is only inserted once in the program, while the control loop is inserted for each task node in the program tree.

To be able to distinguish between header and control loop, the header part of the script should be encapsulated in: ```bash

## **HEADER\_BEGIN**

Here goes the header code

## **HEADER\_END**

## NODE\_CONTROL\_LOOP\_BEGINS

Here goes the control loop code

# NODE\_CONTROL\_LOOP\_ENDS

...

If it is not possible to find either # HEADER\_BEGIN or # HEADER\_END, the script will not be divided into two scripts, and it will not be possible to have multiple task nodes in one program.