OT2 Quick Guide – v.2021-07-23

1. Prepare your robot protocols through the web server (see **'Web Server Manual'**). The web server outputs two files: 1) CommandList and 2) RobotHandler, which can be downloaded directly from the web server, or through a cloud directory connected to the robots' PC. Both of these files should be in the robots' PC before you begin the run.

2. Turn on the OT2 robot(s), and open the "Opentrons" application on the robots' PC. Shortcut to the application is located at the desktop.

3. Connect to the robot, scroll down to "Advanced Settings", and open the robot's Jupyter notebook.
   - ! OT2P20180905A05 is the left robot
   - ! OT2CEP20201219B08 is the right robot

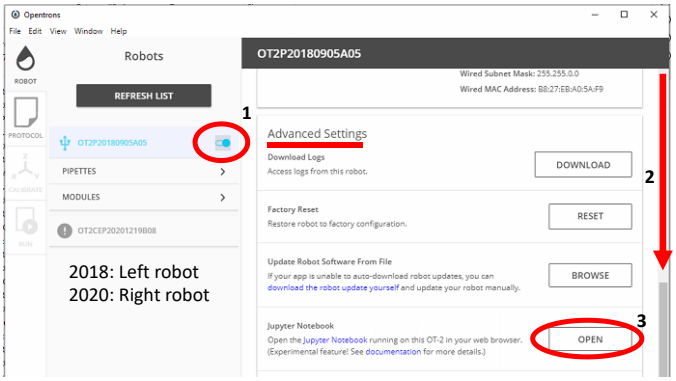

Fig. 2 | Opening the robots' Jupyter notebook

4. A Chrome window will open to the robot's home page

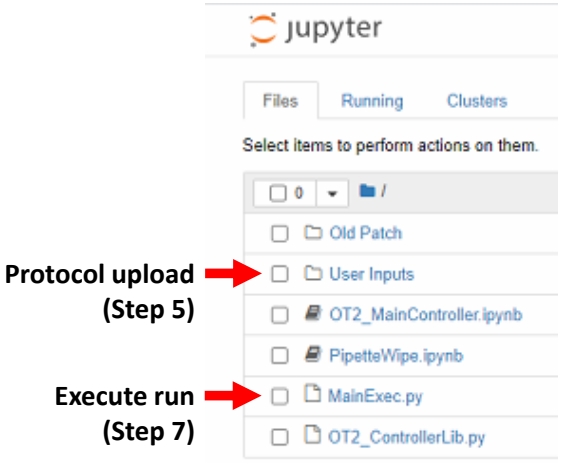

Fig. 3 | OT2 Jupyter notebook home directory

5. Open "User Inputs" (see Fig. 3).
   - Click on the white "Upload" button (Fig. 4; highlight 1) and locate your custom "CommandList" file (prepared on Step 1).
   - Click on the blue "Upload" button (Fig. 4; highlight 3) to confirm the file upload.
   - Click on the folder icon (Fig. 4; highlight 4) to return to the main page.

2 : Locate your "CommandList" file

Fig. 4 | Command list upload to Jupyter notebook

6. Prepare the robot deck. Open your "RobotHandler" file (prepared on Step 1) as guide to prepare the robot.

7. Open "OT2_MainController.ipynb".
   - Click "Refresh Kernel" button and wait until the kernel is ready (highlight 1)
   - Click "Run" button (highlight 2)
   - Type your "CommandList" file name (Fig. 5; highlight 3), include the ".csv" extension.
   - Fill with "Y" (Fig. 5; highlight 4)
   - Once the simulation is completed, if there is no problem, press enter to start run.

Fig. 5 | Executing OT2 run on Jupyter notebook

Reference Guidelines

A) 2021-03-05_OT2 General Guideline and Maintenance.pdf
B) 2021-07-23_WebserverGuide.pdf

Download from
https://vanhasseltlab.lacdr.leidenuniv.nl/ot2/home/