OT2 Quick Guide - v.2021-08-31

- 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. (See Fig. 1). Connect to the robot (A), scroll down to "Advanced Settings" (B), then open the robot's Jupyter notebook (C).
 - ! OT2P<u>2018</u>0905A05 is the <u>left</u> robot
 - ! OT2CEP**2020**1219B08 is the **right** robot

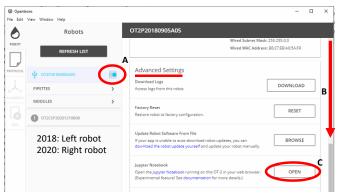


Fig. 1 | Opening the robots' Jupyter notebook

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

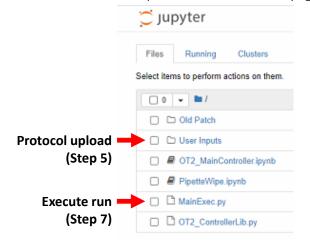


Fig. 2 | OT2 Jupyter notebook home directory

- 5. Open "User Inputs" (see Fig. 2).
 - Click on the white "Upload" button (Fig. 3; highlight A) and locate your custom "CommandList" file (prepared on Step 1).

- Click on the blue "Upload" button (Fig. 3; highlight C) to confirm the file upload.
- Click on the folder icon (Fig. 3; highlight **D**) to return to the main page.



B: Locate your "CommandList" file

Fig. 3 | 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. (See Fig. 4). Open "OT2_MainController.ipynb".
 - Click "Refresh Kernel" button and wait until the kernel is ready (highlight A)
 - Click "Run" button (highlight B)
 - Type your "CommandList" file name (highlight C), include the ".csv" extension.
 - Type "Y", then press ENTER (highlight D)
 - Once the simulation is completed, if there is no problem, press enter to start run.

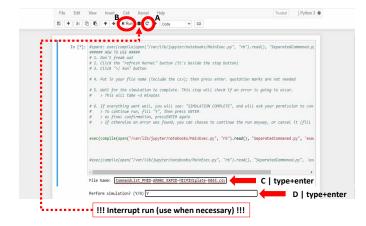


Fig. 4 | Executing OT2 run on Jupyter notebook

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/