

How to use the Open Roberta Lab

Example: Bionic Flower

Step 1: Install Open Roberta Connector

- Go to: <https://stem.festo.com/us/en/products-courses/coding/open-roberta-lab/index.html>
- Go to GitHub: <https://github.com/OpenRoberta/openroberta-connector/releases/tag/v1.4.0>
- Download and install the following file:

The screenshot shows the website's navigation bar with 'Home', 'Integrative STEM Approach', 'Products & Courses', 'Blog', and 'Contact us'. A search bar contains 'wait ms' and '1000'. The main heading is 'Open Roberta Lab - easy start with coding!'. Below it, a paragraph describes the platform. A section titled 'First steps in using Open Roberta Lab with our Bionic Flower' includes a note that a 'Bionic Flower' is needed and a red box highlights '*Open Roberta Connector (.zip)*'. A list of links for downloading an introduction and courseware is provided.

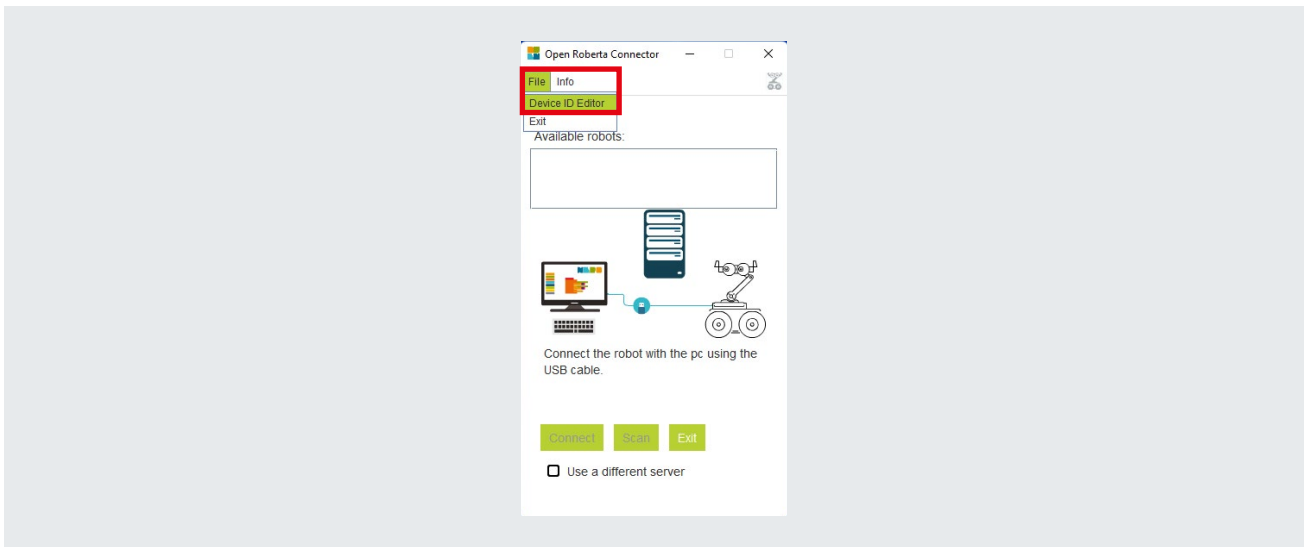
GitHub

The screenshot shows the GitHub release page for 'v1.4.0: integration Rob3rta + FestoBionicFlower'. It lists assets for Linux, MacOSX, and Windows (DE and EN). The Windows EN MSI file, 'OpenRobertaConnectorSetupEN-v1.4.0.msi', is highlighted with a red box.

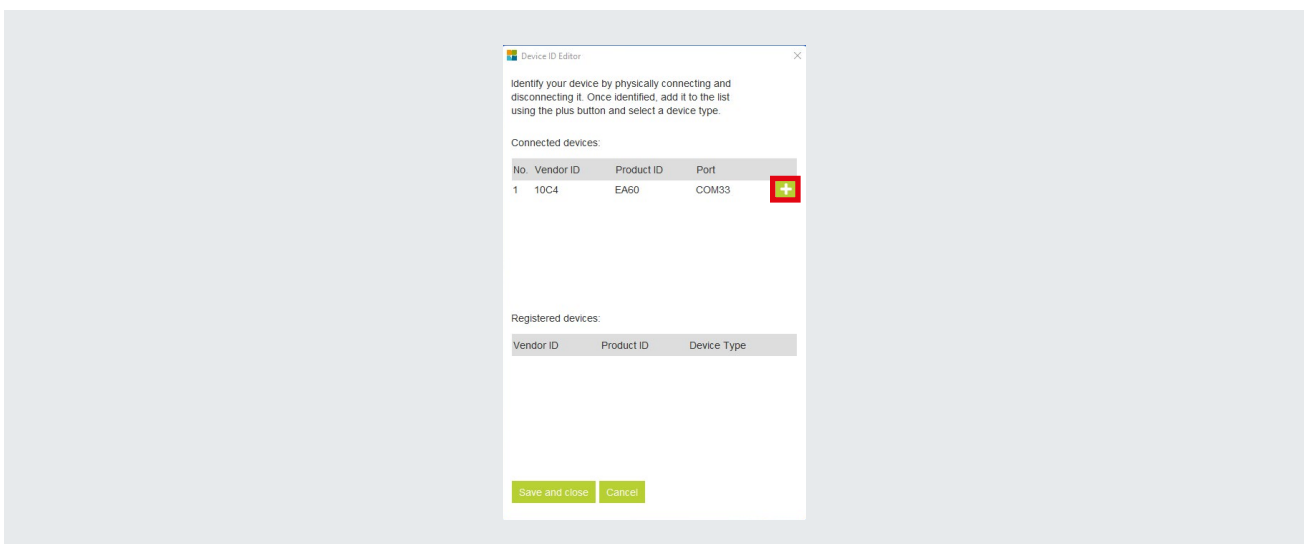
Asset Name	Size	Released
OpenRobertaConnectorLinux-v1.4.0.tar.gz	14.7 MB	28 Mar 2022
OpenRobertaConnectorMacOSX-v1.4.0.pkg	14.3 MB	28 Mar 2022
OpenRobertaConnectorSetupDE-v1.4.0.msi	25.6 MB	28 Mar 2022
OpenRobertaConnectorSetupEN-v1.4.0.msi	25.6 MB	28 Mar 2022
Source code (zip)		28 Mar 2022
Source code (tar.gz)		28 Mar 2022

Step 2: Setup Open Roberta Connector

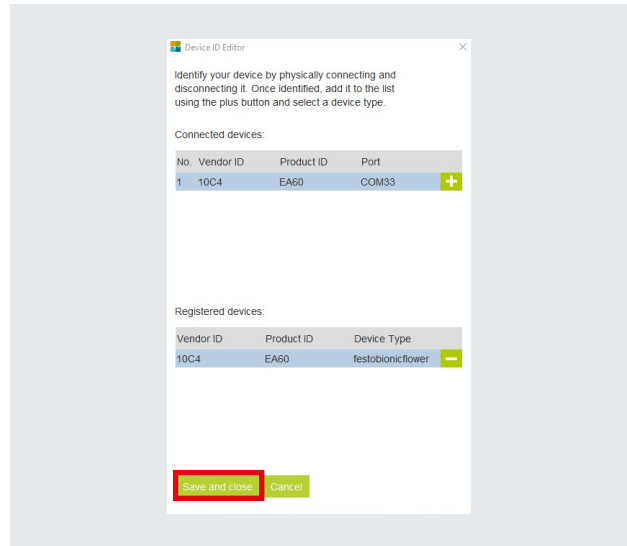
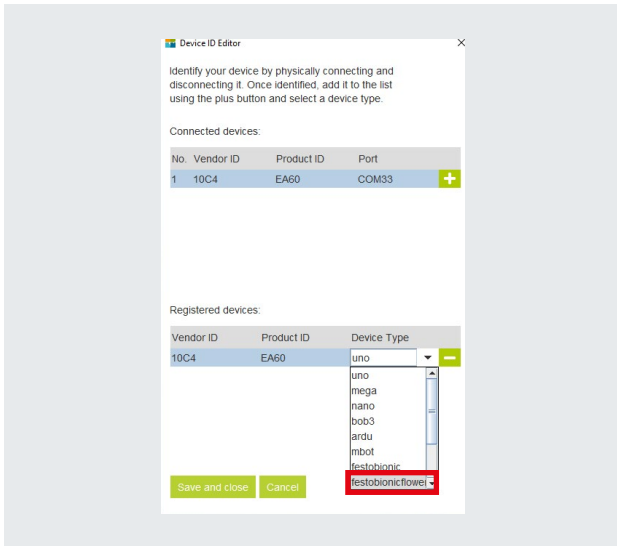
- Open the Roberta Connector.
- Go to: File -> Device ID Editor



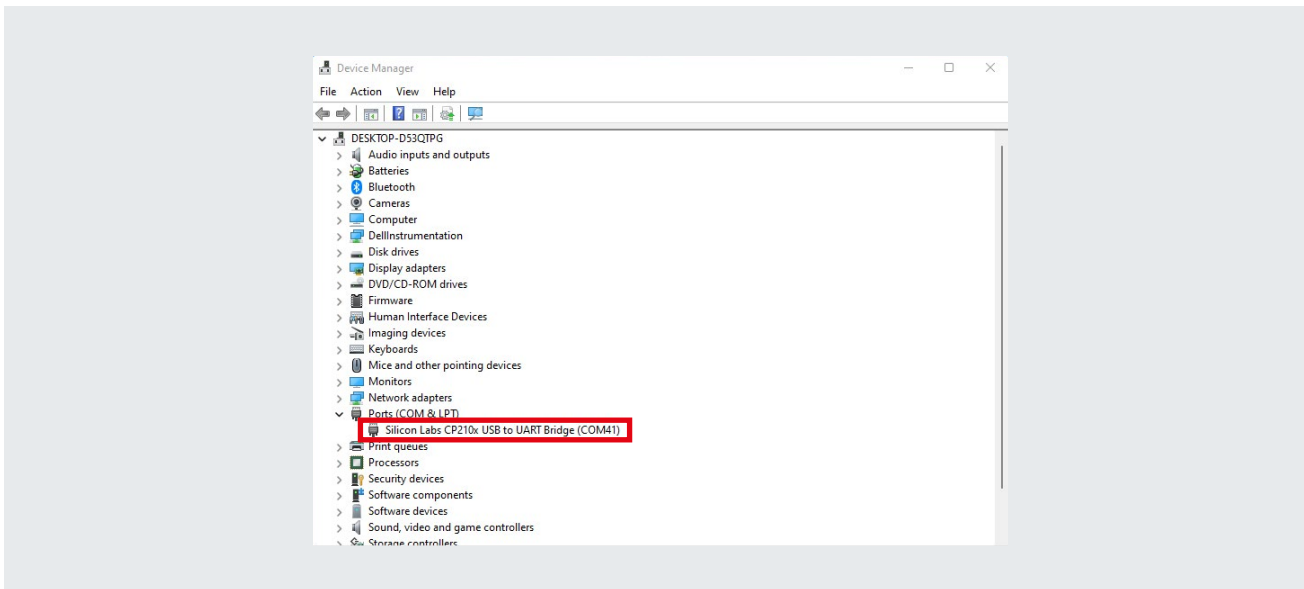
- Add the connected device corresponding to the port of your Bionic Flower.



- Declare the new device as a Bionic Flower robot.
- Save and close.

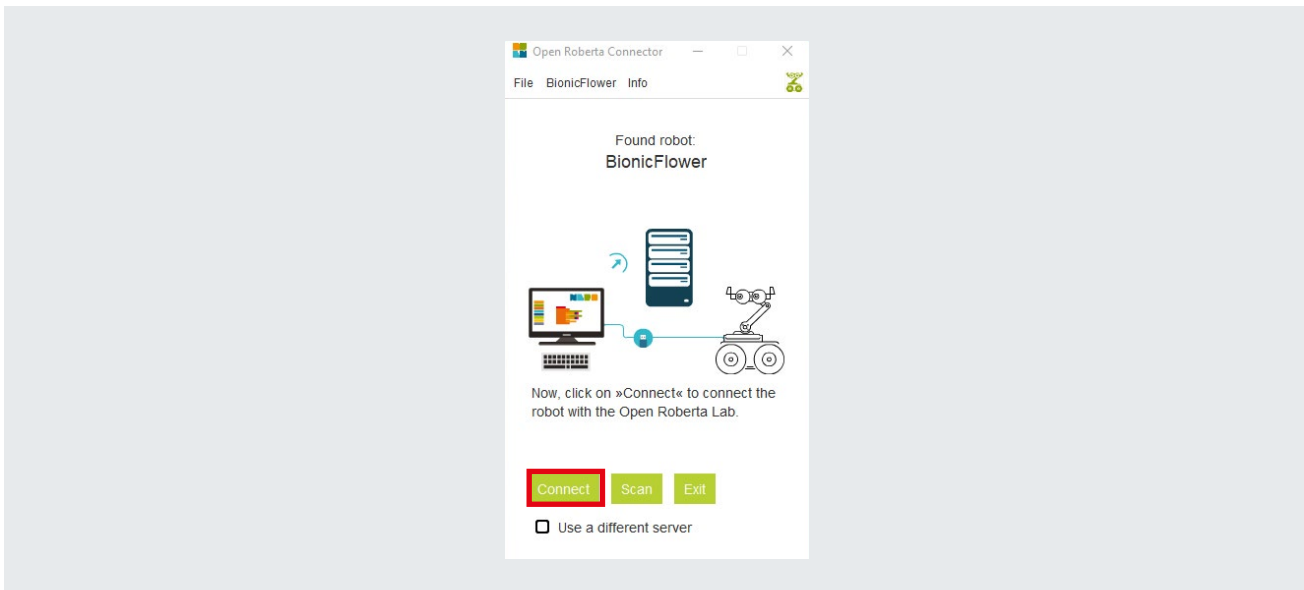


- In case no new robot appears, it means that the driver to recognize the Bionic Flower is not yet installed. To do so, go to the following website: [CP210x USB to UART Bridge VCP Drivers - Silicon Labs \(silabs.com\)](http://silabs.com). Next, in downloads, download the zip file according to your operating system. Then extract this zip file to your documents. Finally, you can check if your Bionic Flower is recognized by your Device Manager.

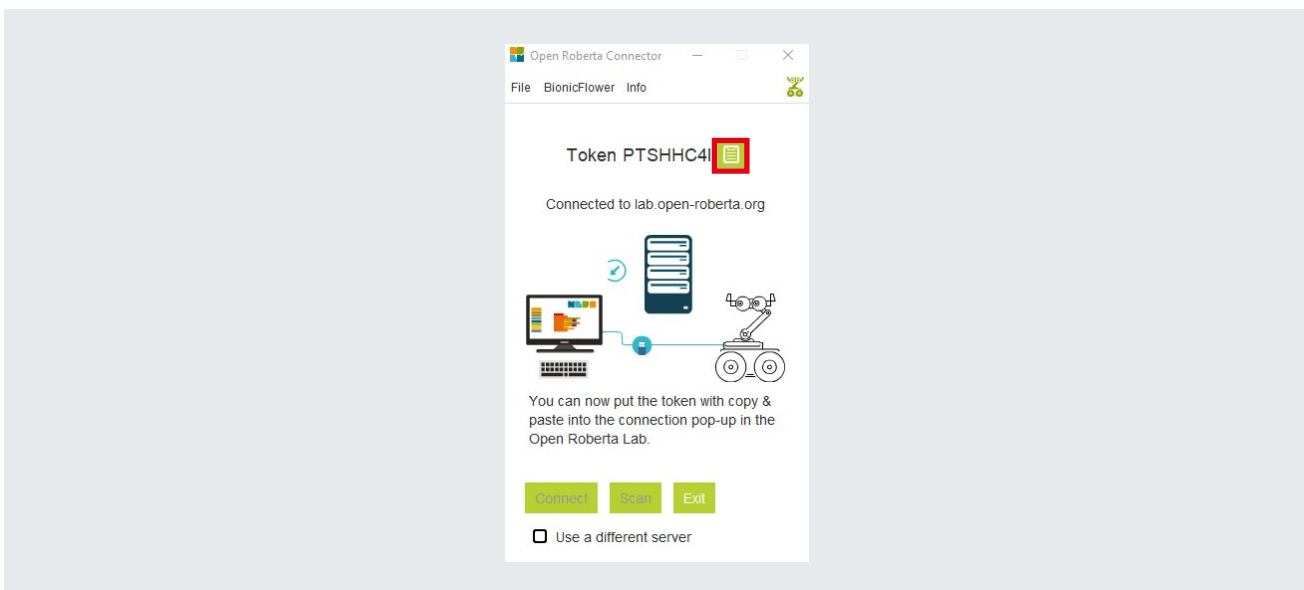


Step 3: Connect the Bionic Flower to the Connector

- Connect the Bionic Flower to your computer with the USB cable.
- Click on the “Connect” button to connect the Bionic Flower.

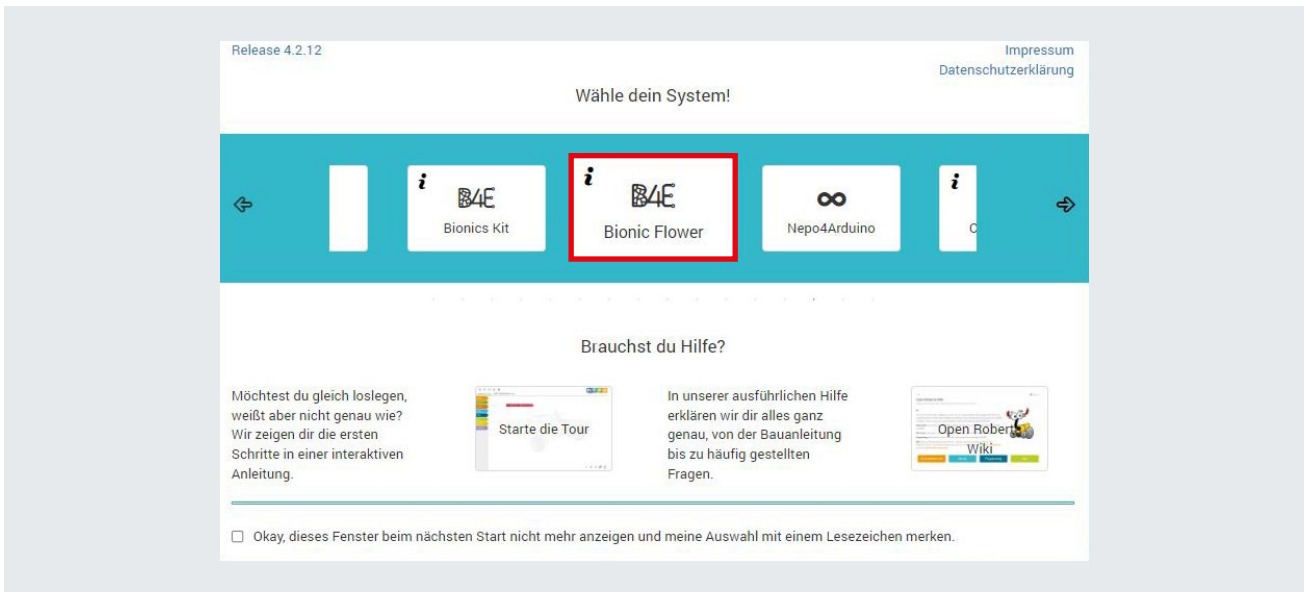


- Copy the code.

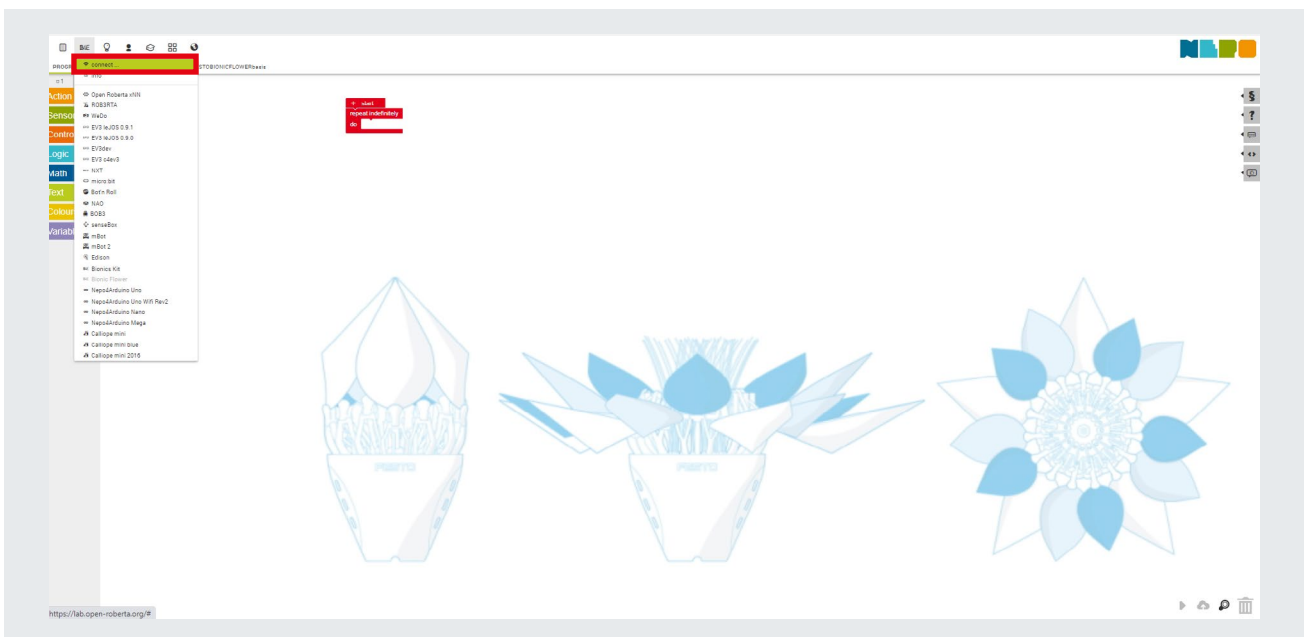


Step 4: Setup the environment of the Open Roberta lab

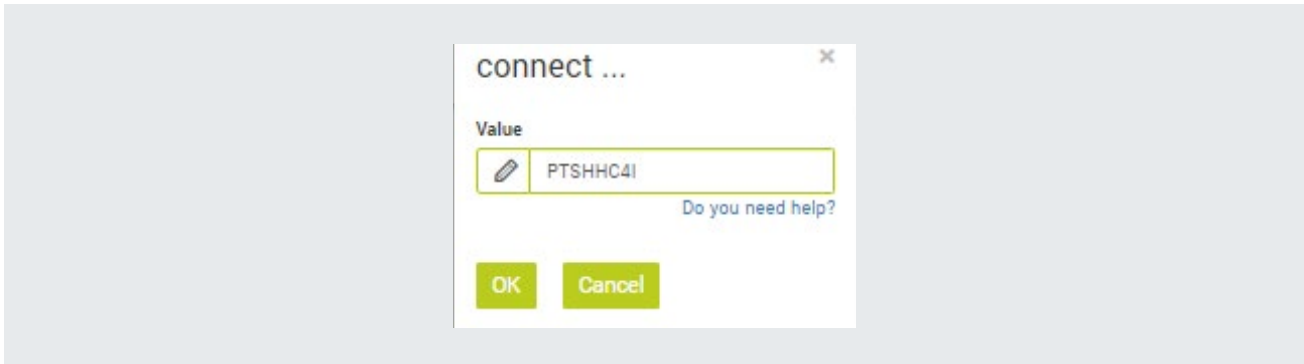
- Go to: <https://lab.open-roberta.org/>
- Select the Bionic Flower in the menu.



- Go to the B4E menu and click to connect the Bionic Flower.

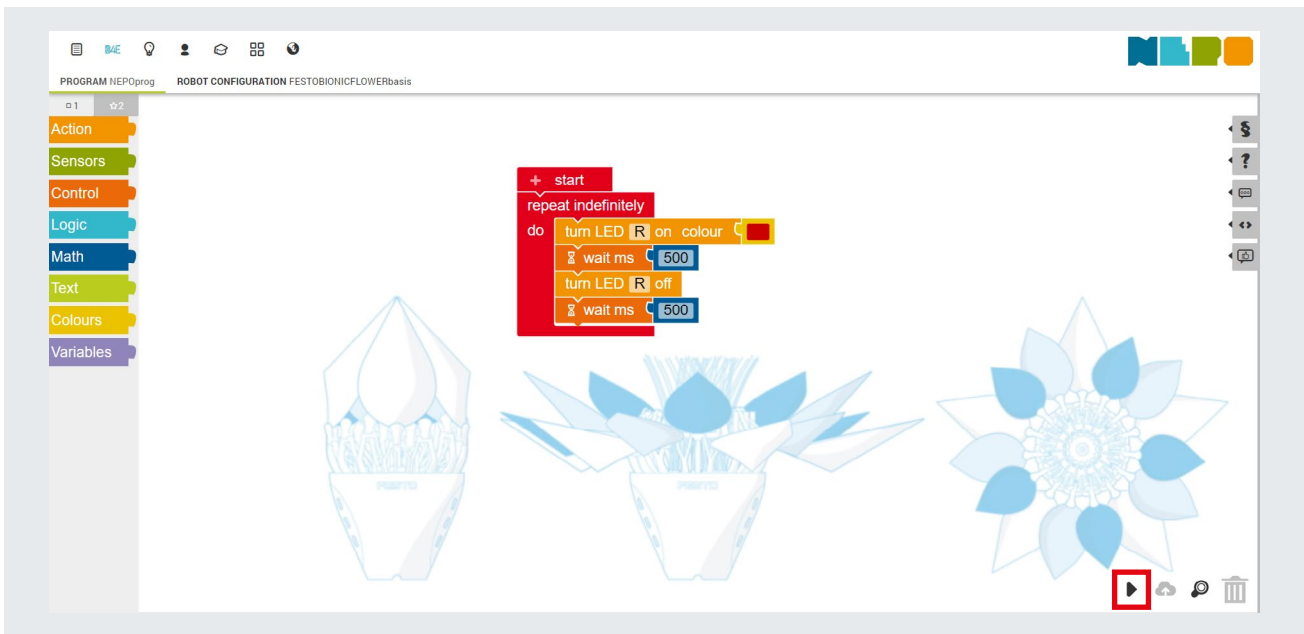


- Paste the code to connect the Bionic Flower and click on “Ok” button.



Step 5: Upload a code to the Bionic Flower

- Click on the arrow at the right bottom



The B4E logo blink to indicate that the code is uploading on the Bionic Flower.

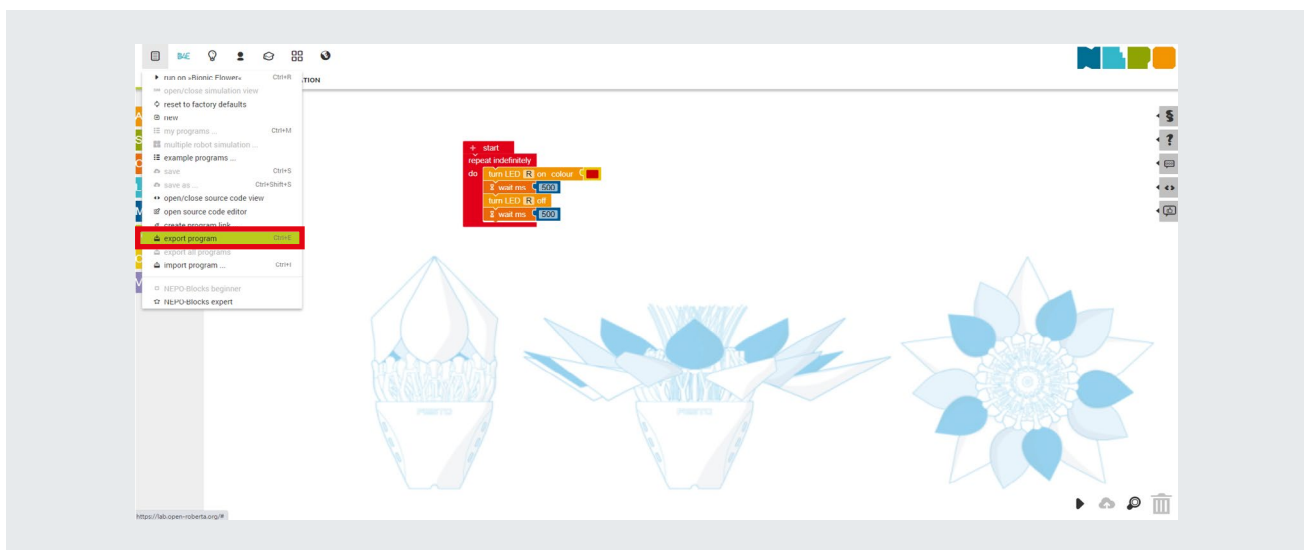
Import or export a code:

It is not possible to record a code. For this you need to export it and after import it to work again with.

Export a code:

- Go to the first menu, and click on the export program.

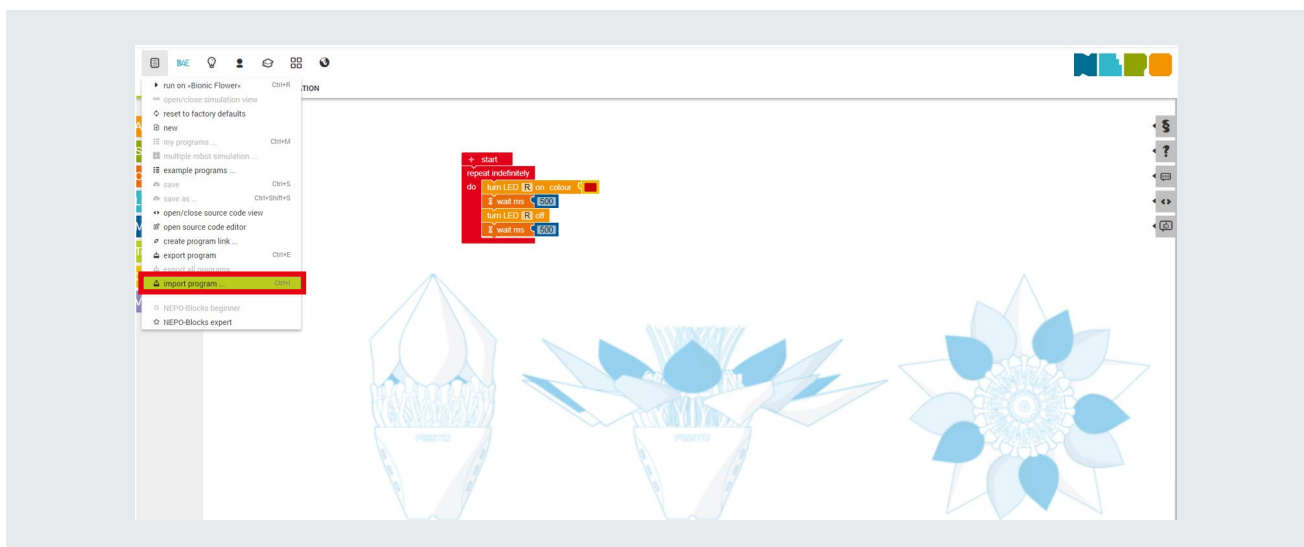
A file with format .xml is created on your download folder.



Import a code:

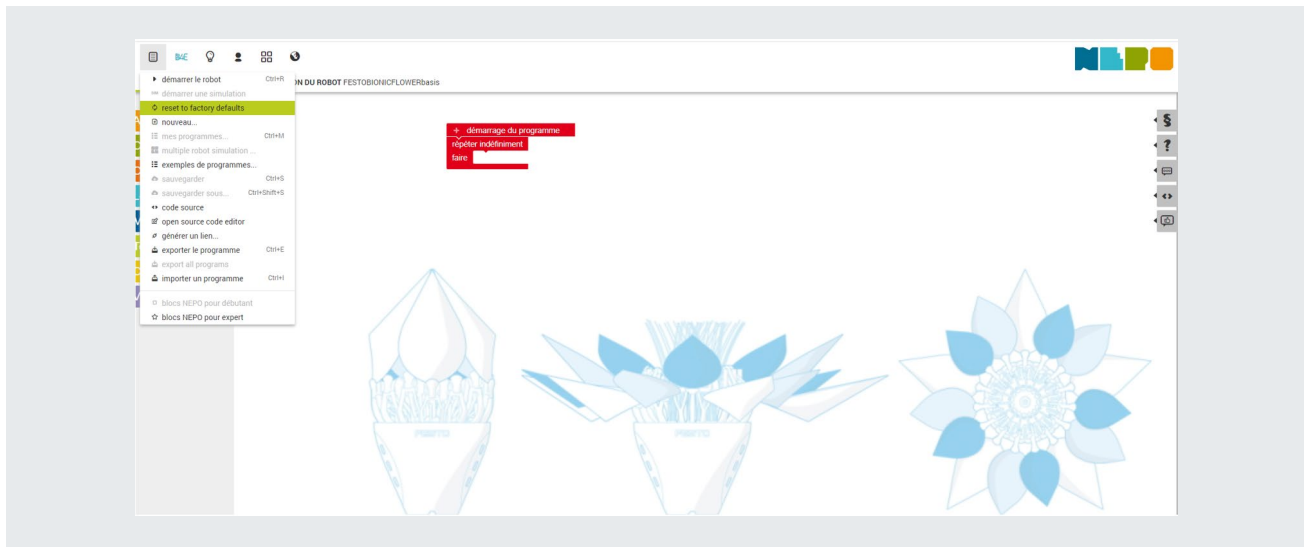
- Go to the first menu, and click on the import program.

Your code appears on the Open Roberta interface.



Reset the code for the Bionic Flower:

If you want to reset the Bionic Flower with the initial code, go to the first menu and click on the “reset to factory defaults”.



Exit:

Before exit Open Roberta, think to import your code if you want to use it for the next time. To exit the Open Roberta, on the Open Roberta Connector disconnect the Flower and disconnect your flower to your computer.