

Plc/Python

For demonstration purpose the PLC template can either run the PLC method or any python script. Select mode Manual, to enable the execution of **PLC code** or **python script**.

The plc state machine contains a step mode for testing the program. It can be switched on/off while the program is running.

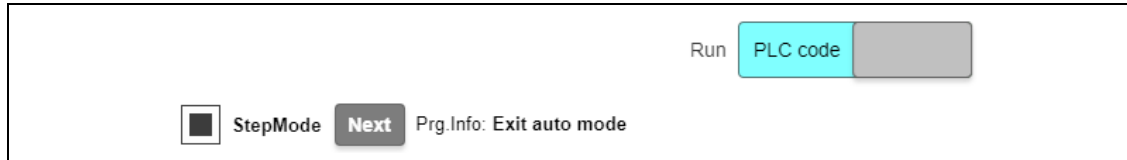


Figure 1: Debug screen

Python scripts can move axes and kinematics and read/write data layer variables. Also, the teach points of this PLC template. An example how to do this, will be shipped in a later version.

The example script only reads/writes variables from the data layer, which are shown in WebIQ HMI:

To use demo HMI page for python script, do the following steps:

- Install IDE & python app on ctrlX OS
- The python scripts are **installed**. **See section Fehler! Verweisquelle konnte nicht gefunden werden. Fehler! Verweisquelle konnte nicht gefunden werden. / ctrlX OS**
 - **DemoDataLayer.py** Read & write of data layer variables, stop script
 - **DemoMoveKin.py** Move kinematic & write data layer variables

In WebIQ HMI:

- Select mode **Manual** or **Setup**
- Open page **Recipe>Setup**
 - Use button **Text** to open textual programs
 - Use button **Visual** to open visual programs
 - Save the recipe
- Open page **Debug>Plc/Python** select Run: **Python**
- “Start” the script in the **Automatic** Mode which changes the fields **bFlag** and **Info**

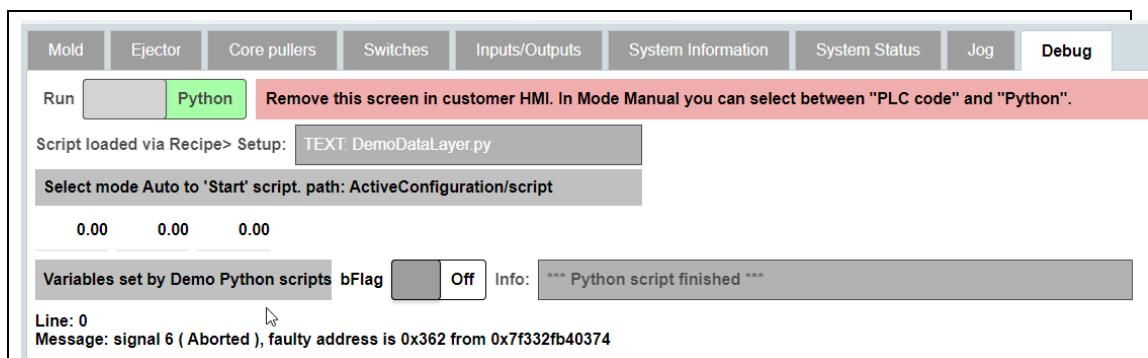


Figure 2: Debug screen

Hint: This screen is only a playground.

It is used to demonstrate the start of Python scripts from the PLC. In a customer project the handling of Python scripts must be implemented customer specific